REGULAR PLANNING COMMISSION MEETING AGENDA

City Hall - Council Chambers
4381 Broadway, Ste. 201, American Canyon
October 24, 2024
6:30 PM

Chair: Brando Cruz
Vice Chair: Davet Mohammed
Commissioners: Eric Altman, Andrew Goff, Crystal Mallare
Youth Commissioner: Ramandeep Jawanda

Tonight's meeting is a limited public forum. American Canyon promotes respectful and responsible behavior among its meeting participants, whether they are present in person or remotely. Using offensive language or remarks that promote, foster, or perpetuate discrimination based on race, creed, color, age, religion, gender marital status, status regarding public assistance, national origin, physical or mental disability or sexual orientation/gender identification, as well as any other category protected by federal, state or local laws will not be tolerated. In the case of an occurrence, the speaker will be immediately disconnected from the microphone.

Planning Commission and other public meetings will be conducted in person at City Hall, 4381 Broadway, Suite 201, American Canyon, CA 94503. This meeting is also available via Zoom Teleconferencing as a convenience for public participation. This meeting will be broadcast live to residents on Napa Valley TV, on our website here and on YouTube here. Should technical issues with Zoom occur, please select another viewing option.

PUBLIC PARTICIPATION

Oral comments, during the meeting: Oral comments can be made in person or via Zoom. To give your public comment via zoom, connect via the below Zoom link and use the "raise your hand" tool, or call into the zoom meeting at 408-638-0968 and press *9 to "raise your hand" when the item is called. To avoid confusion, all hands raised outside of Public Comment periods will be lowered.

Written comments, via eComments: Please submit written comments through the eComments link, located on the Meetings & Agendas page of our website here. Comments will be available to Planning Commissioners in real time. To allow for review of comments, eComments will close at 3:00 pm on the day of the meeting. All comments received will be posted online and become part of the meeting record.

Zoom Meeting Link: Click here.
Webinar ID: 876 0659 2529 Passcode: 123456

The above-identified measures exceed all legal requirements for participation in public comment, including those imposed by the Ralph M. Brown Act. For more information, please call the Office of the City Clerk at (707) 647-4369 or email cityclerk@americancanyon.gov.

AGENDA MATERIALS: Planning Commission agenda materials are published 72 hours prior to the meeting and are available to the public via the City's website at www.americancanyon.gov.

AMERICANS WITH DISABILITIES ACT: The Planning Commission will provide materials in appropriate alternative formats to comply with the Americans with Disabilities Act. Please send a written request to City Clerk at 4381 Broadway, Suite 201, American Canyon, CA 94503 or by email to cityclerk@americancanyon.gov. Include your name, address, phone number and brief description of the requested materials, as well as your preferred alternative format or auxiliary aid, at least three calendar days before the meeting.

6:30 P.M. REGULAR MEETING

CALL TO ORDER

ROLL CALL

PLEDGE

PRESENTATIONS

1. Introduction of Youth Commissioner

PUBLIC COMMENT

*This time is reserved for members of the public to address the Planning Commission on items of interest that are not on the Agenda and are within the subject matter jurisdiction of the Planning Commission. It is recommended that speakers limit their comments to 3 minutes each and it is requested that no comments be made during this period on items on the Agenda. Members of the public wishing to address the Planning Commission on items on the Agenda should comment via email prior to the start of the meeting, or to verbally comment on the item during the meeting, click the "raise your hand" button if joining by computer, or press *9 if joining by phone, when the item is called. The Planning Commission is prohibited by law from taking any action on matters discussed that are not on the Agenda, and no adverse conclusions should be drawn if the Planning Commission does not respond to public comment at this time. Speakers are asked to please speak clearly, and provide their name. Any handouts for distribution to the Planning Commission must be emailed by 3:00 p.m. on meeting day.*

AGENDA CHANGES

CONSENT CALENDAR

2. Minutes of September 26, 2024
Recommendation: Approve the Minutes of September 26, 2024

BUSINESS

3. General Plan Technical Update Draft Environmental Impact Report (DEIR) Public Review Workshop
Recommendation: Receive and file the General Plan Technical Update Draft Environmental Impact Report.

PUBLIC HEARINGS

4. **NVR&G Vertical Metal Post Perimeter Fence Design Permit**

Recommendation: Continue this item to the next regular Planning Commission meeting of November 21, 2024

5. **Watson Ranch Specific Plan Lot 7 Design Permit and Tentative Subdivision Map**

Recommendation: Adopt a Resolution recommending the City Council of the City of American Canyon approve a Vesting Tentative Subdivision Map for Watson Ranch Lot 7 to create 136 single-family home lots on 12.86 acres within the Watson Ranch Specific Plan Medium Density Residential-16 zoning district located west of Marcus Road, Assessor's Parcel Number 059-430-045 (File No. PL24-0012); and

Adopt a Resolution approving Design Permit for Watson Ranch Lot 7 to create 136 single-family homes on 12.86 acres within the Watson Ranch Specific Plan Medium Density Residential-16 zoning district located west of Marcus Road, Assessor's Parcel Number 059-430-045 (File No. PL24-0013).

6. **SDG 220 Warehouse EIR and CUP**

Recommendation: Adopt a Resolution recommending the City Council of the City of American Canyon (i) certify the Final Environmental Impact Report (SCH #2023100842), and (ii) adopt a Mitigation Monitoring and Reporting Program for the SDG Commerce 220 Distribution Center Project located at 1055 Commerce Court, APN 058-030-069 (File Number PL23-0017); and

Adopt a Resolution recommending the City Council of the City of American Canyon approve the SDG Commerce 220 Distribution Center Conditional Use Permit for development of a 219,834 square foot wine warehouse on a 10.45-acre site located at 1055 Commerce Court, APN 058-030-069 (File number PL23-0017)

MANAGEMENT AND STAFF ORAL REPORTS

7. **Active Planning Projects**

Recommendation: Review Active Planning Projects

COMMISSIONER ITEMS

ADJOURNMENT

CERTIFICATION

I, Nicolle Hall, Deputy City Clerk for the City of American Canyon, do hereby declare that the foregoing Agenda of the Planning Commission was posted in compliance with the Brown Act prior to the meeting date.

_____

Nicolle Hall, Deputy City Clerk

CITY OF AMERICAN CANYON
REGULAR PLANNING COMMISSION MEETING

ACTION MINUTES

September 26, 2024

6:30 P.M. REGULAR MEETING

CALL TO ORDER
The meeting was called to order at 6:31 p.m.

PLEDGE
The Pledge of Allegiance was recited.

ROLL CALL
Present: Commissioners Andrew Goff, Crystal Mallare, Chair Brando Cruz, Vice Chair Davet Mohammed
Absent: Commissioner Eric Altman,
Excused: None

PUBLIC COMMENT
Chair Brando Cruz opened Public Comments. Written Comments: None Oral Comments: None. Chair Cruz Brando Closed Public Comments.

AGENDA CHANGES
There were no agenda changes.

CONSENT CALENDAR

1. Minutes of August 22, 2024
Action: Motion to approve the minutes of August 22, 2024, made by Commissioner Crystal Mallare, seconded by Commissioner Andrew Goff, and CARRIED by a roll call vote.

Ayes: Commissioner Andrew Goff, Commissioner Crystal Mallare, Vice Chair Davet Mohammed, Chair Brando Cruz
Nays: None
Abstain: None
Absent: Commissioner Eric Altman
Excused: None

PUBLIC HEARINGS

2. Watson Ranch Lot 8 Design Permit

Senior Planner reported on the item and shared a PowerPoint presentation.

Speakers:
Terrance McGrath, developer of Watson Ranch

Commissioners deliberated on the item.

Chair Brando Cruz opened the Public Hearing.

Written comment California Housing Defense Fund. Speakers: Deputy City Attorney David Schwarz provided an oral summary of the written comment from the California Housing Defense Fund.

Chair Brando Cruz closed the Public Hearing

Action: Motion to adopt Resolution 2024-11 approving a Design Permit for Watson Ranch Lot 8 to develop 25 single-family homes on 2.3 Acres within the Medium Density Residential-16 zoning district located north of Cartier Street, Accessor's Parcel Numbers 059-430-044 and 059-430-037 (File Number PL24-0022) made by Commissioner Andrew Goff, seconded by Vice Chair Davet Mohammed, and CARRIED by roll call vote.

Ayes: Commissioner Andrew Goff, Commissioner Crystal Mallare, Vice Chair Davet Mohammed, Chair Brando Cruz
Nays: None
Abstain: None
Absent: Commissioner Eric Altman
Excused: None

3. Oat Hill Multifamily Residential Major Modification

Community Development Director Brent Cooper reported on the item and shared a PowerPoint presentation.

Commissioners discussed the item.

Speakers: Stevie Villatoro, Russell Square Development

Chair Brando Cruz opened the Public Hearing. Written comments: Tom Gardner. Oral comments: none

Chair Brando Cruz closed the Public Hearing.

Action: Motion to adopt Resolution 2024-12 recommending the City Council of the City of American Canyon, California, approve a Major Modification to the Oat Hill Multifamily Residential Project Parcel A and B Design Permits located on the east side of Oat Hill south of Napa Junction Road (PL24-0009) made by Commissioner Andrew Goff, seconded by Commissioner Crystal Mallare and CARRIED by a roll call vote.

Ayes: Commissioner Andrew Goff, Commissioner Crystal Mallare, Vice Chair Davet Mohammed, Chair Brando Cruz
Nays: None
Abstain: None
Absent: Commissioner Eric Altman
Excused: None

MANAGEMENT AND STAFF ORAL REPORTS

4. Active Planning Projects

Community Development Director Brent Cooper reported on active planning projects, including the SDG 220 environmental impact report, Watson Ranch Lot 7, Hampton Inn Hotel, Napa Cove apartments, the environmental impact report for the General Plan, City Council proclamations for National Community Planning Month, and National Community Code Enforcement Appreciation month.

COMMISSIONER ITEMS

There were no commissioner items.

ADJOURNMENT

The meeting was adjourned at 7:26 p.m.

CERTIFICATION

Respectfully Submitted,

_____

Nicolle Hall, Deputy City Clerk Community Development Department

TITLE

General Plan Technical Update Draft Environmental Impact Report (DEIR) Public Review Workshop

RECOMMENDATION

Receive and file the General Plan Technical Update Draft Environmental Impact Report.

CONTACT

Brent Cooper, AICP, Community Development Director

BACKGROUND & ANALYSIS

Project Description:

The General Plan expresses the shared community vision of a Healthy, Equitable, Resilient, and Economically Vibrant community to the Year 2040 and beyond. A General Plan benefits American Canyon by promoting better projects, streamlined processes, integrated planning, and improved access and use of available resources.

State law (Government Code Section 65300) requires each city and county adopt a comprehensive general plan. The City's existing General Plan was adopted by the City Council on November 3, 1994. The project is a comprehensive effort to update the existing General Plan and to respond to current local and regional conditions, as well as changes in State law that may not have been in effect when the General Plan was originally adopted.

The General Plan defines the policy framework by which the City's physical and economic resources are to be managed and used over the next 20 years. City decision-makers will use the General Plan as a blueprint for:

- Choices about the use of land;
- Protection of environmental resources;
- Conservation and development of housing;
- Provision of supporting infrastructure and public and human services; and
- Protection of people and property from natural and human constructed hazards.

The proposed 2040 Technical General Plan Update has been organized into the following elements: Land Use; Housing; Economic Development; Mobility; Utilities; Public Services and Facilities;

Environment, Parks, and Recreation; Safety; and Environmental Justice. Together, these elements cover all topics required to be included in a General Plan under State law. Additional elements may be added in the future as resources and priorities arise.

The Technical 2040 General Plan would implement the vision of the existing General Plan. The City identifies the following three fundamental roles of the City:

1. The City should be home for a residential population, internally accommodating a sufficient range of uses to support the needs of residents (including a mix of housing types, commercial services, entertainment, employment, recreation, education, health, religious, cultural facilities, transportation services, and open space). At the present time, many of these uses are located outside the City, which necessitates extensive travel by residents to access these services.
2. The City should be a center of employment and commerce for regional, as well as local residents. This will provide an opportunity to capitalize upon (1) the cluster of uses which have developed in the Green Island Industrial Park; (2) the proximity of the City to the Napa County Airport and Southern Pacific railroad, and (3) the relationship of the City to the agricultural and vineyard industries of Napa County.
3. The City can capture visitors to the Napa Valley by providing uses which capitalize on the unique environmental setting of the foothills, river valleys, and agriculture. Environmental educational facilities, such as wetlands interpretative centers, overnight camping and recreational vehicle facilities, river recreational facilities such as boating, golf courses, and hotel/motels and restaurants are representative of the range of uses which may be considered.

A copy of the General Plan is included as Attachment 5.

A General Plan Update is subject to the California Environmental Quality Act (CEQA). This Environmental Impact Report (EIR) examines the potential environmental effects of the proposed City of American Canyon (City) 2040 Technical General Plan Update (“project”).

Consistent with the California Environmental Quality Act (CEQA), the City determined the proposed General Plan Update has the potential for significant environmental impacts. For this reason, an Environmental Impact Report (EIR) is required to fully describe and analyze those impacts.

In accordance with CEQA Guidelines Section 15121(a) (California Code of Regulations, Title 14, Division 6, Chapter 3), the purpose of an EIR is to: Inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR fulfills the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as those of a Project EIR, Program EIRs are by necessity more conceptual

and may contain a more general discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in CEQA Guidelines Section 15168, a Program EIR may be prepared on a series of actions that may be characterized as one large project.

Use of a Program EIR provides enables the City (as Lead Agency) with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the City with greater flexibility to address environmental issues and/or cumulative impacts on a comprehensive basis.

While the Program level EIR uses expansive program-level thresholds, it should not be assumed that impacts determined to be less than significant at a program level would be less than significant for an individual project implemented under the 2040 General Plan, even if the individual project is consistent with the 2040 General Plan.

The EIR evaluates each environmental area of study and identifies each impact under one of four categories of environmental significance. These include:

- **No Impact:** The proposed plan would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

- **Less than Significant**. An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

- L**ess than Significant with Mitigation Incorporated**. An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the CEQA Guidelines.

- **Significant and Unavoidable**. An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the proposed plan is approved pursuant to Section15093 of the CEQA Guidelines.

Each impact evaluated is summarized in Table ES-1 which is included as Attachment 1. Table ES-1 shows that there are only two environmental impacts that are Significant and Unavoidable. These include:

1. **Noise from Construction**. Unfortunately, construction noise will temporarily exceed limits in the Noise Ordinance. Even though noise may exceed standards, there are many measures that can be taken to reduce noise to the greatest extent possible, including measures that will reduce noise from non-construction activities. Table ES-1 identifies these measures.

2 . **Vehicle Miles Travelled**. Transportation is a major source of greenhouse gases that lead to

climate change. Reducing the amount of miles that vehicles travel in American Canyon and throughout California is a way to combat climate change. American Canyon adopted a Vehicle Miles Travelled (VMT) Policy in 2023 that seeks to reduce per capita vehicle transportation use by 19 percent. The good news is smart growth policies in the updated General Plan reduce non-residential (employee) VMT by nearly 33% which exceeds the 19% reduction goal. Unfortunately, citywide residential VMT is forecasted to be reduced by 4.4% which falls short of the 19% reduction goal. Continued efforts to provide services near residents and economic development efforts to bring more jobs closer to American Canyon residents will help reduce VMT in the long term.

Summary of Project Alternatives

According to CEQA, an EIR must describe a reasonable range of alternatives to a proposed project that could feasibly attain most of the basic project objectives, and would avoid or substantially lessen any of the proposed project's significant effects.

This analysis presents three alternatives, including the CEQA-required "no project" alternative, that involve changes to the project that may reduce the project-related environmental impacts identified in this EIR. These Alternatives have been developed to provide a reasonable range of options that would help decision-makers and the public understand the general implications of revising or eliminating certain components of the proposed project. The following alternatives are evaluated in this EIR:

1. Alternative 1: No Project
2. Alternative 2: Watson Ranch Natural Alternative
3. Alternative 3: Limited Growth

Listed below are the Project Alternatives for this Draft EIR:

Alternative 1: The "No Project" Alternative assumes a maximum buildout scenario that accommodates 3,204 housing units and approximately 5.7 million square feet of additional non-residential land uses. Compared to the proposed project, the No Project Alternative would not include updated General Plan policies.

The No Project Alternative would not accomplish the primary objective of the project, which is to update the existing American Canyon General Plan to be compliant with State law. In addition, the No Project Alternative would not include the updated 2040 General Plan policies and programs pertaining to community development, preservation of natural resources, sustainability, and improvement of American Canyon's circulation network.

Alternative 2: The "Watson Ranch Natural" Alternative would assume that each undeveloped portion of Watson Ranch is developed to the maximum allowable zoning density. This would result in an additional 596 dwelling units above the proposed General Plan Update buildout scenario.

Alternative 2 would meet the objectives of the proposed project as it would increase residential buildout while accommodating the same amount of non-residential buildout as the proposed project.

Alternative 3: The "Limited Growth" Alternative would limit future growth to projects already identified by the City to be constructed in the future, such as Watson Ranch Specific Plan, Broadway District Specific Plan, and others that are approved and under review. Alternative 3 would decrease residential units at buildout by 408 units and decreases non-residential area by 65,000 square feet.

Alternative 3 would reduce the ability for the City to meet its vision of accommodating a residential population with a range of uses; creating a center of employment and commerce; and capturing visitors to the Napa Valley. Overall, Alternative 3 would not meet the project objectives to the same extent as the proposed project.

A table that compares the Alternatives is included as Attachment 2. The Draft EIR is included in Attachment 3. the EIR Appendices are included in Attachment 4, and the Draft General Plan is included in Attachment 5.

Draft EIR Comment Period

The city released the General Plan Draft EIR for public review on September 28, 2024. The review period will continue to November 12, 2024. Please provide written/typed comments (including name, affiliation, telephone number, and contact information) via US mail or web link shown below by 5:00 p.m. on Tuesday, November 12, 2024.

Mailed hardcopy comment letters may be sent to the City at:

General Plan 2040 Project City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Electronic comment letters may be sent to the City at this link: https://portal.laserfiche.com/f0791/forms/i6SyE.

A copy of the Notice of Completion is included as Attachment 6.

Next Steps

Following completion of the public review period, the City will prepare responses to comments we receive and make corrections as needed. While it is difficult to predict the complexity of comments we may receive, it is not unusual to need one to two months to prepare thorough responses and corrections.

After completing the responses, the Planning Commission will take up the issue at a public hearing

early next year. Following a Planning Commission recommendation, the City Council should complete its decision making by the middle of 2025.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Economic Development and Vitality: "Attract and expand diverse business and employment opportunities."

FISCAL IMPACT

The General Plan Update costs have been included in the current Fiscal Year budget. In the long term, it is necessary for economic development purposes to have a current General Plan. Adoption of the General Plan and associated EIR will provide a positive fiscal benefit to the City although the specific amount is not possible to calculate.

ENVIRONMENTAL REVIEW

Consistent with the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) was prepared for the proposed SDG Commerce 220 Distribution Center project to fully describe and analyze environmental impacts.

ATTACHMENTS:

1. Summary of Environmental Impacts
2. Alternative Comparisions
3. American Canyon 2040 General Plan Update DEIR
4. American Canyon 2040 General Plan Update DEIR Appendices
5. Draft 2040 General Plan
6. General Plan Update NOA 09.28.24

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts, mitigation measures, and residual impacts (the impact after application of mitigation, if required) associated with implementation of the proposed project. Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the proposed plan is approved pursuant to Section15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed plan would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact Statement	Mitigation Measure(s)	Residual Impact
Aesthetics		
Impact AES-1. The project would not have a substantial adverse effect on a scenic vista, including views of hills, and impacts would be less than significant**.**	No mitigation is required	Less than Significant
Impact AES-2. The city of American Canyon does not have a designated state scenic highway and the project would not damage scenic resources within a state scenic highway. No impact would occur.	No mitigation is required	No Impact
Impact AES-3. The project would implement policies that would require development of objective design standards for future development. The project would not conflict with applicable zoning and other regulations governing scenic quality and this impact would be less than significant.	No mitigation is required	Less than Significant
Impact AES-4. Construction and operation of future development facilitated by the project could create new sources of light or glare that could adversely affect the visual environment. Impacts would be less than significant with mitigation.	**AES-1 Construction Lighting Plan.** Prior to nighttime construction, if needed for a particular project, project applicants shall submit a construction lighting plan to the City for review and approval. The construction lighting plan shall ensure that the minimum amount of lighting is used to meet safety requirements and ensure no spillover occurs to nearby sensitive uses. All lighting shall be directed downward and away from surrounding land uses**.** **AES-2 Operational Lighting Plan.** Prior to discretionary project approval, the project applicant shall prepare and submit a photometric plan to the City for review and approval which demonstrates that all exterior light fixtures will be directed downward or employ full cut-off fixtures to prevent light spillage. The approved plan shall be incorporated into project design plans.	Less than Significant with Mitigation
Air Quality		
Impact AQ-1. The project would be consistent with the BAAQMD's 2017 Clean Air Plan. Impacts would be less than significant.	No mitigation is required	Less than Significant
Impact AQ-2. The project would not result in a cumulatively considerable net increase of criteria pollutants during construction or operations. Impacts would be less than significant.	No mitigation is required	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact AQ-3. Construction activities for projects lasting longer than two months or located within 1,000 feet of sensitive receptors could expose sensitive receptors to substantial pollutant concentrations. Implementation of the project may also expose sensitive receptors to operational sources of toxic air contaminants. Impacts would be less than significant with mitigation.	**AQ-1 Conduct Construction Health Risk Assessment.** Prior to issuance of a grading or building permit, whichever occurs first, the applicant shall submit to the City a construction health risk assessment (HRA) in accordance with BAAQMD recommendations for any development project that has at least one the following characteristics: ▪ The project is located within 1,000 feet of sensitive receptors. ▪ Project construction would last longer than two months. ▪ Project construction would not utilize equipment rated USEPA Tier 4 (for equipment of 50 horsepower or more); construction equipment fitted with Level 3 Diesel Particulate Filters (for all equipment of 50 horsepower or more); or alternative fuel construction equipment. If the HRA determines that construction will exceed BAAQMD significance thresholds, the HRA shall provide mitigation measures to reduce the impact to less than significant, including but not limited to requiring the use of Tier 4 engines, Level 3 Diesel Particulate Filters, and/or alternative fuel construction equipment. **AQ-2 Reduce Operational Toxic Air Contaminants Near Sensitive Receptors.** For new sensitive receptors proposed within 500 feet of a major sources of TAC (high-volume roadways with 10,000 vehicles or more per day), the project applicant shall prepare an operational health risk assessment for the City's review and approval. If TAC exposure at new sensitive receptor sites would exceed BAAQMD health risk thresholds, require the project applicant include mechanical air filtration or other measures to reduce health risk exposure to acceptable levels. **AQ-3 Conduct Operational Health Risk Assessment.** Prior to permit approval for industrial, warehousing, or commercial land uses that would generate at least 100 diesel trucks per day or 40 or more trucks with diesel-powered transport refrigeration units per day, the applicant shall submit an operational health risk assessment (HRA) or submit proof that an HRA is not required in accordance with BAAQMD thresholds to the City for review and approval. If required by the City, the operational HRA shall be prepared in accordance with the Office of Environmental Health Hazard Assessment and BAAQMD requirements, and mitigated to an acceptable level. Typical measures to reduce risk impacts may include, but are not limited to: ▪ Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible. ▪ Electrifying warehousing docks. ▪ Truck Electric Vehicle (EV) Capable trailer spaces. ▪ Requiring use of newer equipment and/or vehicles. ▪ Restricting off-site truck travel through the creation of truck routes.	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	The operational HRA shall be provided to the City for review and concurrence prior to project approval.	
Impact AQ-4. The project would not create objectionable odors that could adversely affect a substantial number of people. Impacts related to odors would be less than significant with mitigation**.**	**AQ-4 Reduce Operational Odor Impacts.** Prior to discretionary approval by the City, if it is determined by the City that a development project has the potential to emit nuisance odors beyond the property line, the project applicant shall prepare an odor management plan and submit it to the City for review and approval. Facilities that have the potential to generate nuisance odors include, but are not limited to: ▪ Wastewater treatment plants ▪ Composting, green waste, or recycling facilities ▪ Fiberglass manufacturing facilities ▪ Painting/coating operations ▪ Large-capacity coffee roasters ▪ Food-processing facilities The odor management plan shall demonstrate compliance with the latest BAAQMD screening distances and guidelines. The odor management plan shall identify the best available control technologies for toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include but are not limited to scrubbers (i.e., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the documents prepared for the development project and/or incorporated into the project's site plan.	Less than Significant with Mitigation
Biological Resources		
Impact BIO-1. The project could have the potential to have an adverse impact on special status species. Implementation of federal, state, and local regulations and policies, as well as mitigation measures bio-1 and bio-2, would ensure development facilitated by the project would not have a substantial adverse effect on candidate, sensitive, or special status species. This impact would be less than significant with mitigation.	**BIO-1 Biological Resources Screening and Assessment. F**or projects proposed within undeveloped parcels, the City shall require project applicants to engage a qualified biologist (having the appropriate education and experience level) to perform a baseline Biological Resources Screening and Assessment to determine whether projects proposed within undeveloped parcels have any potential to impact special-status biological resources, inclusive of special-status plants and animals, sensitive vegetation communities (including vernal pools and other wetlands), and critical habitat. If it is determined that the project has no potential to impact biological resources, no further action is required. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct a project-specific biological analysis to document the existing biological resources within a project footprint plus a minimum buffer of 500 feet around the project footprint, as is feasible, and to determine the potential impacts to those resources. The project-specific biological analysis shall evaluate the potential for impacts to all biological resources including, but not limited to special-status species, nesting birds,	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	wildlife movement, sensitive plant communities, critical habitats, and other resources judged to be sensitive by local, state, and/or federal agencies. If the project would have the potential to impact these resources, the following mitigation measures (mitigation measures BIO-2 through BIO-8) shall be incorporated, as applicable, to reduce impacts to a less than significant level. Pending the results of the project-specific biological analysis, design alterations, further technical studies (e.g., protocol surveys) and consultations with the USFWS, CDFW, and/or other local, state, and federal agencies may be required. Note that specific surveys described in the mitigation measures below may be completed as part of the project-specific biological analysis where suitable habitat is present. **BIO-2 Special-status Plant Species Surveys.** If the project-specific Biological Resources Screening and Assessment (Mitigation Measure BIO-1) determines that there is potential for significant impacts to federally or state-listed plants or regional population level impacts to species with a CRPR of 1B or 2B from project development, a qualified biologist shall complete surveys for special-status plants prior to any vegetation removal, grubbing, or other construction activity (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species. All plant surveys shall be conducted by a qualified biologist during the blooming season prior to development permit approval. All special-status plant species identified on site shall be mapped onto a site-specific aerial photograph or topographic map with the use of Global Positioning System unit. Surveys shall be conducted in accordance with the most current protocols established by the CDFW, USFWS, and the local jurisdictions if said protocols exist. A report of the survey results shall be submitted to the City, and the CDFW and/or USFWS, as appropriate, for review and/or approval. **BIO-3 Special-status Plant Species Avoidance, Minimization, and Mitigation.** If federally and/or state-listed or CRPR 1B or 2 species are found during special-status plant surveys (pursuant to Mitigation Measure BIO-2), and would be directly impacted, or there would be a population-level impact to non-listed sensitive species, then the project shall be re-designed to avoid impacting those plant species, where feasible. Rare and listed plant occurrences that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits shall have bright orange protective fencing installed at least 30 feet beyond their extent, or other distance as approved by a qualified biologist, to protect them from harm. **BIO-4 Habitat Restoration Plan.** If federally or state-listed plants or non-listed special-status CRPR 1B and 2 plant populations identified during special status plant surveys (pursuant to Mitigation Measure BIO-2), cannot be avoided, and will be impacted by development, all impacts shall be mitigated by the applicant at a ratio not lower than 1:1 per acre of impact (and 1:1 per tree), and to be determined by the City (in coordination with CDFW and USFWS as and if applicable) for each species as a component of habitat	

Impact Statement	Mitigation Measure(s)	Residual Impact
	restoration. A qualified biologist shall prepare and submit a restoration plan to the City for review and approval prior to City approval of project plans. (Note: if a federally and/or state-listed plant species will be impacted, the restoration plan shall be submitted to the USFWS and/or CDFW for review, and federal and/or state take authorization may be required by these agencies.) The restoration plan shall include, at a minimum, the following components: 1. Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type). 2. Goal(s) of the compensatory mitigation project (type[s] and area[s]) of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type[s] to be established, restored, enhanced, and/or preserved). 3. Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions, and values). 4. Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan). 5. Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule). 6. Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports). 7. Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type or other industry standards as determined by a qualified restoration specialist. 8. An adaptive management program and remedial measures to address any shortcomings in meeting success criteria. 9. Notification of completion of compensatory mitigation and agency confirmation. 10. Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism). 11. All nursery plants used in restoration shall be inspected for sudden oak death. **BIO-5 Endangered/Threatened Special-status Species Habitat Assessments and Protocol Surveys.** If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that suitable habitat may be present for federal or state listed, candidate, or proposed species, protocol habitat assessments/surveys shall be completed in accordance with current CDFW and/or USFWS protocols prior to issuance of any construction permits.	

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	If, through consultation with the CDFW and/or USFWS, it is determined that protocol habitat assessments/surveys are not required, the applicant shall complete and document this consultation and submit it to the City prior to issuance of any construction permits. Each protocol has different survey and timing requirements. The applicant shall be responsible for ensuring they understand the protocol requirements and shall hire a qualified biologist to conduct protocol surveys. (Note: if a federally and/or state-listed wildlife species will be impacted, federal and/or state take authorization may be required by USFWS and CDFW.) **BIO-6 Endangered/Threatened Animal Species Avoidance and Minimization.** The following measures shall be applied to impacted aquatic and/or terrestrial animal species identified by the project-specific Biological Resources Screening and Assessment required under Mitigation Measure BIO-1. 1. Ground disturbance shall be limited to the minimum necessary to complete the project. A qualified biologist shall flag the project limits of disturbance. Areas of special biological concern within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed between said area and the limits of disturbance. 2. All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species. Any work outside these dates would require project-specific approval from the City and may be subject to regulatory agency approval. 3. All projects occurring within or adjacent to sensitive habitats that may support federally and/or state-listed endangered/threatened species shall have a CDFW- and/or USFWS-approved biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, said biologist shall conduct daily pre-activity clearance surveys for endangered/threatened species. Alternatively, and upon approval of the CDFW and/or USFWS, said biologist may conduct site inspections at a minimum of once per week to ensure all prescribed avoidance and minimization measures are fully implemented. 4. No endangered/threatened species shall be captured and relocated without express permission from the CDFW and/or USFWS. 5. If at any time during project construction an endangered/threatened species enters the construction site or otherwise may be impacted by the project, all project activities shall cease. A CDFW/USFWS-approved biologist shall document the occurrence and consult with the CDFW and USFWS, as appropriate, to determine whether it was safe for project activities to resume.	

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	6. For all work occurring in areas where endangered/threatened species may be present and are at risk of entering the project site during construction, the applicant shall install exclusion fencing along the project boundaries prior to start of construction (including staging and mobilization). The placement of the fence shall be at the discretion of the CDFW/USFWS-approved biologist. This fence shall consist of solid silt fencing placed at a minimum of three feet above grade and two feet below grade and shall be attached to wooden stakes placed at intervals of not more than five feet. The applicant shall inspect the fence weekly and following rain events and high wind events and shall be maintained in good working condition until all construction activities are complete. 7. All vehicle maintenance/fueling/staging shall occur not less than 100 feet from any riparian habitat or water body, including seasonal wetland features. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies. 8. No equipment shall be permitted to enter wetted portions of any affected drainage channel or wetland. 9. At the end of each workday, excavations shall be secured with a cover or a ramp provided to prevent wildlife entrapment. 10. All trenches, pipes, culverts, or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. 11. Considering the potential for the project to impact federally and state-listed species and their habitat, the City shall contact CDFW and USFWS to identify mitigation banks within Napa County during project development. If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that impacts to federally and state threatened or endangered species habitat are expected, City and/or applicant shall explore species-appropriate mitigation bank(s) servicing the region for purchase of mitigation credits. 12. Prior to grading and construction in natural areas of containing suitable upland habitat, a qualified biologist shall conduct a preconstruction survey as determined necessary during the biological analysis (Mitigation Measure BIO-1) . The survey should include a transect survey over the entire project disturbance footprint (including access and staging areas), and mapping of suitable habitat features, such as burrows, that are potentially suitable for listed species. If any listed species are detected, no work shall be conducted until the individual(s) leaves the site of their own accord, unless federal and/or state “take” authorization has been issued for relocation. Typical preconstruction survey procedures, such as burrow scoping and burrow collapse, cannot be conducted without federal and state permits. If any life stage of listed species are found within the survey area, the City and/or applicant shall consult with the	

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	USFWS and CDFW to determine the appropriate course of action to comply with the FESA and CESA, if permits are not already in place at the time of construction. **BIO-7: Pre-Construction Bird Surveys, Avoidance, and Notification.** For all future development under the 2040 General Plan, construction activities initiated during the bird nesting season (February 1 – September 15), involving removal of vegetation (e.g. trees and shrubs), abandoned structures, or other nesting bird habitat, a pre-construction nesting bird survey shall be conducted no more than 5 days prior to initiation of ground disturbance and vegetation removal. The nesting bird pre-construction survey shall be conducted on foot and shall include a buffer around the construction site at a distance determined by a qualified biologist, including staging and storage areas. The minimum survey radii surrounding the work area shall be the following: 250 feet for non-raptors and 1,000 feet for raptors. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in the American Canyon region. If construction lapses for seven days or longer, the qualified biologist shall conduct another focused survey before project activities are reinitiated. If nests are found, an avoidance buffer shall be determined by the biologist dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site. The qualified biologist shall observe the active nest to establish a behavioral baseline of the adults and nestlings, if present. The qualified biologist shall continuously monitor the active nests to detect signs of disturbance and behavioral change as a result of construction impacts, such as noise, vibration, odors, or worker/equipment motion. If signs of disturbance and behavioral changes are observed, the qualified biologist shall cease work causing those changes and may contact CDFW or USFWS for guidance. The buffer shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified of the buffer zone as an “Ecologically Sensitive Area” and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A report summarizing the pre-construction survey(s) shall be prepared by a qualified biologist and shall be submitted to the City prior to the commencement of construction activities. Project site plans shall include a statement acknowledging compliance with the federal MBTA and California Fish and Game Code that includes avoidance of active bird nests and identification of Best Management Practices to avoid impacts to active nests, including checking for nests prior to construction activities during February 1 to September 15, and	

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	what to do if an active nest is found so that the nest is not inadvertently impacted during grading or construction activities. **BIO-8 Roosting Bat Surveys and Avoidance Prior to Removal.** For all future development under the 2040 General Plan that will require the removal of large trees (greater than 20 inches in diameter at five feet from the ground), abandoned buildings, bridges, or other suitable roosting structure identified during the Biological Resources Screening and Assessment (Mitigation Measure BIO-1), prior to tree and/or structure removal, a qualified biologist shall conduct a focused survey of all trees and structures to be removed or impacted by construction activities to determine whether active roosts of special-status bats are present on site. Tree or structure removal shall be planned for either the spring or the fall, and timed to ensure both suitable conditions for the detection of bats and adequate time for tree and/or structure removal to occur during seasonal periods of bat activity exclusive of the breeding season, as described below. Trees and/or structures containing suitable potential bat roost habitat features shall be clearly marked or identified. If no bat roosts are found, the results of the survey will be documented and submitted to the City within 30 days of the survey, after which no further action will be required. If roosts are present, the biologist shall prepare a site-specific roosting bat protection plan to be implemented by the contractor following the City's approval. Additionally, the qualified biologist shall determine compensatory mitigation for temporary or permanent habitat loss due to tree removal, in conjunction with CDFW. The plan shall incorporate the following guidance as appropriate: ▪ When possible, removal of trees/structures identified as suitable roosting habitat shall be conducted during seasonal periods of bat activity, including the following: Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than 0.5 inch of rainfall within 24 hours occurs. Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs. ▪ If a tree/structure must be removed during the breeding season and is identified as potentially containing a colonial maternity roost, then a qualified biologist shall conduct acoustic emergence surveys or implement other appropriate methods to further evaluate if the roost is an active maternity roost. Under the biologist's guidance, the contractor shall implement measures similar to or exceeding the following: If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure.	

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	If it is found that an active maternity roost of a colonial roosting species is present, the roost shall not be disturbed during the breeding season (April 15 to August 31). ▪ Tree removal procedures shall be implemented using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators or other heavy machinery) on day one. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed to not return to the roost that night. The remainder of the tree is removed on day two. ▪ Prior to the demolition of vacant structures within the project site, a qualified biologist shall conduct a focused habitat assessment of all structures to be demolished. The habitat assessment shall be conducted enough in advance to ensure the commencement of building demolition can be scheduled during seasonal periods of bat activity (see above), if required. If no signs of day roosting activity are observed, no further actions will be required. If bats or signs of day roosting by bats are observed, a qualified biologist will prepare specific recommendations such as partial dismantling to cause bats to abandon the roost, or humane eviction, both to be conducted during seasonal periods of bat activity, if required. ▪ If the qualified biologist determines a roost is used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultation with CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately. **BIO-9 Conduct Pre-construction Crotch's Bumblebee surveys and Implement Avoidance Measures.** If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that suitable habitat may be present for Crotch's bumble bee, a habitat assessment shall be performed by a qualified biologist knowledgeable and experienced with Crotch's bumblebee and the habitat in which they occur. If the biologist determines that suitable habitat for Crotch's bumblebee is present, a focused survey shall be performed during the species' active flight period for Crotch's bumblebee and peak blooming period of nectar and pollen sources (May 1 through July 31). The Crotch's bumblebee survey shall be conducted on foot and shall encompass the entirety of a project site and focus on areas that allow for the highest probability of detection, such as high abundance nectar or pollen sources and rodent burrows that may be used for breeding and nesting. If Crotch's bumblebee is determined to be present, the project proponent shall	

Impact Statement	Mitigation Measure(s)	Residual Impact
	map the locations of the observed bumblebee, areas of abundant nectar or pollen sources, and any active nesting sites. A report summarizing the results of the habitat assessment and focused survey (if required) shall be prepared by the qualified biologist and shall be submitted to the City prior to the commencement of construction activities. Further, consultation with the CDFW will be necessary in the event Crotch's bumblebee was observed within a project site and an Incidental Take Permit, in accordance with the California Endangered Species Act, may be required prior to initiating any ground disturbance on the site. If Crotch's bumble are not listed and no longer candidates for listing at the time of project implementation, this mitigation measure would not be required.	
Impact BIO-2. Development and mobility improvements facilitated by the project would be subject to adopted city regulations to minimize impacts to riparian habitat, sensitive natural communities, and wetlands. Compliance with the NPDES construction general permit, ms4 storm water permit, American Canyon municipal code, and proposed policies in the 2040 general plan would ensure potential impacts to riparian habitat, sensitive natural communities, and wetlands would be less than significant.	No mitigation is required.	Less than Significant
Impact BIO-3. Implementation of the project would not substantially impede the movement of native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors after implementation of proposed policies in the 2040 general plan and compliance with the American Canyon municipal code.	No mitigation is required.	Less than Significant
Impact BIO-4. The project would implement proposed policies designed to protect biological resources. Development and mobility improvements facilitated by the project would be required to adhere to these policies, as well as American Canyon municipal code requirements to protect biological resources. Therefore, this impact would be less than significant.	No mitigation is required.	Less than Significant

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Impact BIO-5. Implementation of the project would not conflict with the provision of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. No impact would occur.	No mitigation is required.	No Impact
Cultural Resources		
Impact CUL-1. Development facilitated by the project could adversely affect previously unidentified historic-period resources. Impacts to historic-period resources would be less than significant with mitigation.	**CUL-1 Historical Built Environment.** Prior to project approval, the applicant shall submit a report to the City that identifies any historic-age features (i.e., structures over 45 years of age) proposed to be altered or demolished. If historical-age features are present, the applicant shall submit a historical resources evaluation to the City prepared in areas that contains buildings, structures, objects, sites, landscape/site plans, or other features that are 45 years of age or older, by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualifications Standards (PQS) in architectural history or history (36 CFR Part 61). The evaluation shall include an intensive-level evaluation, in accordance with the guidelines and best practices meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the City for review and approval. If historical resources are identified through the survey and evaluation, efforts shall be made by the applicant to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). The applicant shall submit a report to the City that identifies and specifies the treatment of character-defining features and construction activities, and demonstrates how the project complies with the Standards and avoids the substantial adverse change in the significance of the historical resource as defined by CEQA Guidelines Section 15064.5(b). The report shall be prepared by an architectural historian or historical architect meeting the PQS as defined by 36 CFR Part 61 and provided to the City for review and concurrence prior to project approval.	Less than Significant with Mitigation
Impact CUL-2. Development facilitated by the project could adversely affect previously unidentified archaeological resources. Impacts would be less than significant with mitigation**.**	**CUL-2 Archaeological Resources Assessment.** Prior to project approval of a project that involves ground disturbance activities (that may include but are not limited to, pavement removal, potholing, grubbing, tree removal, and grading), the applicant shall submit to the City an archaeological resources assessment prepared by a qualified archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in either prehistoric or historic archaeology. Assessments shall include a CHRIS records search at the NWIC and a SLF Search from the NAHC. The records searches shall characterize the results of previous cultural resource surveys and disclose any cultural resources that have been recorded and/or evaluated in and around the development site. A qualified professional	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	shall conduct a Phase I pedestrian survey for those projects that include undeveloped areas to locate any surface cultural materials. If the Phase I archaeological survey identifies resources that may be affected, the applicant shall also conduct Phase II testing and evaluation. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, the qualified professional shall identify appropriate site-specific mitigation measures in the Phase II evaluation. These measures may include, but would not be limited to, a Phase III data recovery program, avoidance, or other appropriate actions to be determined by a qualified archaeologist. If significant archaeological resources cannot be avoided, impacts may be reduced to less than significant level by filling on top of the sites rather than cutting into the cultural deposits. Alternatively, and/or in addition, a data collection program may be warranted, including mapping the location of artifacts, surface collection of artifacts, or excavation of the cultural deposit, to characterize the nature of the buried portions of sites. Curation of the excavated artifacts or samples would occur as specified by the archaeologist. The City shall review and approve the archaeological resources assessment prior to project approval. **CUL-3 Unanticipated Discoveries.** For projects whose Phase I archaeological survey identifies archaeological resources that may be affected, the applicant shall retain a qualified cultural resource specialist to monitor construction activities that involve ground-disturbing activities greater than 12 inches in depth and occur within 60 feet of a potentially significant cultural resource. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as excavating the cultural deposit to fully characterize its extent and collecting and curating artifacts may be warranted to mitigate any significant impacts to cultural resources. If archaeological resources of Native American origin are identified during construction, a qualified archaeologist will consult with the City to begin Native American consultation procedures. Periodic reports of the find and subsequent evaluations shall be submitted to the City during construction.	
Impact CUL-3. Development facilitated by the project could result in damage to or destruction of human burials. Impacts would be less than significant through adherence to existing regulations and with mitigation.	**CUL-4 Human Remains.** In the event of an accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:	Less than Significant with Mitigation

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	1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: ▪ The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. ▪ The descendant identified fails to make a recommendation. ▪ The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains: ▪ When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may each develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.	
Greenhouse Gas Emissions		
Impact GHG-1. Development facilitated by the project would make progress towards achieving state goals but would not necessarily meet state 2030 or 2045 goals. Mitigation measures ghg-2 and ghg-3 would require implementation of CEQA GHG thresholds and a climate	**GHG-1 Construction GHG BMPs.** Prior to the issuance of any grading permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating implementation of construction Best Management Practices (BMPs). Measures may include but are not limited to:	Significant and Unavoidable

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action plan (cap); however, development facilitated by the project would not meet the 2030 or 2045 goals until the cap is updated and adopted. This impact would be significant and unavoidable**.**	▪ At least 15 percent of the construction fleet for each project phase shall be alternatively fueled or electric. ▪ At least 10 percent of building materials used for project construction shall be sourced from local suppliers. ▪ At least 65 percent of construction and demolition waste materials shall be recycled or reused. ▪ At least one contractor that has a business location in American Canyon shall be contracted for project construction. ▪ All construction contracts shall include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) using during construction be electrically powered. ▪ Architectural coatings used for project construction shall be "Low-VOC," containing no greater than 50 grams of volatile organic compounds (VOC) per liter of product. ▪ Project construction shall prohibit the use of generators and shall establish grid power connection to electrical equipment needs. ▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure [ATCM] Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions shall be provided for construction workers at all access points. ▪ All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. ▪ The prime construction contractor shall post a publicly visible sign with their telephone number and contractor to contact. The construction contractor shall take corrective action within 48 hours. The BAAQMD's phone number shall also be identified and visible to ensure compliance with applicable regulations. **GHG-2 Adopt and Implement a CEQA GHG Emissions Threshold.** The City shall include and implement a new 2040 General Plan policy under the Environment Element to prepare, adopt, and implement a CEQA GHG Emissions threshold of significance. The City shall adopt the CEQA GHG Emissions threshold of significance by the end of 2025 for use in future CEQA GHG emissions analyses through 2030. In addition, upon completion of future CAP updates and as necessary, the City shall update the CEQA GHG Emissions threshold of significance and American Canyon CEQA GHG Checklist to be consistent with each CAP update. **GHG-3 Adopt American Canyon CAP to Meet the State's 2030 and 2045 GHG Emissions Goals.** The City shall draft and adopt the American Canyon qualified CAP by the end of 2025	

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	to outline how American Canyon will meet the State's 2030 goal of 40 percent below 1990 emissions levels and 2045 goal of carbon neutrality. Implementation measures in the updated qualified CAP to achieve the 2030 and 2045 goals may include, but are not limited to, the following: Develop and adopt Zero Net Energy requirements for new and remodeled residential and non-residential development; ▪ Develop and adopt a building electrification ordinance for existing and proposed structures; ▪ Expand charging infrastructure and parking for electric vehicles; ▪ Implement carbon sequestration by expanding the urban forest, participating in soil-based or compost application sequestration initiatives, supporting regional open space protection, and/or incentivizing rooftop gardens; and ▪ Implement policies and measures included in the California 2022 Climate Change Scoping Plan, such as mobile source strategies for increasing clean transit options and zero emissions vehicles by providing electric vehicle charging stations.	
Land Use and Planning		
Impact LU-1. The project would not physically divide an established community and there would be no impact**.**	No mitigation is required.	No Impact
Impact LU-2. The project would not result in a significant environmental impact due to a conflict with a plan adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant**.**	Mitigation measures AES-1, AES-2, AQ-1 through AQ-4, BIO-1, BIO-2, CUL-1 through CUL-3, GHG-1 through GHG-3, NOI-1 through NOI-3, PAL-1, WF-1, and WF-2.	Less than Significant

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Noise		
Impact NOI-1. Construction of development facilitated by the project would temporarily increase noise levels, potentially affecting nearby noise-sensitive land uses. Development facilitated by the project would also introduce new noise sources and contribute to increases in operational noise. The continued regulation of noise, consistent with the city municipal code and implementation of proposed policies in the 2040 general plan would minimize impacts to adjacent land uses. However, construction and operational traffic noise could exceed standards even after implementation of mitigation. This impact would be significant and unavoidable.	**NOI-1 Conduct Construction Noise Analysis.** The City shall review future developments within 1,000 feet of a sensitive receiver, and where applicable, require the following feasible measures as standard conditions of approval to reduce construction noise levels below a level of significance: ▪ **Mufflers.** During excavation and grading construction phases, all construction equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards. ▪ **Stationary Equipment.** All stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers. ▪ **Equipment Staging Areas.** Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receivers. ▪ **Smart Back-up Alarms.** Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction in compliance with applicable safety laws and regulations. ▪ **Electrically-Powered Tools and Facilities.** Electrical power shall be used to run air compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities, where feasible. ▪ **Noise Disturbance Coordinator.** The project applicant shall designate a "noise disturbance coordinator" responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint and shall require that reasonable measures be implemented to correct the problem. A telephone number for the disturbance coordinator and the City shall be posted at the construction site. ▪ **Temporary Noise Barriers.** Erect temporary noise barriers, where feasible, when construction noise is predicted to exceed the City's construction standards and when the anticipated construction duration is greater than is typical (e.g., two years or greater). Temporary noise barriers shall be constructed with solid materials (e.g., wood) with a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. If a sound blanket is used, barriers shall be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical	Significant and Unavoidable.

Impact Statement	Mitigation Measure(s)	Residual Impact
	blanket, curtain or equivalent absorptive material rated sound transmission class (STC) 32 or higher. **NOI-2 Implement Roadway Vehicle Noise Reduction Measures.** The City shall install "quiet pavement" roadway improvements, such as rubberized asphalt or open-grade asphalt concrete overlays along impacted roadway segments (American Canyon Road west of I-80 and Newell Drive north of American Canyon Road). The program may be funded by "fair share" developer contributions for proposed projects along impacted roadways to pay for the "quiet pavement" roadway improvements.	
Impact NOI-2. Construction of development facilitated by the project would temporarily generate groundborne vibration and noise, potentially affecting nearby land uses. This impact would be less than significant with mitigation. Operation of development facilitated by the project would not result in substantial groundborne vibration and noise and this impact would be less than significant.	**NOI-3 Construction Vibration Control Plan.** Prior to issuance of a building permit for a project that includes the following, the project applicant shall prepare a groundborne noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these construction activities: ▪ Pile driving within: ▫ 135 feet of fragile structures such as historical resources; ▫ 100 feet of non-engineered timber and masonry buildings (e.g., most residential buildings); or ▫ 75 feet of engineered concrete and masonry (no plaster); ▪ A vibratory roller within: ▫ 40 feet of fragile historical resources; or ▫ 25 feet of any other structure ▪ A dozer or other large earthmoving equipment within: ▫ 20 feet for a fragile historical structure; or ▫ 15 feet of any other structure The noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed FTA architectural damage thresholds (e.g., 0.12 in/sec PPV for fragile or historical resources, 0.2 in/sec PPV for non-engineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses such as drilling piles as opposed to pile driving, static rollers as opposed to vibratory rollers, and lower horsepower earthmoving equipment shall be used. If necessary, construction vibration monitoring shall be conducted to ensure FTA vibration thresholds are not exceeded.	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact NOI-3. Development facilitated by the project would not result in a significant increase in airport or airstrip activity. The continued regulation of airport noise consistent with state and federal regulations, the implementation of proposed policies in the 2040 general plan, and compliance with napa county airport land use compatibility plan would minimize disturbance to people residing or working within proximity of the napa county airport. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Paleontological Resources		
Impact PAL-1.the project has the potential to result in impacts to paleontological resources. Impacts would be less than significant with mitigation incorporated**.**	**PAL-1 Retention of a Qualified Professional Paleontologist.** Prior to submittal of a discretionary development application in areas underlain by high or undetermined sensitivity geologic units (i.e., Pleistocene alluvial fan deposits; Markley Sandstone; Jameson Shale Member of Markley Sandstone; Domengine Sandstone; and sandstone and shale of the Great Valley Complex), the City shall require a Qualified Professional Paleontologist [as defined by the Society of Vertebrate Paleontology (SVP) (2010)] be retained to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards. If necessary, the Qualified Professional Paleontologist shall recommend mitigation measures to reduce potential impacts to paleontological resources to a less than significant level. The City shall review and approve the Qualified Professional Paleontologist's findings and recommendation. All recommendations shall be incorporated into the project plans prior to issuance of a grading permit**.**	Less than Significant with Mitigation
Population and Housing		
Impact POP-1. Implementation of the project would facilitate the construction of new housing in American Canyon and would increase population. The 2040 general plan would accommodate and plan for population growth and includes policies to manage growth and development. Impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact POP-2. Implementation of the project would not result in the displacement of substantial numbers of housing or people. The project would facilitate the development of new housing in accordance with state and local housing requirements, while preserving existing residential neighborhoods. Impacts would be less than significant**.**	No mitigation is required.	Less than Significant
Public Services and Recreation		
Impact PS-1. Development facilitated by the project would increase the population in the planning area, which would result in an increase in demand for fire, police, and libraries. Compliance with proposed policies in the 2040 general plan and continued environmental review would minimize adverse environmental effects associated with the provision of new or physically altered fire, police, or library facilities. These impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact PS-2. Future development facilitated by the project would be required to pay impact fees that would provide funding for the provision or expansion of new school facilities, pursuant to government code section 65995(b). Impacts from the project would be offset by the payment of impact fees and impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact PS-3. Development facilitated by the project would increase the population in the planning area, which would increase the use of parks and recreational facilities. Adherence to American Canyon municipal code regulations and proposed 2040 general plan policies would ensure impacts related to parks and recreational facilities would be less than significant.	No mitigation is required	Less than Significant
Transportation		
Impact TRA-1. The project would not conflict with a program, plan, ordinance or policy addressing the circulation system and impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact TRA-2. The future (2040) citywide rate of Residential VMT per Capita with the proposed 2040 General Plan would be higher than the significance threshold. The project would therefore conflict with or be inconsistent with CEQA Guidelines 15064.3(b) and impacts would be significant.	No feasible mitigation measures beyond policies included in the Mobility Element of the General Plan.	Significant and Unavoidable
Impact TRA-3. The project would not substantially increase hazards due to a geometric design feature and impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact TRA-4. The project would not result in inadequate emergency access and impacts would be less than significant**.**	No mitigation is required.	Less than Significant
Tribal Cultural Resources		
Impact TCR-1. The project could adversely impact tribal cultural resources. Impacts would be less than significant through consultation conducted pursuant to AB 52.	No mitigation is required.	Less than Significant
Utilities and Service Systems		
Impact UTL-1. Development facilitated by the project would increase demand for water, wastewater, electric power, telecommunications, and stormwater drainage; however, no additional relocation or construction of utility services would be required to service the project beyond connections to existing utilities. The project would result in a minimal increase in natural gas demand. Impacts would be less than significant**.**	No mitigation is required.	Less than Significant
Impact UTL-2. The project would increase demand for water. Water supply for the project would be provided by the City of American Canyon from existing and planned supply sources including imported water and supplemental water purchased from the City of Vallejo as well as locally developed recycled water. Potential impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact UTL-3. Development facilitated by the project would increase demand for wastewater treatment. The timing, intensity, and location of an expansion of wastewater treatment facilities is unknown at this time, but an expansion would require additional ceqa review and compliance with existing building and zoning codes. As such, impacts related to expansion of wastewater treatment facilities as a result of the 2040 general plan would be less than significant.	No mitigation is required.	Less than Significant
Impact UTL-4. The project would not generate solid waste in excess of state or local standards, would not exceed the capacity of local infrastructure, and would not impair the attainment of solid waste reduction goals. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Wildfire		
Impact W-1. The 2040 general plan proposed policies address emergency access, response, and preparedness. Therefore, the project would not impair an emergency response plan or emergency evacuation plan. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact W-2. The project could expose people and structures to wildfire risk; however, wildfire risks would be reduced with mitigation and impacts would be less than significant.	**WF-1 Wildfire Risk Reduction During Construction.** For projects located in proximity to agricultural or undeveloped areas (including hillside areas) with flammable vegetation, prior to issuance of a grading or building permit, whichever occurs first, the applicant shall submit documentation that they will implement the following measures to reduce risk of loss, injury, or death from wildfire during construction: 1. Construction equipment powered by internal combustion engines shall be equipped with spark arresters. The spark arresters shall be maintained pursuant to manufacturer recommendations to ensure adequate performance. 2. Certain project construction activities with potential to ignite wildfires during red-flag warnings issued by the National Weather Service for the project site location shall be prohibited. Example activities that shall be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings, mowing, chain sawing, chipping, the use of any equipment with the potential to introduce sparks. 3. Fire extinguishers shall be required to be onsite during construction. Construction vehicles shall be equipped with at least one (1) functioning fire extinguisher and one (1) shovel or McLeod firefighting tool. Heavy machinery or equipment (e.g., tractors,	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	grinders, tree chippers, excavators, bulldozers) shall be equipped with one (1) shovel, McLeod firefighting tool, or Pulaski; one (1) functioning fire extinguisher; and at least one 5-gallon backpack pump or larger capacity water (or CAFS) pump/delivery system.. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher. **WF-2 Fire Resistant Vegetation and Landscaping.** For projects located in proximity to agricultural or undeveloped areas (including hillside areas) with flammable vegetation, prior to issuance of a building permit for development located within or adjacent to a VHFHSZ, the applicant shall submit landscape plans prepared by a registered Landscape Architect that are consistent with applicable Building and Fire Codes.	
Impact W-3. The project would include the installation of utilities and future mobility improvements; however, compliance with the HMP and proposed policies in the 2040 general plan would reduce impacts to less than significant.	No mitigation is required.	Less than Significant
Impact W-4. The planning area is relatively flat and compliance with proposed policies in the 2040 general plan and the American Canyon municipal code would ensure that risks from flooding or landslides due to a wildfire would be less than significant.	No mitigation is required	Less than Significant

ATTACHMENT 2

Table 6-1 Comparison of Alternatives

	Proposed Project	Alternative 1: No Project	Alternative 2: Watson Ranch Natural Alternative	Alternative 3: Limited Growth
Total Allowable Dwelling Units Under[1] Alternative	3,204	3,204	3,975	2,971
Change in Total Maximum Dwelling Units Compared to Proposed Project	N/A	-175	+596	-408
Total Additional Residents Under Alternative[1]	10,734	10,990	12,790	10,190
Change in Population Potential Compared to Proposed Project (Number of Residents)	N/A	-600	+2,056	-1,400
Total Additional Non-Residential Square Footage Under Alternative[2]	5,704,000	5,704,000	5,704,000	5,639,000
Change in Total Additional Non-Residential Square Footage Compared to Proposed Project	N/A	N/A	N/A	-65,000
Updated Policies in General Plan	Yes	No	Yes	Yes

[1] The estimates for additional dwelling units, residences, and non-residential square footage are a conservative estimate based on the maximum buildout scenario. Overall, maximum growth will be dependent on multiple factors, including local economic conditions, market demand, and other financing considerations. These numbers are not meant to be a predictor of future growth.

[2] Non-residential square footage in Alternative 2 was assumed to be the same as the existing General Plan and only residential densities were changed.



American Canyon 2040 General Plan Update

Draft Environmental Impact Report

SCH# 2022070038

prepared by

City of American Canyon
Community Development Department
4381 Broadway Street Suite 201
American Canyon, California 94503
Contact: Brent Cooper, Community Development Director

prepared with the assistance of

Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612

September 2024

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Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed City of American Canyon 2040 Technical General Plan Update ("project"). This executive summary summarizes the characteristics of the proposed project, EIR alternatives, and the environmental impacts and mitigation measures associated with implementation of the proposed project.

Project Synopsis

Lead Agency Contact Person

Brent Cooper, AICP, Community Development Director
City of America Canyon Planning Department
4381 Broadway Street Suite 201, American Canyon, CA 94503
bcooper@cityofamericancanyon.org

Project Description

This EIR has been prepared to examine the potential environmental effects of the proposed project. The following is a summary of the full project description, which can be found in Chapter 2, *Project Description*.

The project is an update to the City's current General Plan, which includes the following chapters: Introduction, Land Use Element, Housing Element, Economic Development Element, Circulation Element, Utilities Element, Public Services and Facilities Element, Parks and Recreation Element, Natural and Historic & Cultural Resources Element, Geology Element, Flood Hazards Element, and Noise Element. The project establishes the City's vision for future development through the horizon year of 2040. The project will serve as the City's primary guide for future land use and development decisions in a way that meets the community needs and priorities while serving as a key tool for influencing and improving the quality of life for residents and businesses. As such, it serves as the "blueprint" for future development and conservation of a community. The 2040 General Plan Update will help the City plan for important community issues, such as community growth; health, housing, mobility, and infrastructure needs; climate change; and environmental protection. It will also set the stage for future social, physical, and economic development of the city.

Project Objectives

The Technical 2040 General Plan will serve as a long-term framework for future growth and development, represents the community's view of its future, and contains the goals and policies upon with the City Council, Planning Commission, and the entire community will base land use and resource decisions. The Technical 2040 General Plan will provide a contemporary plan that will guide American Canyon though the next 20 years. The primary objective of this project is to update the existing American Canyon General Plan in order for it to be compliant with State law.

The Technical 2040 General Plan would implement the vision of the existing General Plan. The City identifies the following three fundamental roles of the City:

1. The City should be home for a residential population, internally accommodating a sufficient range of uses to support the needs of residents (including a mix of housing types, commercial services, entertainment, employment, recreation, education, health, religious, cultural facilities, transportation services, and open space). At the present time, many of these uses are located outside the City, which necessitates extensive travel by residents to access these services.
2. The City should be a center of employment and commerce for regional, as well as local residents. This will provide an opportunity to capitalize upon (1) the cluster of uses which have developed in the Green Island Industrial Park; (2) the proximity of the City to the Napa County Airport and Southern Pacific railroad, and (3) the relationship of the City to the agricultural and vineyard industries of Napa County.
3. The City can capture visitors to the Napa Valley by providing uses which capitalize on the unique environmental setting of the foothills, river valleys, and agriculture. Environmental educational facilities, such as wetlands interpretative centers, overnight camping and recreational vehicle facilities, river recreational facilities such as boating, golf courses, and hotel/motels and restaurants are representative of the range of uses which may be considered.

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed plan. Studied alternatives include the following three alternatives. Based on the alternatives analysis, Alternative 3 was determined to be the environmentally superior alternative.

- Alternative 1: No Project Alternative
- Alternative 2: Watson Ranch Natural Alternative
- Alternative 3: Limited Growth

Refer to Chapter 6, *Alternatives*, for the complete EIR alternatives analysis.

Areas of Known Controversy

The EIR scoping process did not identify areas of known controversy for the proposed plan. Public responses to the Notice of Preparation of a Draft EIR as well as public input received at the EIR scoping meeting held by the City are summarized in Chapter 1.0, *Introduction*.

Issues to be Resolved

There are no CEQA-related issues to be resolved at this time.

Issues Not Studied in Detail in the EIR

Impacts related to Agriculture and Forestry Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, and Mineral Resources were found to be less than significant. Discussion of these impacts is included in Chapter 4.15, *Effects Found Not to be Significant,* of the EIR.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts, mitigation measures, and residual impacts (the impact after application of mitigation, if required) associated with implementation of the proposed project. Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the proposed plan is approved pursuant to Section15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed plan would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact Statement	Mitigation Measure(s)	Residual Impact
Aesthetics		
Impact AES-1. The project would not have a substantial adverse effect on a scenic vista, including views of hills, and impacts would be less than significant**.**	No mitigation is required	Less than Significant
Impact AES-2. The city of American Canyon does not have a designated state scenic highway and the project would not damage scenic resources within a state scenic highway. No impact would occur.	No mitigation is required	No Impact
Impact AES-3. The project would implement policies that would require development of objective design standards for future development. The project would not conflict with applicable zoning and other regulations governing scenic quality and this impact would be less than significant.	No mitigation is required	Less than Significant
Impact AES-4. Construction and operation of future development facilitated by the project could create new sources of light or glare that could adversely affect the visual environment. Impacts would be less than significant with mitigation.	**AES-1 Construction Lighting Plan.** Prior to nighttime construction, if needed for a particular project, project applicants shall submit a construction lighting plan to the City for review and approval. The construction lighting plan shall ensure that the minimum amount of lighting is used to meet safety requirements and ensure no spillover occurs to nearby sensitive uses. All lighting shall be directed downward and away from surrounding land uses**.** **AES-2 Operational Lighting Plan.** Prior to discretionary project approval, the project applicant shall prepare and submit a photometric plan to the City for review and approval which demonstrates that all exterior light fixtures will be directed downward or employ full cut-off fixtures to prevent light spillage. The approved plan shall be incorporated into project design plans.	Less than Significant with Mitigation
Air Quality		
Impact AQ-1. The project would be consistent with the BAAQMD's 2017 Clean Air Plan. Impacts would be less than significant.	No mitigation is required	Less than Significant
Impact AQ-2. The project would not result in a cumulatively considerable net increase of criteria pollutants during construction or operations. Impacts would be less than significant.	No mitigation is required	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact AQ-3. Construction activities for projects lasting longer than two months or located within 1,000 feet of sensitive receptors could expose sensitive receptors to substantial pollutant concentrations. Implementation of the project may also expose sensitive receptors to operational sources of toxic air contaminants. Impacts would be less than significant with mitigation.	**AQ-1 Conduct Construction Health Risk Assessment.** Prior to issuance of a grading or building permit, whichever occurs first, the applicant shall submit to the City a construction health risk assessment (HRA) in accordance with BAAQMD recommendations for any development project that has at least one the following characteristics: ▪ The project is located within 1,000 feet of sensitive receptors. ▪ Project construction would last longer than two months. ▪ Project construction would not utilize equipment rated USEPA Tier 4 (for equipment of 50 horsepower or more); construction equipment fitted with Level 3 Diesel Particulate Filters (for all equipment of 50 horsepower or more); or alternative fuel construction equipment. If the HRA determines that construction will exceed BAAQMD significance thresholds, the HRA shall provide mitigation measures to reduce the impact to less than significant, including but not limited to requiring the use of Tier 4 engines, Level 3 Diesel Particulate Filters, and/or alternative fuel construction equipment. **AQ-2 Reduce Operational Toxic Air Contaminants Near Sensitive Receptors.** For new sensitive receptors proposed within 500 feet of a major sources of TAC (high-volume roadways with 10,000 vehicles or more per day), the project applicant shall prepare an operational health risk assessment for the City's review and approval. If TAC exposure at new sensitive receptor sites would exceed BAAQMD health risk thresholds, require the project applicant include mechanical air filtration or other measures to reduce health risk exposure to acceptable levels. **AQ-3 Conduct Operational Health Risk Assessment.** Prior to permit approval for industrial, warehousing, or commercial land uses that would generate at least 100 diesel trucks per day or 40 or more trucks with diesel-powered transport refrigeration units per day, the applicant shall submit an operational health risk assessment (HRA) or submit proof that an HRA is not required in accordance with BAAQMD thresholds to the City for review and approval. If required by the City, the operational HRA shall be prepared in accordance with the Office of Environmental Health Hazard Assessment and BAAQMD requirements, and mitigated to an acceptable level. Typical measures to reduce risk impacts may include, but are not limited to: ▪ Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible. ▪ Electrifying warehousing docks. ▪ Truck Electric Vehicle (EV) Capable trailer spaces. ▪ Requiring use of newer equipment and/or vehicles. ▪ Restricting off-site truck travel through the creation of truck routes.	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	The operational HRA shall be provided to the City for review and concurrence prior to project approval.	
Impact AQ-4. The project would not create objectionable odors that could adversely affect a substantial number of people. Impacts related to odors would be less than significant with mitigation**.**	**AQ-4 Reduce Operational Odor Impacts.** Prior to discretionary approval by the City, if it is determined by the City that a development project has the potential to emit nuisance odors beyond the property line, the project applicant shall prepare an odor management plan and submit it to the City for review and approval. Facilities that have the potential to generate nuisance odors include, but are not limited to: ▪ Wastewater treatment plants ▪ Composting, green waste, or recycling facilities ▪ Fiberglass manufacturing facilities ▪ Painting/coating operations ▪ Large-capacity coffee roasters ▪ Food-processing facilities The odor management plan shall demonstrate compliance with the latest BAAQMD screening distances and guidelines. The odor management plan shall identify the best available control technologies for toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include but are not limited to scrubbers (i.e., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the documents prepared for the development project and/or incorporated into the project's site plan.	Less than Significant with Mitigation
Biological Resources		
Impact BIO-1. The project could have the potential to have an adverse impact on special status species. Implementation of federal, state, and local regulations and policies, as well as mitigation measures bio-1 and bio-2, would ensure development facilitated by the project would not have a substantial adverse effect on candidate, sensitive, or special status species. This impact would be less than significant with mitigation.	**BIO-1 Biological Resources Screening and Assessment. F**or projects proposed within undeveloped parcels, the City shall require project applicants to engage a qualified biologist (having the appropriate education and experience level) to perform a baseline Biological Resources Screening and Assessment to determine whether projects proposed within undeveloped parcels have any potential to impact special-status biological resources, inclusive of special-status plants and animals, sensitive vegetation communities (including vernal pools and other wetlands), and critical habitat. If it is determined that the project has no potential to impact biological resources, no further action is required. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct a project-specific biological analysis to document the existing biological resources within a project footprint plus a minimum buffer of 500 feet around the project footprint, as is feasible, and to determine the potential impacts to those resources. The project-specific biological analysis shall evaluate the potential for impacts to all biological resources including, but not limited to special-status species, nesting birds,	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	wildlife movement, sensitive plant communities, critical habitats, and other resources judged to be sensitive by local, state, and/or federal agencies. If the project would have the potential to impact these resources, the following mitigation measures (mitigation measures BIO-2 through BIO-8) shall be incorporated, as applicable, to reduce impacts to a less than significant level. Pending the results of the project-specific biological analysis, design alterations, further technical studies (e.g., protocol surveys) and consultations with the USFWS, CDFW, and/or other local, state, and federal agencies may be required. Note that specific surveys described in the mitigation measures below may be completed as part of the project-specific biological analysis where suitable habitat is present. **BIO-2 Special-status Plant Species Surveys.** If the project-specific Biological Resources Screening and Assessment (Mitigation Measure BIO-1) determines that there is potential for significant impacts to federally or state-listed plants or regional population level impacts to species with a CRPR of 1B or 2B from project development, a qualified biologist shall complete surveys for special-status plants prior to any vegetation removal, grubbing, or other construction activity (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species. All plant surveys shall be conducted by a qualified biologist during the blooming season prior to development permit approval. All special-status plant species identified on site shall be mapped onto a site-specific aerial photograph or topographic map with the use of Global Positioning System unit. Surveys shall be conducted in accordance with the most current protocols established by the CDFW, USFWS, and the local jurisdictions if said protocols exist. A report of the survey results shall be submitted to the City, and the CDFW and/or USFWS, as appropriate, for review and/or approval. **BIO-3 Special-status Plant Species Avoidance, Minimization, and Mitigation.** If federally and/or state-listed or CRPR 1B or 2 species are found during special-status plant surveys (pursuant to Mitigation Measure BIO-2), and would be directly impacted, or there would be a population-level impact to non-listed sensitive species, then the project shall be re-designed to avoid impacting those plant species, where feasible. Rare and listed plant occurrences that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits shall have bright orange protective fencing installed at least 30 feet beyond their extent, or other distance as approved by a qualified biologist, to protect them from harm. **BIO-4 Habitat Restoration Plan.** If federally or state-listed plants or non-listed special-status CRPR 1B and 2 plant populations identified during special status plant surveys (pursuant to Mitigation Measure BIO-2), cannot be avoided, and will be impacted by development, all impacts shall be mitigated by the applicant at a ratio not lower than 1:1 per acre of impact (and 1:1 per tree), and to be determined by the City (in coordination with CDFW and USFWS as and if applicable) for each species as a component of habitat	

Impact Statement	Mitigation Measure(s)	Residual Impact
	restoration. A qualified biologist shall prepare and submit a restoration plan to the City for review and approval prior to City approval of project plans. (Note: if a federally and/or state-listed plant species will be impacted, the restoration plan shall be submitted to the USFWS and/or CDFW for review, and federal and/or state take authorization may be required by these agencies.) The restoration plan shall include, at a minimum, the following components: 1. Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type). 2. Goal(s) of the compensatory mitigation project (type[s] and area[s]) of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type[s] to be established, restored, enhanced, and/or preserved). 3. Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions, and values). 4. Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan). 5. Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule). 6. Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports). 7. Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type or other industry standards as determined by a qualified restoration specialist. 8. An adaptive management program and remedial measures to address any shortcomings in meeting success criteria. 9. Notification of completion of compensatory mitigation and agency confirmation. 10. Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism). 11. All nursery plants used in restoration shall be inspected for sudden oak death. **BIO-5 Endangered/Threatened Special-status Species Habitat Assessments and Protocol Surveys.** If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that suitable habitat may be present for federal or state listed, candidate, or proposed species, protocol habitat assessments/surveys shall be completed in accordance with current CDFW and/or USFWS protocols prior to issuance of any construction permits.	

Impact Statement	Mitigation Measure(s)	Residual Impact
	If, through consultation with the CDFW and/or USFWS, it is determined that protocol habitat assessments/surveys are not required, the applicant shall complete and document this consultation and submit it to the City prior to issuance of any construction permits. Each protocol has different survey and timing requirements. The applicant shall be responsible for ensuring they understand the protocol requirements and shall hire a qualified biologist to conduct protocol surveys. (Note: if a federally and/or state-listed wildlife species will be impacted, federal and/or state take authorization may be required by USFWS and CDFW.) **BIO-6 Endangered/Threatened Animal Species Avoidance and Minimization.** The following measures shall be applied to impacted aquatic and/or terrestrial animal species identified by the project-specific Biological Resources Screening and Assessment required under Mitigation Measure BIO-1. 1. Ground disturbance shall be limited to the minimum necessary to complete the project. A qualified biologist shall flag the project limits of disturbance. Areas of special biological concern within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed between said area and the limits of disturbance. 2. All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species. Any work outside these dates would require project-specific approval from the City and may be subject to regulatory agency approval. 3. All projects occurring within or adjacent to sensitive habitats that may support federally and/or state-listed endangered/threatened species shall have a CDFW- and/or USFWS-approved biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, said biologist shall conduct daily pre-activity clearance surveys for endangered/threatened species. Alternatively, and upon approval of the CDFW and/or USFWS, said biologist may conduct site inspections at a minimum of once per week to ensure all prescribed avoidance and minimization measures are fully implemented. 4. No endangered/threatened species shall be captured and relocated without express permission from the CDFW and/or USFWS. 5. If at any time during project construction an endangered/threatened species enters the construction site or otherwise may be impacted by the project, all project activities shall cease. A CDFW/USFWS-approved biologist shall document the occurrence and consult with the CDFW and USFWS, as appropriate, to determine whether it was safe for project activities to resume.	

Impact Statement	Mitigation Measure(s)	Residual Impact
	6. For all work occurring in areas where endangered/threatened species may be present and are at risk of entering the project site during construction, the applicant shall install exclusion fencing along the project boundaries prior to start of construction (including staging and mobilization). The placement of the fence shall be at the discretion of the CDFW/USFWS-approved biologist. This fence shall consist of solid silt fencing placed at a minimum of three feet above grade and two feet below grade and shall be attached to wooden stakes placed at intervals of not more than five feet. The applicant shall inspect the fence weekly and following rain events and high wind events and shall be maintained in good working condition until all construction activities are complete. 7. All vehicle maintenance/fueling/staging shall occur not less than 100 feet from any riparian habitat or water body, including seasonal wetland features. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies. 8. No equipment shall be permitted to enter wetted portions of any affected drainage channel or wetland. 9. At the end of each workday, excavations shall be secured with a cover or a ramp provided to prevent wildlife entrapment. 10. All trenches, pipes, culverts, or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. 11. Considering the potential for the project to impact federally and state-listed species and their habitat, the City shall contact CDFW and USFWS to identify mitigation banks within Napa County during project development. If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that impacts to federally and state threatened or endangered species habitat are expected, City and/or applicant shall explore species-appropriate mitigation bank(s) servicing the region for purchase of mitigation credits. 12. Prior to grading and construction in natural areas of containing suitable upland habitat, a qualified biologist shall conduct a preconstruction survey as determined necessary during the biological analysis (Mitigation Measure BIO-1) . The survey should include a transect survey over the entire project disturbance footprint (including access and staging areas), and mapping of suitable habitat features, such as burrows, that are potentially suitable for listed species. If any listed species are detected, no work shall be conducted until the individual(s) leaves the site of their own accord, unless federal and/or state “take” authorization has been issued for relocation. Typical preconstruction survey procedures, such as burrow scoping and burrow collapse, cannot be conducted without federal and state permits. If any life stage of listed species are found within the survey area, the City and/or applicant shall consult with the	

Impact Statement	Mitigation Measure(s)	Residual Impact
	USFWS and CDFW to determine the appropriate course of action to comply with the FESA and CESA, if permits are not already in place at the time of construction. **BIO-7: Pre-Construction Bird Surveys, Avoidance, and Notification.** For all future development under the 2040 General Plan, construction activities initiated during the bird nesting season (February 1 – September 15), involving removal of vegetation (e.g. trees and shrubs), abandoned structures, or other nesting bird habitat, a pre-construction nesting bird survey shall be conducted no more than 5 days prior to initiation of ground disturbance and vegetation removal. The nesting bird pre-construction survey shall be conducted on foot and shall include a buffer around the construction site at a distance determined by a qualified biologist, including staging and storage areas. The minimum survey radii surrounding the work area shall be the following: 250 feet for non-raptors and 1,000 feet for raptors. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in the American Canyon region. If construction lapses for seven days or longer, the qualified biologist shall conduct another focused survey before project activities are reinitiated. If nests are found, an avoidance buffer shall be determined by the biologist dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site. The qualified biologist shall observe the active nest to establish a behavioral baseline of the adults and nestlings, if present. The qualified biologist shall continuously monitor the active nests to detect signs of disturbance and behavioral change as a result of construction impacts, such as noise, vibration, odors, or worker/equipment motion. If signs of disturbance and behavioral changes are observed, the qualified biologist shall cease work causing those changes and may contact CDFW or USFWS for guidance. The buffer shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified of the buffer zone as an “Ecologically Sensitive Area” and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A report summarizing the pre-construction survey(s) shall be prepared by a qualified biologist and shall be submitted to the City prior to the commencement of construction activities. Project site plans shall include a statement acknowledging compliance with the federal MBTA and California Fish and Game Code that includes avoidance of active bird nests and identification of Best Management Practices to avoid impacts to active nests, including checking for nests prior to construction activities during February 1 to September 15, and	

Impact Statement	Mitigation Measure(s)	Residual Impact
	what to do if an active nest is found so that the nest is not inadvertently impacted during grading or construction activities. **BIO-8 Roosting Bat Surveys and Avoidance Prior to Removal.** For all future development under the 2040 General Plan that will require the removal of large trees (greater than 20 inches in diameter at five feet from the ground), abandoned buildings, bridges, or other suitable roosting structure identified during the Biological Resources Screening and Assessment (Mitigation Measure BIO-1), prior to tree and/or structure removal, a qualified biologist shall conduct a focused survey of all trees and structures to be removed or impacted by construction activities to determine whether active roosts of special-status bats are present on site. Tree or structure removal shall be planned for either the spring or the fall, and timed to ensure both suitable conditions for the detection of bats and adequate time for tree and/or structure removal to occur during seasonal periods of bat activity exclusive of the breeding season, as described below. Trees and/or structures containing suitable potential bat roost habitat features shall be clearly marked or identified. If no bat roosts are found, the results of the survey will be documented and submitted to the City within 30 days of the survey, after which no further action will be required. If roosts are present, the biologist shall prepare a site-specific roosting bat protection plan to be implemented by the contractor following the City's approval. Additionally, the qualified biologist shall determine compensatory mitigation for temporary or permanent habitat loss due to tree removal, in conjunction with CDFW. The plan shall incorporate the following guidance as appropriate: ▪ When possible, removal of trees/structures identified as suitable roosting habitat shall be conducted during seasonal periods of bat activity, including the following: Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than 0.5 inch of rainfall within 24 hours occurs. Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs. ▪ If a tree/structure must be removed during the breeding season and is identified as potentially containing a colonial maternity roost, then a qualified biologist shall conduct acoustic emergence surveys or implement other appropriate methods to further evaluate if the roost is an active maternity roost. Under the biologist's guidance, the contractor shall implement measures similar to or exceeding the following: If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure.	

Impact Statement	Mitigation Measure(s)	Residual Impact
	If it is found that an active maternity roost of a colonial roosting species is present, the roost shall not be disturbed during the breeding season (April 15 to August 31). ▪ Tree removal procedures shall be implemented using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators or other heavy machinery) on day one. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed to not return to the roost that night. The remainder of the tree is removed on day two. ▪ Prior to the demolition of vacant structures within the project site, a qualified biologist shall conduct a focused habitat assessment of all structures to be demolished. The habitat assessment shall be conducted enough in advance to ensure the commencement of building demolition can be scheduled during seasonal periods of bat activity (see above), if required. If no signs of day roosting activity are observed, no further actions will be required. If bats or signs of day roosting by bats are observed, a qualified biologist will prepare specific recommendations such as partial dismantling to cause bats to abandon the roost, or humane eviction, both to be conducted during seasonal periods of bat activity, if required. ▪ If the qualified biologist determines a roost is used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultation with CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately. **BIO-9 Conduct Pre-construction Crotch's Bumblebee surveys and Implement Avoidance Measures.** If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that suitable habitat may be present for Crotch's bumble bee, a habitat assessment shall be performed by a qualified biologist knowledgeable and experienced with Crotch's bumblebee and the habitat in which they occur. If the biologist determines that suitable habitat for Crotch's bumblebee is present, a focused survey shall be performed during the species' active flight period for Crotch's bumblebee and peak blooming period of nectar and pollen sources (May 1 through July 31). The Crotch's bumblebee survey shall be conducted on foot and shall encompass the entirety of a project site and focus on areas that allow for the highest probability of detection, such as high abundance nectar or pollen sources and rodent burrows that may be used for breeding and nesting. If Crotch's bumblebee is determined to be present, the project proponent shall	

Impact Statement	Mitigation Measure(s)	Residual Impact
	map the locations of the observed bumblebee, areas of abundant nectar or pollen sources, and any active nesting sites. A report summarizing the results of the habitat assessment and focused survey (if required) shall be prepared by the qualified biologist and shall be submitted to the City prior to the commencement of construction activities. Further, consultation with the CDFW will be necessary in the event Crotch's bumblebee was observed within a project site and an Incidental Take Permit, in accordance with the California Endangered Species Act, may be required prior to initiating any ground disturbance on the site. If Crotch's bumble are not listed and no longer candidates for listing at the time of project implementation, this mitigation measure would not be required.	
Impact BIO-2. Development and mobility improvements facilitated by the project would be subject to adopted city regulations to minimize impacts to riparian habitat, sensitive natural communities, and wetlands. Compliance with the NPDES construction general permit, ms4 storm water permit, American Canyon municipal code, and proposed policies in the 2040 general plan would ensure potential impacts to riparian habitat, sensitive natural communities, and wetlands would be less than significant.	No mitigation is required.	Less than Significant
Impact BIO-3. Implementation of the project would not substantially impede the movement of native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors after implementation of proposed policies in the 2040 general plan and compliance with the American Canyon municipal code.	No mitigation is required.	Less than Significant
Impact BIO-4. The project would implement proposed policies designed to protect biological resources. Development and mobility improvements facilitated by the project would be required to adhere to these policies, as well as American Canyon municipal code requirements to protect biological resources. Therefore, this impact would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact BIO-5. Implementation of the project would not conflict with the provision of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. No impact would occur.	No mitigation is required.	No Impact
Cultural Resources		
Impact CUL-1. Development facilitated by the project could adversely affect previously unidentified historic-period resources. Impacts to historic-period resources would be less than significant with mitigation.	**CUL-1 Historical Built Environment.** Prior to project approval, the applicant shall submit a report to the City that identifies any historic-age features (i.e., structures over 45 years of age) proposed to be altered or demolished. If historical-age features are present, the applicant shall submit a historical resources evaluation to the City prepared in areas that contains buildings, structures, objects, sites, landscape/site plans, or other features that are 45 years of age or older, by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualifications Standards (PQS) in architectural history or history (36 CFR Part 61). The evaluation shall include an intensive-level evaluation, in accordance with the guidelines and best practices meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the City for review and approval. If historical resources are identified through the survey and evaluation, efforts shall be made by the applicant to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). The applicant shall submit a report to the City that identifies and specifies the treatment of character-defining features and construction activities, and demonstrates how the project complies with the Standards and avoids the substantial adverse change in the significance of the historical resource as defined by CEQA Guidelines Section 15064.5(b). The report shall be prepared by an architectural historian or historical architect meeting the PQS as defined by 36 CFR Part 61 and provided to the City for review and concurrence prior to project approval.	Less than Significant with Mitigation
Impact CUL-2. Development facilitated by the project could adversely affect previously unidentified archaeological resources. Impacts would be less than significant with mitigation**.**	**CUL-2 Archaeological Resources Assessment.** Prior to project approval of a project that involves ground disturbance activities (that may include but are not limited to, pavement removal, potholing, grubbing, tree removal, and grading), the applicant shall submit to the City an archaeological resources assessment prepared by a qualified archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in either prehistoric or historic archaeology. Assessments shall include a CHRIS records search at the NWIC and a SLF Search from the NAHC. The records searches shall characterize the results of previous cultural resource surveys and disclose any cultural resources that have been recorded and/or evaluated in and around the development site. A qualified professional	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	shall conduct a Phase I pedestrian survey for those projects that include undeveloped areas to locate any surface cultural materials. If the Phase I archaeological survey identifies resources that may be affected, the applicant shall also conduct Phase II testing and evaluation. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, the qualified professional shall identify appropriate site-specific mitigation measures in the Phase II evaluation. These measures may include, but would not be limited to, a Phase III data recovery program, avoidance, or other appropriate actions to be determined by a qualified archaeologist. If significant archaeological resources cannot be avoided, impacts may be reduced to less than significant level by filling on top of the sites rather than cutting into the cultural deposits. Alternatively, and/or in addition, a data collection program may be warranted, including mapping the location of artifacts, surface collection of artifacts, or excavation of the cultural deposit, to characterize the nature of the buried portions of sites. Curation of the excavated artifacts or samples would occur as specified by the archaeologist. The City shall review and approve the archaeological resources assessment prior to project approval. **CUL-3 Unanticipated Discoveries.** For projects whose Phase I archaeological survey identifies archaeological resources that may be affected, the applicant shall retain a qualified cultural resource specialist to monitor construction activities that involve ground-disturbing activities greater than 12 inches in depth and occur within 60 feet of a potentially significant cultural resource. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as excavating the cultural deposit to fully characterize its extent and collecting and curating artifacts may be warranted to mitigate any significant impacts to cultural resources. If archaeological resources of Native American origin are identified during construction, a qualified archaeologist will consult with the City to begin Native American consultation procedures. Periodic reports of the find and subsequent evaluations shall be submitted to the City during construction.	
Impact CUL-3. Development facilitated by the project could result in damage to or destruction of human burials. Impacts would be less than significant through adherence to existing regulations and with mitigation.	**CUL-4 Human Remains.** In the event of an accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: ▪ The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. ▪ The descendant identified fails to make a recommendation. ▪ The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains: ▪ When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may each develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.	
Greenhouse Gas Emissions		
Impact GHG-1. Development facilitated by the project would make progress towards achieving state goals but would not necessarily meet state 2030 or 2045 goals. Mitigation measures ghg-2 and ghg-3 would require implementation of CEQA GHG thresholds and a climate	**GHG-1 Construction GHG BMPs.** Prior to the issuance of any grading permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating implementation of construction Best Management Practices (BMPs). Measures may include but are not limited to:	Significant and Unavoidable

Impact Statement	Mitigation Measure(s)	Residual Impact
action plan (cap); however, development facilitated by the project would not meet the 2030 or 2045 goals until the cap is updated and adopted. This impact would be significant and unavoidable**.**	▪ At least 15 percent of the construction fleet for each project phase shall be alternatively fueled or electric. ▪ At least 10 percent of building materials used for project construction shall be sourced from local suppliers. ▪ At least 65 percent of construction and demolition waste materials shall be recycled or reused. ▪ At least one contractor that has a business location in American Canyon shall be contracted for project construction. ▪ All construction contracts shall include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) using during construction be electrically powered. ▪ Architectural coatings used for project construction shall be "Low-VOC," containing no greater than 50 grams of volatile organic compounds (VOC) per liter of product. ▪ Project construction shall prohibit the use of generators and shall establish grid power connection to electrical equipment needs. ▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure [ATCM] Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions shall be provided for construction workers at all access points. ▪ All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. ▪ The prime construction contractor shall post a publicly visible sign with their telephone number and contractor to contact. The construction contractor shall take corrective action within 48 hours. The BAAQMD's phone number shall also be identified and visible to ensure compliance with applicable regulations. **GHG-2 Adopt and Implement a CEQA GHG Emissions Threshold.** The City shall include and implement a new 2040 General Plan policy under the Environment Element to prepare, adopt, and implement a CEQA GHG Emissions threshold of significance. The City shall adopt the CEQA GHG Emissions threshold of significance by the end of 2025 for use in future CEQA GHG emissions analyses through 2030. In addition, upon completion of future CAP updates and as necessary, the City shall update the CEQA GHG Emissions threshold of significance and American Canyon CEQA GHG Checklist to be consistent with each CAP update. **GHG-3 Adopt American Canyon CAP to Meet the State's 2030 and 2045 GHG Emissions Goals.** The City shall draft and adopt the American Canyon qualified CAP by the end of 2025	

Impact Statement	Mitigation Measure(s)	Residual Impact
	to outline how American Canyon will meet the State's 2030 goal of 40 percent below 1990 emissions levels and 2045 goal of carbon neutrality. Implementation measures in the updated qualified CAP to achieve the 2030 and 2045 goals may include, but are not limited to, the following: Develop and adopt Zero Net Energy requirements for new and remodeled residential and non-residential development; ▪ Develop and adopt a building electrification ordinance for existing and proposed structures; ▪ Expand charging infrastructure and parking for electric vehicles; ▪ Implement carbon sequestration by expanding the urban forest, participating in soil-based or compost application sequestration initiatives, supporting regional open space protection, and/or incentivizing rooftop gardens; and ▪ Implement policies and measures included in the California 2022 Climate Change Scoping Plan, such as mobile source strategies for increasing clean transit options and zero emissions vehicles by providing electric vehicle charging stations.	
Land Use and Planning		
Impact LU-1. The project would not physically divide an established community and there would be no impact**.**	No mitigation is required.	No Impact
Impact LU-2. The project would not result in a significant environmental impact due to a conflict with a plan adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant**.**	Mitigation measures AES-1, AES-2, AQ-1 through AQ-4, BIO-1, BIO-2, CUL-1 through CUL-3, GHG-1 through GHG-3, NOI-1 through NOI-3, PAL-1, WF-1, and WF-2.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Noise		
Impact NOI-1. Construction of development facilitated by the project would temporarily increase noise levels, potentially affecting nearby noise-sensitive land uses. Development facilitated by the project would also introduce new noise sources and contribute to increases in operational noise. The continued regulation of noise, consistent with the city municipal code and implementation of proposed policies in the 2040 general plan would minimize impacts to adjacent land uses. However, construction and operational traffic noise could exceed standards even after implementation of mitigation. This impact would be significant and unavoidable.	**NOI-1 Conduct Construction Noise Analysis.** The City shall review future developments within 1,000 feet of a sensitive receiver, and where applicable, require the following feasible measures as standard conditions of approval to reduce construction noise levels below a level of significance: ▪ **Mufflers.** During excavation and grading construction phases, all construction equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards. ▪ **Stationary Equipment.** All stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers. ▪ **Equipment Staging Areas.** Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receivers. ▪ **Smart Back-up Alarms.** Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction in compliance with applicable safety laws and regulations. ▪ **Electrically-Powered Tools and Facilities.** Electrical power shall be used to run air compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities, where feasible. ▪ **Noise Disturbance Coordinator.** The project applicant shall designate a "noise disturbance coordinator" responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint and shall require that reasonable measures be implemented to correct the problem. A telephone number for the disturbance coordinator and the City shall be posted at the construction site. ▪ **Temporary Noise Barriers.** Erect temporary noise barriers, where feasible, when construction noise is predicted to exceed the City's construction standards and when the anticipated construction duration is greater than is typical (e.g., two years or greater). Temporary noise barriers shall be constructed with solid materials (e.g., wood) with a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. If a sound blanket is used, barriers shall be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical	Significant and Unavoidable.

Impact Statement	Mitigation Measure(s)	Residual Impact
	blanket, curtain or equivalent absorptive material rated sound transmission class (STC) 32 or higher. **NOI-2 Implement Roadway Vehicle Noise Reduction Measures.** The City shall install "quiet pavement" roadway improvements, such as rubberized asphalt or open-grade asphalt concrete overlays along impacted roadway segments (American Canyon Road west of I-80 and Newell Drive north of American Canyon Road). The program may be funded by "fair share" developer contributions for proposed projects along impacted roadways to pay for the "quiet pavement" roadway improvements.	
Impact NOI-2. Construction of development facilitated by the project would temporarily generate groundborne vibration and noise, potentially affecting nearby land uses. This impact would be less than significant with mitigation. Operation of development facilitated by the project would not result in substantial groundborne vibration and noise and this impact would be less than significant.	**NOI-3 Construction Vibration Control Plan.** Prior to issuance of a building permit for a project that includes the following, the project applicant shall prepare a groundborne noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these construction activities: ▪ Pile driving within: ▫ 135 feet of fragile structures such as historical resources; ▫ 100 feet of non-engineered timber and masonry buildings (e.g., most residential buildings); or ▫ 75 feet of engineered concrete and masonry (no plaster); ▪ A vibratory roller within: ▫ 40 feet of fragile historical resources; or ▫ 25 feet of any other structure ▪ A dozer or other large earthmoving equipment within: ▫ 20 feet for a fragile historical structure; or ▫ 15 feet of any other structure The noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed FTA architectural damage thresholds (e.g., 0.12 in/sec PPV for fragile or historical resources, 0.2 in/sec PPV for non-engineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses such as drilling piles as opposed to pile driving, static rollers as opposed to vibratory rollers, and lower horsepower earthmoving equipment shall be used. If necessary, construction vibration monitoring shall be conducted to ensure FTA vibration thresholds are not exceeded.	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact NOI-3. Development facilitated by the project would not result in a significant increase in airport or airstrip activity. The continued regulation of airport noise consistent with state and federal regulations, the implementation of proposed policies in the 2040 general plan, and compliance with napa county airport land use compatibility plan would minimize disturbance to people residing or working within proximity of the napa county airport. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Paleontological Resources		
Impact PAL-1.the project has the potential to result in impacts to paleontological resources. Impacts would be less than significant with mitigation incorporated**.**	**PAL-1 Retention of a Qualified Professional Paleontologist.** Prior to submittal of a discretionary development application in areas underlain by high or undetermined sensitivity geologic units (i.e., Pleistocene alluvial fan deposits; Markley Sandstone; Jameson Shale Member of Markley Sandstone; Domengine Sandstone; and sandstone and shale of the Great Valley Complex), the City shall require a Qualified Professional Paleontologist [as defined by the Society of Vertebrate Paleontology (SVP) (2010)] be retained to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards. If necessary, the Qualified Professional Paleontologist shall recommend mitigation measures to reduce potential impacts to paleontological resources to a less than significant level. The City shall review and approve the Qualified Professional Paleontologist's findings and recommendation. All recommendations shall be incorporated into the project plans prior to issuance of a grading permit**.**	Less than Significant with Mitigation
Population and Housing		
Impact POP-1. Implementation of the project would facilitate the construction of new housing in American Canyon and would increase population. The 2040 general plan would accommodate and plan for population growth and includes policies to manage growth and development. Impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact POP-2. Implementation of the project would not result in the displacement of substantial numbers of housing or people. The project would facilitate the development of new housing in accordance with state and local housing requirements, while preserving existing residential neighborhoods. Impacts would be less than significant**.**	No mitigation is required.	Less than Significant
Public Services and Recreation		
Impact PS-1. Development facilitated by the project would increase the population in the planning area, which would result in an increase in demand for fire, police, and libraries. Compliance with proposed policies in the 2040 general plan and continued environmental review would minimize adverse environmental effects associated with the provision of new or physically altered fire, police, or library facilities. These impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact PS-2. Future development facilitated by the project would be required to pay impact fees that would provide funding for the provision or expansion of new school facilities, pursuant to government code section 65995(b). Impacts from the project would be offset by the payment of impact fees and impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact PS-3. Development facilitated by the project would increase the population in the planning area, which would increase the use of parks and recreational facilities. Adherence to American Canyon municipal code regulations and proposed 2040 general plan policies would ensure impacts related to parks and recreational facilities would be less than significant.	No mitigation is required	Less than Significant
Transportation		
Impact TRA-1. The project would not conflict with a program, plan, ordinance or policy addressing the circulation system and impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact TRA-2. The future (2040) citywide rate of Residential VMT per Capita with the proposed 2040 General Plan would be higher than the significance threshold. The project would therefore conflict with or be inconsistent with CEQA Guidelines 15064.3(b) and impacts would be significant.	No feasible mitigation measures beyond policies included in the Mobility Element of the General Plan.	Significant and Unavoidable
Impact TRA-3. The project would not substantially increase hazards due to a geometric design feature and impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact TRA-4. The project would not result in inadequate emergency access and impacts would be less than significant**.**	No mitigation is required.	Less than Significant
Tribal Cultural Resources		
Impact TCR-1. The project could adversely impact tribal cultural resources. Impacts would be less than significant through consultation conducted pursuant to AB 52.	No mitigation is required.	Less than Significant
Utilities and Service Systems		
Impact UTL-1. Development facilitated by the project would increase demand for water, wastewater, electric power, telecommunications, and stormwater drainage; however, no additional relocation or construction of utility services would be required to service the project beyond connections to existing utilities. The project would result in a minimal increase in natural gas demand. Impacts would be less than significant**.**	No mitigation is required.	Less than Significant
Impact UTL-2. The project would increase demand for water. Water supply for the project would be provided by the City of American Canyon from existing and planned supply sources including imported water and supplemental water purchased from the City of Vallejo as well as locally developed recycled water. Potential impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact UTL-3. Development facilitated by the project would increase demand for wastewater treatment. The timing, intensity, and location of an expansion of wastewater treatment facilities is unknown at this time, but an expansion would require additional ceqa review and compliance with existing building and zoning codes. As such, impacts related to expansion of wastewater treatment facilities as a result of the 2040 general plan would be less than significant.	No mitigation is required.	Less than Significant
Impact UTL-4. The project would not generate solid waste in excess of state or local standards, would not exceed the capacity of local infrastructure, and would not impair the attainment of solid waste reduction goals. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Wildfire		
Impact W-1. The 2040 general plan proposed policies address emergency access, response, and preparedness. Therefore, the project would not impair an emergency response plan or emergency evacuation plan. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact W-2. The project could expose people and structures to wildfire risk; however, wildfire risks would be reduced with mitigation and impacts would be less than significant.	**WF-1 Wildfire Risk Reduction During Construction.** For projects located in proximity to agricultural or undeveloped areas (including hillside areas) with flammable vegetation, prior to issuance of a grading or building permit, whichever occurs first, the applicant shall submit documentation that they will implement the following measures to reduce risk of loss, injury, or death from wildfire during construction: 1. Construction equipment powered by internal combustion engines shall be equipped with spark arresters. The spark arresters shall be maintained pursuant to manufacturer recommendations to ensure adequate performance. 2. Certain project construction activities with potential to ignite wildfires during red-flag warnings issued by the National Weather Service for the project site location shall be prohibited. Example activities that shall be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings, mowing, chain sawing, chipping, the use of any equipment with the potential to introduce sparks. 3. Fire extinguishers shall be required to be onsite during construction. Construction vehicles shall be equipped with at least one (1) functioning fire extinguisher and one (1) shovel or McLeod firefighting tool. Heavy machinery or equipment (e.g., tractors,	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	grinders, tree chippers, excavators, bulldozers) shall be equipped with one (1) shovel, McLeod firefighting tool, or Pulaski; one (1) functioning fire extinguisher; and at least one 5-gallon backpack pump or larger capacity water (or CAFS) pump/delivery system.. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher. **WF-2 Fire Resistant Vegetation and Landscaping.** For projects located in proximity to agricultural or undeveloped areas (including hillside areas) with flammable vegetation, prior to issuance of a building permit for development located within or adjacent to a VHFHSZ, the applicant shall submit landscape plans prepared by a registered Landscape Architect that are consistent with applicable Building and Fire Codes.	
Impact W-3. The project would include the installation of utilities and future mobility improvements; however, compliance with the HMP and proposed policies in the 2040 general plan would reduce impacts to less than significant.	No mitigation is required.	Less than Significant
Impact W-4. The planning area is relatively flat and compliance with proposed policies in the 2040 general plan and the American Canyon municipal code would ensure that risks from flooding or landslides due to a wildfire would be less than significant.	No mitigation is required	Less than Significant

1 Introduction

This Environmental Impact Report (EIR) examines the potential environmental effects of the proposed City of American Canyon (City) 2040 Technical General Plan Update ("project"). The environmental review process for the project, and legal basis for preparing an EIR, are described below.

1.1 Environmental Impact Report Background

This document is an EIR that evaluates the potential environmental impacts associated with implementation of the project. This section of the EIR:

1. Provides an overview of project's background.
2. Summarizes the process involved in developing the project.
3. Describes the purpose of and legal authority of the EIR.
4. Summarizes the scope and content of the EIR.
5. Lists lead, responsible, and trustee agencies for the EIR.
6. Describes the intended uses of the EIR.
7. Provides a synopsis of the environmental review process required under the California Environmental Quality Act (CEQA).

The contents of other EIR sections are as follows:

- Section 2, *Project Description*, provides a detailed discussion of the project.
- Section 3, *Environmental Setting*, describes the general environmental setting for the City of American Canyon.
- Section 4*, Environmental Impact Analysis*, describes the potential environmental effects associated with development facilitated by the project.
- Section 5*, Other CEQA Required Sections*, discusses issues such as growth inducement and significant irreversible environmental effects.
- Section 6, *Alternatives*, discusses alternatives to the project, including the CEQA-required "no project" alternative.
- Section 7, *References and Report Preparers*, lists informational sources for the EIR and persons involved in the preparation of the document.

In addition, this EIR also includes the following Appendices:

- Appendix A. Notice of Preparation and Scoping Comments Received
- Appendix B. Supporting Biological Resources Information
- Appendix C. Supporting Noise Information

1.2 Overview of the Project

State law (Government Code Section 65300) requires each city and county adopt a comprehensive general plan. The City's existing General Plan was adopted by the City Council on November 3, 1994. The project is a comprehensive effort to update the existing General Plan to respond to current local and regional conditions, and changes in State law that may not have been in effect when the General Plan was originally adopted. The proposed 2040 Technical General Plan Update has been organized into the following elements: Land Use; Housing; Economic Development; Mobility; Utilities; Public Services and Facilities; Environment, Parks, and Recreation; Safety; and Environmental Justice. Together, these elements cover all topics required to include in a General Plan under State law.

The General Plan defines the policy framework by which the City's physical and economic resources are to be managed and used over the next 18 years. City decision-makers will use the General Plan as a blueprint for:

- Choices about the use of land;
- Protection of environmental resources;
- Conservation and development of housing;
- Provision of supporting infrastructure and public and human services; and
- Protection of people and property from natural and constructed hazards.

The General Plan serves as a constitution for future development in American Canyon. Therefore, any City decision affecting land use and development must be consistent with the General Plan. This includes development projects that may be proposed in the future. An action, program, or project would be considered consistent with the General Plan if, considering all of its aspects, it will further the objectives and policies of the General Plan or not obstruct their attainment.

The project contains goals, policies, and implementation programs to implement the City's overarching objectives.

- **Goals** are statements that provide direction and state the desired end condition.
- **Policies** establish basic courses of action to achieve these goals, and directly guide the response of elected and appointed officials to development proposals and related community actions.
- **Implementation Programs** are specific actions, procedures, standards or techniques that the City must take to help achieve a specified goal or implement an adopted policy.

1.3 Purpose and Legal Authority

This EIR has been prepared in accordance with the CEQA Guidelines. In accordance with CEQA Guidelines Section 15121(a) (California Code of Regulations, Title 14, Division 6, Chapter 3), the purpose of an EIR is to:

> Inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR fulfills the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as a Project EIR, Program EIRs are by necessity more conceptual and may

contain more general discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in CEQA Guidelines Section 15168, a Program EIR may be prepared on a series of actions characterized as one large project. Use of a Program EIR enables the City (as Lead Agency) to consider broad policy alternatives and program-wide mitigation measures and greater flexibility to address environmental issues and/or cumulative impacts on a comprehensive basis. While the Program level EIR uses expansive program-level thresholds, it should not be assumed that impacts determined to be less than significant at a program level would be less than significant for an individual project implemented under the 2040 General Plan, even if the individual project is consistent with the 2040 General Plan.

Once a Program EIR has been prepared, subsequent activities within the Project must be evaluated to determine what, if any, additional CEQA documentation needs to be prepared. If the Program EIR addresses the Project's effects as specifically and comprehensively as possible, many subsequent activities could be found to be within the Program EIR scope and additional environmental documentation may not be required (CEQA Guidelines Section 15168(c)). When a Lead agency relies on a Program EIR for a subsequent activity, it must incorporate applicable mitigation measures and alternatives developed in the Program EIR into the subsequent activities (CEQA Guidelines Section 15168(c)(3)). If a subsequent activity would have effects not contemplated or not within the scope of the Program EIR, the Lead Agency must prepare a new Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or a project level EIR. In this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. CEQA Guidelines Section 15168(b) encourage the use of Program EIRs, citing five advantages:

- Provision of a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR.
- Focus on cumulative impacts that might be slighted in a case-by-case analysis.
- Avoidance of continual reconsideration of recurring policy issues.
- Consideration of broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them.
- Reduction of paperwork by encouraging the reuse of data (through tiering).

This EIR has been prepared to analyze potentially significant environmental impacts resulting from implementation of the project and provides feasible mitigation measures or project alternatives that would minimize or eliminate these impacts.

1.4 Scope and Content

In accordance with the CEQA Guidelines, a Notice of Preparation (NOP) of a Draft EIR was circulated to potentially interested parties on July 5, 2022. The NOP, included in Appendix A, indicates that all issues on the City's environmental checklist would be discussed in the EIR. These include:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources

- Greenhouse Gas Emissions
- Land Use and Planning
- Utilities and Service Systems
- Wildfire

This EIR evaluates potential impacts in each of these areas. Impacts regarding the CEQA topics of Agriculture and Forestry Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, and Mineral Resources were determined to not be significant and are analyzed in section 4.15 of this EIR. The focus of this EIR is to:

- Provide information about the project for consideration by the City Council in its selection of the project, an alternative to the project, or a combination of various elements from the project and its alternatives, for approval;
- Review and evaluate the potentially significant environmental impacts that could occur as a result of the growth and development envisioned in the project;
- Identify feasible mitigation measures that may be incorporated into the project to reduce or eliminate potentially significant effects;
- Disclose any potential growth-inducing and/or cumulative impacts associated with the project; and
- Examine a reasonable range of alternative growth scenarios (including growth according to the existing General Plan, reduced growth, and alternative locations within the City for growth) that could feasibly attain the basic objectives of the project, while eliminating and/or reducing some or all of its potentially significant adverse environmental effects.

The NOP of this EIR received three written responses. The responses, included in Appendix A, are addressed, as appropriate, in the analysis contained in the various subsections of Section 4, *Environmental Impact Analysis*. The City staff also conducted a virtual scoping meeting on July 28, 2022. Two Planning Commissioners and one member of the public made comments at the Scoping Meeting. Table 1-1 shows a summary of the written comments and Scoping Meeting comments. The NOP and written comments are included in Appendix A.

Table 1-1 NOP Comments and EIR Response

Commenter	Issue Area/Issues Raised	How and Where Addressed in the EIR
Agency Comments		
California Department of Fish and Wildlife (CDFW)	Requested that the EIR include the following information: land use changes; project footprints; temporarily impacted areas; plans for proposed structures, ground disturbing activities, landscaping, stormwater improvements, fencing, paving, stationary machinery; operational features; and construction activities.	Chapter 2, *Project Description* includes the complete project description. Some of the information requested by CDFW is currently not available, including footprints, plans for buildings, operational features, and construction information. This EIR is a programmatic EIR and the information requested by CDFW will be available when future plans and projects are proposed and reviewed by the City.
	Requested creation of procedure or checklist for evaluating subsequent project impacts on biological resources to determine if individual projects are within the scope of the Program EIR.	Section 1.3, *Purpose and Legal Authority* identifies how this Programmatic EIR would be used in the future.
	Noted regulatory authority under the California Endangered Species Act, Native	These regulations are incorporated into Section 4.3, *Biological Resources.*

Commenter	Issue Area/Issues Raised	How and Where Addressed in the EIR
	Plant Protection Act, Fish and Game Code, and Migratory Bird Treaty Act.	
	Recommended EIR provide baseline data for species and habitat from multiple sources.	The baseline data used for this EIR is included in Section 4.3, *Biological Resources.*
	Recommended surveys be conducted for special-status species.	A requirement for biological resource surveys for future projects is included in Section 4.3, *Biological Resources.*
	Requested discussion of all direct and indirect impacts associated with the project, feasible mitigation, and cumulative impacts	Impacts and mitigation are identified in Section 4.3, *Biological Resources.*
California Department of Transportation (Caltrans)	Identified that VMT analysis should include discussion of multimodal transportation and traffic safety issues; the project's effects on pedestrians, bicycles, travelers with disabilities, and transit performance; and, if necessary, mitigation for an increase in VMT.	Comment is addressed in Section 4.11, *Transportation*
Native American Heritage Commission (NAHC)	Noted tribal consultation is required under Assembly Bill 52 and Senate Bill 18.	The notification process, pursuant to Assembly Bill 52 and Senate Bill 18, is summarized in Section 4.12, *Tribal Cultural Resources.*
	Identified procedures to follow and requested feasible mitigation be considered, including provisions for the inadvertent discovery of tribal cultural resources.	Comment is addressed in Section 4.4, *Cultural Resources* and Section 4.12, *Tribal Cultural Resources.*
Planning Commission Comments		
Vice Chair Wong	Requested information on Measure J consistency with the American Canyon General Plan and Napa County General Plan	This comment concerns the General Plan Update and is not relevant to the EIR.
	Requested information on EIR and General Plan noticing process to public and Planning Commission.	Summary of noticing is provided in Section 1.7*, Environmental Review Process.*
	Asked how the draft resolutions regarding climate change would be incorporated into the General Plan Update.	This comment concerns the General Plan Update and is not relevant to the EIR. A discussion of greenhouse gas emissions is provided in Section 4.7, *Greenhouse Gas Emissions.*
Commissioner Navarro	Asked if General Plan Update and EIR would address climate change and prohibiting new gas stations in the City.	Comment is addressed in Section 4.5, *Energy*, and Section 4.7, *Greenhouse Gas Emissions.*
	Noted highlighting greenhouse gas reduction measures may result in extra community engagement.	A discussion of greenhouse gas emissions is provided in Section 4.7, *Greenhouse Gas Emissions.*
Public Comments		
Chris James	Requested clarification on Measure J, Green Island Vineyards project, and LAFCO's effect on the General Plan Update.	This comment concerns the General Plan Update and is not relevant to the EIR.
	Requested information on the Urban Limit Line and introduction of the Hess Laird property.	A discussion of the Urban Limit Line and Hess Laird property is included in Chapter 2, *Project Description.*

1.5 Lead, Responsible, and Trustee Agencies

The City of American Canyon is the lead agency under CEQA for this EIR because it has primary discretionary authority to determine whether or how to approve the project. CEQA Guidelines Section 15381 defines responsible agencies as other public agencies that are responsible for carrying out/implementing a specific component of a project or for approving a project that implements the goals and policies of a General Plan. There are no responsible agencies for the project. Although not responsible agencies under CEQA, several other agencies have review authority over aspects of the project or approval authority over projects that could potentially be implemented in accordance with various objectives and policies included in the project. These agencies and their roles are listed below.

- The State Geologist is responsible for the review of the City's program for minimizing exposure to geologic hazards and for regulating surface mining activities.
- The Napa Local Agency Formation Commission (LAFCO) has responsibility for approving any annexations to the City that might occur over the life of the project.
- The California Department of Transportation (Caltrans) has responsibility for approving future improvements to the state highway system, including State Route 29.
- The California Department of Fish and Wildlife (CDFW) has responsibility for issuing take permits and streambed alteration agreements for any projects with the potential to affect plant or animal species listed by the State of California as rare, threatened, or endangered or that would disturb waters of the State.
- The Napa County Airport Land Use Commission (ALUC) has the responsibility of reviewing the project and future individual projects, as applicable, for consistency with the ALUC's Airport Land Use Compatibility Plan (ALUCP).
- Any other public agencies which may own land within City boundaries.

Trustee agencies have jurisdiction over certain resources held in trust for the people of California but do not have a legal authority over approving or carrying out the project. CEQA Guidelines Section 15386 designates four agencies as trustee agencies: CDFW with regards to fish and wildlife, native plants designated as rare or endangered, game refuges, and ecological reserves; the State Lands Commission, with regard to state-owned "sovereign" lands, such as the beds of navigable waters and State school lands; the California Department of Parks and Recreation, with regard to units of the State park system; and the University of California, with regard to sites within the Natural Land and Water Reserves System. The CDFW, due to the potential for rare or endangered species, is the only trustee agencies for the project.

1.6 Intended Uses of the EIR

This EIR is as an informational document for use in the City's review and consideration of the project. This document is a Program EIR. CEQA Guidelines Section 15168(a) states that:

> A Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically; (2) as logical parts in a chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria, to govern the conduct of a continuing program; or (4) as individual activities

carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

As a programmatic document, this EIR presents and discloses a region-wide assessment of the environmental impacts of the project. The information and analysis in this EIR will be used by the City of American Canyon Planning Commission and City Council, trustee agencies, and the general public to evaluate the project's potential effects on the environment.

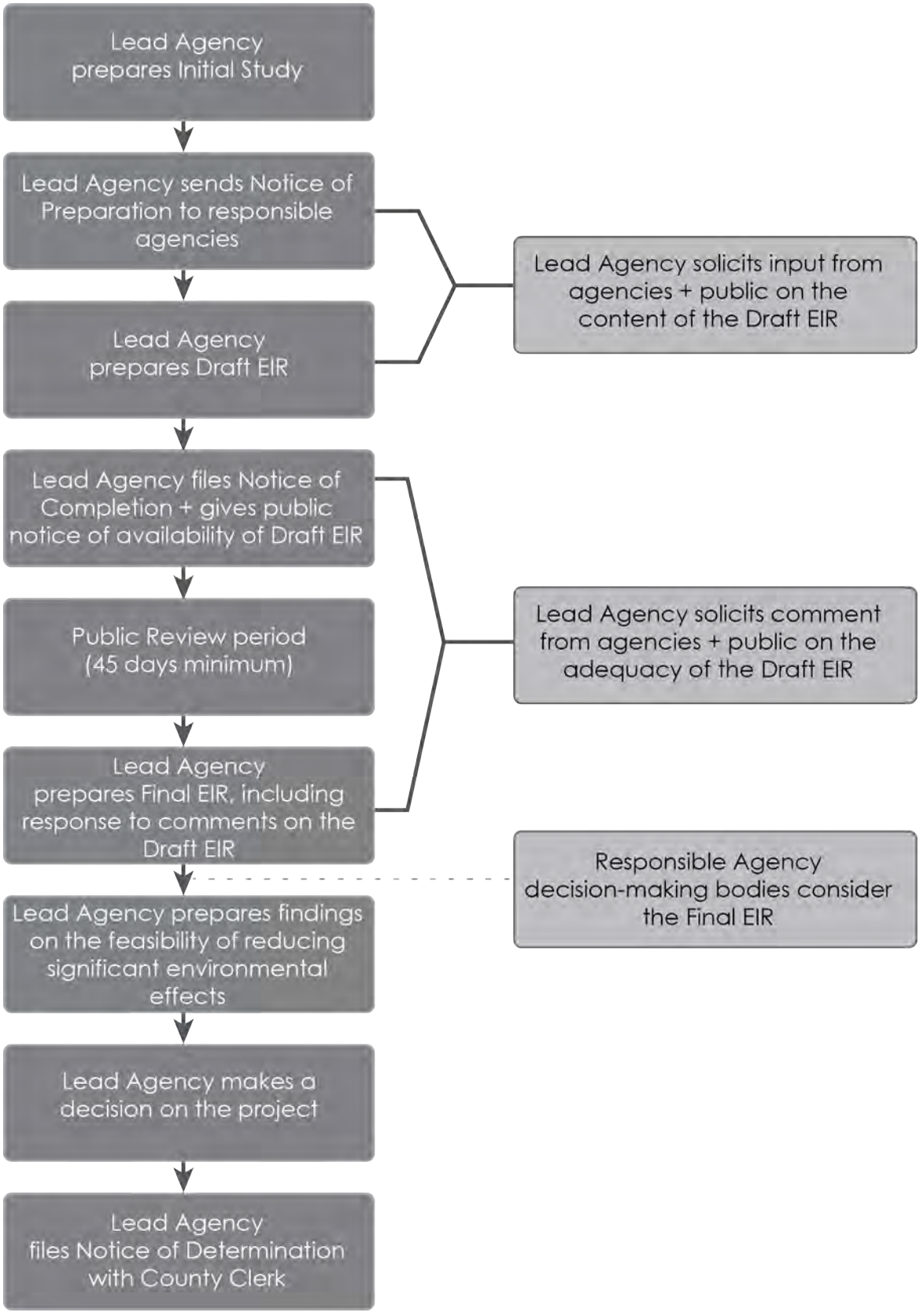
1.7 Environmental Review Process

The environmental impact review process required under CEQA is summarized below and illustrated in Figure 1-1. The steps appear in sequential order.

1. **Notice of Preparation (NOP) Distributed.** Immediately after deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible," "trustee," and involved federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing. The NOP must be posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is not required but may be conducted by the lead agency. The NOP public comment period for the project was from July 5, 2022 to August 4, 2022 and a scoping meeting was held on July 28, 2022. Public comments were received in response to the NOP and scoping process.
2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) alternatives; g) mitigation measures; and h) irreversible changes.
3. **Public Notice and Review.** A lead agency must prepare a Public Notice of Availability of an EIR. The Notice must be placed in the County Clerk's office for 30 days (Public Resources Code Section 21092) and sent to anyone requesting it. Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must consult with and request comments on the Draft EIR from responsible and trustee agencies, and adjacent cities and counties. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days, unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the Draft EIR may be required through the State Clearinghouse. This EIR will be circulated for a 45-day public review and will be sent to the State Clearinghouse.
4. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a Draft EIR.
5. **Final EIR.** A Final EIR must include: a) any revisions to the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
6. **Certification of Final EIR.** The lead agency shall certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the Final EIR prior to approving a project.

7. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted.
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible. If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic, or other reasons supporting the agency's decision.
9. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared. A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges.

Figure 1-1 Environmental Review Process



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2 Project Description

The project analyzed in this Environmental Impact Report (EIR) is the City of American Canyon (City) Technical 2040 General Plan Update, hereafter referred to as the "project." This section of the EIR describes the key characteristics of the project, including the project proponent/lead agency, the geographic extent of the plan, project objectives, required approvals, and the development forecasted by the project.

2.1 Project Purpose

The project is an update to the City's current General Plan, which includes the following chapters: Introduction, Land Use Element, Housing Element, Economic Development Element, Circulation Element, Utilities Element, Public Services and Facilities Element, Parks and Recreation Element, Natural and Historic & Cultural Resources Element, Geology Element, Flood Hazards Element, and Noise Element. The project establishes the City's vision for future development through the horizon year of 2040. The project will serve as the City's primary guide for future land use and development decisions in a way that meets the community needs and priorities while serving as a key tool for influencing and improving the quality of life for residents and businesses. As such, it serves as the "blueprint" for future development and conservation of a community. The 2040 General Plan Update will help the City plan for important community issues, such as community growth; health, housing, mobility, and infrastructure needs; climate change; and environmental protection. It will also set the stage for future social, physical, and economic development of the City.

2.2 Project Proponent/Lead Agency

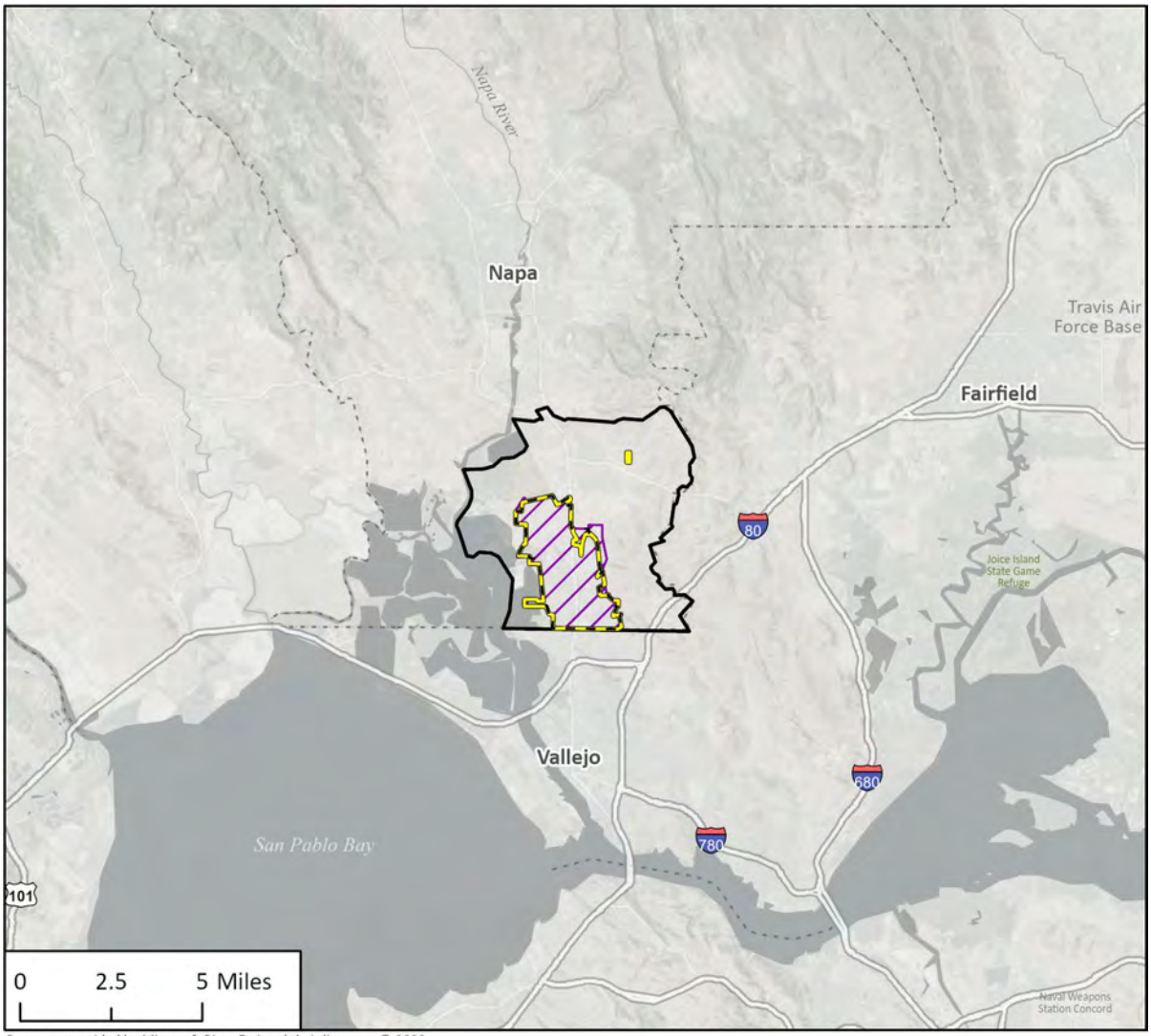
The City of American Canyon is both the project proponent and the lead agency for the project. The City's Community Development Department (located at 4381 Broadway Street, Suite 201, American Canyon, California 94503) prepared this EIR with the assistance of Rincon Consultants, Inc. and Mintier-Harnish.

2.3 Project Location

The City of American Canyonis located in southern Napa County, as shown in Figure 2-1. The City is bordered by Napa County Airport to the north, Sulphur Spring Mountains to the east, Solano County and the City of Vallejo to the south, and the Napa River to the west.

Pursuant to State law, a General Plan must address all areas that bear a physical relationship to the long-term planning of the city. Consistent with this principle, the General Plan Area includes the City of American Canyon Water and Sewer Service area, the City limits, the City's Sphere of Influence (SOI), and urban limit line. Figure 2-1 depicts the limits of the General Plan Area.

Figure 2-1 Regional Location



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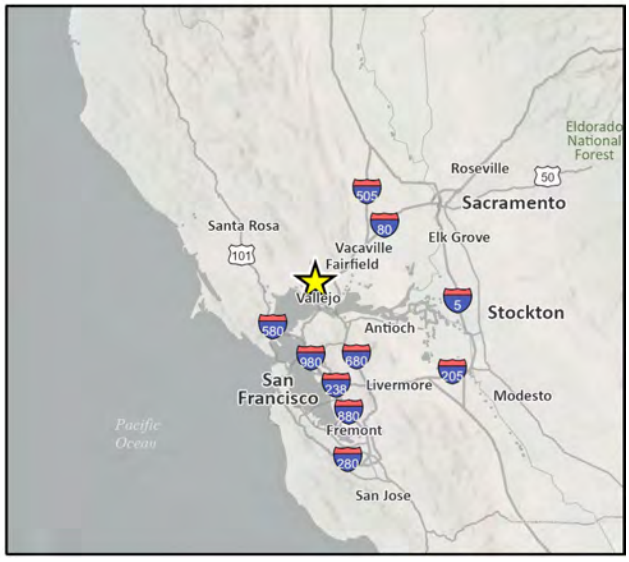
Additional data provided by the City of American Canyon, 2022.

City of American Canyon Boundary
Sphere of Influence
General Plan Area
2030 Urban Limit
Project Location

N



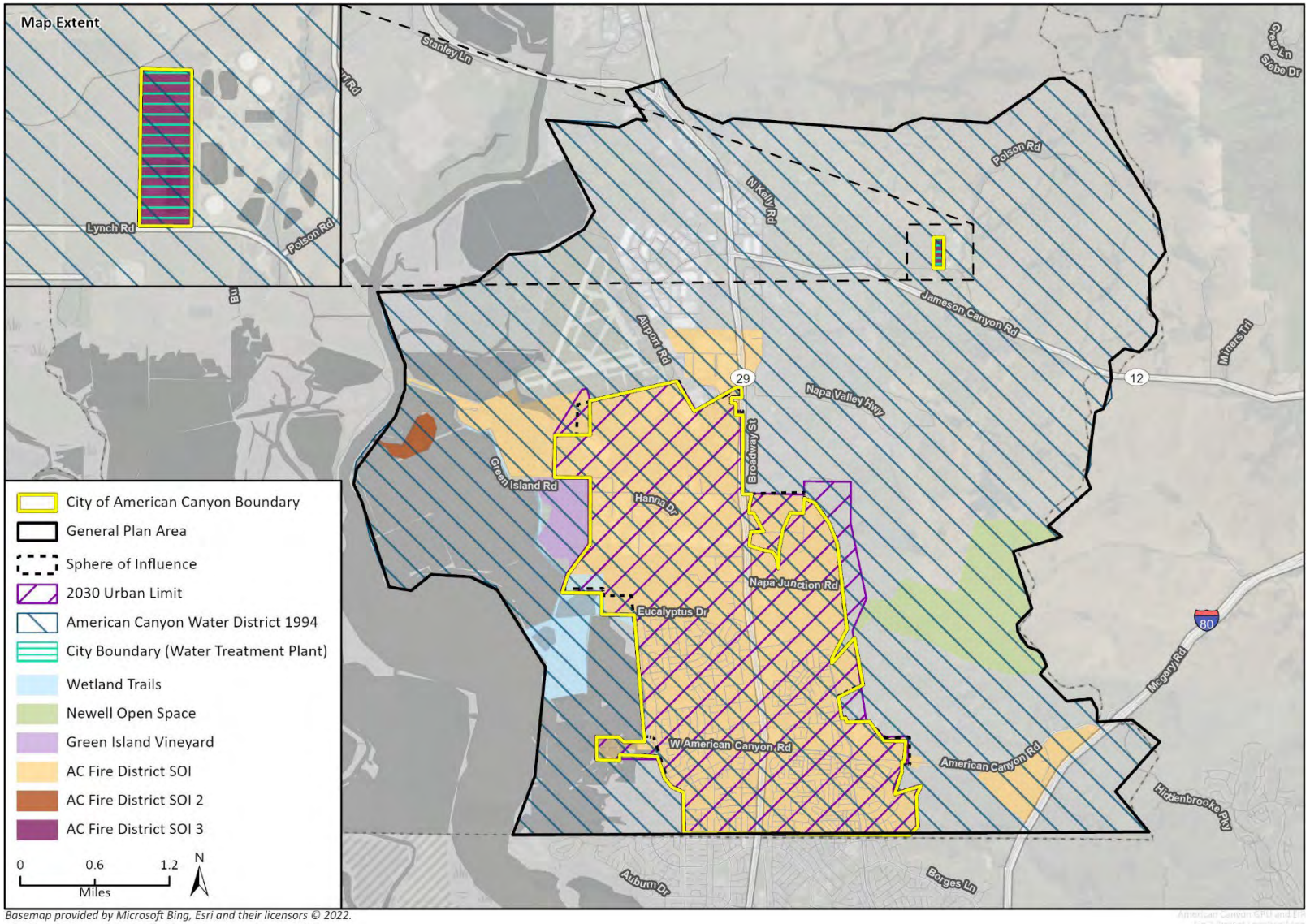
Any future development associated with the 2040 General Plan would be limited to the City limits, the SOI, and the urban limit line. As such, this EIR focuses on these three areas, which altogether are referred to as the "Planning Area." Figure 2-2 depicts the City limits, the SOI, and the urban limit line. The American Canyon city limits defines land that has been incorporated and for which the City has authority. The Napa County Local Agency Formation Commission (LAFCo) established the SOI, which defines the probable physical boundary and service area of a local agency. The SOI includes areas the City will have primary responsibility to provide public facilities and services. The City Council adopted an initiative in 2008 to adopt an urban limit line around the city. This urban limit line was negotiated with Napa County to be consistent with the County's general plan and agricultural protection ordinances. The boundary helps preserve agriculture and open spaces, prevent urban sprawl, implement the planned development of the city, foster sustainable growth, and maintain a balance between housing and jobs. Primary regional access to the City is provided by Interstate 80 (I-80), approximately five miles to the east of the City limits. State Route 29 (SR 29) provides north-south access while State Route 12 (SR 12) provides east-west access to the City. The City is served by a surface street system ranging from multi-lane arterial roadways to narrow two-lane streets.

2.4 Regulatory Setting

State law (Government Code Sections 65300 through 65303.4) sets forth the requirement for each municipality to adopt and periodically update its General Plan, and sets the requirement that a General Plan include the following mandatory subject areas, or "elements": Land Use, Circulation, Housing, Open Space, Conservation, Noise, Safety, and Environmental Justice. State law also allows for optional elements that can be organized or combined at the City's discretion. The 2040 General Plan has been organized into the following elements: Land Use; Housing; Economic Development; Mobility; Utilities; Public Services and Facilities; Environment, Parks, and Recreation; Safety; and Environmental Justice. Together, these elements cover all topics required to be included in a General Plan under State law. The Housing Element was certified by the State Department of Housing and Community Development (HCD) on June 30, 2023.

Under State law, a property's zoning is required to be consistent with its General Plan land use designation (Government Code Section 65860). Section 65860(c) of the Government Code requires that when a General Plan is amended or updated in a way that makes the Zoning Ordinance inconsistent with the General Plan, "the zoning ordinance shall be amended within a reasonable time so that it is consistent with the general plan as amended."

Figure 2-2 Project Location



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Additional data provided by the City of American Canyon, 2022.

2.5 Project Objectives

The Technical 2040 General Plan will serve as a long-term framework for future growth and development, represents the community's view of its future, and contains the goals and policies upon with the City Council, Planning Commission, and the entire community will base land use and resource decisions. The Technical 2040 General Plan will provide a contemporary plan that will guide American Canyon though the next 20 years. The primary objective of this project is to update the existing American Canyon General Plan in order for it to be compliant with State law.

The Technical 2040 General Plan would implement the vision of the existing General Plan. The City identifies the following three fundamental roles of the City:

1. The City should be home for a residential population, internally accommodating a sufficient range of uses to support the needs of residents (including a mix of housing types, commercial services, entertainment, employment, recreation, education, health, religious, cultural facilities, transportation services, and open space). At the present time, many of these uses are located outside the City, which necessitates extensive travel by residents to access these services.
2. The City should be a center of employment and commerce for regional, as well as local residents. This will provide an opportunity to capitalize upon (1) the cluster of uses which have developed in the Green Island Industrial Park; (2) the proximity of the City to the Napa County Airport and Southern Pacific railroad, and (3) the relationship of the City to the agricultural and vineyard industries of Napa County.
3. The City can capture visitors to the Napa Valley by providing uses which capitalize on the unique environmental setting of the foothills, river valleys, and agriculture. Environmental educational facilities, such as wetlands interpretative centers, overnight camping and recreational vehicle facilities, river recreational facilities such as boating, golf courses, and hotel/motels and restaurants are representative of the range of uses which may be considered.

2.6 Project Characteristics

2.6.1 2040 General Plan Update Organization

The elements included in the 2040 General Plan are further described below.

- **Land Use Element.** This element contains the development policies and standards that directly shape land use decisions and the resulting physical form of the City of American Canyon. These include density, lot coverage, and height policies. The Land Use Element serves as the primary means for ensuring that new land uses are logically organized and developed sustainably.
- **Mobility Element.** This element provides a framework for decisions concerning the City's multimodal transportation network. This element also incorporates Vehicle Miles Travelled policies consistent with Senate Bill 743 (SB 743) and updates street standards for all modes of transportation including transit, bicycles, and pedestrian.
- **Utilities.** This element focuses on the variety of public facilities, utilities, and infrastructure that are necessary to sustain existing households and businesses and to accommodate future population and employment growth.
- **Environment, Parks, and Recreation.** This element considers the effects of existing and planned development on natural resources, including biological resources, water resources, soil

resources, cultural and historic resources, and air quality and climate change. This element also guides the long-range preservation and conservation of open space, as well as the park and recreational facilities.

- **Safety Element**. This element addresses natural and urban safety hazards in American Canyon, including existing and potential hazards. This Element establishes policies and actions to mitigate identified hazards to protect City residents and visitors. This element also focuses on noise element requirements, consistent with Government Code Section 65302(f), including new existing noise contours as well as projected noise contours based on future traffic volumes projected to arise from improvements planned for in the Mobility Element.
- **Environmental Justice.** This element establishes goals, policies, and implementation programs related to environmental justice to ensure all the members of the American Canyon community (i.e., residents, workers, business owners, local organizations, and visitors) regardless of race, ethnicity, age, gender, religion, sexual orientation, disability, and socio-economic status feel valued, safe, respected, included, and secure.

The City has also prepared an updated Housing Element, which was made available for public review on September 27, 2022. The Housing Element identifies the City's Regional Housing Needs Allocation (RHNA) goal of 622 dwelling units and provides the City's action plan for the 6th Cycle Housing Element (2023 to 2031). The Housing Element was certified by the State Department of Housing and Community Development (HCD) on June 30, 2023. The Housing Element has undergone separate CEQA review and for that reason is not analyzed in this EIR.

In addition, the 2040 General Plan would include an Economic Development and Public Services and Facilities Element. However, these elements have not been updated and the current Economic Development and Public Services and Facilities Element in the current General Plan would still apply to the project. Pertinent policies that would reduce environmental impacts are identified in this EIR.

2.6.2 Land Use Designations

The land use map for the General Plan Update is provided in Figure 2-3. These land use designations define the basic categories of land uses allowed in the city but are implemented through the City's Zoning Ordinance and Zoning Map, which are part of the City's Municipal Code and contain more specific regulations and standards governing development on individual properties. The project would change some of the land use designations; however, these changes primarily resolve inconsistences between existing uses and the General Plan land use designations. Figure 2-4 shows the changes in land use designations compared to the current General Plan.

2.6.3 Urban Limit Line Expansion

As a part of the project, the City would update the Urban Limit Line to include the Hess/Laird Property, as shown in Figure 2-5. The lands that would be added to the Urban Limit Line are within Napa County's jurisdiction and would need to be incorporated into the City with an annexation before any future development could occur in that area. Because these lands are not within the City's jurisdiction, the potential environmental impacts from future development in the Hess Laird Property will be addressed when the City pursues annexation of that area. The expansion of the Urban Limit Line is an administrative process that would not result in an environmental impacts and is not discussed further in this EIR.

Figure 2-3 2040 General Plan Land Use Designations

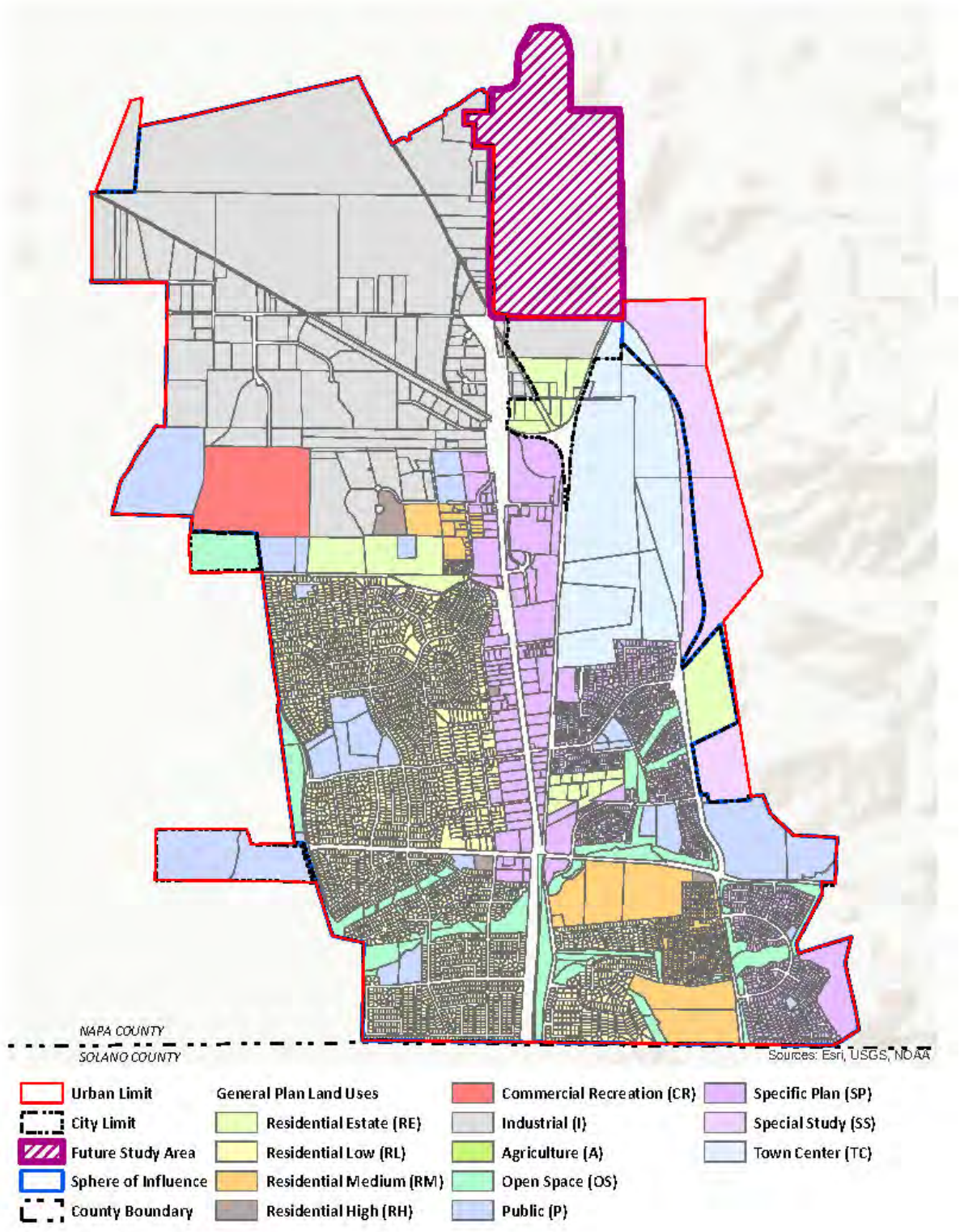
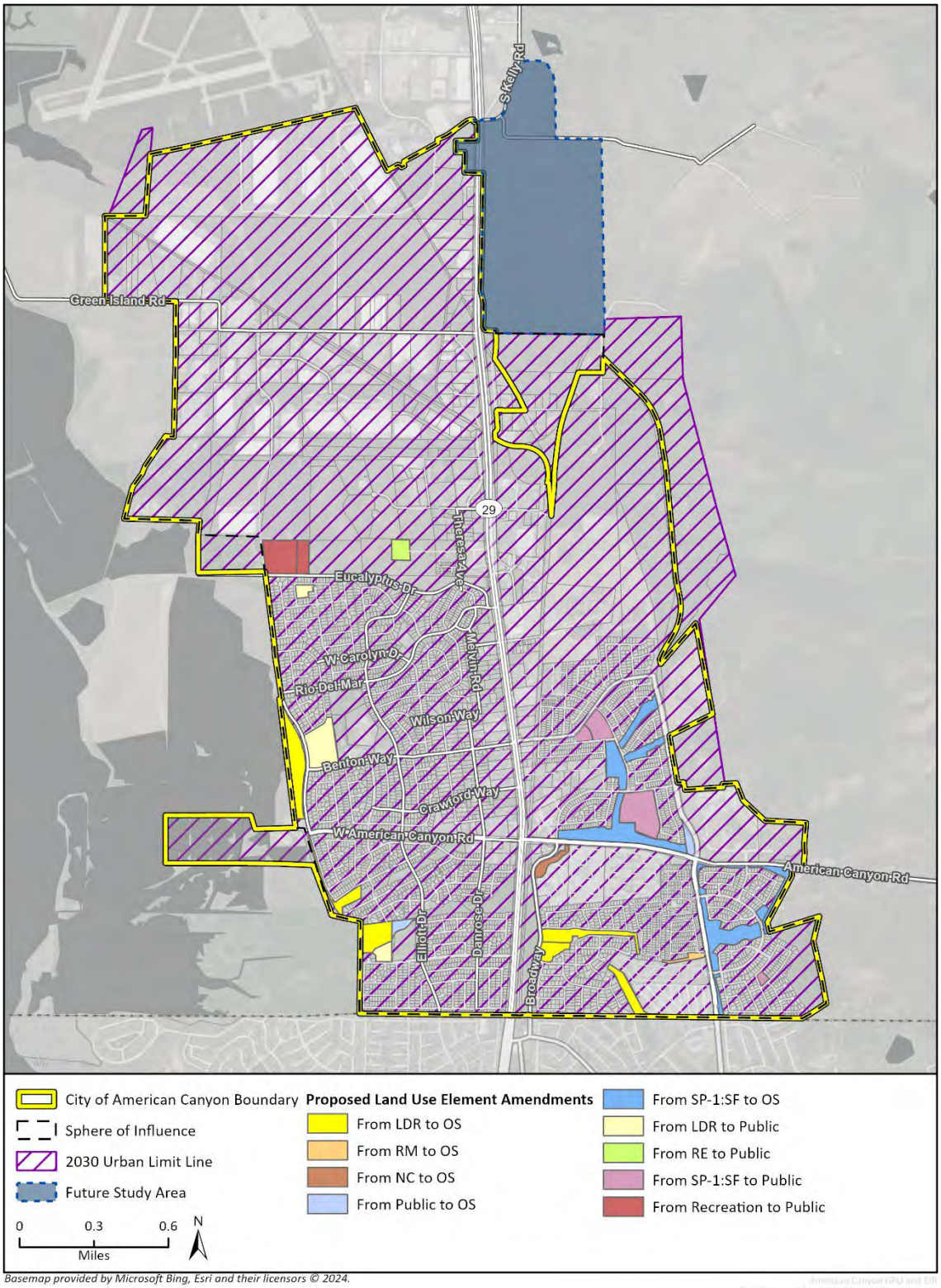


Figure 2-4 Proposed Land Use Element Amendments



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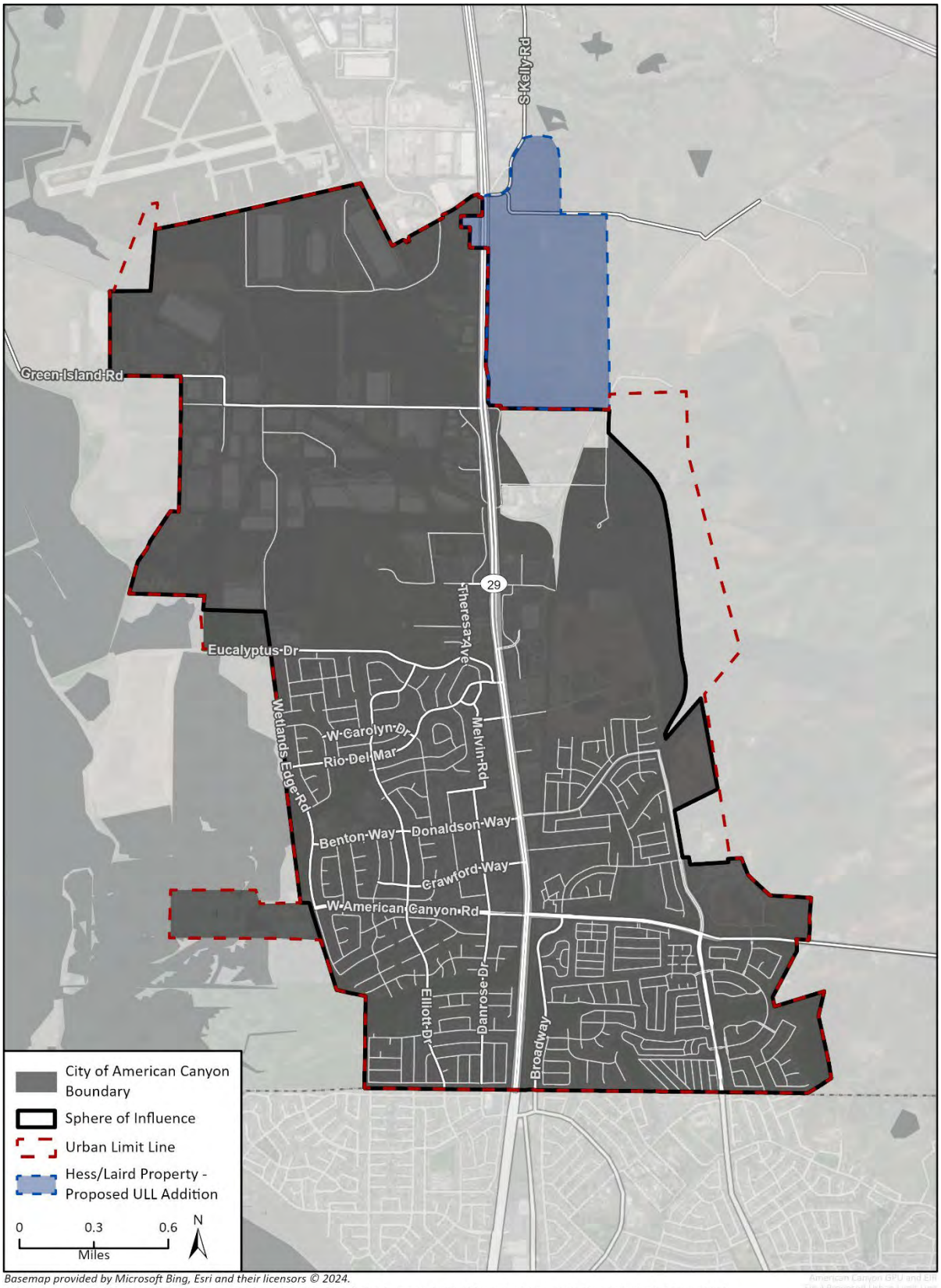
Additional data provided by the City of American Canyon, 2022.

Figure 2-5 Proposed Urban Limit Line



Basemap provided by Microsoft Bing, Esri and their licensors © 2024.
Additional data provided by the City of American Canyon, 2021; Hess/Laird Property digitized from the Proposed Urban Limit Line Addition, 2022.

2.6.4 Project Buildout

Compared to existing conditions, there could be additional buildout from implementation of the 2040 General Plan. The potential buildout associated with the project was estimated based on the City's Traffic Impact Fee (TIF) Nexus Study, as well as the known buildout of specific plans and already approved General Plan Amendments. Table 2-1 and Table 2-2 identifies the additional residential and non-residential buildout that could occur relative to existing conditions, respectively.

Overall, compared to existing conditions, the project could add a total of 3,379 additional residential units and approximately 5,704,000 square feet of commercial, retail, hotel, industrial, warehouse, and research and development (R&D) uses.

2.6.5 Mobility Updates

The 2040 General Plan includes a Mobility Element, which provides a vision and guiding principles for the transportation system. The Mobility Element identifies the following proposed major circulation improvements in American Canyon:

- The City is in partnership with the Napa Valley Transportation Authority to identify improvements to SR 29, including landscaping improvements, pedestrian improvements, and multimodal features.
- Newell Drive extension from Watson Ranch to Highway 29 at Green Island Road (2-Lane Major Collector Road and 4-Lane Arterial)
- Green Island Road reconstruction from a 2-lane Arterial to a 3-Lane Arterial
- West Side Connector (2-Lane Major Collector)
- Eucalyptus Drive extension from Theresa Avenue to Broadway (2-Lane Major Collector)
- Rio Del Mar or South Napa Junction Road, including new at-grade crossing from Broadway to Newell Drive (2-Lane Major Collector)
- Napa Junction Road from Theresa Avenue to Hess Road (2-Lane Minor Collector)
- Newell Drive Railroad Overcrossing
- American Canyon Road Pedestrian Crossing
- Donaldson Way Pedestrian Crossing
- Napa Junction Road Pedestrian Crossing

The new proposed roadways are shown in Figure 2-6.

Table 2-1 Residential Buildout Compared to Existing Conditions

Residential Type	Number of Dwelling Units					
	Pipeline Projects [a]	Remaining TIF Projects [b]	Broadway District Specific Plan [c]	Watson Ranch Specific Plan [d]	Oat Hill Residential General Plan Amendment [e]	Total
Single Family	41	197	0	1,061	0	1,299
Multi-family	186	36	1,200	192	291	1,905
Total	**227**	**233**	**1,200**	**1,253**	**291**	**3,204**

Notes:

a. The City has identified the following pipeline projects that would be constructed in the future: Lemos Pointe, Canton Estates, West Carolyn Subdivision, and Rio Del Mat West Subdivisions (City of American Canyon 2022).

b. The Remaining TIF Projects were calculated by subtracting the estimated buildout in the 2015 TIF with both the pipeline projects and the projects that were constructed between 2014 and 2021 (City of American Canyon 2015 and 2022a).

c. The Broadway District Specific Plan was adopted in July 2019 and has undergone CEQA review (City of American Canyon 2020).

d. The Watson Ranch Specific Plan was adopted in 2018 and has undergone CEQA review (City of American Canyon 2018).

e. In September 2021, the Oat Hill Multi-Family Residential Project, which included a General Plan Amendment was approved. An Initial Study/Mitigated Negative Declaration was prepared for this Project (City of American Canyon 2021).

Table 2-2 Non-Residential Buildout Compared to Existing Conditions

Non-Residential Type	Area (in Million Square Feet)					
	Pipeline Projects [a]	Remaining TIF Projects [b]	Broadway District Specific Plan [c]	Watson Ranch Specific Plan [d]	Watson Lane Annexation [e]	Total
Office	0	65	100	25	0	190
Commercial/Retail/Hotel	0	0	840	175	189	1,204
Industrial/Warehouse/R&D	3,118	0	0	0	1,192	4,310
Total	**3,118**	**65**	**940**	**200**	**1,381**	**5,704**

Notes:

a. The City has identified the following pipeline projects that would be constructed in the future: Future Warehouse at 1055 Commerce Court, Napa Airport Commerce Center, Giovanni Logistics Center, SDG 217 Warehouse, and PGE Regional Center (City of American Canyon 2022).

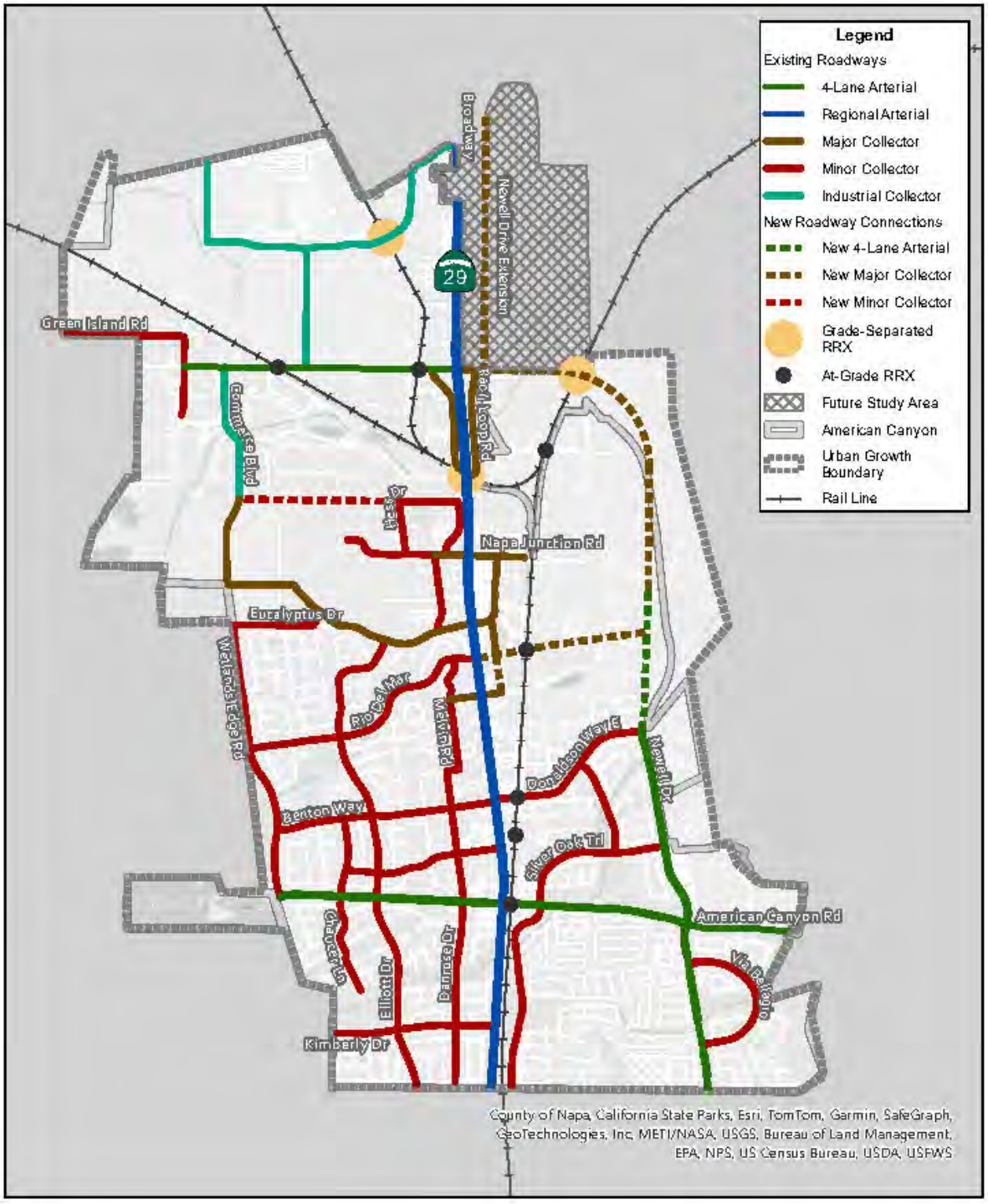
b. The Remaining TIF Projects were calculated by subtracting the estimated buildout in the 2015 TIF with both the pipeline projects and the projects that were constructed between 2014 and 2021 (City of American Canyon 2015 and 2022a).

c. The Broadway District Specific Plan was adopted in July 2019 and has undergone CEQA review (City of American Canyon 2020).

d. The Watson Ranch Specific Plan was adopted in 2018 and has undergone CEQA review (City of American Canyon 2018).

e. The Watson Lane Annexation Project would annex an area within the City's SOI and allow for industrial and commercial development. The project is currently undergoing CEQA (City of American Canyon 2022b).

Figure 2-6 Proposed Roadway Connections



2.7 Intended Use of this EIR

This EIR provides a programmatic environmental review of implementing the City's 2040 General Plan Update. Subsequent activities falling under the City's 2040 General Plan Update will utilize this EIR to focus the environmental review of these consequent activities and to determine their effects. If a new project is proposed that is not anticipated by the 2040 General Plan Update, or may result in project-level environmental effects not addressed in this program-level EIR, the future project would be evaluated as required under CEQA. This EIR is not intended to prohibit consideration of future projects or CEQA analysis of future projects.

2.8 Project Implementation

Following adoption of project by the City Council, all subsequent activities and development within the City will be guided by the goals and policies in the Technical 2040 General Plan Update. It therefore provides specific policy guidance for implementation of plan concepts. The City will also need to work with Napa County and other public agencies to implement policies that affect their respective jurisdictions or would affect the region. Implementing these policies in accordance with new development (residential, commercial, or industrial) will be subject to the City's established review and approval processes, with final review and approval by the appropriate departmental staff, as well as the appointed and elected officials. The principal responsibilities that city officials and staff have for project implementation are briefly summarized below:

- Update the City of American Canyon Zoning Ordinance to achieve consistency with the adopted General Plan Update.
- Rezone properties, as dictated by future development proposals.
- Approve tentative maps, variances, conditional use permits, and other land use permits and entitlements.
- Approve development agreements and issuance of related permits and approvals consistent with the 2040 General Plan Update.
- Analyze and plan public infrastructure such as roadway improvements, other capital improvements, and natural/capital resource preservation and/or restoration.
- Conduct or consider further focused planning studies, as appropriate to future development in the city.

2.9 Required Approvals

With recommendations from the City's Planning Commission, the American Canyon City Council will need to take the following discretionary actions in conjunction with the project:

- Certify the Final EIR and adopt required findings, including required findings under CEQA Guidelines Sections 15090, 15091, and 15093.
- Approve and adopt the Technical 2040 General Plan Update.

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3 Environmental Setting

This section provides a general overview of the environmental setting for the project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Setting

The City of American Canyon is located in southern Napa County, approximately 5 miles south of the City of Napa, 25 miles northeast of the city of San Francisco, and approximately 20 miles north of the City of Oakland. The city is located north of the San Francisco Bay and San Pablo Bay, east of Napa River and west of the Newell Open Space Preserve and Lynch Canyon Open Space Park. Broadly, the City of American Canyon is bordered by unincorporated Napa County and the Napa County Airport to the north, Sulphur Spring Mountains to the east, Solano County and the City of Vallejo to the south, and a salt marsh and wetland area including the Napa River to the west.

The City encompasses an area of approximately 6.1 square miles. In addition, the City has a sphere of influence (SOI), which represents those areas that may already receive City services and are a visual and logical expansion of the city boundaries. There is currently one area in the SOI that is not within City limits. The City is currently in the process of annexing that area as part of the Paoli/Watson Lane Annexation Project and is currently preparing an Environmental Impact Report (EIR) consistent with the California Environmental Quality Act (CEQA) (City of American Canyon 2022). Primary regional access to the city is provided by Interstate 80 (I-80), approximately 5 miles to the east of the city limits. State Route (SR) 29 provides north-south access while SR 12 and SR 37 provide east-west access to the city. The city is served by a surface street system ranging from multi-lane arterial roadways to narrow two-lane streets. Primary access to the project site is provided by SR 29, known locally as “Broadway.”

Land uses in the City include single and multi-family residential, commercial, industrial, and open space. The City plays an important role in the Napa Valley wine industry with continuous growth in wine logistics, wine making, storage and distribution. The City is also home to growing major food production industries and logistics distribution, such as Coca Cola, Barry Callebaut Chocolate, Mezzetta, Amazon, and the nation’s first IKEA E-Commerce Distribution Center.

The climate of the City of American Canyon is a warm-summer Mediterranean climate, characterized by dry, hot summers and moderately moist, cool winters. The average temperature for the year in the City is 56.4°F (13.6°C). The warmest month, on average, is August with an average temperature of 65.1°F (18.4°C). The coolest month on average is December, with an average temperature of 45.4°F (7.4°C) (Weatherbase 2022). Average annual precipitation in American Canyon is 17.4 inches. Generally, in an average or typical year, most precipitation is received from October through April (Weatherbase 2022).

3.2 EIR Baseline

Section 15125 of the California Environmental Quality Act (CEQA) Guidelines states that an Environmental Impact Report (EIR) “should include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is

published." Section 15125 states that this approach "normally constitute[s] the baseline physical conditions by which a lead agency determines whether an impact is significant." This EIR evaluates impacts against existing conditions, at the time the notice of preparation (NOP) was published, which was July 5, 2022. This EIR considers the potential impacts from buildout of the General Plan in 2040, compared to exiting conditions.

3.3 Cumulative Development

CEQA defines cumulative impacts as two or more individual actions that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows an EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

Because the project is a general plan update, cumulative impacts are treated somewhat differently than would be the case for a project-specific development. CEQA Guidelines Section 15130 provides the following direction relative to cumulative impact analysis and states that the following elements are necessary for an adequate discussion of environmental impacts:

> A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

By its nature, a general plan considers cumulative impacts insofar as it considers cumulative development that could occur within the Planning Area. For example, the transportation analysis considers the overall change in vehicle miles travelled (VMT) due to implementing several development projects that would add to the buildout associated with implementing the project. These cumulative VMT calculations are accounted for in the air quality, energy, greenhouse gas emissions, and noise analyses; therefore, these analyses would also be considered cumulative. Other impacts, such as geology and soils and cultural resources, are site specific and would not result in an overall cumulative impact from growth outside of the city. Therefore, the analysis of project impacts in this EIR also constitutes the cumulative analysis.

4 Environmental Impact Analysis

This section discusses the possible environmental effects of the project for the specific issue areas identified through the scoping process with potential to experience significant effects. A "significant effect" as defined by the California Environmental Quality Act (CEQA) Guidelines Section 15382:

> means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds," which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable**. An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved pursuant to CEQA Guidelines Section 15093.
- **Less than Significant with Mitigation Incorporated**. An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under CEQA Guidelines Section 15091.
- **Less than Significant**. An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the project.

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4.1 Aesthetics

This section summarizes the aesthetic resources in the Planning Area and analyzes the impacts on aesthetics, including impacts to scenic vistas, scenic resources, visual character, visual quality, and light and glare due to the project.

4.1.1 Setting

The Planning Area is situated in the central portion of the Coast Mountain Ranges in the southeastern portion of Napa County, between the east bank of the Napa River and the Sulfur Springs Mountains foothills. The primary arterial roadway in the City is State Route (SR) 29, which bisects the City from north to south and serves as the primary commercial corridor. Residential uses are generally located in the southern portion of the City, with commercial and industrial uses located in the northern portion near the Napa County Airport. American Canyon is characterized by its low-rise, rural suburban appearance, with most development having occurred within the last 40 years. The City is characterized by a variety of visual resources, both natural and constructed, including the rolling foothills to the east, riparian corridors, Oat Hill, Napa River, and the Basalt Plant. Visual resources in American Canyon are shown in Figure 4.1-1 through Figure 4.1-6. These figures show views of American Canyon Creek (Figure 4.1-1), the Basalt Plant site (Figure 4.1-2), the foothills to the east of American Canyon (Figure 4.1-3), an overview of American Canyon (Figure 4.1-4), a view of Oat Hill (Figure 4.1-5), and a view of the Napa River and wetlands to the west of American Canyon (Figure 4.1-6).

a. Scenic Resources

Most communities identify scenic resources that contribute to community identity. Scenic resources can be natural or constructed features such as trees, rock formations, historic buildings, and public art. The eastern foothills contribute to the City's visual image as they provide a transition between the higher mountain ranges to the east and the low land or floodplains to the west. The foothills also contribute to the rural quality of the community and serve as a backdrop to the City's existing development, which is viewed by its residents and vehicles traveling on State Route (SR) 29. Active vineyards located on portions of the foothills provide a linkage with the Napa Valley (City of American Canyon 1994a).

Oat Hill is located in the western portion of the City between developed land and the Napa River. The hill is a visual landmark that provides direction and orientation to many residents in the community, particularly those living in residential neighborhoods within proximity to the hill (City of American Canyon 1994a).

Although most of the city's visual resources are natural, the Napa Valley Ruins & Gardens is an exception. The Basalt Rock Company started a rock quarrying facility and operations near the Napa River in 1941. Following World War II, the plant built almost 30 miles of pipeline in Napa County. This facility is now the focus of the Watson Ranch Specific Plan neighborhood. Architectural features of the Napa Valley Ruins & Gardens are planned to be incorporated into the design of the Watson Ranch Specific Plan neighborhood.

Figure 4.1-1 View of American Canyon Creek, Facing East



Figure 4.1-2 View of Distant Basalt Plant Site, Facing Northeast



Figure 4.1-3 View of Foothills East of Newell Drive, Facing East



Figure 4.1-4 View of American Canyon from Napa Junction Road, Facing Southeast



Figure 4.1-5 View of Oat Hill from Napa Junction Road, Facing South



Figure 4.1-6 View of the Napa River and Wetlands from Wetlands Edge Road, Facing Northwest



Scenic Vistas and Views

A scenic vista provides views of an aesthetically valued landscape that benefits the public. The term "vista" generally implies an expansive view, usually from an elevated point or open area. This designation may be officially designated or unofficially defined by a set of criteria. American Canyon contains a number of streams and creeks, including American Canyon Creek, that provide the area with riparian habitats and vegetation and are considered scenic views. American Canyon Creek runs through the central portion of the City from the higher elevations of the Sulphur Spring Mountains to the Napa River. Development has altered the creek's natural stream course and ability to be viewed in some locations in American Canyon (City of American Canyon 1994a).

Although the Napa River flows outside City limits, the river serves as the primary western edge for American Canyon. In addition to the river's role as a key boundary, the river itself is another visual resource that enhances the overall beauty of the area. Napa River is clearly visible from the City's higher elevations, including atop Oat Hill, the eastern foothills, and neighborhoods immediately east of the Napa River (City of American Canyon 1994a).

Scenic Roadways

California's Scenic Highway Program designates scenic highways with the intention of protecting these corridors from change that would diminish the aesthetic value of adjacent lands. A highway is designated as an eligible scenic highway when the California Department of Transportation (Caltrans) determines that the roadway corridor qualifies for official status. The status of an officially designated scenic highway changes when the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated (Caltrans 2022). Scenic highways must have an approved Corridor Protection Program and remain in compliance to maintain scenic highway status. According to the Caltrans State Scenic Highway Map and list of eligible and officially designated State Scenic Highways, SR 29 is eligible for designation as a State Scenic Highway but is not officially designated as such (Caltrans 2018).

b. Visual Character

The City is in a transitional area between the Sulphur Springs Mountains and the Napa River. A high-quality visual image and environmental character distinguish the area from other cities in the northern San Francisco Bay region. These visual and physical qualities provide a contrast from the urbanized areas to the south (City of American Canyon 1994b). Residential uses are generally located in the southern portion of American Canyon, with commercial and industrial uses located in the northern portion near the Napa County Airport.

c. Light and Glare Conditions

Light and glare from indoor or outdoor uses can reduce visibility of the night sky, create potential hazards to drivers, and be a nuisance to residential areas. The City has typical light conditions found in suburban areas (e.g., roadway lighting, commercial parking lot and building lighting, residential buildings, headlights from motor vehicles). Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass, and other shiny reflective surfaces. Nighttime lighting and glare are produced by both stationary and mobile sources. Stationary sources of nighttime light include structure illumination, decorative landscape lighting, lighted signs, and streetlights. The primary source of mobile nighttime light is motor vehicle headlights. Sources of

light and glare in the residential areas include street lighting along roadways, lit building exteriors and signage, and parking lot lighting.

4.1.2 Regulatory Setting

a. Federal Regulations

No existing federal regulations pertain to the aesthetic resources in the City.

b. State Regulations

California Scenic Highways Program

The California Scenic Highway Program, established in 1963, identifies and designates certain highways throughout the State which require special conservation treatment in relation to surrounding land use development. Caltrans manages the State Scenic Highway Program and defines a scenic highway as any freeway, highway, road, or other public right-of-way, that traverses an area of exceptional scenic quality. Suitability for designations as a State scenic highway is based on the vividness, intactness, and unity of their view corridors, as described in Caltrans' Scenic Highway Guidelines (Caltrans 2008):

- *Vividness* is the extent to which the landscape is memorable. This is associated with the distinctiveness, diversity, and contrast of visual elements. A vivid landscape makes an immediate and lasting impression on the viewer.
- *Intactness* is the integrity of visual order in the landscape and the extent to which the natural landscape is free from visual intrusions (e.g., buildings, structures, equipment, grading).
- *Unity* is the extent to which development is sensitive to and visually harmonious with the natural landscape.

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, consists of regulations to control building standards throughout the State. The California Electrical Code (Title 24, Part 3) and Green Building Standards Code (also referred to as the CALGreen Code; Title 24, Part 11) stipulate minimum light intensities for safety and security at pedestrian pathways, circulation ways, and paths of egress.

- The CALGreen Code (24 CCR, Part 11, Paragraph 5.106.8, *Light Pollution Reduction*) provides that all nonresidential outdoor lighting must comply with the following:
  - The minimum requirements in the California Energy Code (CEC) for Lighting Zones 0 to 4 as defined in Chapter 10 of the California Administrative Code;
  - Backlight ratings as defined in the Illuminating Engineering Society's Technical Memorandum on Luminaire Classification Systems for Outdoor Luminaires (IES TM-15-11);
  - Uplight and Glare ratings as defined in the CEC; and
  - Allowable backlight, uplight, and glare ratings not exceeding those shown in Table 5.106.8 in Section 5.106.8 of the CALGreen Code, or a local ordinance lawfully enacted pursuant to Section 101.7 of the CALGreen Code, whichever is more stringent.

The 2022 updates to the CALGreen Code went into effect on January 1, 2023. They require nonresidential buildings to maximize light emitting diode (LED) technology in indoor and outdoor lighting plans.

c. Local Regulations

American Canyon Municipal Code – Title 19 (Zoning)

The Zoning Code (Title 19) of the American Canyon Municipal Code implements the General Plan, particularly the Land Use Element. While General Plan designations are more generalized in nature, the Zoning Code and zoning districts provide specific controls on land use, density or intensity of development, and development standards to implement the City's General Plan goals and policies. The Zoning Code provides standards for protection of visual resources, compatible design, and illumination for new development in the City that is associated with zoning. Zoning Code Title 19 establishes standards for development within the City. Zoning Code Chapter 19.23 provides a list of prohibited signage in the City. The California Building Code, which includes lighting requirements, has been adopted in Chapter 16.02 of the Municipal Code (City of American Canyon 2022).

4.1.3 Impact Analysis

a. Significance Thresholds and Methodology

CEQA Significance Criteria

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on aesthetics if it would:

1. Have a substantial adverse effect on a scenic vista;
2. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or
4. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

Methodology

Aesthetics impact assessments involve qualitative analysis that is subjective but informed by the City policies detailed above. Reactions to the same aesthetic conditions vary according to viewer taste and interests but are basically governed by the visual compatibility with the surroundings and existing development, coherence with design guidelines established by the jurisdiction, and use of high-quality materials that blend into the landscape. Ultimately, development decisions that prescribe aesthetic or design treatments for specific projects fall under the purview of the American Canyon Planning Commission and appointed or elected bodies charged with overseeing development permits. As a programmatic document, this EIR presents a City-wide assessment of the project. Because the EIR is a long-term document intended to guide actions for many years into the future, this analysis relies on program-level and qualitative evaluation.

Threshold 1: Would the project have a substantial adverse effect on a scenic vista?

Impact AES-1 THE PROJECT WOULD NOT HAVE A SUBSTANTIAL ADVERSE EFFECT ON A SCENIC VISTA, INCLUDING VIEWS OF HILLS, AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The City has no designated scenic vistas or scenic viewpoints; however, views of the hills and ridgelines surrounding the City, including the Sulphur Springs foothills to the east and Oat Hill to the west, are generally considered important visual resources. Views from SR 29 provide motorists with expansive, although fleeting, views of these hills. In addition, expansive scenic views of the City and surrounding natural areas are provided from the Newell Open Space Preserve. Views from the Newell Open Space Preserve include the City, the Napa Wetlands, the Napa River, and Oat Hill. Wetlands Edge Road provides unobstructed views of the wetlands and Napa River to the west.

Future mobility improvements facilitated by the project, including improvements to roadways, and bicycle and pedestrian facilities, would not substantially obstruct views of a scenic vista. Mobility improvements such as installation of a roundabout, repaving of roads, or other improvements to bicycle lanes or pedestrian intersections are not large-scale developments which have the potential to substantially obstruct views of important visual resources in the City. In addition, mobility improvements could offer new opportunities for the public to view scenic areas. Accordingly, mobility improvements facilitated by the project would not have a substantial adverse effect on a scenic vista.

In addition, the 2040 General Plan Update would implement the following proposed policies to minimize impacts to scenic vistas:

- **Policy ENV-9.3: Identify Scenic Vistas.** Identify notable viewsheds and public views from which scenic vistas can be observed.
- **Policy ENV-9.4: Visual Design**. Require massing, height, and orientation of new development where allowable by the zoning standards adjacent to viewsheds and public views be evaluated and be sited and designed to minimize additional obstructions of public views to and along scenic areas.

Implementation of the proposed policies ENV-9.3 and ENV-9.4 would require the City's Community Development Department to create and periodically update an inventory of scenic resources important to the City; identify and map valuable scenic views; and update the City's development and design standards to protect scenic resources and viewsheds by requiring massing, height, and orientation of new development adjacent to viewsheds and public views be designed to minimize additional obstructions of public views and along scenic areas. Future development would be required to comply with the City's updated development and design standards created in accordance with proposed policies ENV-9.3 and ENV-9.4. As a result, project-specific development would be designed to minimize obstruction to scenic vistas. Therefore, the project would not have a substantial adverse effect on a scenic vista. This impact would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2:	Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact AES-2 THE CITY OF AMERICAN CANYON DOES NOT HAVE A DESIGNATED STATE SCENIC HIGHWAY AND THE PROJECT WOULD NOT DAMAGE SCENIC RESOURCES WITHIN A STATE SCENIC HIGHWAY. NO IMPACT WOULD OCCUR.

There are no designated state scenic highways within or directly adjacent to the Planning Area (Caltrans 2018). Because there are no state scenic highways in the Planning Area, there would be no impacts related to scenic resources within a state scenic highway.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

There would be no impact.

Threshold 3:	Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact AES-3 THE PROJECT WOULD IMPLEMENT POLICIES THAT WOULD REQUIRE DEVELOPMENT OF OBJECTIVE DESIGN STANDARDS FOR FUTURE DEVELOPMENT. THE PROJECT WOULD NOT CONFLICT WITH APPLICABLE ZONING AND OTHER REGULATIONS GOVERNING SCENIC QUALITY AND THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

CEQA Guidelines Section 21071 defines an urbanized area as an incorporated city that meets either of the following criteria:

- Has a population of at least 100,000 persons; or
- Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.

The City does not meet the first criteria but does meet the second criteria (California Department of Finance 2022)[1]. Therefore, this analysis considers whether the project conflicts with applicable zoning and other regulations governing scenic quality. The 2040 General Plan Update would implement the following proposed policies, which would minimize impacts on scenic quality from future development:

- **Policy LU-2.3: Objective Design Standards.** Establish objective design standards that convey a high level of quality and character in new residential development.

[1] The City of American Canyon has a population of approximately 21,758 persons. The City of Vallejo is an incorporated city which is contiguous to the City of American Canyon and has a population of approximately 121,558 persons. The combined population of both cities exceeds 100,000 persons.

- **Policy LU-2.4: Nonresidential Structures in Residential Neighborhoods**. Require nonresidential structures in new development (e.g., recreation facilities, community meeting rooms and auditoriums, neighborhood commercial, services, and religious facilities) be designed to be compatible with and convey the visual and physical scale and character of residential structures.
- **Policy LU-3.2: Unique Viewsheds.** Accommodate commercial uses on Oat Hill that capitalize on the unique views of the Napa River, San Francisco Bay, and Napa Valley, site topography, and other natural characteristics.
- **Policy LU-5.2: Industrial Development Unified Character.** Require new industrial development be designed to convey a unified character by inclusion of pedestrian walkways, arcades, an/or other visual elements to interconnect individual buildings; differentiation of building facades by materials, color, architectural details, and modulation of building volumes; use of consistent and well-designed public and informational signage; and installation of elements that define the key entries to the industrial district.
- **Policy LU-8.2: Objective Design and Development Standards.** Require new development to comply with the City's objective design and development standards to maintain long- term, high-quality development.
- **Policy ENV-9.4: Visual Design**. Require massing, height, and orientation of new development where allowable by the zoning standards adjacent to viewsheds and public views be evaluated and be sited and designed to minimize additional obstructions of public views to and along scenic areas.

Proposed policy LU-2.3 and policy LU-8.2 would require all new development to comply with objective design standards prepared by the City's Community Development Department. Proposed policy LU-2.4 would require nonresidential structures be designed to be visually compatible with the surrounding character of residential structures. Proposed policy LU-3.2 would require commercial development to be sited and designed to emphasize the visual characteristics of its setting. Proposed policy LU-5.2 would require industrial development to be designed to convey a unified character with surrounding development through implementation of visual elements to interconnect individual buildings. Furthermore, proposed policy ENV-9.4 would require massing, height, and orientation of new development adjacent to viewsheds and public views be evaluated and be sited and designed to minimize additional obstructions of public views to and along scenic areas.

All future development facilitated by the project would be required to adhere to the proposed policies within the 2040 General Plan Update and the City's objective design standards, which would be developed as required by the 2040 General Plan Update. As such, future development facilitated by the project would not conflict with applicable zoning or other regulations governing scenic quality. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 4:	Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Impact AES-4 CONSTRUCTION AND OPERATION OF FUTURE DEVELOPMENT FACILITATED BY THE PROJECT COULD CREATE NEW SOURCES OF LIGHT OR GLARE THAT COULD ADVERSELY AFFECT THE VISUAL ENVIRONMENT. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

The City of American Canyon is a built out city with existing sources of light and glare. Future development facilitated by the project would introduce new sources of light or glare to American Canyon. New sources of light (security lighting, parking lot lighting, ornamental lighting, pedestrian scale lights, lighting from ground floor storefronts, and signs) would increase overall lighting levels in areas where increased development would occur.

Construction of future development would largely be limited to between 7:00a.m. and 7:00p.m., consistent with the City's Noise Ordinance, codified as Chapter 8.12 in the American Canyon Municipal Code. However, temporary construction lighting may be necessary for specific developments during the early morning or evening hours for safety and security reasons, and could be approved by the City upon applicant request. The introduction of temporary construction lighting could potentially result in new sources of substantial light or glare that could adversely affect nighttime views. This lighting could be bright, which would be a potentially significant impact. Implementation of Mitigation Measure AES-1 would require construction lighting to be minimized and downward-facing.

The City is characterized by existing residential, commercial, and other land uses that already generate high ambient levels of lighting. Nonetheless, a potentially significant lighting impact could occur if lighting on future development is not properly installed to minimize light spillage. Future development facilitated by the project would adhere to the CALGreen Code Section 5.106.8 which stipulates new lighting must conform to standards that keep light generated on-site from leaving the site through the use of reflectors, shields, screen walls, and any other method which complies with the CALGreen Code's intent to limit light pollution. Furthermore, future development facilitated by the project would adhere to existing American Canyon Municipal Code standards. Section 19.14.040 prohibits bright or flashing lights to be visible off-site in industrial zones. Section 19.11.060 requires parking illumination in commercial districts, including security lighting, to be arranged to reflect from adjoining properties and rights-of-way. Furthermore, the 2040 General Plan includes the following policies that would minimize lighting impacts:

- **Policy LU-3.3: Unwanted Glare.** Prevent glare with commercial lighting designed to illuminate within the property line in accordance with safety standards.
- **Policy LU-5.4: Industrial Operations.** Require, where industrial uses are located adjacent to residential neighborhoods, that their operations be controlled to prevent adverse impacts on adjacent property (e.g., noise, light and glare, and odors) and appropriate measures implemented to buffer these uses (e.g., setbacks, landscaping, and earthen berms).

Furthermore, implementation of Mitigation Measure AES-2 would require the submittal of a photometric plan for future development to ensure that all exterior light fixtures are directed downward or employ full cut-off fixtures to minimize light spillage. Implementation of this mitigation, as well as the requirements in the Municipal Code and policies in the 2040 General Plan would minimize potentially significant light and glare impacts.

Mitigation Measures

AES-1 Construction Lighting Plan

Prior to nighttime construction, if needed for a particular project, project applicants shall submit a construction lighting plan to the City for review and approval. The construction lighting plan shall ensure that the minimum amount of lighting is used to meet safety requirements and ensure no spillover occurs to nearby sensitive uses. All lighting shall be directed downward and away from surrounding land uses.

AES-2 Operational Lighting Plan

Prior to discretionary project approval, the project applicant shall prepare and submit a photometric plan to the City for review and approval which demonstrates that all exterior light fixtures will be directed downward or employ full cut-off fixtures to prevent light spillage. The approved plan shall be incorporated into project design plans.

Significance After Mitigation

Implementation of Mitigation Measure AES-1 would require a construction lighting plan for projects that would require nighttime construction and Mitigation Measure AES-2 would require the preparation of a photometric plan. Implementation of Mitigation Measures AES-1 and AES-2 would ensure that lighting and glare is minimized during construction and operation of future development. With implementation of Mitigation Measures AES-1 and AES-2, impacts would be less than significant.

4.2 Air Quality

This section analyzes the potential effects on air quality related to implementation of the project, including impacts due to construction, operations, and impacts to nearby sensitive receptors.

4.2.1 Setting

a. Climate and Topography

Air quality is affected by the rate and location of pollutant emissions and by climatic conditions that influence the movement and dispersion of pollutants. Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients, along with local and regional topography, influence the relationship between air pollutant emissions and air quality.

The Planning Area is in the San Francisco Bay Area Air Basin (SFBAAB), which is comprised of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma Counties. SFBAAB covers approximately 5,540 square miles of complex terrain, consisting of coastal mountain ranges, inland valleys, and the San Francisco Bay. The SFBAAB is generally bounded on the west by the Pacific Ocean, on the north by the Coast Ranges, and on the east and south by the Diablo Range.

The climate within the SFBAAB is dominated by a strong, semi-permanent, subtropical high-pressure cell over the northeastern Pacific Ocean. Climate is also affected by the adjacent oceanic heat reservoir's moderating effects. Mild summers and winters, moderate rainfall and humidity, and daytime onshore breezes characterize regional climatic conditions in the San Francisco Bay Area (Bay Area). In summer, when the high-pressure cell is strongest and farthest north, fog forms in the morning and temperatures are mild. In winter, when the high-pressure cell is weakest and farthest south, occasional rainstorms occur.

Winter daytime temperatures in the SFBAAB typically average in the mid-50s, with nighttime temperatures averaging in the low 40s. Summer daytime temperatures typically average in the 70s, with nighttime temperatures averaging in the 50s. Precipitation varies in the region, but in general, annual rainfall is lowest in the coastal plain and inland valley, higher in the foothills, and highest in the mountains.

b. Air Pollutants of Primary Concern

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O_3) is generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered local pollutants because they tend to accumulate in the air locally. Coarse particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$) are considered both regional and local pollutants.

Ozone

O_3 is a highly oxidative unstable gas, produced by a photochemical reaction (triggered by sunlight) between NO_X and reactive organic gas (ROG)/volatile organic compounds (VOC).[1] ROG are composed of non-methane hydrocarbons (with some specific exclusions), and NO_X is composed of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and NO_2. NO_X is formed during the combustion of fuels, while ROG are formed during combustion and evaporation of organic solvents. As a highly reactive molecule, O_3 readily combines with many different components of the atmosphere. Consequently, high levels of O_3 tend to exist only while high ROG and NO_X levels are present to sustain the O_3 formation process. Once the precursors have been depleted, O_3 levels rapidly decline. Because these reactions occur on a regional rather than local scale, O_3 is considered a regional pollutant. Groups most sensitive to O_3 include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors (United States Environmental Protection Agency [USEPA] 2022a). Depending on the level of exposure, O_3 can result in the following:

- Cause coughing and sore or scratchy throat;
- Make it more difficult to breathe deeply and vigorously and cause pain when taking a deep breath;
- Inflame and damage the airways;
- Make the lungs more susceptible to infection;
- Aggravate lung diseases such as asthma, emphysema, and chronic bronchitis; and/or
- Increase the frequency of asthma attacks.

Carbon Monoxide

CO is a localized pollutant that is found in high concentrations only near its source. The major source of CO, a colorless, odorless, poisonous gas, is the incomplete combustion of petroleum fuels by automobile traffic. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces during the winter. When CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. People with heart disease have restricted blood flow which results in a lack of oxygen to the heart muscle. These people are especially vulnerable to the effects of CO when exercising or under increased stress, when the heart needs more oxygen than usual. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina (USEPA 2022b).

Nitrogen Dioxide

NO_2 is a by-product of fuel combustion; the primary sources are motor vehicles and industrial boilers and furnaces. The principal form of NO_x produced by combustion is nitric oxide, but nitric oxide reacts rapidly to form NO_2, creating the mixture of nitric oxide and NO_2, commonly called NO_x. NO_2 is a reactive, oxidizing gas and an acute irritant capable of damaging cell linings in the respiratory tract. Such exposures over short periods can aggravate respiratory diseases, particularly

[1] The California Air Resources Board defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this environmental impact report.

asthma, leading to respiratory symptoms (such as coughing, wheezing, or difficulty breathing), and increase hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO_2 (USEPA 2022c). NO_2 absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of O_3/smog and acid rain.

Sulfur Dioxide

SO_2 is included in a group of highly reactive gases known as "oxides of sulfur." The largest sources of SO_2 emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of SO_2 emissions include industrial processes such as extracting metal from ore and burning fuels with a high sulfur content by locomotives, large ships, and off-road equipment. Short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO_2 (USEPA 2022d).

Particulate Matter

Suspended atmospheric PM_{10} and $PM_{2.5}$ is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. Both PM_{10} and $PM_{2.5}$ are directly emitted into the atmosphere as by-products of fuel combustion and wind erosion of soil and unpaved roads. Particulate matter is also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with PM_{10} and $PM_{2.5}$ can be very different. PM_{10} is generally associated with dust mobilized by wind and vehicles while $PM_{2.5}$ is generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. PM_{10} can cause increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling. For $PM_{2.5}$, short-term exposures (up to 24-hours duration) have been associated with respiratory issues such as acute bronchitis and asthma attacks. In addition, $PM_{2.5}$ can cause premature mortality, increased hospital admissions for heart or lung issues, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases (California Air Resources Board [CARB] 2022a).

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about $1/70^{th}$ the diameter of a human hair) and thus is a subset of $PM_{2.5}$. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (CARB 2022b).

TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is

typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

TACs include both organic and inorganic chemical substances. While DPM is a main source, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. People exposed to toxic air pollutants at sufficient concentrations and durations may have an increased chance of developing cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (USEPA 2020).

c. Air Quality Standards and Attainment

The federal and state governments have authority under the federal and state Clean Air Acts (CAA) to regulate emissions of airborne pollutants and have established ambient air quality standards (AAQS) for the protection of public health. An air quality standard is defined as "the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harming public health" (CARB 2019a). The USEPA is the federal agency designated to administer air quality regulation, while CARB is the state equivalent in California. Federal and state AAQS have been established for six criteria pollutants: O_3, CO, NO_2, SO_2, $PM_{10,}$ $PM_{2.5}$, and lead. AAQS are designed to protect those segments of the public most susceptible to respiratory distress, such as children under the age of 14, the elderly (over the age of 65), persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases (USEPA 2016). In addition to the federal criteria pollutants, the California Ambient Air Quality Standards (CAAQS) also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (CARB 2019b). Table 4.2-1 lists the current National Ambient Air Quality Standards (NAAQS) as well as the CAAQS for regulated pollutants.

USEPA and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the AAQS standards are classified as nonattainment areas. The NAAQS (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The CAAQS are not to be exceeded during a three-year period. The attainment status for Napa County is included in Table 4.2-2.

Pursuant to the CAA, USEPA designates areas as attainment, nonattainment, or maintenance for each criteria pollutant based on whether the NAAQS have been achieved. Whether an area meets the state and federal standards is based on air quality monitoring data. Areas that are unclassified have insufficient monitoring data for a specific pollutant to determine attainment or nonattainment status, although unclassified areas are typically treated as attainment for a specific pollutant. Since attainment and nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal and state Ozone standards and the State PM_{10} and $PM_{2.5}$ standards. The region is designated unclassified or attainment for all other ambient air quality standards (BAAQMD 2017a).

Table 4.2-1 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS	CAAQS
Ozone	1-Hour	–	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	–	–
	24-Hour	–	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	–	20 µg/m^3
	24-Hour	150 µg/m^3	50 µg/m^3
PM_{25}	Annual	12 µg/m^3	12 µg/m^3
	24-Hour	35 µg/m^3	–
Lead	30-Day Average	–	1.5 µg/m^3
	3-Month Average	0.15 µg/m^3	–

NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; µg/m^3 = micrograms per cubic meter

Source: CARB 2016; USEPA 2016

Table 4.2-2 Attainment Status of Criteria Pollutants in Napa County

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Nonattainment	Unclassified/Attainment
CO	Attainment	Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Attainment

Sources: BAAQMD 2017a

d. Current Ambient Air Quality

The Planning Area is located in Napa County, which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD is responsible for achieving and maintaining the state and federal AAQS within its jurisdiction. BAAQMD operates a network of air quality monitoring stations throughout the SFBAAB. The monitoring stations aim to measure ambient concentrations of pollutants and determine whether ambient air quality meets the state and federal standards. The monitoring station closest to the Planning Area is the Vallejo – 304 Tuolomne Street Station, approximately 4 miles south of the Planning Area. This station measures 8-hour O_3, hourly O_3, $PM_{2.5}$, and NO_X. The Napa – Valley College air monitoring station (located at Magnolia Drive and Route 221) in Napa is the closest air monitoring station to the Planning Area that measures PM_{10}. This station is approximately 6.5 miles north of the Planning Area. Table 4.2-3 indicates the number of

days each federal and state standard was exceeded at the Vallejo – 304 Tuolomne Street and Napa – Valley College air monitoring stations. As shown in Table 4.2-3, O_3 measurements exceeded federal or state O_3 standards in all three observation years. PM_{10} measurements exceeded the State standard in 2020. $PM_{2.5}$ measurements exceeded federal $PM_{2.5}$ standards in 2020. No other state or federal standards were exceeded at these air monitoring stations.

Table 4.2-3 Ambient Air Quality Data

Pollutant	2019	2020	2021
8 Hour Ozone (ppm), 8-Hour Average[1]	**0.076**	**0.077**	**0.072**
Number of Days of state exceedances (>0.070 ppm)	1	1	1
Number of days of federal exceedances (>0.070 ppm)	1	1	1
Ozone (ppm), Worst Hour[1]	0.092	**0.096**	**0.099**
Number of days of state exceedances (>0.09 ppm)	0	1	1
Carbon Monoxide (ppm), Worst-Hour	*	*	*
Number of days of state exceedances (>20.0 ppm)	*	*	*
Nitrogen Dioxide (ppm) - Worst Hour[1]	0.053	0.048	0.041
Number of days of state exceedances (>0.18 ppm)	0	0	0
Number of days of federal exceedances (>0.10 ppm)	0	0	0
Particulate Matter 10 microns, μg/m^3, Worst 24 Hours[2]	37.5	**122.9**	22.9
Number of days of state exceedances (>50 μg/m^3)	0	12	0
Number of days above federal standard (>150 μg/m^3)	0	0	0
Particulate Matter <2.5 microns, μg/m^3, Worst 24 Hours[1]	30.5	**152.7**	32.0
Number of days above federal standard (>35 μg/m^3)	0	12	0

[1] Measurements were taken from the Vallejo – 304 Tuolomne Street Station

[2] Measurements taken from the Napa – Valley College Station.

*Insufficient data available to determine the value.

Bold lettering indicates an exceedance of applicable AAQS.

Source: CARB 2022c

e. Sensitive Receptors

Sensitive receptors are facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. According to BAAQMD, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals and residential areas (BAAQMD 2017b). The Planning Area contains residential sensitive receptors throughout the Planning Area. Schools within the city include American Canyon High School, Canyon Oaks Elementary School, Donaldson Way Elementary School, and American Canyon Middle School.

4.2.2 Regulatory Setting

a. Federal

Federal Clean Air Act

The Federal Clean Air Act (CAA) governs air quality in the United States. The CAA is administered by United States Environmental Protection Agency (USEPA) at the federal level, California Air Resources Board (CARB) at the State level, and by the Air Quality Management Districts at the regional and local levels. The CAA of 1970 and the CAA Amendments of 1971 required the USEPA to establish the National Ambient Air Quality Standards (NAAQS), with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that CO_2 is an air pollutant covered by the CAA; however, no NAAQS have been established for CO_2.

The USEPA is responsible for enforcing the federal CAA. The USEPA is also responsible for establishing NAAQS. NAAQS are required under the 1977 CAA and subsequent amendments. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The agency has jurisdiction over emission sources outside State waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission standards established by CARB.

USEPA Emission Standards for New Off-road Equipment

Before 1994, there were no standards to limit the amount of emissions from off-road equipment. In 1994, USEPA established emission standards for hydrocarbons, NOx, CO, and PM to regulate new pieces of off-road equipment. These emission standards came to be known as Tier 1. Since that time, increasingly more stringent Tier 2, Tier 3, and Tier 4 (interim and final) standards were adopted by USEPA, as well as by CARB. Each adopted emission standard was phased in over time. New engines built in and after 2015 across all horsepower sizes must meet Tier 4 final emission standards. In other words, new manufactured engines cannot exceed the emissions established for Tier 4 final emissions standards.

b. State

California Clean Air Act

The California CAA allows the state to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California State Implementation Plan

The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins, as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The BAAQMD 2017 Clean Air Plan is the SIP for the SFBAAB. The 2017 Clean Air Plan accommodates growth by projecting the growth in emissions based on different indicators. For example, population forecasts adopted by the Association of Bay Area Governments (ABAG) are used to forecast population-related emissions. Through the planning process, emissions growth is offset by basin-wide controls on stationary, area, and transportation sources of air pollution.

California Low-Emission Vehicle Program

CARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 SIP. In 2012, CARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.

California On-Road Heavy-Duty Vehicle Program

CARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. CARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.

California Airborne Toxics Control Measure for Asbestos

CARB has adopted Airborne Toxics Control Measures for sources that emit a particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology to minimize emissions. In July 2001, CARB approved an Air Toxic Control Measure for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of best management practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities.

The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the air district prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs. Buildings often include materials containing asbestos. Asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present. The Planning Area is not located in an area likely to contain naturally occurring asbestos (California Department of Conservation 2000).

Verified Diesel Emission Control Strategies

USEPA and CARB tiered off-road emission standards only apply to new engines and off-road equipment can last several years. CARB has developed Verified Diesel Emission Control Strategies (VDECS), which are devices, systems, or strategies used to achieve the highest level of pollution control from existing off-road vehicles, to help reduce emissions from existing engines. VDECS are designed primarily for the reduction of diesel PM emissions and have been verified by CARB. There are three levels of VDECS, the most effective of which is the Level 3 VDECS. Tier 4 engines are not required to install VDECS because they already meet the emissions standards for lower tiered equipment with installed controls.

California Diesel Risk Reduction Plan

CARB Diesel Risk Reduction Plan has led to the adoption of new state regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

TACs in California are primarily regulated through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), also known as the Hot Spots Act. To date, CARB has identified more than 21 TACs and has adopted the USEPA list of Hazardous Air Pollutants (HAPs) as TACs.

Carl Moyer Memorial Air Quality Standards Attainment Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program), a partnership between CARB and local air districts, issues grants to replace or retrofit older engines and equipment with engines and equipment that exceed current regulatory requirements to reduce

air pollution. Money collected through the Carl Moyer Program complements California's regulatory program by providing incentives to effect early or extra emission reductions, especially from emission sources in environmental justice communities and areas disproportionately affected by air pollution.

The program has established guidelines and criteria for the funding of emissions reduction projects. Within the SFBAAB, the BAAQMD administers the Carl Moyer Program. The program has established guidelines and criteria for the funding of emissions reduction projects. Within SFBAAB, the BAAQMD administers the Carl Moyer Program. The program establishes cost-effectiveness criteria for funding emission reductions projects, which under the final 2017 Carl Moyer Program Guidelines are $30,000 per weighted ton of NOX, ROG, and PM.

c. Regional and Local Regulations

Bay Area Clean Air Plan

The BAAQMD is responsible for assuring that the federal and state ambient air quality standards are attained and maintained in the Bay Area. BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities.

BAAQMD adopted the *Bay Area Clean Air Plan: Spare the Air, Cool the Climate (Bay Area Clean Air Plan)* on April 19, 2017 as an update to the 2010 Clean Air Plan. The BAAQMD prepared the 2017 Clean Air Plan in cooperation with the Metropolitan Transportation Commission (MTC) and the ABAG. The goals of the 2017 Clean Air Plan are to reduce regional air pollutants and climate pollutants to improve the health of Bay Area residents for the next decades. The 2017 Clean Air Plan aims to lead the region into a post-carbon economy, continue progress toward attaining all State and federal air quality standards, and eliminate health risk disparities from air pollution exposure in Bay Area communities. The 2017 Clean Air Plan defines an integrated, multi-pollutant control strategy that includes 85 distinct feasible control measures to reduce emissions for four categories: ground-level ozone and its precursors, ROG and NO_X; PM (primarily $PM_{2.5}$, and precursors to secondary $PM_{2.5}$); TACs, and greenhouse gas emissions. The control measures are categorized based on the economic sector framework and include stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, and water. To protect public health, the control strategy will decrease population exposure to PM and TACs in communities that are most impacted by air pollution with the goal of eliminating disparities in exposure to air pollution between communities. The control strategy will also protect the climate by reducing greenhouse gas emissions and developing a long-range vision of how the Bay Area could look and function in a year 2050 post-carbon economy.

The focus of control measures includes aggressively targeting the largest source of GHG, ozone pollutants, and PM emissions: transportation. This includes more incentives for electric vehicle infrastructure, off-road electrification projects such as Caltrain and shore power at ports, and reducing emissions from trucks, school buses, marine vessels, locomotives, and off-road equipment. Additionally, the BAAQMD will continue to work with regional and local governments to reduce Vehicle Miles Traveled (VMT) through the further funding of rideshare, bike and shuttle programs.

BAAQMD Particulate Matter Plan

To fulfill federal air quality planning requirements, BAAQMD adopted a 2010 $PM_{2.5}$ emissions inventory in 2012. The Bay Area Clean Air Plan also included several measures for reducing PM emissions from stationary sources and wood burning. In 2013, USEPA issued a final rule determining that the Bay Area has attained the 24-hour $PM_{2.5}$ NAAQS, suspending federal SIP planning requirements for the SFBAAB. Despite this USEPA action, the SFBAAB will continue to be designated as nonattainment for the national 24-hour $PM_{2.5}$ standard until BAAQMD submits a redesignation request and a maintenance plan to USEPA, and USEPA approves the proposed redesignation.

The SFBAAB is in nonattainment for the federal PM_{10} and federal $PM_{2.5}$ standards. USEPA lowered the 24-hour $PM_{2.5}$ standard from 65 micrograms per cubic meter ($\mu g/m^3$) to 35 $\mu g/m^3$ in 2006, and designated the Air Basin as nonattainment for the new $PM_{2.5}$ standard effective December 14, 2009.

BAAQMD believes that it would be premature to submit a redesignation request and $PM_{2.5}$ maintenance plan at this time. Therefore, BAAQMD will prepare a "clean data" SIP to address the required elements, including:

- An emission inventory for primary $PM_{2.5}$, as well as precursors to secondary PM formation; and
- Amendments to the BAAQMD's New Source Review regulation to address $PM_{2.5}$.

The SFBAAB will continue to be designated as nonattainment for the 24-hour $PM_{2.5}$ NAAQS until the Air District elects to submit, and the EPA approves, a redesignation request and maintenance plan. At this time, BAAQMD does not have an applicable SIP with which the project would be required to comply. However, development facilitated by the project would be subject to the Bay Area Clean Air Plan, in addition to regulations set forth by BAAQMD as discussed in the following section.

BAAQMD Regulations

Regulation 2, Rule 1 (Permits–General Requirements)

The BAAQMD regulates new sources of air pollution and the modification and operation of existing sources through the issuances of authorities to construct and permits to operate. Regulation 2, Rule 1 provides an orderly procedure which the project would be required to comply with to receive authorities to construct or permits to operate from the BAAQMD for new sources of air pollutants, as applicable.

Regulation 2, Rule 5 (New Source Review Permitting)

The BAAQMD regulates backup emergency generators, fire pumps, and other sources of TACs through its New Source Review (Regulation 2, Rule 5) permitting process. Although emergency generators are intended to be used only during periods of power outages, monthly testing of each generator is required. BAAQMD limits testing to no more than 50 hours per year. Each emergency generator installed is assumed to meet a minimum of Tier 2 emission standards (before control measures). As part of the permitting process, the BAAQMD limits the excess cancer risk from any facility to no more than 10 per 1-million-population for any permits that are applied for within a 2-year period, and would require any source that would result in an excess cancer risk greater than 1 per 1 million to install Best Available Control Technology for Toxics.

Regulation 6, Rule 1 (Particulate Matter–General Requirements)

The BAAQMD regulates PM emissions through Regulation 6 by means of establishing limitations on emission rates, emissions concentrations, and emission visibility and opacity. Regulation 6, Rule 1 provides existing standards for PM emissions that could result during project construction or operation that the project would be required to comply with, as applicable, such as the prohibition of emissions from any source for a period or aggregate periods of more than 3 minutes in any hour which are equal to or greater than 20 percent opacity.

Regulation 6, Rule 6, (Particulate Matter–Prohibition of Trackout)

One rule by which the BAAQMD regulates PM includes Regulation 6, Rule 6, which prohibits PM trackout during project construction and operation. Regulation 6, Rule 6 requires the prevention or timely cleanup of trackout of solid materials onto paved public roads outside the boundaries of large bulk material sites, large construction sites, and large disturbed surface sides such as landfills.

Regulation 8, Rule 3 (Architectural Coatings)

This rule governs the manufacture, distribution, and sale of architectural coatings and limits the reactive organic gases content in paints and paint solvents. Although this rule does not directly apply to the project, it does dictate the ROG content of paint available for use during the construction.

Regulation 8, Rule 15 (Emulsified and Liquid Asphalts)

Although this rule does not directly apply to the project, it does dictate the reactive organic gases content of asphalt available for use during construction by regulating the sale and use of asphalt and limiting the ROG content in asphalt.

Regulation 1, Rule 301 (Odorous Emissions)

BAAQMD enforces odor control by helping the public to document a public nuisance. Upon receipt of a complaint, BAAQMD sends an investigator to interview the complainant and to locate the odor source if possible. BAAQMD typically brings a public nuisance court action when there are a substantial number of confirmed odor events within a 24-hour period. An odor source with five or more confirmed complaints per year averaged over 3 years is considered to have a substantial effect on receptors. Several BAAQMD regulations and rules apply to odorous emissions. Regulation 1, Rule 301 is the nuisance provision that states that sources cannot emit air contaminants that cause nuisance to a number of persons. Regulation 7 specifies limits for the discharge of odorous substances where BAAQMD receives complaints from 10 or more complainants within a 90-day period. Regulation 7 also precludes discharge of an odorous substance that causes the ambient air at or beyond the property line to be odorous after dilution with 4 parts of odor-free air, and specifies maximum limits on the emission of certain odorous compounds.

Regulation 9, Rule 8 (Inorganic Gaseous Pollutants–Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines)

Under Regulation 9, Rule 8, the BAAQMD regulates the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower. As such, any proposed stationary source equipment (e.g., backup generators, fire pumps) which would be greater than 50 horsepower would require a BAAQMD permit under Regulation 9, Rule 8 to operate.

Regulation 11, Rule 2 (Hazardous Pollutants–Asbestos Demolition, Renovation, and Manufacturing)

Under Regulation 11, Rule 2, the BAAQMD regulates emissions of asbestos to the atmosphere during demolition, renovation, milling, and manufacturing and establishes appropriate waste disposal procedures. Any of these activities which pose the potential to generate emissions of airborne asbestos are required to comply with the appropriate provisions of this regulation.

Plan Bay Area

On October 2021, the Metropolitan Transportation Commission (MTC) approved Plan Bay Area 2050. Plan Bay Area includes integrated land use and transportation strategies for the region and was developed through OneBayArea, a joint initiative between ABAG, BAAQMD, MTC, and the San Francisco Bay Conservation and Development Commission. Plan Bay Area is also considered the ABAG/MTC Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In accordance with SB 743, Plan Bay Area included elements designed to encourage the type of land-use development to meet three primary objectives. First, Roadway Level of Service (LOS) could not be considered an environmental impact under the California Environmental Quality Act (CEQA). Second, it introduced changes to VMT per capita as a determinant of environmental impact. Third, the use of VMT as an environmental impact in CEQA is considered a mechanism for achieving State and regional GHG reduction goals. As a regional land use plan, Plan Bay Area aims to reduce per-capita GHG emissions through the promotion of more compact, mixed-use residential and commercial neighborhoods located near transit (ABAG; MTC 2021).

Industrial Commerce Centers Sustainability Standards Ordinance 2024-03

The American Canyon Industrial Greenhouse Gas (GHG) Standards Ordinance applies to warehousing, logistics and distribution facilities in the City for which a Notice of Preparation is issued after March 1, 2024 under CEQA. The Ordinance requires zero or low emissions standards to various aspects of industrial commerce center(s), including zero-emission equipment, rooftop solar panels, and environmental compliance measures aimed at mitigating air quality degradation.

The Ordinance establishes the following standards to all warehousing, logistics, and distribution facilities in the City where a Notice of Preparation is issued after March 1, 2024, under the California Environmental Quality Act (CEQA). It defines such facilities as those used for storing and consolidating manufactured goods, typically larger than 200,000 square feet with specific characteristics such as dock high loading doors and truck activities.

The following standards are applicable under the proposed Ordinance:

1. Zero Emission Operational Equipment: All on-site motorized operational equipment (forklifts, yard trucks, pallet jacks, etc.) must be zero-emission. This includes using electrical hookups instead of diesel-fueled generators for construction tools.
2. Zero Emission Cargo Handling Equipment: All outdoor cargo handling equipment must be zero-emission vehicles. Necessary charging stations or infrastructure for these vehicles must be included in each building.
3. Rooftop Solar Panels: Before issuing a business license, the City will ensure that rooftop solar panels are installed to supply 100% of the power needed for non-refrigerated parts of the facility, including parking areas.

4. Refrigerated Space Requirements: Facilities not committing to non-refrigerated use must install conduits during construction for potential refrigerated spaces. Electric plug-in units for refrigeration units must be installed at relevant dock doors.
5. Zero Emission Construction Equipment: All generators and diesel-fueled off-road construction equipment over 75 horsepower must be zero-emissions or have CARB Tier IV-compliant engines. Exemptions are possible if such equipment is not reasonably available.
6. Electric Vehicle Charging Stations: Install infrastructure for Level 2 (or faster) EV charging stations for a percentage of employee parking spaces, increasing to 25% by 2030.
7. Air Filtration Systems: Install HVAC and/or HEPA air filtration systems in all warehouse facilities.

4.2.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on air quality if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;
3. Expose sensitive receptors to substantial pollutant concentrations; or
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

This analysis uses the BAAQMD 2017 CEQA Air Quality Guidelines to evaluate air quality.

Construction Criteria Pollutant and TAC Emissions

Construction-related emissions are limited in duration but may still cause adverse air quality impacts. Construction would generate emissions from three primary sources: the operation of construction vehicles (e.g., scrapers, loaders, dump trucks, etc.); ground disturbance during site preparation and grading, which creates fugitive dust; and the application of asphalt, paint, or other oil-based substances.

At this time, the pace, location, and duration associated with construction are not sufficiently detailed to quantify a specific emission impact, and thus it would be speculative to do so. Rather, construction criteria pollutant and TAC emissions impacts for the project are discussed qualitatively, pursuant to the BAAQMD 2017 CEQA Air Quality Guidelines.

Operation Criteria Pollutant and TAC Emissions

Based on plan-level guidance from the BAAQMD 2017 CEQA Air Quality Guidelines, long-term operational criteria pollutant and TAC emissions associated with implementation of the project are discussed qualitatively by comparing the project to the 2017 Clean Air Plan goals, policies, and control measures. In addition, comparing the rate of increase of plan VMT and population is recommended by BAAQMD for determining significance of criteria pollutants. If the project does not meet either criterion, then impacts would be potentially significant.

Odors

The impact analysis qualitatively evaluates the types of land uses facilitated by the project to evaluate whether major sources of anticipated odors would be present and, if so, whether those sources would likely generate objectionable odors. According to the BAAQMD 2017 CEQA Air Quality Guidelines, the project-level threshold for odor sources is if they result in five confirmed complaints per year averaged over three years within the screening distance for land uses shown in Table 3-3 of the guidelines (BAAQMD 2017b). The plan-level threshold states to identify the location and include policies to reduce the impacts of existing or planned sources of odors. None of the land uses identified as odor sources in the 2017 guidelines are planned as part of the project. The significance thresholds for odor impacts are qualitative in nature. Specifically, an odor-generating source with five or more confirmed complaints in the new source area per year averaged over three years is considered to have a significant impact on receptors within the screening distances provided in the guidelines.

Methodology

Consistency with Air Quality Plan

The applicable air quality plan is the BAAQMD 2017 Bay Area Clean Air Plan, which identifies measures to:

- Reduce emissions and reduce ambient concentrations of air pollutants; and
- Safeguard public health by reducing exposure to the air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution.

The project would be consistent with the Bay Area Clean Air Plan if it would support the Clean Air Plan goals, include applicable control measures, and not disrupt or hinder implementation of Clean Air Plan. Consistency with the Clean Air Plan is the basis for determining whether the project would conflict with or obstruct implementation of an applicable air quality plan.

Construction Criteria Pollutant and TAC Emissions Thresholds

BAAQMD's 2017 CEQA Air Quality Guidelines have no plan-level significance thresholds for construction air pollutants emissions. However, they do include the individual project-level thresholds for construction-related and long-term operational emissions of air pollutants. These thresholds represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. Construction emissions associated with implementation of the project are discussed qualitatively to evaluate potential air quality impacts.

For health risks associated with TAC and $PM_{2.5}$ emissions, the BAAQMD 2017 CEQA Air Quality Guidelines state a project would result in a significant impact if the any of the following thresholds are exceeded:

- Non-compliance with Qualified Community Risk Reduction Plan;
- Increased cancer risk of > 10.0 in a million;
- Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
- Ambient $PM_{2.5}$ increase of > 0.3 $\mu g/m^3$ annual average

In addition, a project would have a cumulatively considerably impact associated with health risks from TAC and $PM_{2.5}$ emissions if the aggregate total emissions of all past, present, and foreseeable future sources within a 1,000-foot radius of the fenceline of the source plus the project's contribution exceed any of the following thresholds:

- Non-compliance with Qualified Community Risk Reduction Plan;
- Increased cancer risk of > 100.0 in a million;
- Increased non-cancer risk of > 10.0 Hazard Index (Chronic or Acute); or
- Ambient $PM_{2.5}$ increase of > 0.8 µg/m^3 annual average

Operational Criteria Pollutant and TAC Emissions Thresholds

BAAQMD's *2017 CEQA Air Quality Guidelines* contain specific operational plan-level significance thresholds for criteria air pollutants. Plans must show the following over the planning period:

- Consistency with current air quality plan control measures
- VMT or vehicle trips increase is less than or equal to the plan's projected population increase

If a plan can demonstrate consistency with both of these criteria, then impacts are considered less than significant. The same thresholds listed above for construction health risks from TAC and $PM_{2.5}$ would apply to operation.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 THE PROJECT WOULD BE CONSISTENT WITH THE BAAQMD'S 2017 CLEAN AIR PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Under BAAQMD's methodology, a determination of consistency with CEQA Guidelines thresholds should demonstrate that a project:

- Supports the primary goals of the 2017 Clean Air Plan;
- Includes applicable control measures from the 2017 Clean Air Plan; and
- Does not disrupt or hinder implementation of any 2017 Clean Air Plan control measures.

The following includes a discussion of consistency with these criteria for the project. The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollution and protecting the climate in the Bay Area. For consistency with climate planning efforts at the State level, the control strategies in the 2017 Clean Air Plan are based on the same economic sector framework used by CARB, which encompass stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants (such as methane and hydrofluorocarbons). Table 4.2-4 identifies applicable control measures and discusses project consistency with the 2017 Clean Air Plan.

Table 4.2-4 Clean Air Plan Control Measures Consistency Analysis

Control Measures	Consistency
Stationary Sources	
SS18: Basin-Wide Combustion Strategy. Stabilize and then reduce emissions of GHGs, criteria air pollutant and toxic emissions from stationary combustion sources throughout the Air District by first establishing carbon intensity caps on major GHG sources, and then adopting new rules to (1) reduce fuel use on a source-type by source-type basis, and (2) evaluate alternatives to decarbonize abatement devices. **SS21: New Source Review for Air Toxics.** Propose revisions to Air District Rule 2-5, New Source Review of Toxic Air Contaminants, based on OEHHA's 2015 Health Risk Assessment Guidelines and CARB/ CAPCOA's 2015 Risk Management Guidance. Revise the Air District's health risk assessment trigger levels for each toxic air contaminant using the 2015 Guidelines and most recent health effects values.	**Consistent.** Stationary sources are regulated directly by BAAQMD, which routinely adopts/revises rules or regulations to implement the Stationary Source control measures to reduce stationary source emissions. Therefore, any new stationary sources associated with development facilitated by the project would be required to comply with BAAQMD's regulations.
Transportation	
TR2: Trip Reduction Programs. Implement the regional Commuter Benefits Program (Rule 14-1) that requires employers with 50 or more Bay Area employees to provide commuter benefits. Encourage trip reduction policies and programs in local plans, e.g., general and specific plans, while providing grants to support trip reduction efforts. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to adopt transit benefits ordinances in order to reduce transit costs to employees, and to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips. Fund various employer-based trip reduction programs.	**Consistent**: The Mobility Element includes proposed policies that encourage trip reduction programs. The following proposed goals and policies aim to reduce VMT through implementation of policies such as: ▪ **Policy MOB-1.5: Sidewalks.** Require sidewalks on all arterial and collector streets. Where feasible, separate sidewalks from streets on arterials and collectors with landscaping including a tree canopy to create shade. ▪ **Policy MOB-1.7: Promote Walking and Bicycling.** Promote walking and bicycling for transportation, recreation, and improvement of public health. ▪ **Policy MOB-1.11: Reduce the Need to Drive.** Implement land use policies designed to create a pattern of activity that makes it easy to shop, play, visit friends, and conduct personal business without driving. ▪ **Policy MOB-1.17: Reduce Vehicle Miles Traveled.** Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop. ▪ **Policy MOB-1.22: Non-motorized Circulation System.** Provide safe and direct pedestrian routes and bikeways between places. ▪ **Policy MOB-6.1: VMT Thresholds.** Maintain and periodically reevaluate established vehicle miles traveled (VMT) thresholds and Transportation Demand Management (TDM) mitigation requirements for the purposes of environmental review under the California Environmental Quality Act (CEQA). Continue to maintain LOS standards for the purposes of planning and designing street

Control Measures	Consistency
	improvements on Green Island Road, Devlin Road, and American Canyon Road. ▪ **Policy MOB 5.10 : Transit Supportive Development.** Ensure that new development is designed to make transit a viable transportation choice for residents, including neighborhood centers or focal points with sheltered bus stops; locating medium and high-density development on or near streets served by transit wherever feasible; and link neighborhoods to bus stops by continuous sidewalks or pedestrian paths. *(Source: Existing Policy 3.11)* ▪ **Policy MOB 5.12 : SB 375 Implementation.** Coordinate with other agencies to implement regional transit solutions as part of the SB 375 Sustainable Communities Strategy. *Source: Existing Policy 3.12)*
TR13: Parking Policies. Encourage parking policies and programs in local plans, e.g., reduce minimum parking requirements; limit the supply of off-street parking in transit-oriented areas; unbundle the price of parking spaces; support implementation of demand-based pricing (such as "SF Park") in high-traffic areas.	**Consistent**: Development facilitated by the project would be required to comply with existing City parking standards and standards regarding EV parking in compliance with the latest CALGreen standards.
Energy	
EN1: Decarbonize Electricity Production. Engage with PG&E, municipal electric utilities and CCEs to maximize the amount of renewable energy contributing to the production of electricity within the Bay Area as well as electricity imported into the region. Work with local governments to implement local renewable energy programs. Engage with stakeholders including dairy farms, forest managers, water treatment facilities, food processors, public works agencies and waste management to increase use of biomass in electricity production. **EN2: Decrease Electricity Demand**. Work with local governments to adopt additional energy-efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.	**Consistent.** Measures EN1 and EN2 are intended to decrease energy use as a means of reducing adverse air quality emissions. Development facilitated by the project would comply with 2022 Building Energy Efficiency Standards (or most recent version of the California Building Code) requirements that commercial buildings be electric-ready and standards for expanded solar and battery storage and residential development under three stories include rooftop photovoltaic panels. The Building Energy Efficiency Standards are updated every three years and the project would be subject to the 2022 California Building Standards when they go into effect on January 1, 2023. In addition, 2040 General Plan proposed policies listed in Section 4.15, *Effects Found to be Less than Significant*, under Section 4.15.2, *Energy,* would encourage energy efficiency and reduction.
Buildings	
BL1: Green Buildings. Collaborate with partners such as KyotoUSA to identify energy-related improvements and opportunities for on-site renewable energy systems in school districts; investigate funding strategies to implement upgrades. Identify barriers to effective local implementation of the CALGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Work with ABAG's BayREN program to make additional funding available for energy-related projects in the buildings sector. Engage with additional partners to target reducing emissions from specific types of buildings.	**Consistent**: Measures BL1 and BL2 focus on working with local governments to adopt the best GHG emissions control practices and policies. As discussed above for the Energy and Climate control measures, development facilitated by the project would comply with 2022 Building Energy Efficiency Standards' (or most recent version of the California Building Code) requirements that commercial buildings be electric-ready and standards for expanded solar and battery storage and residential development under three stories include rooftop photovoltaic panels. The Building Energy Efficiency Standards are updated every three years and the project would be subject to the 2022 California Building Standards when they go into

Control Measures	Consistency
BL2: Decarbonize Buildings. Explore potential Air District rulemaking options regarding the sale of fossil fuel-based space and water heating systems for both residential and commercial use. Explore incentives for property owners to replace their furnace, water heater or natural-gas powered appliances with zero-carbon alternatives. Update Air District guidance documents to recommend that commercial and multi-family developments install ground source heat pumps and solar hot water heaters.	effect on January 1, 2023. In addition, 2040 General Plan proposed policies listed in Section 4.15, *Effects Found to be Less than Significant*, under Section 4.15.2, *Energy,* would encourage energy efficiency and reduction.
Waste Management Control Measures	
WA4: Recycling and Waste Reduction. Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects	**Consistent.** Measure WA4 include strategies to increase waste diversion rates through efforts to reduce, reuse, and recycle. Development facilitated by the project would comply with Assembly Bill (AB) 341, which requires mandatory commercial recycling for businesses that generate four cubic yards or more of commercial solid waste per week. For further discussion of waste diversion, please refer to Section 4.13, *Utilities and Service Systems.*

BAAQMD has identified examples of how a project or plan may disrupt or delay local government implementation of these control measures, such as a project that may preclude an extension of a transit line or bike path, or that propose excessive parking beyond parking requirements. Development within the project area would not disrupt or delay local government implementation of control measures. Overall, the project would be consistent with the three criteria for evaluating consistency with the 2017 Clean Air Plan. As such, the project would not conflict with or obstruct implementation of the applicable air quality plan, and this impact would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact AQ-2 THE PROJECT WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF CRITERIA POLLUTANTS DURING CONSTRUCTION OR OPERATIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Future development and mobility improvements associated with the project would involve constructions activities that result in air pollutant emissions. Specifically, construction activities such as demolition, grading, construction worker travel, delivery and hauling of construction supplies and debris, and fuel combustion by on-site construction equipment would generate pollutant emissions. These construction activities would create emissions of dust, fumes, equipment exhaust, and other air contaminants, particularly during site preparation and grading. The extent of daily emissions, particularly ROGs and NO_X emissions, generated by construction equipment, would depend on the

quantity of equipment used and the hours of operation for each project. The extent of $PM_{2.5}$ and PM_{10} emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary. Dust emissions can lead to both nuisance and health impacts. According to the 2017 BAAQMD *CEQA Air Quality Guidelines,* $PM_{2.5}$ is the greatest pollutant of concern during construction.

The BAAQMD 2017 CEQA Air Quality Guidelines have no plan-level significance thresholds for construction air pollutant emissions that would apply to the project. However, the guidelines include project-level thresholds for construction emissions. If an individual project's construction emissions fall below the project-level thresholds, the project's impacts on regional air quality would be individually and cumulatively less than significant. The BAAQMD has also identified feasible fugitive dust control measures for construction activities. These Basic Construction Mitigation Measures are recommended for all projects. In addition, the BAAQMD and CARB have regulations that address the handling of hazardous air pollutants such as lead and asbestos, which could be aerially disbursed during demolition activities. BAAQMD rules and regulations address both the handling and transport of these contaminants. Construction of development facilitated by the project would temporarily increase air pollutant emissions, possibly creating localized areas of unhealthy air pollution concentrations or air quality nuisances, resulting in a potentially significant impact.

However, the following 2040 General Plan proposed policy would reduce fugitive dust emissions from construction activities by requiring future development to implement construction management plans in accordance with BAAQMD standards:

- **Policy ENV-11.2: Construction Management Plans.** Require new development and redevelopment projects to prepare and implement a construction management plan that incorporates Best Available Control Measures and all best management practices in accordance with the Air District standards to reduce criteria pollutants.

Best available control measures and best management practices in accordance with BAAQMD would include the following:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper conditions prior to operation.

- Post a publicly visible sign with the applicant's site superintendent telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.

With adherence to 2040 General Plan proposed Policy ENV-11.2, cumulative construction impacts associated with violating an air quality standard or contributing substantially to an existing or projected air quality violation in terms of criteria air pollutant emissions would be less than significant.

Operation

The greatest source of criteria pollutants in American Canyon is and would continue to be from transportation sources, specifically mobile emissions from roadway traffic. The project emphasizes reducing VMT on area roadways through emphasizing greater mixed use in the area and proximity of residents to jobs. The following 2040 General Plan proposed goals and policies would encourage active transportation modes, such as walking and bicycling, as well as the use of public transit, thereby reducing vehicle trips and associated criteria air pollutants in the Planning Area:

Goal LU-1: Establish American Canyon as a "complete city" with a diversity of distinct land uses that serve the needs of residents, businesses, and visitors.

- **Policy LU-1.4: Compact Development Pattern**. Maintain a compact development pattern that fosters a walkable and bikeable urban form.

Goal MOB-1: Provide safe and convenient access throughout the community with a citywide network of complete streets that meet the needs of all users and reduce vehicle miles traveled (VMT).

- **Policy MOB-1.7: Promote Walking and Bicycling.** Promote walking and bicycling for transportation, recreation, and improvement of public health.
- **Policy MOB-1.11: Reduce the Need to Drive.** Implement land use policies designed to create a pattern of activity that makes it easy to shop, play, visit friends, and conduct personal business without driving.
- **Policy MOB-1.12: Neighborhood Context.** Support safe, complete, and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.
- **Policy MOB-1.17: Reduce Vehicle Miles Traveled.** Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop.
- **Policy MOB-1.20: Bicycle Plan Funding.** Include funding for the City's Bicycle Plan updates and bikeway improvements consistent with the Bicycle Plan in the City's transportation financing program and TIF, recognizing the multi-modal travel needs of the City.
- **Policy MOB-1.22: Non-motorized Circulation System.** Provide safe and direct pedestrian routes and bikeways between places.
- **Policy MOB-1.23: Pedestrian Connections to Employment Destinations**. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their

workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.

- **Policy MOB-1.24: Bicycle Facilities.** Bicycle facilities shall be provided to complete a continuous bikeway system, consistent with state standards, as shown on the Bikeway Plan Map. In cases where existing right of way constraints limit development of Class II or Class IV facilities, Class Ill signage and demarcation may be permitted at the discretion of the City Engineer. Deviations from these standards and from the routing shown on the diagram shall be permitted with the approval of the City Engineer.
- **Policy MOB-1.27: Sustainable Roadway Expansion.** Monitor the effects of roadway expansion on air, noise, seismic and archeological resources, and nesting habitat.

Goal MOB-5: Support increased public transit to improve mobility, improve air quality, and support efforts to reduce vehicle miles traveled (VMT).

- **Policy MOB-6.1: VMT Thresholds**. Maintain and periodically reevaluate established vehicle miles traveled (VMT) thresholds and Transportation Demand Management (TDM) mitigation requirements for the purposes of environmental review under the California Environmental Quality Act (CEQA). Continue to maintain LOS standards for the purposes of planning and designing street improvements on Green Island Road, Devlin Road, and American Canyon Road.
- **Policy MOB-5.2: Existing Transportation Demand Management Efforts**. Continue to support the implementation of existing local and regional efforts to manage traffic demand, such as the Napa Logistics Park trip monitoring program, and employer TDM provisions of the Bay Area Air Quality Management District (BAAAQMD).
- **Policy MOB-5.3: Support Transit Operation Improvements.** Work with NVTA to expand both ACT and VINE fixed route services, improve operations, and support dedicated bus lanes and/or queue-jump lanes on SR 29 to enhance bus operations by reducing travel time for transit vehicles.
- **Policy MOB-5.7: Future Transit Links.** Consider orienting transit system expansion to link with other potential future commuter bus and/or rail services.

According to the BAAQMD 2017 CEQA Air Quality Guidelines, the threshold for criteria air pollutants and precursors requires a comparison of the percent increase in VMT and population. Table 4.2-5 summarizes the net increase in population versus VMT for cumulative plus project buildout conditions based on data provided by GHD (2022).

Table 4.2-5 Comparison of VMT and Population Increase due to the Project

Scenario	Existing (2024)	Cumulative Plus Project Buildout [a]	Net Increase
Population (number of residents)	21,758	33,248	11,490
Percentage change			53%
Total Citywide VMT	562,492	568,813	6,321
Percentage change			1%

Note:

[a.] Cumulative conditions with the project is based on Year 2040 citywide residential and commercial growth, as well as projected regional land use growth

Source: GHD 2022

The project emphasizes changing land uses to concentrate growth and jobs and services near residences to reduce singular vehicle trips. As shown in Table 4.2-5, the City's population increase would be proportionately greater than the VMT increase. If a plan's VMT increase, under the cumulative condition, is less than or equal to the plan's projected population increase, impacts to operational criteria pollutant emissions would be less than significant. As such, impacts from project operation would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 3:	Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 CONSTRUCTION ACTIVITIES FOR PROJECTS LASTING LONGER THAN TWO MONTHS OR LOCATED WITHIN 1,000 FEET OF SENSITIVE RECEPTORS COULD EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS. IMPLEMENTATION OF THE PROJECT MAY ALSO EXPOSE SENSITIVE RECEPTORS TO OPERATIONAL SOURCES OF TOXIC AIR CONTAMINANTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

Construction

The project would result in Diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment associated with site preparation (e.g., excavation, grading, clearing), building construction, and other construction activities. The potential cancer risk from inhaling DPM, as discussed below, outweighs the potential non-cancer[2] health impacts (CARB 2022b).

Generation of DPM from construction typically occurs in a single area for a short period. Future construction would occur over approximately seventeen years (assuming a buildout year of 2040), but use of diesel-powered construction equipment in any one area would likely occur for no more than a few years for an individual project and would cease when construction is completed in that area. It is impossible to quantify risk without identified specific project details and locations.

The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period. According to the California Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the development (OEHHA 2015). BAAQMD uses an exposure period of 30 years (BAAQMD 2016).

[2] Non-cancer risks include premature death, hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma, increased respiratory symptoms, and decreased lung function (CARB 2021a).

The maximum PM_{10} and $PM_{2.5}$ emissions would occur during demolition, site preparation and grading activities, which would only occur for a portion of the overall estimated timeframe of seventeen years for individual project construction. These activities would typically last for approximately two weeks to two years, depending on the extent of grading and excavation required (e.g., projects with subterranean parking structures or geological constraints require additional grading as compared to those without). PM_{10} and $PM_{2.5}$ emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less intensive construction equipment. While the maximum DPM emissions associated with demolition, site preparation, and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent between 0.1 to 7 percent of the total 30-year exposure period for health risk calculation.

Development facilitated by the project would also be required to be consistent with the applicable 2017 Clean Air Plan, BAAQMD regulatory requirements and control strategies, and the CARB In-Use Off-Road Diesel Vehicle Regulation, which are intended to reduce emissions from construction equipment and activities. Additionally, development facilitated by the project would be required to adhere to General Plan proposed Policy ENV-11.2, which requires implementation of BAAQMD best available control measures and best management practices that would reduce construction-related TACs. According to the OEHHA, construction of individual projects lasting longer than two months or placed within 1,000 feet of sensitive receptors could potentially expose nearby sensitive receptors to substantial pollutant concentrations, which could result in potentially significant risk impacts. There is the potential that development associated with the project could last more than two months or be within 1,000 feet of sensitive receptors. As such, these projects could exceed BAAQMD's thresholds of an increased cancer risk of greater than 10.0 in a million and an increased non-cancer risk of greater than 1.0 Hazard Index (Chronic or Acute). Therefore, construction impacts from TAC emissions would be potentially significant. However, implementation of Mitigation Measure AQ-1 would require the preparation of a Construction Health Risk Assessment for future projects and would mitigate potential construction-related TACs exposure impacts to a less than significant level.

Operation

The BAAQMD CEQA Guidelines include methodology for jurisdictions to evaluate the potential impacts from placing sensitive receptors in proximity to major air pollutant sources. For assessing community risk and hazards for siting a new receptor, sources within a 1,000-foot radius of a project site are typically considered. Sources are defined as freeways or high-volume roadways with 10,000 vehicles or more per day and permitted sources (BAAQMD 2017b).

Development facilitated by the project could accommodate a net increase of approximately 3,379 additional residential units and approximately 5.7 million square feet of commercial, retail, hotel, industrial, warehouse, and research and development uses. Development facilitated by the 2040 General Plan in accordance with land use and zoning regulations would not site land uses that typically generate TAC, such as industrial land uses near residential land uses. Additionally, if the proposed commercial, retail, warehouse, research and development, and industrial uses site a new stationary TAC source, like an emergency generator, then said stationary source would be required to receive a permit from BAAQMD. The permitting process would ensure that the stationary source does not present a health risk to existing nearby sensitive receptors.

Furthermore, there are several high-volume roadways in American Canyon, including SR 29, American Canyon Road, Flosden Road, and Newell Drive. The 2040 General Plan may facilitate locating sensitive receptors in proximity to high-volume roadways and freeways. To minimize health risks to sensitive receptors located near stationary sources and/or high-volume roadways, the 2040 General Plan includes the following proposed goal and policies that aim to improve air quality and minimize exposure to TAC:

Goal ENV-11: Improve air quality and minimize human exposure to toxic air pollutants.

- **Policy ENV-11.1: Regional Air Quality Efforts.** Support and coordinate with BAAQMD and State and Federal planning efforts aimed at reducing air pollution and management of major pollutants affecting American Canyon and the region, including the Clean Air Plan.
- **Policy ENV-11.3: Separate Sensitive Land Uses.** Separate sources of air pollution from sensitive land uses, such as residences, schools, day care centers, hospitals, and nursing homes.

In addition, the following proposed policy would ensure that industrial uses would not generate unacceptable levels of air emissions, including TAC.

- **Policy LU-5.5: Prevent Adverse Impacts.** Control, through the permit process, the development of industrial uses that use, store, produce, or transport hazardous materials in threshold planning quantities, generate unacceptable levels of noise or air emissions, or result in other impacts that adversely impact American Canyon.

The primary mobile source of TACs within the plan area is truck idling and use of off-road equipment. New warehousing operations could generate substantial DPM emissions from off-road equipment use and truck idling. In addition, some warehousing and industrial facilities may include use of transport refrigeration units for cold storage. Such potential future uses could generate an increase in DPM that would contribute to cancer and noncancer health risk at nearby sensitive receptors. Without project-specific analysis, health risk impacts from nonpermitted sources associated with development of industrial and commercial land uses under the proposed plan would be potentially significant. Mitigation Measure AQ-2 would require project applicants to prepare an operational health risk assessment for the siting of new sensitive receptors within 500 feet of major sources of TAC (high-volume roadways with 10,000 vehicles or more per day). Mitigation Measure AQ-3 would require applicants for land uses that would generate substantial diesel truck travel to determine the appropriate level of operational health risk assessment require. With the implementation of Mitigation Measures AQ-2 and AQ-3, the project's impacts related to TAC emissions would be less than significant.

Mitigation Measures

AQ-1 Conduct Construction Health Risk Assessment

Prior to issuance of a grading or building permit, whichever occurs first, the applicant shall submit to the City a construction health risk assessment (HRA) in accordance with BAAQMD recommendations for any development project that has at least one the following characteristics:

- The project is located within 1,000 feet of sensitive receptors.
- Project construction would last longer than two months.

- Project construction would not utilize equipment rated USEPA Tier 4 (for equipment of 50 horsepower or more); construction equipment fitted with Level 3 Diesel Particulate Filters (for all equipment of 50 horsepower or more); or alternative fuel construction equipment.

If the HRA determines that construction will exceed BAAQMD significance thresholds, the HRA shall provide mitigation measures to reduce the impact to less than significant, including but not limited to requiring the use of Tier 4 engines, Level 3 Diesel Particulate Filters, and/or alternative fuel construction equipment.

AQ-2 Reduce Operational Toxic Air Contaminants Near Sensitive Receptors

For new sensitive receptors proposed within 500 feet of a major sources of TAC (high-volume roadways with 10,000 vehicles or more per day), the project applicant shall prepare an operational health risk assessment for the City's review and approval. If TAC exposure at new sensitive receptor sites would exceed BAAQMD health risk thresholds, require the project applicant include mechanical air filtration or other measures to reduce health risk exposure to acceptable levels.

AQ-3 Conduct Operational Health Risk Assessment

Prior to permit approval for industrial, warehousing, or commercial land uses that would generate at least 100 diesel trucks per day or 40 or more trucks with diesel-powered transport refrigeration units per day, the applicant shall submit an operational health risk assessment (HRA) or submit proof that an HRA is not required in accordance with BAAQMD thresholds to the City for review and approval. If required by the City, the operational HRA shall be prepared in accordance with the Office of Environmental Health Hazard Assessment and BAAQMD requirements, and mitigated to an acceptable level. Typical measures to reduce risk impacts may include, but are not limited to:

- Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible.
- Electrifying warehousing docks.
- Truck Electric Vehicle (EV) Capable trailer spaces.
- Requiring use of newer equipment and/or vehicles.
- Restricting off-site truck travel through the creation of truck routes.

The operational HRA shall be provided to the City for review and concurrence prior to project approval.

Significance After Mitigation

Construction and operational related TACs exposure impacts would be less than significant with implementation of Mitigation Measures AQ-1 through AQ-3.

Threshold 4:	Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-4 THE PROJECT WOULD NOT CREATE OBJECTIONABLE ODORS THAT COULD ADVERSELY AFFECT A SUBSTANTIAL NUMBER OF PEOPLE. IMPACTS RELATED TO ODORS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

Construction of development and mobility improvements would require the operation of construction equipment and asphalt paving, which could generate oil, diesel fuel, and asphalt odors.

The odors would be limited to the construction period and would be temporary. Therefore, odors emitted from the construction of individual future projects under the project would be less than significant.

As stated in the BAAQMD CEQA Guidelines, land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food manufacturing plants, chemical plants, composting, refineries, landfills, and confined animal facilities. Development facilitated by the 2040 General Plan would include commercial, retail, hotel, industrial, warehouse, and research and development uses. Most of these land uses typically do not produce objectionable odors; however, certain commercial and industrial uses would have the potential to generate nuisance odors. Therefore, individual projects under the 2040 General Plan could generate potentially significant objectionable odors unless analyzed and mitigated. Mitigation Measure AQ-4 would require project applicants to evaluate potential odor impacts and implement odor control measures to the extent feasible. Therefore, 2040 General Plan impacts related to operational odor impacts would be less than significant with mitigation. In addition, other odors from development of the 2040 General Plan include odors associated with vehicle and engine exhaust and idling; however, odors from vehicles are not stationary and are dispersed throughout the roadway network and would result in less than significant impacts.

Mitigation Measures

AQ-4 Reduce Operational Odor Impacts

Prior to discretionary approval by the City, if it is determined by the City that a development project has the potential to emit nuisance odors beyond the property line, the project applicant shall prepare an odor management plan and submit it to the City for review and approval. Facilities that have the potential to generate nuisance odors include, but are not limited to:

- Wastewater treatment plants
- Composting, green waste, or recycling facilities
- Fiberglass manufacturing facilities
- Painting/coating operations
- Large-capacity coffee roasters
- Food-processing facilities

The odor management plan shall demonstrate compliance with the latest BAAQMD screening distances and guidelines. The odor management plan shall identify the best available control technologies for toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include but are not limited to scrubbers (i.e., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the documents prepared for the development project and/or incorporated into the project's site plan.

Significance After Mitigation

Odor impacts would be less than significant with implementation of Mitigation Measure AQ-4 to reduce operational odor impacts.

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4.3 Biological Resources

This section summarizes the biological resources in the Planning Area and analyzes the potential effects on biological resources related to implementation of the project.

4.3.1 Setting

This following information was obtained through a desktop literature review of the United States Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI) and Information for Planning and Consultation (IPaC); the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB); the National Oceanic and Atmospheric Administration's (NOAA) Protected Resources Application; the Napa County General Plan Environmental Impact Report; and Napa County vegetation mapping.

a. Land Cover

The Planning Area contains substantial urban development. There are, however, areas of relatively undisturbed natural habitats in the Planning Area. Descriptions of the vegetation communities in the Planning Area are listed below, based on vegetation mapping in Napa County (Napa County 2019). Figure 4.3-1 shows the vegetation communities and land covers within the Planning Area.

Grassland

Grassland is a relatively common biotic community within the Planning Area. Three common grassland assemblages exist within Napa County: annual grassland, native grassland, and serpentine (bunchgrass) grassland. Of these assemblages, annual grassland is found within the Planning Area. Vernal pools are found in some grassland areas (County of Napa 2007).

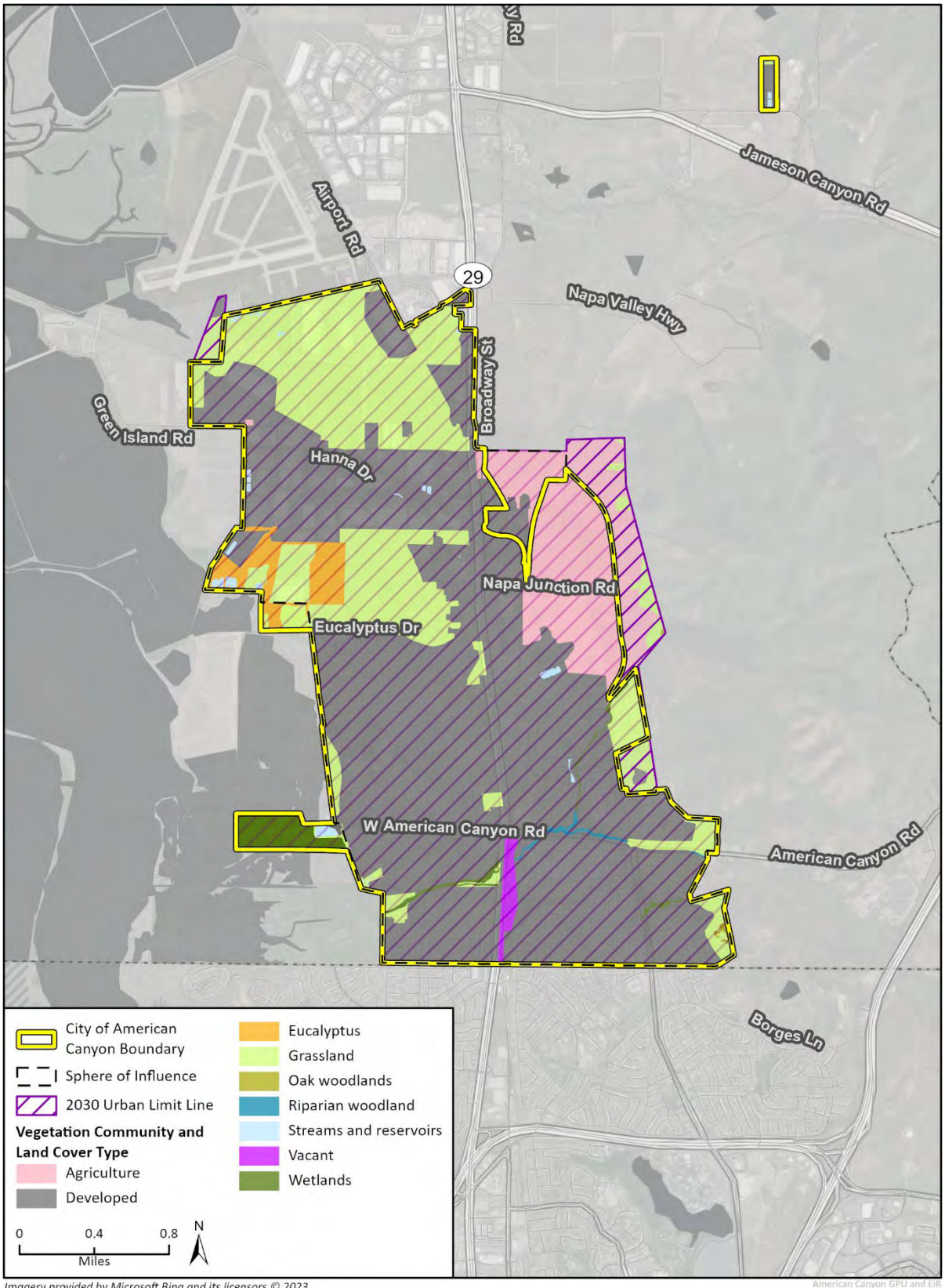
Oak Woodland

Oak woodland occurs across a broad range of elevations, on gentle and steep slopes. There are 13 vegetation types (alliances or associations) within the oak woodland group. Six of these are dominated by evergreen oak species, six are dominated by deciduous oak species, and one is a mixture of deciduous and evergreen oaks (County of Napa 2007). Within the Planning Area, oak savannahs are protected via the American Canyon Municipal Code, Chapter 19.24.

Riparian Woodland

Within the Planning Area, riparian areas are associated with the American Canyon Creek, Rio Del Mar Creek, North Slough, and No Name Creek. Riparian woodland habitat can provide shade, habitat, and nesting sites for resident birds, migratory birds, and other wildlife such as reptiles. In addition, riparian habitat can serve as rearing habitat for anadromous fish.

Figure 4.3-1 Vegetation Communities in American Canyon



Imagery provided by Microsoft Bing and its licensors © 2023.
Additional data provided by Napa County, 2019.

American Canyon GPU and EIR
Fig X Vegetation Communities in American Canyon

Wetlands, Streams, and Reservoirs

Wetlands are highly productive habitats for plants and wildlife. Coastal wetlands and riparian wetlands (linear areas adjacent to streams, creeks and drainages) are especially productive for plants, because recurrent flooding in these areas delivers influxes of soil and nutrients. This highly productive biotic community provides shelter and food sources for resident and migratory wildlife. The structural complexity and existence of native vegetation in these areas enhance the productivity of wetlands for wildlife species, by providing diverse sites for foraging and breeding (Napa County 2007). According to the USFWS NWI, wetlands in and surrounding the Planning Area consist of estuarine and marine habitats, freshwater ponds, freshwater emergent wetlands, and riverine habitats (USFWS 2022a).

Open water habitats, such as streams and reservoirs, are highly diverse in size, type, water chemistry, and hydrologic functions. The Napa River is a prominent aquatic feature in the Planning Area (County of Napa 2007).

Eucalyptus

American Canyon contains eucalyptus groves near the northwestern border of its city limits. The eucalyptus groves are surrounded by industrial development, a school, and public facilities. Eucalyptus are non-native and invasive in California.

b. Special Status Species

For the purposes of this analysis, special-status species include the following:

- Species listed as threatened or endangered under the Federal Endangered Species Act (FESA), including proposed and candidate species.
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA).
- Species designated as Fully Protected by the California Fish and Game Code (CFGC), and Species of Special Concern or Watch List by CDFW.
- Plant species protected by the Native Plant Protection Act (NPPA) (State Rare).
- Plant species with California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR) 1A, 1B, 2A and 2B.
- Species designated as locally important by the Local Agency and/or otherwise protected through ordinance, local policy, or HCPs/NCCPs.

Queries of the USFWS's IPaC, CNDDB, and CNPS's online Inventory of Rare and Endangered Plants of California were conducted to obtain comprehensive information regarding special-status species and sensitive vegetation communities known or with potential to occur in the Planning Area. Queries of the CNPS inventory and CNDDB database included the Cuttings Wharf U. S. Geological Service (USGS) 7.5-minute topographic quadrangle and surrounding 11 quadrangles (Cordelia, Sonoma, Napa, Mt. George, Fairfield North, Fairfield South, Vine Hill, Benicia, Mare Island, Petaluma Point, and Sears Point). The results of these scientific database queries are provided as Appendix B of this EIR. There are 51 plant species and 44 animal species with potential to occur within the Planning Area which meet at least one of the criteria for a special status species, described above (Appendix B). These include the federally endangered Suisun thistle (*Cicuta maculate* var. *bolanderi*), the federally threatened and State species of special concern California red-legged frog

(*rana draytonii*), the federally threatened green sturgeon – southern DPS (*Acipenser medirostris pop. 1*), and the federally threatened vernal pool fairy shrimp (*Branchinecta lynchi*) (Appendix B).

c. Nesting Birds

Suitable nesting sites for avian species protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), including shrubs, trees, man-made structures, and the ground surface occur throughout the Planning Area. Some species prefer vegetation for nesting, including ornamental vegetation and some species can be found nesting in man-made structures, such as power poles or the eaves of buildings. Nesting birds may occur during the breeding season (generally February 1 through August 31 but beginning January 1 for some raptor species).

d. Sensitive Vegetation Communities and Critical Habitat

Various habitats support special status species. The City identifies the following habitats as sensitive, and the American Canyon Municipal Code provides enhanced protection for these habitats and subsequently, species within these habitats:

- Riparian corridors
- Coastal saltmarsh
- Mixed hardwood forest
- Oak savannah
- Vernal pool
- Wetland habitats

The following five sensitive natural communities occur within the 12 quadrangles search range (Appendix B):

- Coastal Brackish Marsh
- Northern Claypan Vernal Pool
- Northern Coastal Salt Marsh
- Northern Vernal Pool
- Serpentine Bunchgrass

In addition, NOAA identifies critical habitat for green sturgeon – southern DPS (*Acipenser medirostris pop. 1*) in the waters adjacent to the western border of the Planning Area (NOAA 2022). UWFWS identifies critical habitat for the California red-legged frog (*rana draytonii*) and the vernal pool fairy shrimp within the City limits (*Branchinecta lynchi*) (USFWS 2022a).

e. Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the linkages do not necessarily need to be the same or of the same quality as the habitats that are being linked. Rather, the linkage merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Migration corridors can be bordered on either site by urban land uses, and within the City limits these corridors often include barriers to movement such as developed areas and roads. Substantial habitat connectivity occurs generally to the east and north of the City's sphere-of-influence (SOI), as well as within the City's riparian corridors. As defined by CDFW, the eastern portion of American Canyon, including the City's SOI and urban limit line are within essential habitat connectivity areas. However, due to the existing level of development, the area is considered less permeable, meaning it is more difficult for animals to migrate in these areas (CDFW 2022).

4.3.2 Regulatory Setting

a. Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 and subsequent amendments provide for the conservation of endangered and threatened species, and the ecosystems upon which they depend. FESA is intended to prevent the unlawful "take" of listed fish, wildlife, and plant species. Section 9(a)(1)(B) specifically states take of species listed as threatened or endangered is unlawful. Take is defined as any action that would harass, harm, pursue, hunt, wound, shoot, kill, trap, capture, or collect any threatened or endangered species. Section 10 of the FESA allows the USFWS to issue incidental take permits if take of a listed species may occur during otherwise lawful activities. Section 10(a)(1)(B) requires a Habitat Conservation Plan for an incidental take permit on non-federal lands. Section 7 of the FESA requires federal agencies to aid in the conservation of listed species, and to ensure that the activities of federal agencies will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. The USFWS and NOAA are responsible for administration of the FESA and have regulatory authority over federally listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds, and prohibits the removal of nests occupied by migratory birds. The USFWS has regulatory authority for the MBTA.

Clean Water Act

The United States Army Corps of Engineers (USACE), under provisions of Section 404 of the Clean Water Act (CWA) and USACE implementing regulations, has jurisdiction over the placement of dredged or fill material into "waters of the United States." Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." In practice, the boundaries of certain waters subject to USACE jurisdiction under Section 404 have not been fully

defined. Previous regulations codified in 1986 defined "waters of the United States" as traditional navigable waters, interstate waters, all other waters that could affect interstate or foreign commerce, impoundments of waters of the United States, tributaries, the territorial seas, and adjacent wetlands.

USACE jurisdictional limits are typically identified by the Ordinary High Water Mark (OHWM) or the landward edge of adjacent wetlands, where present. The OHWM is the "line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 Code of Federal Regulations 328.3).

The USACE defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3). The USACE's delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

Fish and Wildlife Coordination Act

The USFWS also has responsibility for project review under the Fish and Wildlife Coordination Act. This statute requires that all federal agencies consult with USFWS, NOAA Fisheries, and the State's wildlife agency (CDFW) for activities that affect, control, or modify streams and other water bodies. Under the authority of the Fish and Wildlife Coordination Act, USFWS, NOAA Fisheries, and the CDFW review applications for permits issued under Section 404 and provide comments to the SACE about potential environmental impacts.

b. State Regulations

California Endangered Species Act

The CDFW is responsible for administration of the California Endangered Species Act. For projects that may affect both a State and federal listed species, compliance with the FESA will satisfy the CESA, provided the CDFW determines that the federal incidental take authorization is consistent with the CESA.

Take is defined in the California Fish and Game Code (CFGC) Section 86 as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The CESA allows for take incidental to otherwise lawful activities under CFGC Section 2081. Project proponents wishing to obtain incidental take permits can do so through a permitting process outlined in California Code of Regulations (CCR) Section 783. Additionally, some sensitive mammals and birds are protected by the state as Fully Protected Mammals or Fully Protected Birds, as described in the CFGC, Sections 4700 and 3511, respectively.

Projects that may result in a take of a California listed species require a take permit under the CESA. The federal and State acts lend protection to species considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or den locations, communal roosts, and other essential habitat. Unlike the FESA, the CESA prohibits the take of not just listed endangered or threatened species, but also candidate species (species petitioned for listing).

The CESA defines an endangered species as:

> …a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

A threatened species is defined as:

> …a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.

Candidate species are defined as:

> …a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species. Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating:

> …no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.

California Fish and Game Code - Nesting Bird Protection

According to CFGC Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird [except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)]. Sections 3503 and 3513 prohibit the taking of specific birds, their nests, eggs, or any portion thereof during the nesting season. Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 overlaps with the federal MBTA, prohibiting the take or possession of any migratory nongame bird.

California Native Plant Protection Act

The California Native Plant Protection Act (NPPA) was enacted in 1977 and allows the California Fish and Wildlife Commission to designate plants as rare or endangered. Currently, 64 species, subspecies, and varieties of plants are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites; changes in land use; and in certain other situations. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA permitting procedures (CFG Code Section 2081) would be applied to plants listed under the NPPA as

"Rare." With this change, there is little practical difference between regulations and protocols for plants listed under CESA and those listed under the NPPA.

Clean Water Act Section 401, Porter-Cologne Water Quality Control Act

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over "waters of the State," which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering Section 401 of the CWA. In addition, where Federal jurisdiction is not asserted (for example, due to a lack of connectivity to a Relatively Permanent Waters [RPW] and Traditional Navigable Waters [TNW]), RWQCB assert jurisdiction over "waters of the State" pursuant to Section 13263 of the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. In this event, the SWRCB may issue general Waste Discharge Requirements (WDRs) regarding discharges to "isolated" waters of the State if limiting criteria are not exceeded (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the USACE to be Outside of Federal Jurisdiction) or project-specific WDRs.

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance, each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Procedures for defining wetland waters of the State pursuant to the SWRCB's State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

> the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

California Fish and Game Code Section 1600 et seq.

Pursuant to CFGC Section 1600, CDFW has authority over all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state, and requires any person, state or local governmental agency, or public utility to notify the CDFW before beginning any activity that would "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material

containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" that supports fish or wildlife resources.

A stream is defined as a "body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (CCR, Title 14 Section 1.72). A Lake or Streambed Alteration Agreement may be required for any project that would result in an adverse impact to a river, stream, or lake. CDFW jurisdiction typically extends to the top of the bank and out to the outer edge of adjacent riparian vegetation if present. However, CDFW can take jurisdiction over a body of flowing water and the landform that conveys it, including water sources and adjoining landscape elements that are byproducts of and affected by interactions with flowing water without regard to size, duration, or the timing of flow.

CDFW Special Animals List

Special-status wildlife species are those species included on the CDFW "Special Animals" list (CDFW 2020). "Special Animal" is a general term that refers to all the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. The CDFW considers the taxa on this list to be those of greatest conservation need. The species on this list generally fall into one or more of the following categories:

- Officially listed or proposed for listing under the CESA and/or FESA
- State or Federal candidate for possible listing
- Taxa that meet the criteria for listing, even if not currently included on any list, as described in CEQA Guidelines Section 15380
- Taxa considered by the Department to be a Species of Special Concern
- Taxa that are biologically rare, very restricted in distribution, declining throughout their range, or have a critical vulnerable stage in their life cycle that warrants monitoring
- Populations in California that may be on the periphery of a taxon's range but are threatened with extirpation in California

c. Local Regulations

American Canyon Municipal Code

The American Canyon Municipal Code Title 14, Title 18, and Title 19 implement measures designed to protect biological resources. Chapter 14.28 implements requirements designed to reduce substantial adverse effects to water quality in the City. These include the following:

- Implementation of erosion control measures.
- Implementation construction and operational Best Management Practices (BMPs) to reduce protect water quality.
- Prohibition of discharge, modification, deposition, construction, or placement of material into a water course.

Chapter 18.40 sets design standards for development. Specifically, Section 18.40.110 sets the following requirements to protect trees:

- Requires existing trees to be preserved unless otherwise approved by City Council as part of site development plans.

- Mandates removed trees shall be replaced on-site unless an exception is approved by City Council.

Chapter 19.24 requires protection, preservation, and enhancement of biological habitats, plants, and wildlife within the City. Specifically, Chapter 19.24 requires the following:

- Requires the preparation of a biological assessment report for developments which have the potential to substantially adversely affect biological resources.
- Limits permitted uses in riparian corridors to development including underground utilities, flood control, fish and wildlife management, water supply projects, education and research, nonmotorized recreation, trails, bridges, and resource consumptive uses as provided in the California Fish and Game Code and Title 14 of the California Administrative Code.
- Prohibits development and grading that alters the biological integrity of a riparian corridor unless no feasible alternative exists, and damaged habitat is replaced with habitat of equal value.
- Requires development permitted in riparian corridors to minimize the removal of vegetation, erosion, sedimentation, and runoff; provide for sufficient passage of native and anadromous fish; minimize wastewater discharges and entrapment; prevent groundwater depletion or substantial interference with surface and subsurface flows; minimize the channelization of streams or other water courses, provide wildlife corridors to adjacent open space; buffer habitat areas, and use open space or conservation easements to protect sensitive species and their habitats.
- Requires development in wetlands areas and areas of existing or potential vernal pools be designed and sited to preserve these areas in their natural conditions. Requires habitat replacement for any wetland or vernal pool habitat removed.
- Requires development of areas designated as oak savannah, mixed hardwood forest, and coastal saltmarsh maintain a buffer from the edge of the designated habitat, maintain connectivity to surrounding habitats, and limit public access in areas where damage to habitats may occur.

4.3.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on biological resources if it would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

3. Have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

Methodology

The assessment of potential impacts to biological resources were informed based on a review of readily available information from the USFWS, CDFW, and the NOAA. As a programmatic document, this EIR presents an assessment of the potential for adoption of the 2040 General Plan to result in significant impacts to biological resources. Because the EIR is a long-term document intended to guide actions for many years into the future, this analysis relies on program-level and quantitative evaluation.

Threshold 1:	Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact BIO-1 THE PROJECT COULD HAVE THE POTENTIAL TO HAVE AN ADVERSE IMPACT ON SPECIAL STATUS SPECIES. IMPLEMENTATION OF FEDERAL, STATE, AND LOCAL REGULATIONS AND POLICIES, AS WELL AS MITIGATION MEASURES BIO-1 AND BIO-2, WOULD ENSURE DEVELOPMENT FACILITATED BY THE PROJECT WOULD NOT HAVE A SUBSTANTIAL ADVERSE EFFECT ON CANDIDATE, SENSITIVE, OR SPECIAL STATUS SPECIES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

As discussed in Section 4.3.1, *Setting*, there are 51 plant species and 44 animal species with potential to occur within the Planning Area. In addition, the Planning Area contains riparian corridors, coastal saltmarsh, mixed hardwood forest, and oak savannah which could serve as habitat for special status species. Critical habitat is also present within the Planning Area. Potentially significant effects on candidate, sensitive, or special status species would occur if temporary disturbance during construction or permanent development facilitated by the project would result in incremental direct loss of habitat, fragmentation of larger open areas and wildlife corridors, or disturbance of special status wildlife or vegetation species.

As shown in Figure 4.3-1, the City is primarily developed and vegetation communities primarily exist outside of the City's SOI. The American Canyon Municipal Code requires project-specific development to minimize the potential for impacts to biological resources. Section 19.24.030 of the American Canyon Municipal Code requires a biological assessment report to be prepared by a qualified professional chosen by the City for project-specific development which has the potential to adversely affect biological resources. Section 19.24.040 of the American Canyon Municipal Code prohibits residential, commercial, and industrial use in riparian corridors. Section 19.24.060 of the American Canyon Municipal Code requires development in areas that encompass oak savannah, mixed hardwood forest, and coastal saltmarsh to maintain buffers from these habitats as

recommended by the biological assessment report, maintain connectivity to surrounding habitats, and limit public access in areas where habitat damage may occur. In addition, the 2040 General Plan would include the following proposed policies that would help protect habitats:

- **Policy ENV-1.2: Sensitive Habitat Assessment and Impact Mitigation.** Require new development and redevelopment located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, vernal pools, and riparian habitats to provide a detailed assessment of the potential for impacts on these resources, and include measures to reduce any identifiable impacts.
- **Policy ENV-1.3: Habitat Conservation.** Support habitat conservation efforts to set aside and preserve suitable habitats, with priority given to habitats for rare and endangered species in American Canyon in accordance with state and federal resource agency requirements.

Compliance with the American Canyon Municipal Code and implementation of proposed policies in the 2040 General Plan would help ensure habitats are identified prior to project-specific siting and habitat areas are protected where applicable. However, the Municipal Code is only applicable to "significant biological habitats" defined as riparian corridors, coastal saltmarsh, mixed hardwood forest, oak savannah, vernal pools and wetlands (as defined by USFWS), and special-status species may occur in other habitats such as grasslands and eucalyptus stands, or less suitable habitats within the planning area. The Municipal Code also does not specify what level of mitigation would be required if impacts are unavoidable within significant biological habitats. Regionally occurring special-status species such as Crotch's bumblebee (*Bombus crotchii*, state candidate endangered), monarch butterfly (*Danaus Plexippus*, federal candidate), burrowing owl (*Athene cunicularia*, California species of special concern), and western pond turtle (*Actinemys marmorata*, federally proposed threatened) may occur outside these significant biological habitats and development facilitated by the project could result in indirect impacts. Given the City does not have substantial contiguous, high-quality habitat to support special status species in previously developed and disturbed areas of the City and existing American Canyon Municipal Code requirements designed to limit the disturbance of habitat, including critical habitat, development facilitated by the project would not result in significant direct impacts to special status species due to habitat loss, but may impact special status-species if individuals are present during vegetation removal or construction. Therefore, impacts to special-status species would be potentially significant.

Construction activities associated with development and mobility improvements facilitated by the project could potentially result in impacts to birds and raptors. Nesting birds and raptors have the potential to nest on buildings, in shrubs and trees, in rocky outcrops, and on bare ground throughout the City. Vegetation, including street trees, in the City can provide refuge cover from predators, perching sites, and favorable nesting habitat. Future development and mobility improvements facilitated by the project must comply with the requirements of the MBTA and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, which include obtaining prior authorization by the USFWS before the take of a protected migratory bird species occurs, subject to USFWS requirements, and prohibiting the take, possession, or destruction of nests or eggs. However, existing City regulations do not mandate procedures to ensure compliance with the requirements of the MBTA and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code. Therefore, it is possible development facilitated by the project could result in disturbance to birds or raptors and potentially violate the MBTA and Sections 3503, 3503.5, and/or 3513 of the California Fish and Game Code. Impacts to nesting birds would be potentially significant.

In addition, construction activities associated with development facilitated by the project could result in indirect impacts to bats, such as the pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and big free-tailed bat (*Nyctinomops macrotis*). Bats have the potential to roost in buildings and trees, including street trees. If construction or demolition activities associated with development facilitated by the project would alter, demolish, or remove buildings or trees it could result in the disturbance of bat roosts. Therefore, impacts to special-status bats would be potentially significant.

Indirect impacts to special status species which utilize riparian corridors and other aquatic habitat could occur because of future development and mobility improvements facilitated by the project. The federal Clean Water Act requires compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit for projects disturbing more than one acre during construction. Compliance with the Construction General Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) developed by a certified Qualified SWPPP Developer. The SWPPP includes project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants from construction into stormwater. Typical BMPs include, but are not limited to, installation of silt fences, erosion control blankets, and anti-tracking pads at site exits to prevent off-site transport of soil materials. Chapter 14.28 of the American Canyon Municipal Code requires any construction activities to implement appropriate BMPs to prevent the discharge of sediment. If a project would not be required to submit a SWPPP pursuant to the NPDES Construction General Permit, the City requires implementation of an Erosion and Sediment Control Plan for any project subject to a grading permit. In addition, American Canyon Municipal Code Section 14.28.082 requires implementation of a Stormwater Control Plan (SCP) for all new development and redevelopment projects subject to post-construction stormwater control measure requirements. In addition, the 2040 General Plan would include the following proposed policies that would minimize water quality impacts:

- **Policy U-4.1: Storm Drainage Maintenance.** Maintain existing public storm drains and flood control facilities and construct upgraded and expanded storm drain and flood control facilities, where necessary, to protect existing and accommodate new permitted development.
- **Policy U-4.8: Low Impact Development.** Require new developments to install green infrastructure consistent with the best management practices of the State and the San Francisco Bay Regional Water Quality Control Board, including but not limited to pervious pavement, infiltration basins, raingardens, green roofs, rainwater harvesting systems, and other types of low impact development (LID).

Compliance with these regulatory requirements would minimize indirect impacts to special status species that utilize aquatic and riparian habitat. Therefore, the project would result in less than significant indirect impacts to special status species within aquatic or riparian habitat.

Mitigation Measures

BIO-1 Biological Resources Screening and Assessment

For projects proposed within undeveloped parcels, the City shall require project applicants to engage a qualified biologist (having the appropriate education and experience level) to perform a baseline Biological Resources Screening and Assessment to determine whether projects proposed within undeveloped parcels have any potential to impact special-status biological resources, inclusive of special-status plants and animals, sensitive vegetation communities (including vernal

pools and other wetlands), and critical habitat. If it is determined that the project has no potential to impact biological resources, no further action is required. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct a project-specific biological analysis to document the existing biological resources within a project footprint plus a minimum buffer of 500 feet around the project footprint, as is feasible, and to determine the potential impacts to those resources. The project-specific biological analysis shall evaluate the potential for impacts to all biological resources including, but not limited to special-status species, nesting birds, wildlife movement, sensitive plant communities, critical habitats, and other resources judged to be sensitive by local, state, and/or federal agencies. If the project would have the potential to impact these resources, the following mitigation measures (mitigation measures BIO-2 through BIO-8) shall be incorporated, as applicable, to reduce impacts to a less than significant level. Pending the results of the project-specific biological analysis, design alterations, further technical studies (e.g., protocol surveys) and consultations with the USFWS, CDFW, and/or other local, state, and federal agencies may be required. Note that specific surveys described in the mitigation measures below may be completed as part of the project-specific biological analysis where suitable habitat is present.

BIO-2 Special-status Plant Species Surveys

If the project-specific Biological Resources Screening and Assessment (Mitigation Measure BIO-1) determines that there is potential for significant impacts to federally or state-listed plants or regional population level impacts to species with a CRPR of 1B or 2B from project development, a qualified biologist shall complete surveys for special-status plants prior to any vegetation removal, grubbing, or other construction activity (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species. All plant surveys shall be conducted by a qualified biologist during the blooming season prior to development permit approval. All special-status plant species identified on site shall be mapped onto a site-specific aerial photograph or topographic map with the use of Global Positioning System unit. Surveys shall be conducted in accordance with the most current protocols established by the CDFW, USFWS, and the local jurisdictions if said protocols exist. A report of the survey results shall be submitted to the City, and the CDFW and/or USFWS, as appropriate, for review and/or approval.

BIO-3 Special-status Plant Species Avoidance, Minimization, and Mitigation

If federally and/or state-listed or CRPR 1B or 2 species are found during special-status plant surveys (pursuant to Mitigation Measure BIO-2), and would be directly impacted, or there would be a population-level impact to non-listed sensitive species, then the project shall be re-designed to avoid impacting those plant species, where feasible. Rare and listed plant occurrences that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits shall have bright orange protective fencing installed at least 30 feet beyond their extent, or other distance as approved by a qualified biologist, to protect them from harm.

BIO-4 Habitat Restoration Plan

If federally or state-listed plants or non-listed special-status CRPR 1B and 2 plant populations identified during special status plant surveys (pursuant to Mitigation Measure BIO-2), cannot be avoided, and will be impacted by development, all impacts shall be mitigated by the applicant at a ratio not lower than 1:1 per acre of impact (and 1:1 per tree), and to be determined by the City (in coordination with CDFW and USFWS as and if applicable) for each species as a component of habitat restoration. A qualified biologist shall prepare and submit a restoration plan to the City for review

and approval prior to City approval of project plans. (Note: if a federally and/or state-listed plant species will be impacted, the restoration plan shall be submitted to the USFWS and/or CDFW for review, and federal and/or state take authorization may be required by these agencies.) The restoration plan shall include, at a minimum, the following components:

1. Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type).
2. Goal(s) of the compensatory mitigation project (type[s] and area[s]) of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type[s] to be established, restored, enhanced, and/or preserved).
3. Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions, and values).
4. Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan).
5. Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule).
6. Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports).
7. Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type or other industry standards as determined by a qualified restoration specialist.
8. An adaptive management program and remedial measures to address any shortcomings in meeting success criteria.
9. Notification of completion of compensatory mitigation and agency confirmation.
10. Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).
11. All nursery plants used in restoration shall be inspected for sudden oak death.

BIO-5 Endangered/Threatened Special-status Species Habitat Assessments and Protocol Surveys

If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that suitable habitat may be present for federal or state listed, candidate, or proposed species, protocol habitat assessments/surveys shall be completed in accordance with current CDFW and/or USFWS protocols prior to issuance of any construction permits. If, through consultation with the CDFW and/or USFWS, it is determined that protocol habitat assessments/surveys are not required, the applicant shall complete and document this consultation and submit it to the City prior to issuance of any construction permits. Each protocol has different survey and timing requirements. The applicant shall be responsible for ensuring they understand the protocol requirements and shall hire a qualified biologist to conduct protocol surveys. (Note: if a federally and/or state-listed wildlife species will be impacted, federal and/or state take authorization may be required by USFWS and CDFW.)

BIO-6 Endangered/Threatened Animal Species Avoidance and Minimization

The following measures shall be applied to impacted aquatic and/or terrestrial animal species identified by the project-specific Biological Resources Screening and Assessment required under Mitigation Measure BIO-1.

1. Ground disturbance shall be limited to the minimum necessary to complete the project. A qualified biologist shall flag the project limits of disturbance. Areas of special biological concern within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed between said area and the limits of disturbance.
2. All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species. Any work outside these dates would require project-specific approval from the City and may be subject to regulatory agency approval.
3. All projects occurring within or adjacent to sensitive habitats that may support federally and/or state-listed endangered/threatened species shall have a CDFW- and/or USFWS-approved biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, said biologist shall conduct daily pre-activity clearance surveys for endangered/threatened species. Alternatively, and upon approval of the CDFW and/or USFWS, said biologist may conduct site inspections at a minimum of once per week to ensure all prescribed avoidance and minimization measures are fully implemented.
4. No endangered/threatened species shall be captured and relocated without express permission from the CDFW and/or USFWS.
5. If at any time during project construction an endangered/threatened species enters the construction site or otherwise may be impacted by the project, all project activities shall cease. A CDFW/USFWS-approved biologist shall document the occurrence and consult with the CDFW and USFWS, as appropriate, to determine whether it was safe for project activities to resume.
6. For all work occurring in areas where endangered/threatened species may be present and are at risk of entering the project site during construction, the applicant shall install exclusion fencing along the project boundaries prior to start of construction (including staging and mobilization). The placement of the fence shall be at the discretion of the CDFW/USFWS-approved biologist. This fence shall consist of solid silt fencing placed at a minimum of three feet above grade and two feet below grade and shall be attached to wooden stakes placed at intervals of not more than five feet. The applicant shall inspect the fence weekly and following rain events and high wind events and shall be maintained in good working condition until all construction activities are complete.
7. All vehicle maintenance/fueling/staging shall occur not less than 100 feet from any riparian habitat or water body, including seasonal wetland features. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies.
8. No equipment shall be permitted to enter wetted portions of any affected drainage channel or wetland.
9. At the end of each workday, excavations shall be secured with a cover or a ramp provided to prevent wildlife entrapment.

10. All trenches, pipes, culverts, or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.
11. Considering the potential for the project to impact federally and state-listed species and their habitat, the City shall contact CDFW and USFWS to identify mitigation banks within Napa County during project development. If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that impacts to federally and state threatened or endangered species habitat are expected, City and/or applicant shall explore species-appropriate mitigation bank(s) servicing the region for purchase of mitigation credits.
12. Prior to grading and construction in natural areas of containing suitable upland habitat, a qualified biologist shall conduct a preconstruction survey as determined necessary during the biological analysis (Mitigation Measure BIO-1) . The survey should include a transect survey over the entire project disturbance footprint (including access and staging areas), and mapping of suitable habitat features, such as burrows, that are potentially suitable for listed species. If any listed species are detected, no work shall be conducted until the individual(s) leaves the site of their own accord, unless federal and/or state "take" authorization has been issued for relocation. Typical preconstruction survey procedures, such as burrow scoping and burrow collapse, cannot be conducted without federal and state permits. If any life stage of listed species are found within the survey area, the City and/or applicant shall consult with the USFWS and CDFW to determine the appropriate course of action to comply with the FESA and CESA, if permits are not already in place at the time of construction.

BIO-7 Pre-Construction Bird Surveys, Avoidance, and Notification

For all future development under the 2040 General Plan, construction activities initiated during the bird nesting season (February 1 – September 15), involving removal of vegetation (e.g. trees and shrubs), abandoned structures, or other nesting bird habitat, a pre-construction nesting bird survey shall be conducted no more than 5 days prior to initiation of ground disturbance and vegetation removal. The nesting bird pre-construction survey shall be conducted on foot and shall include a buffer around the construction site at a distance determined by a qualified biologist, including staging and storage areas. The minimum survey radii surrounding the work area shall be the following: 250 feet for non-raptors and 1,000 feet for raptors. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in the American Canyon region. If construction lapses for seven days or longer, the qualified biologist shall conduct another focused survey before project activities are reinitiated. If nests are found, an avoidance buffer shall be determined by the biologist dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site. The qualified biologist shall observe the active nest to establish a behavioral baseline of the adults and nestlings, if present. The qualified biologist shall continuously monitor the active nests to detect signs of disturbance and behavioral change as a result of construction impacts, such as noise, vibration, odors, or worker/equipment motion. If signs of disturbance and behavioral changes are observed, the qualified biologist shall cease work causing those changes and may contact CDFW or USFWS for guidance. The buffer shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified of the buffer zone as an "Ecologically Sensitive Area" and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A report summarizing the

pre-construction survey(s) shall be prepared by a qualified biologist and shall be submitted to the City prior to the commencement of construction activities.

Project site plans shall include a statement acknowledging compliance with the federal MBTA and California Fish and Game Code that includes avoidance of active bird nests and identification of Best Management Practices to avoid impacts to active nests, including checking for nests prior to construction activities during February 1 to September 15, and what to do if an active nest is found so that the nest is not inadvertently impacted during grading or construction activities.

BIO-8 Roosting Bat Surveys and Avoidance Prior to Removal

For all future development under the 2040 General Plan that will require the removal of large trees (greater than 20 inches in diameter at five feet from the ground), abandoned buildings, bridges, or other suitable roosting structure identified during the Biological Resources Screening and Assessment (Mitigation Measure BIO-1), prior to tree and/or structure removal, a qualified biologist shall conduct a focused survey of all trees and structures to be removed or impacted by construction activities to determine whether active roosts of special-status bats are present on site. Tree or structure removal shall be planned for either the spring or the fall, and timed to ensure both suitable conditions for the detection of bats and adequate time for tree and/or structure removal to occur during seasonal periods of bat activity exclusive of the breeding season, as described below. Trees and/or structures containing suitable potential bat roost habitat features shall be clearly marked or identified. If no bat roosts are found, the results of the survey will be documented and submitted to the City within 30 days of the survey, after which no further action will be required.

If roosts are present, the biologist shall prepare a site-specific roosting bat protection plan to be implemented by the contractor following the City's approval. Additionally, the qualified biologist shall determine compensatory mitigation for temporary or permanent habitat loss due to tree removal, in conjunction with CDFW. The plan shall incorporate the following guidance as appropriate:

- When possible, removal of trees/structures identified as suitable roosting habitat shall be conducted during seasonal periods of bat activity, including the following:
  - Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than 0.5 inch of rainfall within 24 hours occurs.
  - Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs.
- If a tree/structure must be removed during the breeding season and is identified as potentially containing a colonial maternity roost, then a qualified biologist shall conduct acoustic emergence surveys or implement other appropriate methods to further evaluate if the roost is an active maternity roost. Under the biologist's guidance, the contractor shall implement measures similar to or exceeding the following:
  - If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure.
  - If it is found that an active maternity roost of a colonial roosting species is present, the roost shall not be disturbed during the breeding season (April 15 to August 31).
- Tree removal procedures shall be implemented using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators

or other heavy machinery) on day one. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed to not return to the roost that night. The remainder of the tree is removed on day two.

- Prior to the demolition of vacant structures within the project site, a qualified biologist shall conduct a focused habitat assessment of all structures to be demolished. The habitat assessment shall be conducted enough in advance to ensure the commencement of building demolition can be scheduled during seasonal periods of bat activity (see above), if required. If no signs of day roosting activity are observed, no further actions will be required. If bats or signs of day roosting by bats are observed, a qualified biologist will prepare specific recommendations such as partial dismantling to cause bats to abandon the roost, or humane eviction, both to be conducted during seasonal periods of bat activity, if required.
- If the qualified biologist determines a roost is used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultation with CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.

BIO-9 Conduct Pre-construction Crotch's Bumblebee Surveys and Implement Avoidance Measures

If the results of the project-specific biological analysis (Mitigation Measure BIO-1) determine that suitable habitat may be present for Crotch's bumble bee, a habitat assessment shall be performed by a qualified biologist knowledgeable and experienced with Crotch's bumblebee and the habitat in which they occur. If the biologist determines that suitable habitat for Crotch's bumblebee is present, a focused survey shall be performed during the species' active flight period for Crotch's bumblebee and peak blooming period of nectar and pollen sources (May 1 through July 31). The Crotch's bumblebee survey shall be conducted on foot and shall encompass the entirety of a project site and focus on areas that allow for the highest probability of detection, such as high abundance nectar or pollen sources and rodent burrows that may be used for breeding and nesting. If Crotch's bumblebee is determined to be present, the project proponent shall map the locations of the observed bumblebee, areas of abundant nectar or pollen sources, and any active nesting sites. A report summarizing the results of the habitat assessment and focused survey (if required) shall be prepared by the qualified biologist and shall be submitted to the City prior to the commencement of construction activities. Further, consultation with the CDFW will be necessary in the event Crotch's bumblebee was observed within a project site and an Incidental Take Permit, in accordance with the California Endangered Species Act, may be required prior to initiating any ground disturbance on the site. If Crotch's bumble are not listed and no longer candidates for listing at the time of project implementation, this mitigation measure would not be required.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 through BIO-9 would reduce potential impacts to special-status species, nesting birds, and roosting bats to a less than significant level by requiring Biological Resources Screening and Assessments, avoidance and minimization, habitat restoration, and preconstruction surveys.

Threshold 2:	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
Threshold 3:	Would the project have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact BIO-2 DEVELOPMENT AND MOBILITY IMPROVEMENTS FACILITATED BY THE PROJECT WOULD BE SUBJECT TO ADOPTED CITY REGULATIONS TO MINIMIZE IMPACTS TO RIPARIAN HABITAT, SENSITIVE NATURAL COMMUNITIES, AND WETLANDS. COMPLIANCE WITH THE NPDES CONSTRUCTION GENERAL PERMIT, MS4 STORM WATER PERMIT, AMERICAN CANYON MUNICIPAL CODE, AND PROPOSED POLICIES IN THE 2040 GENERAL PLAN WOULD ENSURE POTENTIAL IMPACTS TO RIPARIAN HABITAT, SENSITIVE NATURAL COMMUNITIES, AND WETLANDS WOULD BE LESS THAN SIGNIFICANT.

The City identifies riparian corridors, coastal saltmarsh, mixed hardwood forest, and oak savannah as sensitive areas. These areas support a range of wildlife species. Riparian areas in particular shade aquatic habitats and maintain cooler water temperatures for wildlife within riparian areas. In addition, the CNDDB identifies coastal brackish marsh, northern claypan vernal pools, northern costal salt marsh, northern vernal pool, and serpentine bunchgrass as sensitive natural communities, which could occur in the Planning Area (Appendix B). According to the USFWS NWI, wetlands in and surrounding the City consist of estuarine and marine habitats, freshwater ponds, freshwater emergent wetlands, and riverine habitats (USFWS 2022a). Potentially significant effects on riparian or other sensitive natural communities would occur if future development or mobility improvements facilitated by the project result in the loss of habitat or degradation of habitat, such as impacts to water quality. Potentially significant impacts to state or federally protected wetlands could occur if development or mobility improvements facilitated by the project would result in the loss or degradation of existing wetlands.

Mobility improvements facilitated by the project, including improvements to roadways, and bicycle and pedestrian facilities, are not likely to result in the removal of riparian or other sensitive natural community habitat, as they would occur in areas of the City that are developed and surrounded by existing development. Development facilitated by the project would be subject to American Canyon Municipal Code requirements to protect riparian habitat and sensitive natural communities.

Section 19.24.040 of the American Canyon Municipal Code restricts residential, commercial, and industrial uses in riparian corridors and limits the potential for new development to substantially affect riparian areas. In addition, Section 19.24.040 requires development permitted in a riparian corridor to minimize the removal of vegetation, erosion, sedimentation, and runoff; minimize wastewater discharges and entrapment; buffer habitat from the built environment; and locate and design roads and utilities to avoid conflicts with biological resources, habitat areas, and wildlife corridors. Section 19.24.030 of the American Canyon Municipal Code requires a biological assessment report to be prepared for project-specific development that could result in potentially significant impacts to riparian habitat, wetlands, or vernal pools. This biological assessment would identify and provide mitigation for potentially significant impacts, in accordance with City review processes.

Section 19.24.050 of the American Canyon Municipal Code requires new development to be sited to preserve wetlands, including the retention of sufficient natural space. If preservation of wetlands for project-specific development is infeasible, the project applicant would be required to replace the

habitat consistent with the provisions of Section 19.24.050. Future development would not result in substantial adverse effects due to the direct removal of wetlands, as development facilitated by the project would primarily occur outside of substantial wetland habitat, and any wetland habitat that would be removed would be replaced in accordance with City requirements.

Section 19.24.060 of the American Canyon Municipal Code requires development of areas that encompass oak savannah, mixed hardwood forest, and coastal saltmarsh to maintain a buffer from the edge of the designated habitat zone as recommended by a biological assessment report, maintain connectivity to surrounding habitats, and limit public access in areas where damage to habitat may occur.

In addition, Section 14.28.110 of the American Canyon Municipal Code prohibits discharge into a watercourse; modification of the natural flow of water; deposition or removal of material from a watercourse; alteration of watercourse; or the placement of loose or unconsolidated material in or adjacent to a watercourse. Implementation of Section 14.28.110 would minimize the potential for development facilitated by the project to fill or hydrologically interrupt a wetland or damage water quality in riparian habitat. Development in state and/or federally protected wetlands would potentially be subject to United States Army Corps of Engineers, CDFW, and RWQCB permitting requirements.

In addition, the 2040 General Plan would include the following proposed policies that would protect riparian, creek, and wetland habitats:

- **Policy ENV-1.2: Sensitive Habitat Assessment and Impact Mitigation.** Require new development and redevelopment located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, vernal pools, and riparian habitats to provide a detailed assessment of the potential for impacts on these resources, and include measures to reduce any identifiable impacts.
- **Policy ENV-1.3: Habitat Conservation.** Support habitat conservation efforts to set aside and preserve suitable habitats, with priority given to habitats for rare and endangered species in American Canyon in accordance with state and federal resource agency requirements.
- **Policy: ENV-2.1: Creek Preservation.** Maintain American Canyon Creek within its natural waterway.
- **Policy ENV-2.2: Existing Streams and Creeks.** As required by wetland resource permitting agencies, require new development to incorporate existing streams and creeks into proposed development plans in their natural state to prevent degradation, erosion, or sedimentation and help impart a unique character to the city.

Development and mobility improvements facilitated by the project would be subject to applicable federal, State, and City requirements, which would minimize potential impacts to riparian habitat, sensitive natural communities, and wetlands. Through compliance with these regulations, the project would not have a substantial adverse impact on riparian habitat, sensitive natural communities, or wetlands. These impacts would be less than significant.

In addition, as discussed in Impact BIO-1, development and mobility improvements facilitated by the project would be required to comply with the provisions of the NPDES Construction General Permit, MS4 Storm Water Permit, American Canyon Municipal Code, and proposed policies in the 2040 General Plan. Compliance with these regulations would ensure future development facilitated by the project would not substantially degrade water quality in wetlands riparian habitats. These indirect impacts would be less than significant.

Mitigation Measure

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 4:	Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact BIO-3 IMPLEMENTATION OF THE PROJECT WOULD NOT SUBSTANTIALLY IMPEDE THE MOVEMENT OF NATIVE RESIDENT OR MIGRATORY FISH OR WILDLIFE SPECIES, OR WITH ESTABLISHED NATIVE RESIDENT OR MIGRATORY WILDLIFE CORRIDORS AFTER IMPLEMENTATION OF PROPOSED POLICIES IN THE 2040 GENERAL PLAN AND COMPLIANCE WITH THE AMERICAN CANYON MUNICIPAL CODE.

Habitat connectivity is generally located to the east and north of the Planning Area, as well as within the riparian corridors in the Planning Area. Potentially significant effects on wildlife movement would occur if temporary disturbance during construction or permanent new development facilitated by the project would result in the fragmentation or degradation of wildlife corridors or nursery sites. Mobility improvements facilitated by the project, including improvements to roadways, and bicycle and pedestrian facilities, would occur in areas of the City that are developed and generally are surrounded by existing development and urban disturbance. As a result, mobility improvements facilitated by the project would not result in potentially significant impacts to wildlife movement because they would not obstruct wildlife corridors or fragment habitat such that wildlife movement is restricted.

Due to the existing level of development, the Planning Area is not within an essential connectivity area as defined by CDFW (CDFW 2022). Development facilitated by the project would generally occur in areas of the City that are developed or surrounded by existing development and urban disturbance. The 2040 General Plan includes the following proposed policy to establish a network of open spaces along the City's natural drainages and riparian corridors:

- **ENV-1.5: Open Space Network.** Establish a network of open spaces along the city's natural drainages and riparian corridors and link significant biological habitats by restricting alteration to these resources and limiting land uses. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.

In addition, Section 19.24.040 of the American Canyon Municipal Code restricts uses in riparian corridors, which would minimize the potential impacts on riparian habitat. Furthermore, Section 19.24.040 requires project-specific development permitted within riparian corridors provide for sufficient passage of native and anadromous fish and provide wildlife corridors to adjacent open spaces.

The 2040 General Plan also includes the following proposed policy, which would minimize impacts from any future development or mobility improvements on sensitive habitat that could provide opportunities for wildlife movement:

- **ENV-1.2: Sensitive Habitat Assessment and Impact Mitigation.** Require new development and redevelopment located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, vernal pools, and riparian habitats to provide a detailed assessment of the

potential for impacts on these resources, and include measures to reduce any identifiable impacts.

With implementation of the proposed policies in the 2040 General Plan, as well as compliance with the American Canyon Municipal Code, development facilitated by the project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. This impact would be less than significant.

Mitigation Measure

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 5:	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact BIO-4 **THE PROJECT WOULD IMPLEMENT PROPOSED POLICIES DESIGNED TO PROTECT BIOLOGICAL RESOURCES. DEVELOPMENT AND MOBILITY IMPROVEMENTS FACILITATED BY THE PROJECT WOULD BE REQUIRED TO ADHERE TO THESE POLICIES, AS WELL AS AMERICAN CANYON MUNICIPAL CODE REQUIREMENTS TO PROTECT BIOLOGICAL RESOURCES. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.**

The Planning Area has trees within its developed and disturbed areas, as well as its surrounding parks and open space. Section 18.40.110 of the American Canyon Municipal Code provides regulations governing trees in the City. Pursuant to Section 18.40.110, existing trees are required to be preserved unless otherwise approved by City Council as part of a development plan. Any tree removed as part of project-specific development is required to be replaced on-site at a minimum size of a 24-inch box of the same species, unless specifically approved by the City Council. In addition, the 2040 General Plan would implement the following proposed policies related to trees:

- **Policy ENV-1.4: Native Species.** Encourage the use of native vegetation where possible.
- **Policy ENV-1.6: Urban Forest.** Build upon existing streetscapes and develop an urban forest within the City's streets, parks, and open space to provide avian habitat, sequester carbon monoxide emissions, foster pedestrian activity, and provide shade.
- **Policy ENV-1.7: Trees for Pollinators.** Support sustainable pollinator species (i.e.: bees, birds, butterflies) in American Canyon by planting low-water use pollinator-supportive trees in streets, parks, open spaces, and private development.
- **Policy ENV-6.12: Climate Adaptation.** Mitigate the effects of heat reflecting from paved trail surfaces by incorporating shade trees along the south and west sides of trails wherever possible.

In addition, the Environment, Parks, and Recreation Element in the 2040 General Plan has additional policies that would protect biological resources in the Planning Area. Development and mobility improvements facilitated by the project would adhere to the requirements of the American Canyon Municipal Code and the proposed polices in the 2040 General Plan. Therefore, the project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact would be less than significant.

Mitigation Measure

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 6:	Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact BIO-5 IMPLEMENTATION OF THE PROJECT WOULD NOT CONFLICT WITH THE PROVISION OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN. NO IMPACT WOULD OCCUR.

There are no habitat conservation plans, natural community conservation plans, or other approved local regional or state habitat conservation plans in the Planning Area. Therefore, development and improvements in the Planning Area would not conflict with such plans. No impact would occur.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

There would be no impact and no mitigation would be required.

4.4 Cultural Resources

This section summarizes the potential cultural resources in the Planning Area and analyzes the impacts on cultural resources due to the project.

4.4.1 Setting

a. Cultural Setting

The cultural setting for the Planning Area is presented broadly in three overviews: Prehistoric, Ethnographic, and Historic. The prehistoric and historic overviews describe human occupation before and after European contact. The ethnographic overview in the Section 4.12, *Tribal Cultural Resources* provides a synchronic "snapshot" of traditional Native American culture.

Prehistory

The Planning Area lies in the San Francisco Bay Area archaeological region (Milliken et al. 2007, Moratto 1984). Milliken et al. (2007) generally divided the prehistoric chronology of the Bay Area into five periods: The Early Holocene (8,000-3,500 before common era [BCE]), Early Period (3,500-500 BCE), Lower Middle Period (500 BCE to CE 430 common era [CE]), the Upper Middle Period (430-1050 CE), and the Late Period (1050 CE-contact).

It is presumed that early Paleoindian groups lived in the area prior to 8,000 BCE; however, no evidence for this period has been discovered in the San Francisco Bay Area (Milliken et al. 2007). Sites dating to this period may be submerged or deeply buried as a result of rising sea levels and widespread sediment deposition that has occurred since the Terminal Pleistocene (Byrd et al. 2017). For this reason, the Terminal Pleistocene Period (ca. 11,700-8,000 BCE) is not discussed here.

The earliest intensive study of the archaeology of the San Francisco Bay Area began with N.C. Nelson of the University of California, Berkeley, between 1906 and 1908. He documented over 400 shell mounds throughout the area. Nelson was the first to identify the Bay Area as a discrete archaeological region (Moratto 1984).

Early Holocene (8,000-3,500 BCE)

Archaeological evidence from the early Holocene is limited as sites dating to this period are likely buried under Holocene alluvial deposits (Moratto 1984; Ragir 1972). The available data suggests that the Early Holocene in the San Francisco Bay Area is characterized by a mobile forager pattern and the presence of millingslabs, handstones, and a variety of leaf-shaped projectile points. Two archaeological sites (CA-CCO-696 and CA-CCO-637) dating to this period have been identified in Contra Costa County at the Los Vaqueros Reservoir. The earliest date for the Early Holocene comes from the CA-CCO-696, dating to approximately 7000 BCE (Milliken et al. 2007).

Early Period (3,500-600 BCE)

The Early Period saw increased sedentism with the introduction of new ground stone technologies (i.e., mortar and pestle), an increase in regional trade, and the first cut shell beads. The earliest evidence for the use of the mortar and pestle in the San Francisco Bay Area dates to 3800 BCE and comes from archaeological site CA-CCO-637. By 1500 BCE, mortars and pestles had almost completely replaced millingslabs and handstones, indicating a greater reliance on processing nuts,

especially acorns. Faunal evidence from various sites during this person indicate a diverse faunal exploitation pattern based on the presence mussel and other shellfish, marine mammals, terrestrial mammals, and birds within sites dating to this period (D'Oro 2009).

The earliest cut bead horizon is also associated with this period. Rectangular Haliotis spp. (abalone) and Callianax biplicate (formerly *Olivella biplicata*) (Vellanoweth et al. 2014) (snail) beads have been identified at several Early Period sites, including CA-CCO-637, CA-SCL-832 in Sunnyvale, and CA-ALA-307 in Berkeley (Milliken et al. 2007). These early examples of cut beads were recovered from mortuary contexts.

Lower Middle Period (500 BCE-CE 430)

The Lower Middle Period saw numerous changes from the previous period. The presence of chipped stone points and bone tools became typical. Rectangular shell beads (common during the Early Period) disappear completely and are replaced by split-beveled and saucer Olivella beads. Haliotis spp. ornaments, bone tools and ornaments, and basketry awls also became typical, indicating the development of coiled basketry technology. Mortars and pestles continued to be the dominant grinding tool (Luby and Gruber 1999; Milliken et al. 2007).

Evidence for the Lower Middle Period in the Bay Area comes from sites such as the Emeryville shell mound (CA-ALA-309) and Ellis Landing (CA-CCO-295). The Emeryville shell mound (CA-ALA-309) is one of the largest shell mounds in the San Francisco Bay Area and contains multiple cultural sequences. The lower levels of the site, which date to the Middle Period, contain flexed burials with bone implements, chert bifaces, charmstones, and oyster shells (Moratto 1984).

Upper Middle Period (CE 430-1050)

Around CE 430, Olivella saucer bead trade networks that had been established during earlier periods collapsed and over half of known sites occupied during the Lower Middle Period were abandoned. Olivella saucer beads were replaced with Olivella saddle beads. New types of material culture appear within these sites, including elaborate, decorative blades, fishtail charmstones, new Haliotis spp. ornament forms, and mica ornaments. Sea otter bones became more abundant, while salmon and other fish became less so, suggesting changes in faunal exploitation patterns from earlier periods (Milliken et al. 2007; Simons and Carpenter 2009). Excavations at archaeological site CA-ALA-309 indicate that a shift from mussels to oysters, and oysters to clams may have occurred (Gifford 1916). Isotopic analysis confirms that San Francisco Bay Area individuals shifted from hunting higher-trophic-level foods in the Early Period to gathering foods like plants and shellfish in the Middle and Upper Periods (Burns et. al 2012). Subsistence analyses at various sites dating to this period indicate a diverse diet that included numerous species of fish, mammals, birds, shellfish, and plant resources that varied by location in the San Francisco Bay Area (Hylkema 2002).

Late Period (CE 1050-contact)

The Late Period saw an increase in social complexity, indicated by differences in burials and an increased level of sedentism relative to preceding periods, evidenced by mortars weighing up to 90.7 kilograms (Lentz 2012). An increase in imported Napa Valley obsidian occurred during this time for the production of smaller points, preforms and simple flake tools. Small, finely worked projectile points of the Stockton Serrated series associated with bow and arrow technology appear around CE 1250. Olivella shell beads disappeared and were replaced with Olivella lipped and spire -lopped beads in the South Bay and clamshell disk beads in the North Bay. Thicker and larger beads indicated higher affluence. The toggle harpoon, hopper mortar, and magnesite tube beads also

appeared during this period (Milliken et al. 2007; Lentz 2012; Von Der Porten et al. 2014), as did an increase in the intensity of resource exploitation that correlates with an increase in population (Moratto 1984). Many of the well-known sites of earlier periods, such as the Emeryville shell mound (CA-ALA-309) and the West Berkeley site (CA-ALA-307) were abandoned, as indicated by the lack of Late Period elements. Researchers have suggested that the abandonment of these sites may have resulted from fluctuating climates and drought that occurred throughout the Late Period (Lightfoot and Luby 2002).

b. Historic Context

The Post-European contact history of California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present). Each of these periods is briefly described below.

Spanish Period (1769 – 1822)

For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). Explorers such as Francis Drake and Sebastian Cermeno explored the San Francisco Bay area in the late 1500s (Bean 1968). Gaspar de Portolá and the Franciscan Father Junípero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá in 1769, the first of 21 missions erected by the Spanish. Portolá continued north, reaching the San Francisco Bay later that year. Pedro Fages' expedition also explored the region in 1772 (Cook 1957). Mission San Francisco de Asis and the San Francisco presidio (military fort) were founded in 1776, and Mission San Rafael Arcangel was built in 1817, all within about 30 miles of the Planning Area (Presidio Trust 2020; California Missions Foundation, N.D.).

Mexican Period (1822 – 1848)

The Mexican Period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period saw the federalization of mission lands in California with the passage of the Secularization Act of 1833. This Act enabled Mexican governors in California to distribute former mission lands to individuals in the form of land grants. Successive Mexican governors made more than 700 land grants between 1822 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). The approximately 80,000-acre Rancho Suscol or Soscol was acquired by General Vallejo in 1843; which encompasses the Planning Area (City of Sonoma, N.D.).

The Mexican period saw an increased importance of sea trade and an influx of American settlers, which motivated the United States to expand their territory into California. The United States supported a small group of insurgents from Sonoma during the Bear Flag Revolt. The Bear Flaggers captured Sonoma in June of 1846. The next month, Commodore John Drake Sloat landed in Monterey and proceeded to take Yerba Buena, Sutter's Fort, Bodega Bay, and Sonoma. Fighting between American and Mexican forces continued until Mexico surrendered in 1847 (Rolle 2003).

American Period (1848 – Present)

The American Period began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of California

continued to increase during the early American Period. Many ranchos were sold or otherwise acquired by Americans, and most were subdivided into agricultural parcels or towns. California's population grew exponentially with the discovery of gold in 1848. San Francisco grew from a population of 812 to 25,000 in only a few years and became California's first city (Rolle 2003).

The City of Vallejo, located directly south of the Planning Area, was founded on what was once General Vallejo's rancho land, and thus was named after him. After the state of California was admitted to the Union, he donated 156 acres of land and offered funding to establish a new state capital. The town of Vallejo briefly became the site of the state capitol in 1852, and it served as the capital again in 1853 for approximately one month. Vallejo's son-in-law, John B. Frisbie, is generally credited with the founding of the city and helping to establish its government (Vallejo Convention and Visitors Bureau 2019; Vallejo Chamber of Commerce 2020).

Although the town lost the government center, a naval shipyard was established there in 1854 which furthered development of the town. Mare Island Naval Shipyard, also located approximately 5-miles south of the Planning Area, became the first United States Navy installation on the Pacific Coast, and Vallejo developed into an important shipping center with ferry transportation serving passengers, railroads, and the Pony Express (Vallejo Convention and Visitors Bureau 2019). The Mare Island Naval Shipyard had an immense impact on the population of Vallejo and surrounding areas. It was known in the 1920s for the development of submarines, and its peak production period for shipbuilding, repair, and maintenance occurred during World War II. Correspondingly, the population in the areas greatly expanded during the war years. Mare Island continued to be a primary station for the construction and development of the Navy's pacific fleet of submarines in the years that followed. At the time, the base encompassed 5,200 acres (Vallejo Chamber of Commerce 2020). The area flourished as well, in part due to the Navy's presence which attracted countless military and civilian personnel from various parts. In the 1920s many Filipinos settled in the area following the Spanish-American War and the Filipino Insurrection, making the area one of the most diverse areas in northern California.

With the end of the Cold War, Mare Island Naval Shipyard's budget was reduced and the shipyard was closed in 1996, dramatically affecting the surrounding areas. The municipality underwent a bankruptcy in 2008, and efforts afterwards focused on drawing new investment to the area (Felix 2013). Various industrial, educational, recreational and historical areas have been developed as part of evolving the property for new uses (Gase 2019). Today, the waterfront area has become a focus for redevelopment to generate economic growth (City of Vallejo 2018).

City of American Canyon

The area now comprising Napa County was subject to European exploration as early as 1823, when Francisco Castro, Father Jose Altamira, and Jose Sanchez led an expedition though the area to find a site for a new mission. However, despite this incursion, European-American settlement of what is now American Canyon did not begin until two years after California was admitted to the United States (FirstCarbon Solutions 2016). In 1852, American Simpson Thompson purchased lands from General Mariano Guadalupe Vallejo and General J.B. Frisbie to establish a ranch. Thompson earned fame as one of the area's earliest fruit growers, but also grew grains on his land. In 1869, a railroad servicing the Napa Valley was developed, with a stop at Napa Junction (the original name for American Canyon), from which another line went east into the interior of California (ACHC n.d.). The area maintained a predominantly agricultural character until around 1900, when Augustus Watson established a limestone quarry. By 1902, Watson sold the quarry to the Standard Portland Cement Company, which supplemented the quarry with a new cement plant. Central to the local economy,

the plant employed 200 and produced more than 2,000 barrels of cement a day, on average. The plant continued producing cement until the 1920s or 1930s, when the local supply of limestone was exhausted. By 1946, the Basalt Rock Company repurposed the facility for the production of aggregate (FirstCarbon Solutions 2016).

Residential development of the area began after World War II. American Canyon's first subdivision, McKnight Acres was completed in 1948 and the Rancho Del Mar subdivision was built in 1952. Throughout the 1950s and 1960s, the community established new institutions and municipal services, such as the American Canyon Fire Protection District and the American Canyon Water District, in addition to expansions of the sewer and parks systems. A multi-decade campaign resulted in the incorporation of American Canyon in 1992, confirming the community's separate identity from neighboring Vallejo and Napa (ACHC n.d.). The city has grown steadily since its incorporation, expanding from about 7,000 in 1990 to approximately 21,758 residents in 2024 (see Section 4.13, *Population and Housing*).

c. Historical and Archaeological Resources in the Planning Area

There are seven important historic resources in or next to American Canyon city limits: the four properties described below and three residential properties on Jameson Canyon Road. These properties are not listed on the National Register of Historic Places or the California Register of Historical Resources but with further research and evaluation they, along with other historic-age properties within the city boundaries, may have potential to be listed historical resources.

Watson Ranch

Watson Ranch gained its name from the Watson family, who homesteaded the land in the 1850's and started the Napa Junction Company in 1900. This property consists of a main house and six outbuildings, including a secondary residence, three barns, a shop, and a garage. The Napa Junction Company mined and manufactured aggregate rock for cement, and Watson sold the company to the Standard Portland Cement Company in 1902.

Standard Portland Cement Company

The Standard Portland Cement Company mined limestone and clay from quarries located where the Watson Ranch development is now proposed. The concrete made from materials mined onsite went into countless projects in the Bay Area, including rebuilding San Francisco after the 1906 earthquake. Since the plant's closure in 1970, the structures have deteriorated and were further damaged in the 2014 Napa earthquake. The remaining walls of the structures have become an attraction for local urban graffiti artists as well. The Watson Ranch development will possibly preserve parts of the historic structures and include housing, retail, and other community services.

Lee Ranch

Lee Ranch is located at the north end of American Canyon between Green Island Road and the railroad tracks in what is now an industrial area. The home was built in 1929 and is a privately-owned home.

Newell Ranch

Newell Ranch was the home of Jack and Bernice Newell, beloved residents and benefactors of Vallejo and American Canyon for several decades until their passing. Historic Newell Ranch consists

of a barn and the ruins of two sheds, with a modern house constructed on the property in 1991. The ranch is a cultural icon for the community. The Newell Ranch Open Space was donated to the City of American Canyon by the Newell family in 1999, allowing residents to enjoy the 640 acres of trails, open hills, and scenic overlooks it provides, as well as preserving habitat for critical and endangered species and on-site cultural resources.

d. Native American Outreach

On August 16, 2022, City mailed and emailed out letters to the Cortina Band of Indians, Federated Indians of Graton Rancheria, and Yocha Dehe Wintun Nation to inform them of the proposed General Plan Update. To date, one response dated September 14, 2022 was received on from the Yocha Dehe Wintun Nation which stated that the project is within the aboriginal territories of the Yocha Dehe Wintun Nation. The Tribe requested formal consultation with the lead agency, a project timeline, detailed project information, and the latest cultural study conducted for the project. On November 16, 2022; December 9, 2022; and December 12, 2022, the City communicated with the Tribe to coordinate a date and time to meet regarding the General Plan Update. A consultation meeting was held on January 12, 2023. For a summary of the consultation meeting, refer to the discussion in Impact TCR-1 in Section 4.12, *Tribal Cultural Resources*.

4.4.2 Regulatory Setting

a. Federal Regulations

National Register of Historic Places

Although the project does not have a federal nexus, properties which are listed in or have been formally determined eligible for listing in the National Register of Historic Places (NRHP) are automatically listed in the California Register of Historical Resources (CRHR). The following is therefore presented to provide applicable regulatory context. The NRHP was authorized by Section 101 of the National Historic Preservation Act and is the nation's official list of cultural resources worthy of preservation. The NRHP recognizes the quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects. Pursuant to 36 Code of Federal Regulations (CFR) Part 60.4, a property is eligible for listing in the NRHP if it meets one or more of the following criteria:

Criterion A: Are associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B: Are associated with the lives of persons significant in our past.

Criterion C: Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined as follows:

Location: The place where the historic property was constructed or the place where the historic event occurred.

Design: The combination of elements that create the form, plan, space, structure, and style of a property.

Setting: The physical environment of a historic property.

Materials: Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

Workmanship: The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling: A property's expression of the aesthetic or historic sense of a particular period of time.

Association: The direct link between an important historic event or person and a historic property.

Certain properties are generally considered ineligible for listing in the NRHP, including cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions, relocated structures, or commemorative properties. Additionally, a property must be at least 50 years of age to be eligible for listing in the NRHP. The National Park Service states that 50 years is the general estimate of the time needed to develop the necessary historical perspective to evaluated significance (National Park Service 1997:41). Properties which are less than 50 years must be determined to have "exceptional importance" to be considered eligible for NRHP listing.

b. State Regulations

California Environmental Quality Act

California Public Resources Code (PRC) Section 21804.1 requires lead agencies determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the CRHR; a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or cultural significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the NRHP are automatically listed in the CRHR and are, therefore, historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

CEQA Guidelines Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a "unique archaeological resource" as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. It contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources will be less than significant and need not be considered further (CEQA Guidelines Section 15064.5[c][4]). CEQA Guidelines Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (CEQA Guidelines Section 15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (CEQA Guidelines Section 15064.5[b][2][A]).

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

CEQA Guidelines Section 15126.4 stipulates an EIR shall describe feasible measures to minimize significant adverse impacts. In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impacts of the project. Generally, a project which is found to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (the Standards) is considered to be mitigated below a level of significance (CEQA Guidelines Section 15126.4 [b][1]). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (CEQA Guidelines Section 15126.4[b][3]).

California Register of Historical Resources

The CRHR was established in 1992 and codified by PRC Sections 5024.1 and 4852. The CRHR is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected from substantial adverse change to the extent prudent and feasible (Public Resources Code, 5024.1(a)). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use to include a range of historical resources that better reflect the history of California (Public Resources Code, 5024.1(b)). Unlike the NRHP, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance

(California Office of Historic Preservation 2006). Further, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2006). Generally, the California Office of Historic Preservation recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995:2).

Properties are eligible for listing in the CRHR if they meet one of more of the following criteria:

Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Criterion 2: Is associated with the lives of persons important to our past.

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains, until the coroner of the county in which the remains are discovered has determined if the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification.

California Public Resources Code Section 5097.98

California Public Resources Code Section 5097.98 states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5, shall immediately notify those persons it believes to be descended from the deceased (i.e., the Most Likely Descendant or "MLD"). With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

c. Local Regulations

City of American Canyon General Plan

The current City of American Canyon General Plan contains goals and policies to avoid potential impacts to cultural resources.

4.4.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on cultural resources if it would:

1. Cause a substantial adverse change in the significance of a historic resource pursuant to Section 15064.5
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5
3. Disturb any human remains, including those interred outside of formal cemeteries

Methodology

If a project may cause a substantial adverse change in the characteristics of a resource that convey its significance or justify its eligibility for inclusion in the CRHR, either through demolition, destruction, relocation, alteration, or other means, then the project would have a significant effect on the environment (CEQA Guidelines Section 15064.5[b]).

Direct impacts can be assessed by identifying the types and locations of proposed development, determining the exact locations of cultural resources within the Planning Area, assessing the significance of the resources that may be affected, and determining the appropriate mitigation. Removal, demolition, or alteration of historical resources can permanently impact the historic fabric of an archaeological site, building or structure, or historic district.

The State Legislature, in enacting the CRHR, amended CEQA to clarify which properties are significant, as well as which project impacts are considered significantly adverse. A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have significant effect on the environment (CEQA Guidelines Section 150645[b]). A substantial adverse change in the significance of a historical resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines Section 150645[b][1]).

The CEQA Guidelines further state that "[t]he significance of an historical resource is materially impaired when a project… [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in the California Register … local register of historic resources… or its identification in an historic resources survey." As such, the consideration for determining whether the project will have a significant impact on identified historic resources is whether it will materially impair the physical integrity of the historic resource, such that it could no longer be listed in the CRHR or a local landmark program.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact CUL-1 DEVELOPMENT FACILITATED BY THE PROJECT COULD ADVERSELY AFFECT PREVIOUSLY UNIDENTIFIED HISTORIC-PERIOD RESOURCES. IMPACTS TO HISTORIC-PERIOD RESOURCES WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

As discussed above in Section 4.4.1, *Setting*, review of historical maps and aerial photographs indicate that there are several historic-aged buildings or structures located within the Planning Area. Currently there are no specific development plans; however, the 2040 General Plan could result in development on parcels containing buildings that meet the age threshold for potential historical resources, pursuant to CEQA.

Development facilitated by the project could result in material impairment of historical resources, which CEQA Guidelines Section 15064.5[b][2][A] defines as the demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register. The Environment Element of the 2040 General Plan Update contains the following proposed goals and policies, which would minimize impacts to historical resources within the City of American Canyon:

Goal ENV-4: Preserve and restore sites, and structures that have architectural, historical, archaeological and/or cultural significance to the City of American Canyon.

- **Policy ENV-4.1: Resource Protection.** Ensure the City's culturally, historically, and archaeologically significant resources are protected in a manner that preserves and/or enhances the inherent resource value.
- **Policy ENV-4.2: Historic Structure Compatibility.** Encourage compatibility between new development and existing adjacent historic structures in terms of scale, massing, building materials and general architectural treatment.
- **Policy ENV-4.3: Historic Resource Reuse.** Encourage appropriate adaptive reuse of historic resources where possible to prevent misuse, disrepair, and demolition.
- **Policy ENV-4.4: Historical Building Code.** When historical structures are rehabilitated in accordance with established historic preservation guidelines, consider implementing the State Historical Building Code Part 8, Title 24.
- **Policy ENV-4.5: Historic Resource Preservation.** Prohibit demolition of an historic resource as a first-choice alternative for resources that qualify for Federal, State Historic Registration, or Locally Significant Resources.
- **Policy ENV-4.6: Flexible Development Standards** Consider flexibility in development standards, such as a Variance of setbacks, heights and parking requirements to help feasibility of new development that contains preserved historic resources.

These policies would help reduce impacts; however, they do not require formal historical resource evaluations or the consideration of measures to mitigate potential impacts. As such, additional measures would be required to identify and mitigate impacts to historical resources to a less than significant level. The implementation of Mitigation Measure CUL-1 would reduce impacts on historical resources by requiring evaluations for age-eligible buildings within the Planning Area and

avoiding impacts on any identified potential historical resources. This impact would be less than significant with implementation of this mitigation measure.

Mitigation Measure

CUL-1 Historical Built Environment

Prior to project approval, the applicant shall submit a report to the City that identifies any historic-age features (i.e., structures over 45 years of age) proposed to be altered or demolished. If historical-age features are present, the applicant shall submit a historical resources evaluation to the City prepared in areas that contains buildings, structures, objects, sites, landscape/site plans, or other features that are 45 years of age or older, by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualifications Standards (PQS) in architectural history or history (36 CFR Part 61). The evaluation shall include an intensive-level evaluation, in accordance with the guidelines and best practices meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the City for review and approval.

If historical resources are identified through the survey and evaluation, efforts shall be made by the applicant to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). The applicant shall submit a report to the City that identifies and specifies the treatment of character-defining features and construction activities, and demonstrates how the project complies with the Standards and avoids the substantial adverse change in the significance of the historical resource as defined by CEQA Guidelines Section 15064.5(b). The report shall be prepared by an architectural historian or historical architect meeting the PQS as defined by 36 CFR Part 61 and provided to the City for review and concurrence prior to project approval.

Significance After Mitigation

Mitigation Measure CUL-1 would ensure a historical resource evaluation is conducted for sites with age-eligible resources within the Planning Area and require measures to reduce impacts to historical resources to less than significant.

Threshold 2:	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact CUL-2 Development facilitated by the project could adversely affect previously unidentified archaeological resources. Impacts would be less than significant with mitigation.

The City has known archaeological sensitivity and, as a result, the potential to encounter unidentified archaeological resources is moderate to high. Overall, ground disturbance into native soils in any areas within the Planning Area could contain previously unknown prehistoric or historic-period resources. Undeveloped areas have a higher probability of containing previously unidentified archaeological resources, given the City's known sensitivity and the probable lack of previous ground-disturbing activities in those areas. The Environment Element of the 2040 General Plan contains the following proposed goals and policies, which would minimize impacts to archaeological resources within the City of American Canyon:

Goal ENV-4: Preserve and restore sites, and structures that have architectural, historical, archaeological and/or cultural significance to the City of American Canyon.

- **Policy ENV-4.1: Resource Protection.** Ensure the City's culturally, historically, and archaeologically significant resources are protected in a manner that preserves and/or enhances the inherent resource value.

Goal ENV-5: Protect cultural and tribal resources.

- **Policy ENV-5.1: Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Many portions of the Planning Area have been previously developed for various purposes and uses. Nonetheless, there is the potential for both historic and prehistoric archaeological resources to exist surficially and below the ground surface throughout the Planning Area, which could be disturbed by grading and excavation activities for future projects. Therefore, development projects within the Planning Area that involve ground disturbance activities would have the potential to damage or destroy archaeological resources, especially if they occur in less disturbed sediments. Consequently, impacts would be potentially significant, and mitigation would be required for projects involving ground disturbance activities.

Mitigation Measures

CUL-2 Archaeological Resources Assessment

Prior to project approval of a project that involves ground disturbance activities (that may include but are not limited to, pavement removal, potholing, grubbing, tree removal, and grading), the applicant shall submit to the City an archaeological resources assessment prepared by a qualified archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in either prehistoric or historic archaeology. Assessments shall include a CHRIS records search at the NWIC and a SLF Search from the NAHC. The records searches shall characterize the results of previous cultural resource surveys and disclose any cultural resources that have been recorded and/or evaluated in and around the development site. A qualified professional shall conduct a Phase I pedestrian survey for those projects that include undeveloped areas to locate any surface cultural materials.

If the Phase I archaeological survey identifies resources that may be affected, the applicant shall also conduct Phase II testing and evaluation. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, the qualified professional shall identify appropriate site-specific mitigation measures in the Phase II evaluation. These measures may include, but would not be limited to, a Phase III data recovery program, avoidance, or other appropriate actions to be determined by a qualified archaeologist. If significant archaeological resources cannot be avoided, impacts may be reduced to less than significant level by filling on top of the sites rather than cutting into the cultural deposits. Alternatively, and/or in addition, a data collection program may be warranted, including mapping the location of artifacts, surface collection of artifacts, or excavation of the cultural deposit, to characterize the nature of the buried portions of sites. Curation of the excavated artifacts or samples would occur as specified by the archaeologist. The City shall review and approve the archaeological resources assessment prior to project approval.

CUL-3 Unanticipated Discoveries

For projects whose Phase I archaeological survey identifies archaeological resources that may be affected, the applicant shall retain a qualified cultural resource specialist to monitor construction activities that involve ground-disturbing activities greater than 12 inches in depth and occur within 60 feet of a potentially significant cultural resource. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as excavating the cultural deposit to fully characterize its extent and collecting and curating artifacts may be warranted to mitigate any significant impacts to cultural resources. If archaeological resources of Native American origin are identified during construction, a qualified archaeologist will consult with the City to begin Native American consultation procedures. Periodic reports of the find and subsequent evaluations shall be submitted to the City during construction.

Significance After Mitigation

Mitigation Measures CUL-2 and CUL-3 would reduce potential impacts to a less than significant level by requiring the identification and evaluation of any archaeological resources that may be present prior to construction and by providing steps for the evaluation and protection of unanticipated finds encountered during construction.

Threshold 3:	Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact CUL-3 DEVELOPMENT FACILITATED BY THE PROJECT COULD RESULT IN DAMAGE TO OR DESTRUCTION OF HUMAN BURIALS. IMPACTS WOULD BE LESS THAN SIGNIFICANT THROUGH ADHERENCE TO EXISTING REGULATIONS AND WITH MITIGATION.

Human burials outside of formal cemeteries can occur in prehistoric archaeological contexts. While no known burial sites have been identified within the Planning Area, excavations during construction activities could have the potential to disturb these resources, which could include Native American burial sites. Although it is unlikely that human remains are present, the Planning Area has the possibility of containing previously unidentified human remains.

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in PRC Section 5097. The California Health and Safety Code (Section 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protect them from disturbance, vandalism, or destruction. They also include established procedures to be implemented if Native American skeletal remains are discovered. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and establishes the NAHC to resolve any related disputes.

The Environment Element of the 2040 General Plan Update contains the following proposed goals and policies, which would minimize impacts to human burials within the City of American Canyon:

Goal ENV-4: Protect cultural and tribal resources.

- **Policy ENV-4.1: Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.
- **Policy ENV-4.2: Development.** Ensure that human remains are treated with sensitivity and dignity and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.
- **Policy ENV-4.3: Yocha Dehe Wintun Nation Treatment Protocol**. In the event any Native American human remains, grave goods, ceremonial items, and items of cultural patrimony are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity, the "Yocha Dehe Wintun Nation Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation" shall be implemented as included as Appendix A to the Housing Element.

Construction of future development and mobility improvements facilitated by the project, such as improvements to roadways, and bicycle and pedestrian facilities would be subject to State of California Health and Safety Code Section 7050.5, which states that if human remains are unearthed, no further disturbance can occur until the county coroner has made the necessary findings as to the origin and disposition of the remains, pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC, which will determine and notify an MLD. The MLD shall complete the inspection of the site and make recommendations to the landowner within 48 hours of being granted access. Implementation of Mitigation Measure CUL-4 would ensure that the appropriate protocols are followed if human remains are encountered and would reduce potentially significant impacts to a less than significant level.

Mitigation Measures

CUL-4 Human Remains

In the event of an accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98.

2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
   - The descendant identified fails to make a recommendation.
   - The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

   Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

   - When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may each develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

Significance After Mitigation

Mitigation Measure CUL-4 would reduce potential impacts on human remains to a less than significant level by requiring the implementation of the appropriate protocols.

4.5 Greenhouse Gas Emissions

This section summarizes the setting for greenhouse gas (GHG) emissions and climate change and analyzes the impacts related to GHG emissions and climate change due to the project.

4.5.1 Setting

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2); methane (CH_4); nitrous oxides (N_2O); fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs); and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a 100-year GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (United Nations Intergovernmental Panel on Climate Change [IPCC] 2021).[1]

GHGs are emitted by natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are usually by-products of fossil fuel combustion, and CH_4 results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (United States Environmental Protection Agency [USEPA] 2022a).

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record, which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The IPCC expressed in their Sixth Assessment Report that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities (IPCC 2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, a total of 2,390 gigatons of anthropogenic CO_2 was emitted. It is likely that anthropogenic activities have increased the global

[1] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2013). However, since 1750, estimated concentrations of CO_2, CH_4, and N_2O in the atmosphere have increased by 47 percent, 156 percent, and 23 percent, respectively, primarily due to human activity (IPCC 2021). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

a. Greenhouse Gas Emissions Inventory

Global Emissions Inventory

Worldwide anthropogenic GHG emissions totaled 47,000 million metric tons (MT) of CO_2e in 2015, which is a 43 percent increase from 1990 GHG levels (USEPA 2022b). Specifically, 34,522 million metric tons (MMT) of CO_2e of CO_2, 8,241 MMT of CO_2e of CH_4, 2,997 MMT of CO_2e of N_2O, and 1,001 MMT of CO_2e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and fuel use from vehicles and buildings, which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed three percent and international transportation sources contributed two percent. These sources account for approximately 98 percent because there was a net sink of two percent from land-use change (including afforestation/reforestation and emissions removals by other land use activities) (USEPA 2022b).

United States Emissions Inventory

Total United States (U.S.) GHG emissions were 6,558 MMT of CO_2e in 2019. Emissions decreased by 1.7 percent from 2018 to 2019. Since 1990, total U.S. emissions have increased by an average annual rate of 0.06 percent for a total increase of 1.8 percent between 1990 and 2019. The decrease from 2018 to 2019 reflects the combined influences of several long-term trends, including population changes, economic growth, energy market shifts, technological changes such as improvements in energy efficiency, and decrease carbon intensity of energy fuel choices. In 2019, the industrial and transportation end-use sectors accounted for 30 percent and 29 percent, respectively, of nationwide GHG emissions; while the commercial and residential end-use sectors accounted for 16 percent and 15 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (USEPA 2022c).

California Emissions Inventory

Based on the California Air Resources Board (CARB) California Greenhouse Gas Inventory for 2000-2019, California produced 418.2 MMT of CO_2e in 2019, which is 7.2 MMT of CO_2e lower than 2018 levels. The major source of GHG emissions in California is the transportation sector, which comprises 40 percent of the state's total GHG emissions. The industrial sector is the second largest source, comprising 21 percent of the state's GHG emissions, while electric power accounts for approximately 14 percent (CARB 2021a). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, its relatively mild climate is a factor that reduces California's per capita fuel use and GHG emissions as compared to

other states. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels, as emissions fell below 431 MMT of CO_2e (CARB 2021).

Local Emissions Inventory

Based on the City of American Canyon's 2012 Energy Efficiency Climate Action Plan (EECAP), the City generated approximately 120,201 MT of CO_2e in 2010 (City of American Canyon 2012). On-road transportation was the major source accounting for 39.9 percent of the total, largely due to passenger vehicles, but also commercial trips and buses. Commercial/industrial energy was the second largest source of emissions at 27 percent. Residential energy usage represented 18 percent, and solid waste and wastewater represented 7 percent each. Off-road transportation accounted for 2 percent. Agriculture accounted for less than 1 percent of emissions (City of American Canyon 2012).

b. Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Each of the past three decades has been warmer than all the previous decades on record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature from 2015 to 2017 was approximately 1.0°C higher than the average global mean surface temperature over the period from 1880 to 1900 (National Oceanic and Atmospheric Administration 2020). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature obtained from station observations jointly indicate that Land-Surface Air Temperature and sea surface temperatures have increased.

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, larger forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that could be experienced in California because of climate change.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone. The magnitude of the effect of the increased concentration of ground-level ozone, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California

2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them (California Natural Resources Agency 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California coasts (State of California 2018). The Sierra snowpack provides most of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels between 1993 to 2022, observed by satellites, is approximately 3.5 millimeters per year, double the twentieth century trend of 1.6 millimeters per year (World Meteorological Organization 2013; National Aeronautics and Space Administration 2022). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. While the City is no close to the Pacific coast, sea level rise may jeopardize California’s water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018).

Agriculture

California has an over $50 billion annual agricultural industry that produces over a third of the country’s vegetables and two-thirds of the country’s fruits and nuts (California Department of Food and Agriculture 2020). Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase

water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions because of higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

4.5.2 Regulatory Setting

a. International

United Nations Climate Change Framework Convention

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Climate Change Framework Convention. Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

b. Federal Regulations

Federal Clean Air Act

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the USEPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the USEPA and the National Highway Traffic Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California's authority to set its own GHG emissions standards and to adopt its own zero-emission vehicle mandates. On April 30, 2020, the USEPA and the National Highway Traffic Safety Administration published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and CO_2 emissions standards for passenger cars and trucks of model years 2021-2026, such that the standards increase by approximately 1.5 percent each year through model year 2026, as compared to the approximately 5 percent annual increase required under the 2012 standards (National Highway Traffic Safety Administration 2022).

Construction Equipment Fuel-Efficiency Standard

USEPA sets emission standards for construction equipment. The first federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower (hp) and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 hp and established the Tier 2 and Tier 3 standards. The Tier 2 and Tier 3 standards were phased in by 2008 for all equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements, which are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068 (originally adopted in 69 Federal Register 38958 [June 29, 2004] and most recently updated in 2014 [79 Federal Register 46356]). Emissions requirements for new off-road Tier 4 vehicles were completely phased in by the end of 2015.

c. State Regulations

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. There are numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

California Advanced Clean Cars Program

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the USEPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles, beginning with the 2009 model year, which allows California to implement more stringent vehicle emission standards than those promulgated by the USEPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as "LEV (Low Emission Vehicle) III GHG," regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

California Advanced Clean Trucks Program

In June 2020, CARB approved the Advanced Clean Trucks regulation, which requires manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. In addition,

the regulation requires company and fleet reporting for large employers and fleet owners with 50 or more trucks. By 2045, all new trucks sold in California must be zero-emission. Implementation of this regulation would reduce consumption of nonrenewable transportation fuels as trucks transition to alternative fuel sources.

Executive Order B-48-18: Zero-Emission Vehicles

On January 26, 2018, Governor Brown signed Executive Order B-48-18 requiring all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle (EV) charging stations by 2025. It specifies that 10,000 of the EV charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 ZEV Action Plan, along with the 2018 ZEV Action Plan Priorities Update, which includes and extends the 2016 ZEV Action Plan (Governor's Interagency Working Group on Zero-Emission Vehicles 2016, 2018) to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities.

Executive Order N-79-20

Governor Gavin Newsom signed Executive Order N-79-20 in September 2020, which sets a Statewide goal that 100 percent of all new passenger car and truck sales in the State will be zero-emissions by 2035. It also sets a goal that 100 percent of statewide new sales of medium- and heavy-duty vehicles will be zero emissions by 2045, where feasible, and for all new sales of drayage trucks to be zero emissions by 2035. Additionally, the Executive Order targets 100 percent of new off-road vehicle sales in the State to be zero emission by 2035. CARB is responsible for implementing the new vehicle sales regulation.

California Global Warming Solutions Act of 2006 (Assembly Bill 32, Senate Bill 32, and Assembly Bill 1279)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO_2e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008).

The CARB approved the 2013 Scoping Plan update in May 2014. The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan.

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40

percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies.

AB 1279, "The California Climate Crisis Act," was passed on September 16, 2022 and declares the State would achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative greenhouse gas emissions thereafter. In addition, the bill states that the State would reduce GHG emissions by 85 percent below 1990 levels no later than 2045. The 2022 Scoping Plan lays out a path to achieve AB 1279 targets (CARB 2022). The actions and outcomes in the 2022 Scoping Plan would achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO's Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as "transit priority projects") can receive incentives to streamline CEQA processing.

The City of American Canyon is within the planning area of the Association of Bay Area Governments (ABAG). ABAG was assigned targets of a 10 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035 (CARB 2022b).

Assembly Bill 1493 (Reduce GHG Emissions from Vehicle Use)

AB 1493 (Chapter 200, Statutes of 2002), known as the Pavley Bill, amended Health and Safety Code Sections 42823, and added Section 43018.5 requiring CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.

Assembly Bill 1007 (State Alternative Fuels Plan)

AB 1007 (Chapter 371, Statutes of 2005) required the California Energy Commission (CEC) to prepare a State plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other federal, State, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-State

production of biofuels without causing a significant degradation of public health and environmental quality.

CARB In-Use On-Road and Off-Road Diesel Rules

The CARB rule imposes limits on idling, restricts the addition of older vehicles, and requires the retirement or replacement of older engines depending on their fleet size category. This policy indirectly impacts energy consumption.

More specifically, CARB is also charged with developing air pollution control regulations based upon the best available control measures and implementing feasible control measures under the State and Federal Clean Air Act. (Health & Safety Code, Sections 39602.5, 39667, 43013, subds. (a) and (h), 43018, 40600, 40601, 40612(a)(2) and (c)(1)(A).) Pursuant to these statutory authorities, more stringent emission standards were adopted in 2004 for off-road construction equipment (i.e. "Tier 4" standards) (40 Code of Federal Regulations Parts 1039, 1065, and 1068; Cal. Code Regs., tit. 13, Section 2025; AR 2854). CARB also adopted emission standards for on-road heavy duty diesel vehicles (i.e., haul trucks). (Cal. Code Regs., title 13, Section 1956.8.) These haul truck regulations mandate fleet turn-over to ensure that by January 1, 2023, nearly all on-road diesel trucks will have 2010 model year engines or equivalent [i.e., Tier 4]. In addition, interim steps are incorporated into the regulations (e.g., vehicles older than 1999 will be replaced with newer engines by 2020).

California Integrated Waste Management Act (Assembly Bill 341)/Assembly Bill 1826 (Mandatory Recycling/Composting)

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows diversion away from landfills of 75 percent of all solid waste by 2020 and annually thereafter. AB 1826 requires recycling of organic waste (i.e., composting). All businesses and public entities that generate four or more cubic yards of solid waste per week and multi-family residential dwellings that have five or more units are required to recycle and compost.

Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard (RPS) Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by

2030, and 100 percent by 2045. The 2020 goal was met, with approximately 36 percent of electricity coming from renewable sources in March 2021 (CARB 2021b).

Executive Order B-55-18

On September 10, 2018, the former Governor Brown issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Refrigerant Management Program

California's Refrigerant Management Program (RMP) regulates refrigerants used in larger facilities, primarily industrial and supermarket land uses. Refrigerants regulated under the RMP include any refrigerant that is an ozone depleting substance as defined in Title 40 of the Code of Federal Regulation, Part 82, and any compound with a GWP value equal to or greater than 150 according to the GWPs specified in the IPCC Fourth Assessment Report of 2007. According to the RMP, all supermarket and industrial refrigeration systems with a full recharge capacity of 50 pounds (22.7 kilograms) or greater will be required to limit the refrigerants used to no greater than 150 GWP beginning in 2022. Similarly, according to the RMP, all room air conditioning unit systems with a full recharge capacity of 50 pounds or greater will be required to limit the refrigerants used to no greater than 750 GWP beginning in 2023.

Senate Bill 1020

Senate Bill 1020 (SB 1020), signed into law on September 16, 2022, requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035, 95 percent by 2040, and 100 percent by 2045. All State agencies facilities must be served by 100 percent renewable and zero-carbon resources by 2030. SB 1020 also requires the Public Utilities Commission, Energy Commission, and CARB to issue a joint progress report outlining the reliability of the electrical grid with a focus on summer reliability and challenges and gaps. Additionally, SB 1020 requires the Public Utilities Commission to define energy affordability and use energy affordability metrics to develop protections, incentives, discounts, or new programs for residential customers facing hardships due to energy or gas bills.

CARB Gas Appliances Sales Ban

As part of the 2022 State Implementation Plan, CARB adopted a ban on new sales of natural gas heaters, water heaters, and furnaces by 2030 in September of 2022. This new measure is intended to reduce emissions from new residential and commercial space and water heaters sold in the State. An emission standard for space and water heaters will go into effect in 2030. Beginning in 2030, 100 percent of the sales of new natural gas-powered heaters and water heaters would need to comply with the emission standard, such as putting in electric heaters or other zero-emission options.

California Building Standards Code

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, and accessibility for persons with physical and sensory disabilities. The California Building Standards Code's energy-efficiency and green building standards are outlined below. These standards are updated every

three years and future projects would be subject to the 2022 California Building Standards when they go into effect on January 1, 2023.

Part 6 – Building Energy Efficiency Standards/Energy Code

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The current iteration is the 2019 Title 24 standards. The California Building Standards Code's energy-efficiency and green building standards are outlined below. The 2022 Standards have been adopted and will come into effect January 1, 2023.

Part 11 – California Green Building Standards

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective on January 1, 2011 (as part of the 2010 California Building Standards Code). The 2022 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- Minimum 20 percent reduction in indoor water use relative to specified baseline levels[2]
- Waste Reduction
  - Minimum 65 percent non-hazardous construction/demolition waste diverted from landfills;
  - Non-residential and Multifamily dwellings with 5 or more units shall provide readily accessible areas identified for the depositing, storage and collection of nonhazardous materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastic, organic waste, and metals;
  - Nonresidential: 100 percent of trees, stumps, rocks and associated vegetation soils resulting from primary land clearing shall be reused or recycled.
- Inspections of energy systems to ensure optimal working efficiency
- Electric Vehicle (EV) Charging for New Construction[3]
  - Multifamily dwellings, hotels/motels with less than 20 units/rooms: Designation of at least 10 percent of the total number of parking spaces shall be EV capable and at least 25 percent of the total number of parking spaces shall be EV Ready.

[2] Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

[3] EV Capable = a vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways to support EV charging. EV Ready = a vehicle space which is provided with a branch circuit and any necessary raceways to accommodate EV charging stations including a receptacle for future installation of a charger. See 2022 California Green Building Standard Code, Title 24 Part 11 for full explanation of mandatory measures including exceptions.

- Multifamily dwellings, hotels/motels with greater than 20 units/rooms: Designation of at least 10 percent of the total number of parking spaces shall be EV capable, at least 25 percent of the total number of parking spaces shall be EV Ready, and at least 5 percent of the total number of parking spaces shall be equipped with a Level 2 Charging Station.
- Non-residential land uses shall comply with the following EV charging requirements based on the number of passenger vehicle parking spaces
  - 0-9: no EV capable spaces or charging stations required;
  - 10 – 25: 4 EV capable spaces but no charging stations required;
  - 26 – 50: 8 EV capable spaces of which 2 must be equipped with charging stations;
  - 51 – 75: 13 EV capable spaces of which 3 must be equipped with charging stations;
  - 76 – 100: 17 EV capable spaces of which 4 must be equipped with charging stations;
  - 101 – 150: 25 EV capable spaces of which 6 must be equipped with charging stations;
  - 151 – 200: 35 EV capable spaces of which 9 must be equipped with charging stations;
  - >200: 20 percent of the total available parking spaces of which 25 percent must be equipped with charging stations;
- Non-residential land uses shall comply with the following EV charging requirements for medium-duty and heavy-duty vehicles: Warehouses, grocery stores, and retail stores with planned off-street loading spaces shall install EV supply and distribution equipment, spare raceway(s) or busway(s) and adequate capacity for transformer(s), service panel(s), or subpanel(s) at the time of construction based on the number of off-street loading spaces as indicated in Table 5.106.5.4.1 of the California Green Building Standards.

- Bicycle Parking
  - Non-residential short term bicycle parking for projects anticipated to generate visitor traffic: permanently anchored bicycle racks within 200 feet of visitor entrance for 5 percent of new visitor motorized vehicle parking spaces with a minimum of one two-bike capacity rack.
  - Non-residential buildings with tenant spaces of 10 or more employees/tenant-occupants: Secure bicycle parking for 5 percent of the employee/tenant-occupant vehicle parking spaces with a minimum of one bicycle parking facility.

- Shade Trees (Non-Residential)
  - Surface parking: Minimum No. 10 container size or equal shall be installed to provide shade over 50 percent of the parking within 15 years (unless parking area covered by appropriate shade structures and/or solar);
  - Landscape areas: Minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years;
  - Hardscape areas: Minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years (unless covered by applicable shade structures and/or solar or the marked area is for organized sports activities).

The CALGreen voluntary standards are only mandatory if a local ordinance requires them. Since the City has not made any of the voluntary measures mandatory, the following voluntary standards would not be applicable to the project:

- Deconstruct existing buildings and reuse applicable salvaged materials;

- Residential Bicycle Parking:
  - Multifamily/hotel/motel short-term parking: Provide permanently anchored bicycle racks within 100 feet of visitor's entrance for 5 percent of visitor motorized vehicle parking capacity (minimum 1 two-bile capacity rack);
  - Hotel/Motel long-term parking: Provide one acceptable on-site bicycle parking space for every 25,000 square feet but not less than two spaces;

The CALGreen voluntary standards are divided into two tiers. Tier 1 adds additional requirements beyond the mandatory measures, whereas Tier 2 further increases the requirements.

- **Tier I**
  - Stricter energy efficiency requirements;
  - Stricter water conservation requirements for specific fixtures;
  - Minimum 65 percent reduction in construction waste with third-party verification, Minimum 10 percent recycled content for building materials;
  - Minimum 20 percent permeable paving;
  - Minimum 20 percent cement reduction;
  - Multifamily developments/hotels/motels: Minimum 35 percent of total parking spaces shall be EV ready and for projects with 20 or more dwelling units/rooms a minimum of 10 percent of the total number of parking spaces shall be equipped with EV charging stations;
- **Tier II**
  - Stricter energy efficiency requirements,
  - Stricter water conservation requirements for specific fixtures;
  - Minimum 75 percent reduction in construction waste with third-party verification,
  - Minimum 15 percent recycled content for building materials;
  - Minimum 30 percent permeable paving;
  - Minimum 25 percent cement reduction;
  - Multifamily developments/hotels/motels: Minimum 40 percent of total parking spaces shall be EV ready and for projects with 20 or more dwelling units/rooms a minimum of 15 percent of the total number of parking spaces shall be equipped with EV charging stations

Plan Bay Area 2050

Plan Bay Area 2050 is a State-mandated, integrated long-range transportation, land-use, and housing plan, known as an RTP/SCS, that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area. Plan Bay Area 2050 builds on earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. Plan Bay Area 2050 focuses on advancing equity and improving resiliency in the Bay Area by creating strategies in the following four elements: Housing, Economy, Transportation, and Environment. The Plan discusses how the future is uncertain due to anticipated employment growth, lack of housing options, and outside forces, such as climate change and economic turbulence. These uncertainties will impact growth in the Bay Area and exacerbate issues for those who are historically and systemically marginalized and underserved and excluded. Thus, Plan Bay Area 2050 has created strategies and considered investments that will serve those systemically underserved communities

and provide equitable opportunities. The Plan presents a total of 35 strategies to outline how the $1.4 trillion dollar investment would be utilized. The strategies include, but are not limited to, the following: providing affordable housing, allowing higher-density in proximity to transit-corridors, optimizing the existing roadway network, creating complete streets, providing subsides for public transit, reducing climate emissions, and expanding open space area. To bring these strategies to fruition, it will require participation by agencies, policymakers, and the public. An implementation plan is also included as part of the Plan to assess the requirements needed to carry out the strategies, identify the roles of pertinent entities, create an appropriate method to implement the strategies, and create a timeline for implementation.

Napa Valley Transportation Authority

The Napa Valley Transportation Authority (NVTA) is a Congestion Management Agency (CMA) formed in 1998 as a joint power authority between the cities of American Canyon, Calistoga, Napa, St. Helena, the town of Yountville, and the County of Napa. NVTA serves as the countywide transportation planning agency. NVTA also develops the long-range county transportation plan, which (along with similar plans from the other eight Bay Area counties) forms the "primary basis" for the RTP/SCS adopted by the Metropolitan Transportation Commission. In turn, the county transportation plan must consider the most recently adopted RTP/SCS to assure that both plans employ a common planning framework.

City of American Canyon Energy Efficiency Climate Action Plan

The City of American Canyon Energy Efficiency Climate Action Plan (EECAP) was adopted in December 2012 to develop a coordinated approach to energy efficiency and GHG reductions within the community and local government. The EECAP provides feasible strategies and measures that cost-effectively reduce energy-related and GHG emissions. Additionally, the EECAP includes an inventory of GHG emissions from all sectors in the community for years 2005 and 2010, as well as forecasts of anticipated GHG emissions for years 2020 and 2035 under a business-as-usual scenario that takes into consideration current consumption patterns, as well as population and job projections.

American Canyon Industrial GHG Standards Ordinance 2024-02

CEQA requires lead agencies to choose a threshold of significance to evaluate greenhouse gas emissions that is supported by substantial evidence and captures all significant impacts which may be one developed by an expert agency. The City falls within the Bay Area Air Quality Management District (BAAQMD), which in 2022 issued GHG significance thresholds recommendations for residential and commercial projects but did not recommend a threshold for industrial land uses. The South Coast Air Quality Management District (SCAQMD), which includes Los Angeles County, has developed a threshold of significance under CEQA for industrial land uses that is supported by substantial evidence and serves as a basis for mitigation of significant sources of GHG impacts.

The City's threshold of significance that combines BAAQMD's baseline threshold with the SCAQMD's threshold will capture the main sources of GHG emissions from industrial land uses.

The threshold standards are applied in a tiered evaluation system:

Tier 1: CEQA Categorical Exemptions

- Initially, determine if the project qualifies for any CEQA categorical exemptions. If it does not, proceed to Tier 2.

Tier 2: Consistency with Local GHG Reduction Plans

- Assess if the project aligns with a locally adopted GHG reduction plan. This plan must have undergone public hearing and CEQA review, have an approved inventory, and include monitoring. If the project is not consistent with such a plan, move to Tier 3.

Tier 3: Project Design Elements

- Evaluate the project against specific design elements
    1. **Buildings**
        a. The project should not include natural gas appliances or plumbing.
        b. The project should avoid wasteful or unnecessary energy use, as per CEQA guidelines.
    2. **Transportation**
        a. The project must achieve a reduction in vehicle miles traveled (VMT) below the regional average, currently at least 15% as per the California Climate Change Scoping Plan.
        b. The project must comply with the latest CALGreen Tier 2 electric vehicle requirements.
- If the project does not incorporate these design elements, it is considered to have a significant GHG impact. If it does, move to Tier 4.

Tier 4: GHG Emissions Screening Threshold

- Determine if the project's GHG emissions exceed the South Coast Air Quality Management District's threshold of 10,000 metric tons of CO2 equivalent (MT CO2e) per year for industrial uses and stationary projects. Projects exceeding this threshold are deemed to have a significant GHG impact.

Industrial Commerce Centers Sustainability Standards Ordinance 2024-03

The American Canyon Industrial Greenhouse Gas Standards Ordinance establishes the following standards to all warehousing, logistics, and distribution facilities in the City where a Notice of Preparation is issued after March 1, 2024, under CEQA. It defines such facilities as those used for storing and consolidating manufactured goods, typically larger than 200,000 square feet with specific characteristics such as dock high loading doors and truck activities.

The following standards are applicable under the proposed Ordinance:

1. **Zero Emission Operational Equipment.** All on-site motorized operational equipment (forklifts, yard trucks, pallet jacks, etc.) must be zero-emission. This includes using electrical hookups instead of diesel-fueled generators for construction tools.
2. **Zero Emission Cargo Handling Equipment.** All outdoor cargo handling equipment must be zero-emission vehicles. Necessary charging stations or infrastructure for these vehicles must be included in each building.

3. **Rooftop Solar Panels.** Before issuing a business license, the City will ensure that rooftop solar panels are installed to supply 100% of the power needed for non-refrigerated parts of the facility, including parking areas.
4. **Refrigerated Space Requirements.** Facilities not committing to non-refrigerated use must install conduits during construction for potential refrigerated spaces. Electric plug-in units for refrigeration units must be installed at relevant dock doors.
5. **Zero Emission Construction Equipment.** All generators and diesel-fueled off-road construction equipment over 75 horsepower must be zero-emissions or have CARB Tier IV-compliant engines. Exemptions are possible if such equipment is not reasonably available.
6. **Electric Vehicle Charging Stations.** Install infrastructure for Level 2 (or faster) EV charging stations for a percentage of employee parking spaces, increasing to 25% by 2030.
7. **Air Filtration Systems.** Install HVAC and/or HEPA air filtration systems in all warehouse facilities.

4.5.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on GHG emissions if it would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Most individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence on climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]). The 2022 BAAQMD *CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans* provides two plan level thresholds for determining the significance of GHGs. The two approaches are as follows:

1. Consistency with a qualified GHG reduction plan
2. Meets the State's goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045

The City of American Canyon's EECAP is not a qualified GHG reduction plan, since it contains targets only for 2020 and was adopted prior to the adoption of new targets contained in the 2022 Scoping Plan; therefore, the first approach is not feasible. As such, the City uses the second approach to determine the significance of GHGs for development facilitated by the project.

Methodology

Based on plan-level guidance from the 2022 BAAQMD *CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans,* GHG emissions associated with project implementation is discussed qualitatively by comparing the project to the 2022 BAAQMD GHG thresholds, namely whether policies work towards achieving carbon neutrality by 2045. In addition, the project is qualitatively compared to other applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs.

In developing its 2022 GHG significance thresholds, BAAQMD analyzed what new land use development projects will require to achieve California's long-term climate goal of carbon neutrality by 2045, thereby better representing what design elements new land use development projects need to incorporate to sufficiently contribute to achieving the State's goal. As GHG emissions from the land use sector come primarily from building energy use and from transportation, these are the areas that need to be evaluated to determine whether the project can or will be carbon neutral. With respect to building energy use, this can be achieved by replacing natural gas with electric power and by eliminating inefficient or wasteful electricity usage. These strategies will support California's transition away from fossil fuel-based energy sources and will bring the project's GHG emissions associated with building energy use down to zero because SB 100 incrementally requires greater proportions of in-state sales of electricity to be generated from renewable and carbon-free sources, ultimately requiring 100 percent of in-state electricity sales to be generated from carbon-free sources by 2045. With respect to transportation, projects need to be designed to reduce project-generated VMT and to provide sufficient EV charging infrastructure to support the adoption of EVs. BAAQMD's 2022 significance thresholds for project design elements are listed below. If a land use development project cannot demonstrate consistency, then that project would result in a potentially significant impact related to GHG emissions.

1. **Buildings**
    i. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
    ii. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the CEQA Guidelines.

2. **Transportation**
    i. Achieve compliance with off-street EV requirements in the most recently adopted version of CALGreen Tier 2.
    ii. Achieve a 15 percent reduction in project-generated residential VMT per capita and VMT per employee rate below the existing American Canyon rate.

As discussed in Chapter 4.11, *Transportation*, project-generated traffic is evaluated for whether it would conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), which describes specific considerations for analyzing transportation impacts as amended on July 1, 2020, pursuant to SB 375. SB 375 aims to better promote statewide policies that (a) combat climate change by reducing greenhouse gas emissions and particulates; (b) encourage infill development and a diversity of uses instead of sprawl; and (c) promote multi-modal transportation networks, providing clean, efficient access to destinations and improving public health through active transportation. Section 15064.3(b) states that VMT is "generally" the most appropriate measure of transportation impacts. No particular methodology or metric is mandated by section 15064.3(b) and the methodology or

metric is left to the lead agency, bearing in mind the criteria the legislature had in mind for determining the significance of transportation impacts in SB 743. These were expressed in Public Resource Code section 21099(b)(1), which states: "[t]hose criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." The American Canyon travel demand model is a trip-based model and estimates the following:

- Residential VMT per capita was estimated based on the VMT attributable to home-based trip productions, to and from residences in American Canyon.
- VMT per employee was estimated based on the VMT associated with home-based work (HBW) trips, to and from places of employment in American Canyon.

VMT impacts would be considered potentially significant if the forecasted rate of residential VMT per capita or VMT per employee for the project were to exceed 85 percent of the existing rate of VMT in each category for American Canyon, based on the American Canyon travel demand model.

In terms of the potential for wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and CEQA Guidelines Section 15126.2(b), project energy impacts are addressed under *Energy* in Chapter 4.15, *Effects Found to be Less than Significant*.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
Threshold 2:	Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact GHG-1 DEVELOPMENT FACILITATED BY THE PROJECT WOULD MAKE PROGRESS TOWARDS ACHIEVING STATE GOALS BUT WOULD NOT NECESSARILY MEET STATE 2030 OR 2045 GOALS. MITIGATION MEASURES GHG-2 AND GHG-3 WOULD REQUIRE IMPLEMENTATION OF CEQA GHG THRESHOLDS AND A CLIMATE ACTION PLAN (CAP); HOWEVER, DEVELOPMENT FACILITATED BY THE PROJECT WOULD NOT MEET THE 2030 OR 2045 GOALS UNTIL THE CAP IS UPDATED AND ADOPTED. THIS IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE.

Construction

Construction of future development and mobility improvements associated with the 2040 General Plan would result in GHG emissions during construction, primarily from fuel consumption associated with heavy equipment, light-duty vehicles, machinery, and generators for lighting. Temporary grid power may also be provided to construction trailers or electric construction equipment that may result in indirect GHG emissions from energy generation. The project would utilize construction contractors that would be required to comply with applicable CARB regulations, such as accelerated retrofitting, repowering, or replacement of heavy-duty diesel on-road and off-road equipment. Construction contractors are required to comply with the provisions of CCR Title 13, sections 2449 and 2485, and CARB regulations, which prohibit diesel-fueled commercial and off-road vehicles from idling for more than five minutes, minimizing unnecessary GHG emissions. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would minimize inefficient fuel consumption and thus GHG emissions. These construction equipment

standards (i.e., Tier 4 efficiency requirements) are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Pursuant to applicable regulatory requirements of CALGreen, the project would comply with construction waste management practices to divert construction and demolition debris from landfills. These practices would result in efficient use of energy during construction and, therefore, would minimize unnecessary GHG emissions. Furthermore, in the interest of cost efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary, which would also have the effect of minimizing GHG emissions.

The use of GHG-reducing construction Best Management Practices (BMPs) is considered by the City to be a pragmatic and effective approach for the control of construction-related GHG emissions. The BAAQMD, in their 2017 CEQA Air Quality Guidelines, recommend that following construction BMPs for reducing GHG emissions:

- The use of alternative fueled construction vehicles and equipment for at least 15 percent of the fleet.
- The use of local building materials for at least 10 percent of materials.
- The recycling and reuse of at least 50 percent of construction and demolition waste materials.

Pursuant to the 2022 BAAQMD *CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans*, BAAQMD does not recommend a construction-related climate impact threshold. According to BAAQMD, GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions. However, incorporation of feasible and applicable GHG-reducing construction BMPs serves herein as the basis for whether project construction would contribute its "fair share" of GHG emission reductions consistent with the legislative reduction targets codified by SB 32 and the State's long-term climate goal of carbon neutrality by 2045. The California Supreme Court, in Center for Biological Diversity v. Department of Fish & Wildlife (2015) (62 Cal.4th 204, 220-223), explained that an approach by which a lead agency ascertains a proposed project's "fair share" of required Statewide GHG reductions is a legitimate approach for formulating significance thresholds for GHG emissions. Under this approach, which here is focused on the project incorporating BAAQMD-recommended BMPs for construction-related emissions, the project would be considered to result in a potentially significant impact if project construction would not incorporate feasible and applicable GHG reducing construction BMPs including, at a minimum, those listed above. Implementation of Mitigation Measure GHG-1 would require incorporation of those GHG reducing construction BMPs and reduce construction related impacts to be less than significant.

The proposed thresholds for land use projects are designed to address operational GHG emissions that represent the vast majority of project GHG emissions. Therefore, the primary evaluation of GHG emissions impacts associated with project implementation is focused on operational emissions, discussed below.

Operation

The project would result in GHG emissions during operation. The nature of GHG emissions would be typical of those associated with residential, commercial, retail, hotel, industrial, warehouse, and research and development uses. GHG emissions would result primarily from building energy usage and fuel consumption associated with vehicle trips. The project contains policies that aim to reduce operational GHG emissions in accordance with State 2030 GHG emissions reductions goals and provide substantial progress to the State's goal of carbon neutrality by 2045, as included below. Operational buildout is expected to be 2040.

Transportation

On-road transportation sources are based on passenger vehicle and truck trip generation rates and VMT. As described in Section 4.11, *Transportation,* implementation of the 2040 General Plan would result in less than significant VMT impacts. The forecasted VMT of the project, including both VMT per residents and VMT per employee, would be more than 15 percent lower than existing VMT.

General Plan goals and policies listed under Impact AQ-2 in Section 4.2, *Air Quality,* would reduce emissions from vehicles by encouraging active transportation and transit use. Goal LU-1, coupled with proposed policy LU-1.4, would encourage compact development to reduce reliance on automobiles and associated GHG emissions. Goal MOB-1 and associated policies would encourage creation of complete streets (i.e., streets that support pedestrians and bicyclists) to reduce VMT in the City, which would reduce GHG emissions associated with vehicle use. Goal MOB-5 and associated policies would support public transit to reduce VMT, which would also reduce GHG emissions associated with vehicle use.

Buildings

Future buildings developed under the project would be served by Marin Clean Energy (MCE) or Pacific Gas and Electricity (PG&E). MCE is an alternative to PG&E for energy generation. All residents and local businesses are automatically enrolled in the Light Green Program (60 percent renewable energy) and have the option to opt up to the Deep Green Program, which offers 100 percent renewable energy. PG&E is required to increase its renewable energy procurement in accordance with SB 100 targets. SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. It requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. In addition, GHG emissions from building use would be reduced through implementation of the proposed policies listed below, which would encourage energy efficiency in buildings.

- **Policy U-9.1: Reach Building Code.** Reduce energy use in new development by considering a local amendment that requires a 15% energy efficient standard improvement over the California Building Code.
- **Policy U-9.2: Electric Energy Systems.** Coordinate with Pacific Gas and Electric Company (PG&E) to ensure that electrical energy systems do not adversely impact land uses and population in the City of American Canyon.
- **Policy U-9.5: Electric Energy Systems.** Coordinate with Pacific Gas and Electric Company (PG&E) to ensure that electrical energy systems do not adversely impact land uses and population in the City of American Canyon.
- **Policy U-9.6: Passive Solar Heating and Cooling.** Consistent with the California Subdivision Map Act, require new subdivisions to examine the feasibility of incorporating site layouts that allow passive solar heating and cooling.
- **Policy U-9.7: Residential Energy Efficiency.** Seek grant funds that help low and moderate-income residents obtain low or no-cost loans to increase energy efficiency of their homes through weatherization, insulation, solar energy generation and energy battery backup storage; and assist utility providers with outreach on home energy efficiency rebates and programs for all residents, regardless of income.

- **Policy ENV-10.6: Reach Building Code.** Consider feasibility of adopting a "reach" local amendment to the California building code to require a 15% or greater energy efficiency than the State standard.
- **Policy ENV-10.8: Building Electrification.** Consider a Reach Building Code that would prohibit installation of natural gas in all new construction.
- **Policy ENV-11.1: Energy Efficiency.** Require developers employ energy-efficient site planning methods and building design, including building orientation, shading, landscaping, building reflectance, and passive solar heating and hot water systems.
- **Policy ENV-11.1: Renewable Energy Sources.** Work with other agencies and utility companies to develop safe, economical, and renewable energy resources.
- **Policy ENV-11.2: Renewable Energy Program.** Support installation of renewable energy and battery storage for homes and businesses.
- **Policy ENV-11.3: Energy Retrofit Program.** Develop an energy retrofit program and incentives for homeowners and building owners to encourage energy efficiency improvements such as fixture and appliance upgrades.
- **Policy ENV-11.4: Energy Efficiency City Operations.** Increase energy efficiency of City operations and evaluate the feasibility of installing renewable energy at city facilities.

Proposed policies U-9.1 and ENV-10.6 would encourage a reduction in building energy use and associated GHG emissions by adopting a reach code that requires greater energy efficiency than mandated by the State. Proposed policies U-9.2, U-9.5 through U-9.7, and ENV-11.1 through ENV-11.4 would reduce energy use and associated GHG emissions through various energy efficiency programs and increased use of renewable energy sources. Proposed policy ENV-10.8 would reduce GHG emissions by supporting a prohibition of natural gas.

The proposed policies regarding vehicle use and buildings would assist in reducing emissions to 40 percent below 1990 levels by 2030 and reaching carbon neutrality by 2045 but would not necessarily achieve either goal. The project is a policy-level document that guides land use and development throughout the City. The CARB 2022 Climate Change Scoping Plan outlines a pathway to achieving the 2030 reduction targets set under SB 32, which are considered interim targets toward meeting the long-term 2045 carbon neutrality goal established by California Executive Order B-55-18. While the project would facilitate additional development within the City, building energy consumption and VMT (and thus GHG emissions), water consumption, and solid waste generation per capita would be reduced under the project's buildout compared to existing conditions, given the above discussed policies. However, the project does not outline how the City would meet the goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045. The project would therefore not be consistent with the California Executive Order B-55-18 goal of carbon neutrality by 2045, nor does it have a qualified GHG reduction plan to guide progress towards State goals. Therefore, impacts related to generation of GHG emissions and consistency with State GHG reduction plans due to the project would be potentially significant.

Implementation of Mitigation Measures GHG-2 and GHG-3 would require that the City implement CEQA GHG emissions thresholds and adopt the American Canyon CAP to establish a Citywide GHG reduction target and provide an outline of how the City will meet the State goal of carbon neutrality by 2045.

Mitigation Measures

GHG-1 Construction GHG BMPs

Prior to the issuance of any grading permits, the project applicant shall provide the City of American Canyon with documentation (e.g., site plans) demonstrating implementation of construction Best Management Practices (BMPs). Measures may include but are not limited to:

- At least 15 percent of the construction fleet for each project phase shall be alternatively fueled or electric.
- At least 10 percent of building materials used for project construction shall be sourced from local suppliers.
- At least 65 percent of construction and demolition waste materials shall be recycled or reused.
- At least one contractor that has a business location in American Canyon shall be contracted for project construction.
- All construction contracts shall include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) using during construction be electrically powered.
- Architectural coatings used for project construction shall be "Low-VOC," containing no greater than 50 grams of volatile organic compounds (VOC) per liter of product.
- Project construction shall prohibit the use of generators and shall establish grid power connection to electrical equipment needs.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure [ATCM] Title 13, Section 2485 of California Code of Regulations). Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The prime construction contractor shall post a publicly visible sign with their telephone number and contractor to contact. The construction contractor shall take corrective action within 48 hours. The BAAQMD's phone number shall also be identified and visible to ensure compliance with applicable regulations.

GHG-2 Adopt and Implement a CEQA GHG Emissions Threshold

The City shall include and implement a new 2040 General Plan policy under the Environment Element to prepare, adopt, and implement a CEQA GHG Emissions threshold of significance. The City shall adopt the CEQA GHG Emissions threshold of significance by the end of 2025 for use in future CEQA GHG emissions analyses through 2030. In addition, upon completion of future CAP updates and as necessary, the City shall update the CEQA GHG Emissions threshold of significance and American Canyon CEQA GHG Checklist to be consistent with each CAP update.

GHG-3 Adopt American Canyon CAP to Meet the State's 2030 and 2045 GHG Emissions Goals

The City shall draft and adopt the American Canyon qualified CAP by the end of 2025 to outline how American Canyon will meet the State's 2030 goal of 40 percent below 1990 emissions levels and

2045 goal of carbon neutrality. Implementation measures in the updated qualified CAP to achieve the 2030 and 2045 goals may include, but are not limited to, the following:

- Develop and adopt Zero Net Energy requirements for new and remodeled residential and non-residential development;
- Develop and adopt a building electrification ordinance for existing and proposed structures;
- Expand charging infrastructure and parking for electric vehicles;
- Implement carbon sequestration by expanding the urban forest, participating in soil-based or compost application sequestration initiatives, supporting regional open space protection, and/or incentivizing rooftop gardens; and
- Implement policies and measures included in the California 2022 Climate Change Scoping Plan, such as mobile source strategies for increasing clean transit options and zero emissions vehicles by providing electric vehicle charging stations.

Significance After Mitigation

Implementation of Mitigation Measure GHG-1 would ensure that construction related GHG impacts would be less than significant. Implementation of Mitigation Measures GHG-2 and GHG-3 would ensure that development facilitated by the project after 2024 would be consistent with State emissions goals. However, individual projects that may occur prior to 2024 would not be guaranteed to be consistent with State emissions goals, nor are exact emissions reductions known at the time of adoption of the 2040 General Plan. Until the CEQA GHG thresholds are adopted and the CAP is updated, implementation of the project would not be consistent with BAAQMD GHG thresholds nor would it be consistent with State GHG reduction plans. Therefore, the project's impacts related to GHG emissions would be significant and unavoidable.

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4.6 Land Use and Planning

This section summarizes existing and planned land uses in the Planning Area and analyzes the impacts on land use and planning due to the project. The physical environmental effects associated with the project, many of which pertain to issues of land use compatibility (e.g., aesthetics, air quality, noise) are evaluated in other sections of this EIR.

4.6.1 Setting

a. Existing Land Use Patterns

The General Plan Planning Area includes the following four components.

1. Current City Limits: The City limits encompasses approximately 6.1 square miles. The existing uses within City limits are discussed in further detail below.
2. Sphere of Influence (SOI): The SOI represents areas that may already receive City services and are a visual and logical expansion of the city boundaries. There is currently one area in the SOI that is not within City limits. The City is currently in the process of annexing that area as part of the Paoli/Watson Lane Annexation Project and is currently preparing the California Environmental Quality Act (CEQA) documentation (City of American Canyon 2022).
3. Urban Limit Line (ULL): The ULL was established in a 2008 voter initiative. The ULL agreement obtained County support for City annexation of three properties in the Napa Airport Specific Plan and potentially additional properties within the ULL until the Year 2030. In return, the City clarified its City Water Service area policies for some properties outside the City limits. The ULL boundary includes the SOI plus additional properties east of the City (see Figure 2-3 in Chapter 2, *Project Description*).
4. Historical City Water Service Area: Areas within the City's historical water service area beyond the ULL are intended to remain outside the city limits for the duration of the General Plan planning period. This property is relevant to the General Plan because these County properties obtain potable water from the City's water service area.

Within the City limits, approximately 30 percent of the city has residential uses, including single-family, multifamily, and mobile home parks (American Canyon 2020). Approximately 26 percent of American Canyon is made up of vacant land, primarily vacant industrial land. Public facilities, parks, and open space make up next largest category at 16 percent. Existing industrial uses occupy 14 percent of the city, while commercial uses comprise 4.2 percent (American Canyon 2020).

Residential

Residential uses are the predominant land use in the City. Housing units consist of single-family, multi-family, mobile homes, and estate (agricultural) homes. Neighborhoods containing single-family detached dwelling units are the primary developed land use within the city. Most low-density (i.e., single-family) residential uses are located west of State Route (SR) 29 while the higher density residential uses (i.e., multi-family and mobile homes) are generally located between American Canyon Road and the City' s southern limit, and between SR 29 and Flosden Road.

Commercial

Commercial uses in the City include retail (general and personal services), offices, restaurants, convenience markets, gas stations, and auto-related facilities. Commercial uses located along SR 29 and are generally sited to attract customers from commuter or tourist traffic on SR 29 (e.g., gas stations, restaurants, and convenience markets) (American Canyon 1994a). Planned multimodal improvements (i.e.: sidewalks, trails, property interconnectivity) as well as adjacent existing and planned housing will increase non-motorized access.

Industrial

Industrial uses in the City include light and heavy manufacturing, storage and salvage yards, business parks, and other related uses (American Canyon 1994a). Industrial uses are primarily located in the north-western portion of the City.

Institutional

Institutional uses include churches, and other religious institutions. These facilities provide a variety of services for the physically challenged, senior citizens, and others (American Canyon 1994a).

Public

The City's public uses encompass educational facilities, recreational facilities, utilities, easements, and civic structures. Utility facilities and easements include such uses as a wastewater treatment plant and Pacific Gas & Electric transmission line corridors (American Canyon 1994a). The City also includes a network of public parks, primarily around residences, and open space adjacent to the Napa River and Newell Open Space to provide opportunities for recreation.

Agriculture

Agriculture uses are limited within the Urban Limit Line (ULL). These consist of grazing, livestock feed crops and vineyards.

Vacant

Vacant land in the city is primarily located in areas designated industrial and residential on the northwestern side of the city. In the northeastern side of the City and ULL, vacant land is designated industrial, residential, and special study.

4.6.2 Regulatory Setting

a. Federal Regulations

There are no federal regulations that pertain to land use and planning.

b. State Regulations

General Plan Law (California Government Code Section 65300)

California Government Code Section 65300 regulates the substantive and topical requirements of general plans. State law requires that each city and county adopt a general plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its

planning." The California Supreme Court has called the general plan the "constitution for future development." The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private.

California Government Code Section 65301

Section 65301 of the California Government Code requires a general plan to address the geographic territory of the local jurisdiction and any other territory outside its boundaries that bears relation to the planning of the jurisdiction. The jurisdiction may exercise their own judgment in determining what areas outside of its boundaries to include in the planning area. The State of California General Plan Guidelines denotes that the planning area for a city should include (at minimum) all land within the city limits and all land within the city's SOI.

Government Code Section 65860(a)

State law requires that general law city or town zoning ordinances be consistent with the general plan. A zoning ordinance is consistent with an adopted general plan only if the various land uses authorized by the zoning ordinance "are compatible with the objectives, policies, general land uses, and programs specified in such a plan" (Government Code Section 65860(a)). State law also provides that in the event a zoning ordinance becomes inconsistent with a general plan by reason of amendment to such a plan, the zoning ordinance must be amended within a reasonable time so that it is consistent with the general plan as amended [Government Code Section 65860(a)]. The City of American Canyon is a general law city and is, therefore, required to have zoning consistency.

Cortese Knox Hertzberg Local Government Reorganization Act of 2000

The 2000 Cortese Knox Hertzberg Local Government Reorganization Act (CKH Act) established procedures for local agency changes of organization, including city incorporation, annexation to a city or special district, and consolidation of cities or special districts (Section 56000, et seq.). Local Agency Formation Commissions (LAFCOs) have numerous powers under the CKH Act, but the most important are the power to act on local agency boundary changes and to adopt sphere of influences (SOIs) for local agencies. The law states that to update an SOI, LAFCOs are required to first conduct a review of the municipal services provided by the local agency. The CKH Act requires LAFCOs to update SOIs for every city and special district every five years. The original deadline was January 2006, five years following the CHK Act becoming State law. That deadline was extended two years to January 2008. Every SOI update must be accompanied by an update of the municipal services review. American Canyon's SOI is not being updated as a part of the 2040 General Plan.

State Aeronautics Act

The State Aeronautics Act requires each county with an airport to establish an Airport Land Use Commission (ALUC) to regulate land use around airports to protect public safety and ensure that land uses near airports do not interfere with aviation operations. The Napa County Airport Land Use Compatibility Plan (ALUCP) regulates land use around the Napa County Airport, as well as two other aviation facilities in the County, by requiring compliance with the policies of the plan. In certain circumstances, local governments may override the decisions of the ALUC.

Sustainable Communities and Climate Protection Act (SB 375)

The Sustainable Communities and Climate Protection Act (SB 375) supports the State's climate goals by helping reduce greenhouse gas emissions through coordinated transportation, housing, and land

use planning. Under SB 375, the California Air Resources Board (CARB) set targets for 2020 and 2035 for each of the 18 metropolitan planning organization regions in 2010 and updated them in 2018. Each of the regions must prepare a Sustainable Communities Strategy (SCS), as an integral part of its regional transportation plan, that contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet CARB's targets. SB 375 establishes some incentives to encourage implementation of the development patterns and strategies included in an SCS. Developers can get relief from certain environmental review requirements under CEQA if their new residential and mixed-use projects are consistent with a regions SCS that meets the targets (see Public Resources Code Sections 21155, 21155.1, 21155.2, and 21159.28).

c. Local Regulations

Association of Bay Area Governments 2021 Regional Transportation Plan/Sustainable Communities Strategy

The Association of Bay Area Governments (ABAG) is required by State and federal law to prepare, update, and adopt a Regional Transportation Plan (RTP) every four years. Senate Bill (SB) 375, California's Sustainable Communities and Climate Protection Act, was enacted in 2008, requiring all RTPs to include an SCS that reduces greenhouse gas emissions from passenger vehicles and light-duty trucks. The most recent update to the RTP/SCS was completed by ABAG and the Metropolitan Transportation Commission in October 2021. The 2021 RTP/SCS, also known as Plan Bay Area 2050, builds on ABAG's 2017 RTP/SCS and serves as the blueprint for the region's transportation system over the next 30 years (ABAG 2021).

The 2021 RTP/SCS includes the following goals:

- Protect and preserve affordable housing.
- Spur housing production for residents of all income levels.
- Create inclusive communities.
- Improve economic mobility.
- Shift the location of jobs.
- Maintain and optimize the existing transportation system.
- Create healthy and safe streets.
- Build a next-generation transit network.
- Reduce risks from hazards.
- Expand access to parks and open space.
- Reduce climate emissions.

City of American Canyon Municipal Code

The Zoning Code (Title 19) of the City of American Canyon Municipal Code is the primary tool used by the City to carry out the goals, objectives, and policies of the American Canyon General Plan by classifying and regulating the uses of land and structures within the city, consistent with the General Plan. Zoning is the instrument that implements the land use designations of a general plan. In addition to establishing permitted uses, zoning may also establish development standards relating to issues such as intensity, setbacks, height, and parking. Projects submitted to the City for review and approval are generally evaluated for consistency with the zoning designations.

The 21 existing zoning districts established by the American Canyon Zoning Ordinance are as follows (American Canyon 2015):

- RE – Residential Estate
- RR – Rural Residential (RR-20,000, RR-10,000)
- RS – Suburban Residential (RS-8000, RS-6500)
- RM – Medium Residential
- RH – High Residential (RH-1, RH-2)
- PC – Planned Community
- SP – Specific Plan (SP-1, SP-2)
- CN – Neighborhood Commercial
- CC – Community Commercial
- REC – Recreation
- TC – Town Center
- P – Public
- LI – Light Industrial
- GI – General Industrial
- OS – Open Space
- OS-CRW – Open Space Clarke Ranch West
- SS – Special Study

Napa County Airport Land Use Compatibility Plan

The Napa County ALUCP governs land use around Napa County Airport. The ALUCP identifies two categories of flight hazards: physical obstructions and land use characteristics. Physical obstructions are associated with tall objects or structures. The ALUCP establishes a height restriction of 35 feet above the ground for objects located within Zone D. Additional height may be permitted under stringent Special Use Permit procedures as provided for in the Airport Safety Ordinance No. 416 and be referred to the Napa County ALUC prior to final approval. Land use characteristics involve uses that may produce hazards to aviation. Specific characteristics prohibited within the airport land use planning boundaries are listed below:

- Glare or distracting lights, which could be mistaken for airport lights
- Sources of dust, steam, or smoke that may impair pilot visibility
- Sources of electrical interference with aircraft communications or navigation
- Any use that may attract large flocks or birds, especially landfills or certain agricultural uses

The ALUCP follows Noise Compatibility Guidelines, as included in Table 2-1 of the ALUCP (ALUC 1991). New residential uses are not permitted within Zone D without ALUC review. However, the City entered a Settlement Agreement with the ALUC on May 3, 2022. The Settlement Agreement provides that the City will not recommend for approval any application for a residential use in Zone D until an amendment to the ALUCP has been approved or December 31, 2023, whichever occurs first. The Settlement Agreement does not prohibit the City from processing an application for a residential proposal within Zone D.

4.6.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on land use and planning if it would:

1. Physically divide an established community;
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Methodology

The consistency analysis describes existing regional and local plans and policies and is intended to fulfill the requirements of CEQA Guidelines Section 15125(d). The emphasis of the analysis is on the project's inconsistency and potential conflicts between the project and existing applicable land use plans adopted for the purpose of avoiding or mitigating an environmental effect, and whether any inconsistencies would cause significant environmental effects. The project is considered consistent with the provisions of the identified regional and local plans if it meets the general intent of the applicable plans and does not conflict with directly applicable policies. A given project need not be in perfect conformity with each and every policy nor does state law require precise conformity of a proposed project with every policy or land use designation. Courts have also acknowledged that general and specific plans attempt to balance a range of competing interests, and that it is nearly, if not absolutely, impossible for a project to be in perfect conformity with each and every policy set forth in the applicable plan. Additionally, in reaching such consistency conclusions, the City may also consider the consequences of denial of a project, which can result in other policy inconsistencies. For example, Government Code Section 65589.5 explains that the potential consequences of limiting the approval of housing can include reduced mobility, urban sprawl, excessive commuting, and air quality deterioration.

For an impact to be considered significant, an inconsistency would also have to result in a significant adverse change in the environment not already addressed in the other resource chapters of this EIR. The analysis below provides a discussion of the most relevant policies from the various planning documents. However, the City's consistency conclusions are based upon the planning documents as a whole.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project physically divide an established community?

Impact LU-1 THE PROJECT WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY AND THERE WOULD BE NO IMPACT.

Most of the Planning Area is currently developed. As described in Section 2, *Project Description,* the project would have a maximum buildout potential of an additional 3,204 residential units and an additional 5.7 million non-residential square footage. This buildout is projected to occur specifically within the existing City limits. The 2040 General Plan would involve implementation of proposed policies and land use designations that identify the type and intensity of uses permissible in the

Planning Area. Intensity and density standards are established for each land use classification. The intent of the land use designations is to adequately classify and distinguish the various land uses needed within the Planning Area.

The Land Use Element of the 2040 General Plan contains the following proposed goals and policies, which would maintain existing communities within the City of American Canyon and would ensure that established communities would not be divided by development facilitated by the project:

Goal LU-1: Establish American Canyon as a "complete city" with a diversity of distinct land uses that serve the needs of residents, businesses, and visitors.

- **Policy LU-1.1: Balance of Land Uses.** Establish a diversity of land use designations that provide for housing, commercial, employment, educational, cultural, entertainment, and recreation needs of residents; capture visitor and tourist activity; provide employment opportunities for residents of the greater subregion; and provide open space and aesthetic relief from developed urban/suburban areas.
- **Policy LU-1.2: Pattern of Development.** Support a pattern of development that establishes distinct neighborhoods, districts, places of community activity and culture and open spaces that are interlinked and promote a cohesive image; locates jobs, commerce, recreation, and other places of community activity within close proximity to housing, minimizing the need for vehicular use; achieves a balance of uses to serve both sides of Highway 29; and establishes an overall compact urban form surrounded by open space.
- **Policy LU-1.4: Compact Development Pattern**. Maintain a compact development pattern that fosters a walkable and bikeable urban form.

These policies would maintain existing communities in the City of American Canyon and would ensure that established communities would not be divided. Policy LU-1.1 would ensure orderly, contiguous development and would avoid land use incompatibilities, which would prevent division of existing communities. Policies LU-1.2 and LU-1.4 would encourage infill development and development of underutilized property, which facilitate development of vacant or underutilized properties to be consistent with their surrounding land uses. Furthermore, the mobility improvements identified in the Mobility Element of the 2040 General Plan would not be located within an established community and would therefore not divide an established community. The project would not physically divide the City of American Canyon or its established communities. There would be no impact.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

There would be no impact and no mitigation would be required.

Threshold 2:	Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact LU-2 THE PROJECT WOULD NOT RESULT IN A SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO A CONFLICT WITH A PLAN ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Several regionally and locally adopted land use plans, policies, and regulations apply to the project. These include the Plan Bay Area 2050, the Bay Area 2017 Clean Air Plan, and the ALUCP. Project consistency with the 2017 Clean Air Plan is discussed in Section 4.2, *Air Quality*. Project consistency with applicable goals and policies of Plan Bay Area 2050 are identified below in Table 4.6-1. Consistency of the project with the ALUCP is described below.

Table 4.6-1 Project Consistency with the Plan Bay Area 2050

Plan Bay Area Goals	Project Consistency
Environmental Strategies	
EN4. Maintain urban growth boundaries. Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions.	**Consistent.** The Planning Area is within the City's Sphere of Influence and urban limit line boundaries.
Economic Strategies	
EC4. Allow greater commercial densities in Growth Geographies. Allow greater densities for new commercial development in select Priority Development Areas and Transit-Rich Areas to encourage more jobs to locate near public transit.	**Consistent.** The following 2040 General Plan proposed goals and policies encourages commercial and mixed-use development that is clustered and attractive to pedestrians and cyclists. ▪ **Goal LU-3:** Attractive and vibrant neighborhoods, community, and regional commercial centers with convenient shopping, services, entertainment, and social interaction. ▪ **Policy LU-3.1: Diversity of Commercial Uses.** Provide for a diversity of retail and service commercial uses that support multiple neighborhoods and the greater community, reduce the need for trips to adjacent jurisdictions for goods and services, and provide shopping and service opportunities for commuters, visitors, and tourists. ▪ **Goal LU-4:** Improve the appearance and functionality of the Highway 29 corridor and establish a Town Center to provide for economically sound local-serving commercial development. ▪ **Policy LU-4.9: Commercial Clustering.** Encourage the clustering of commercial activities along Highway 29 to provide more attractive and cohesive facilities while minimizing potential circulation conflicts. Overall, compared to existing conditions, the project could add approximately 5.7 million square feet of commercial, retail, hotel, industrial, warehouse, and research and development uses. With implementation of the proposed goals and policies in the 2040 General Plan, the project would be consistent with strategy EC4.

Plan Bay Area Goals	Project Consistency
EC6. Retain and invest in key industrial lands. Implement local land use policies to protect key industrial lands, identified as Priority Production Areas, while funding key infrastructure improvements in these areas.	**Consistent.** Portions of the Planning Area are mapped as Priority Production Areas by ABAG. The project would facilitate infrastructure and roadway improvements while maintaining existing industrial lands throughout the Planning Area.

The Napa County Airport is located less than one mile north of the city limits and development within the Napa County Airport's sphere of influence is governed by the ALUCP. Portions of the northern areas of the city are located within Compatibility Zone D and Zone E. The Napa County ALUCP contains "Supporting Compatibility Policies" related to noise, safety, airspace protection, and overflight (ALUC 1991). Consistency with the ALUCP regarding noise and maintenance of acceptable noise levels is discussed in Section 4.7, *Noise*, which finds impacts to be less than significant. Consistency with the ALUCP regarding hazards, including those related to safety, airspace protection, and overflight, is discussed in Section 4.15, *Effect Found to be Less Than Significant*, which finds impacts to be less than significant. As such, the project would be consistent with the ALUCP and impacts would be less than significant.

As demonstrated above, the project would be consistent with Plan Bay Area 2050 and the ALUCP. Therefore, impacts would be less than significant.

Mitigation Measures

No additional mitigation measures for land use and planning would be required beyond those identified throughout this EIR, including Mitigation Measures AES-1 and AES-2; AQ-1 through AQ-4; BIO-1 and BIO-2; CUL-1 through CUL-3; GHG-1 through GHG-3; NOI-1 through NOI-3; PAL-1; and WF-1 and WF-2.

Significance After Mitigation

Impacts would be less than significant without mitigation, beyond those identified throughout this EIR.

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4.7 Noise

This section analyzes noise and groundborne vibration impacts associated with the project, including short-term construction and long-term operational noise and vibration. Noise modeling results associated with the analysis herein are included in Appendix C to this EIR.

4.7.1 Environmental Setting

a. Fundamentals of Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dBA; dividing the energy in half would result in a 3 dBA decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible; and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (Caltrans 2013).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in sound level as the distance from the source increases. The manner by which noise declines with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, ventilation units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result simply from the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013).

Noise levels may also be reduced by intervening structures. The amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5 dBA reduction in source noise levels at the receiver.

Noise Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs, its frequency, and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed.

One of the most frequently used noise metrics that considers both duration and intensity is the equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, L_{eq} is equivalent to a one-hour period, even when measured for shorter durations, as the noise level of a 10- to 30-minute period would be the same as the hour if the noise source is relatively steady. L_{max} is the highest Root Mean Squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period. Normal conversational levels at three feet are in the 60- to 65-dBA L_{eq} range and ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (L_{dn} or DNL), which is a 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by DNL and CNEL usually differ by about 0.5 dBA and are, therefore, generally considered to be interchangeable.

b. Overview of Groundborne Vibration

In environmental analysis, groundborne vibration of concern consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hertz. The frequency of a vibrating object describes how rapidly it oscillates. Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration.

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hertz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is impacted by

vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV). The PPV is normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration and other construction activity because it is related to the stresses that are experienced by buildings (Caltrans 2020). Table 4.7-1 summarizes the vibration damage criteria recommended by the FTA for evaluating the potential for architectural damage to buildings.

Table 4.7-1 Criteria for Vibration Damage Potential

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Nonengineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

in/sec = inches per second; PPV = peak particle velocity

Source: FTA 2018

c. Sensitive Receivers

According to the City's 2040 General Plan, the City defines noise-sensitive land uses as residential uses, residential care, child/elder care facilities, schools, places of worship, and hospitals. Vibration-sensitive receivers, which are similar to noise-sensitive receivers include residences, hotels, and institutional uses, such as hospitals, schools, and churches. However, vibration-sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment (e.g., recording studies or medical facilities with sensitive equipment). Other uses that may have particular sensitivity to groundborne vibration include historic sites and structures.

Noise-sensitive land uses are located throughout American Canyon. Residential development is located on the western and eastern sides of the City, mostly away from State Route (SR) 29 and the noise-generating areas of the airport and commercial area to the north. Schools, daycares, and assisted living facilities are located within these quieter residential areas, ensuring they are also located away from major noise sources.

d. Existing Conditions

Noise Sources

The most prevalent noise source in the City is from vehicle traffic along SR 29 and American Canyon Road. Motor vehicle noise is characterized by a high number of individual events that can create a sustained noise level in proximity to noise-sensitive uses. Roadways with the highest roadway vehicle volumes and speeds produce the highest noise levels. Table 4.7-2 provides existing roadway vehicle noise levels along roadway segments near the project area. Traffic noise modeling data are contained in Appendix C.

Table 4.7-2 Existing Traffic Noise Levels Along Roadway Segments

Roadway	Segment	Existing ADT [1, 2]	Existing Traffic Noise Level at 50 feet (dBA CNEL) [3]
SR 29	North of SR 37	43,483	77.1
SR 29	South of Mini Drive	37,492	76.3
SR 29	North of Mini Drive	43,469	76.6
SR 29	North of American Canyon Road	49,579	77.1
SR 29	South of Napa Junction Road	40,762	77.1
SR 29	North of Napa Junction Road	59,044	78.6
SR 29	North of Green Island Road	60,263	79.2
SR 29	South of SR 12	59,200	78.9
American Canyon Road	West of SR 29	15,330	69.5
American Canyon Road	East of Flosden Road	10,771	67.1
American Canyon Road	West of I-80	4,076	66.0
Flosden Road	South of American Canyon Road	21,510	71.1
Newell Drive	North of American Canyon Road	9,685	64.0
South Kelly Road	South of SR 12	1,602	59.2

1. ADT = average daily traffic
2. Source: GHD 2022
3. Traffic noise levels were estimated based on the existing ADT by Rincon staff.

Figure 4.7-1 shows the existing 60, 65, and 70 dBA CNEL noise contours from roadways and highways in the Planning Area.

Airport noise associated with Napa County Airport operations is an additional noise source in American Canyon. The northern City boundary is just south of the Napa County Airport, with industrial buildings closest to the airport and residences located approximately four miles south. The Napa County Airport does not support commercial flights and mostly serves single-engine aircraft. Napa County projects that by 2021, the Napa County Airport would operate between approximately 210,000 and 260,000 total aircrafts (County of Napa 2007). The northern portion of American Canyon falls within the Napa County Airport Compatibility Zones D and E (Federal Aviation Administration [FAA] 2008).

Railroad operations are another source of noise in some parts of the Planning Area. Average noise levels from rail traffic vary depending on the number of daily trains along a given rail line, the timing and duration of train pass-by events, and whether trains sound their warning whistles near "at-grade" crossings. When trains approach an at-grade crossing, they are required to sound their warning horn within a quarter mile unless a Federal Railroad Administration (FRA) Quiet Zone has been established. There are no FRA Quiet Zones in the Planning Area; therefore, trains must sound their warning horn in the Planning Area. Train warning horns typically generate maximum noise levels of 105 to 110 dBA at 100 feet.

Using train data provided by the FRA and the Bay Area Regional Rail Plan (FRA 2022, MTC 2006), railroad noise levels were modeled using the FTA CREATE Model and the FRA Grade Crossing Horn Model. Table 4.7-3 contains the calculated distances to the 65 dBA L_{dn}/CNEL contours from railroad noise, both from the main line and within a quarter mile of grade crossings where horn warnings are required. Switching train activity is also a source of noise in the area around Napa Junction.

Table 4.7-3 Existing Railroad Noise Levels

Operator	Line	Distance (feet) to 65 dBA L_{dn}/CNEL Contour (Mail Line)	Distance (feet) to 65 dBA L_{dn}/CNEL Contour (Within ¼ Mile of Grade Crossing)
CFNR	Ignacio to Fairfield/Suisun	50	218
CFNR	Calistoga to Vallejo	35	199

Notes: CFNR = California Northern Railroad Company

Source: Calculated using the FTA CREATE Model and the FRA Grade Crossing Horn Model. See Appendix C.

Vibration Sources

Existing sources of operational vibration in the Planning Area include railroad operation and vehicle traffic on roadways. Caltrans has studied the effects of propagation of vehicle vibration on sensitive land uses and notes that "heavy trucks, and quite frequently buses, generate the highest earthborn vibrations of normal traffic." Caltrans further notes that the highest traffic-generated vibrations are along freeways and state routes. Their study finds that "vibrations measured on freeway shoulders (five meters from the centerline of the nearest lane) have never exceeded 0.08 in/sec, with the worst combinations of heavy trucks and poor roadway conditions (while such trucks were moving at freeway speeds). This level coincides with the maximum recommended safe level for ruins and ancient monuments (and historic buildings)" (Caltrans 2013). Construction vibration levels have the potential to be significant when equipment such as impact and vibratory pile drivers, rock blasting, and vibratory rollers are used during construction.

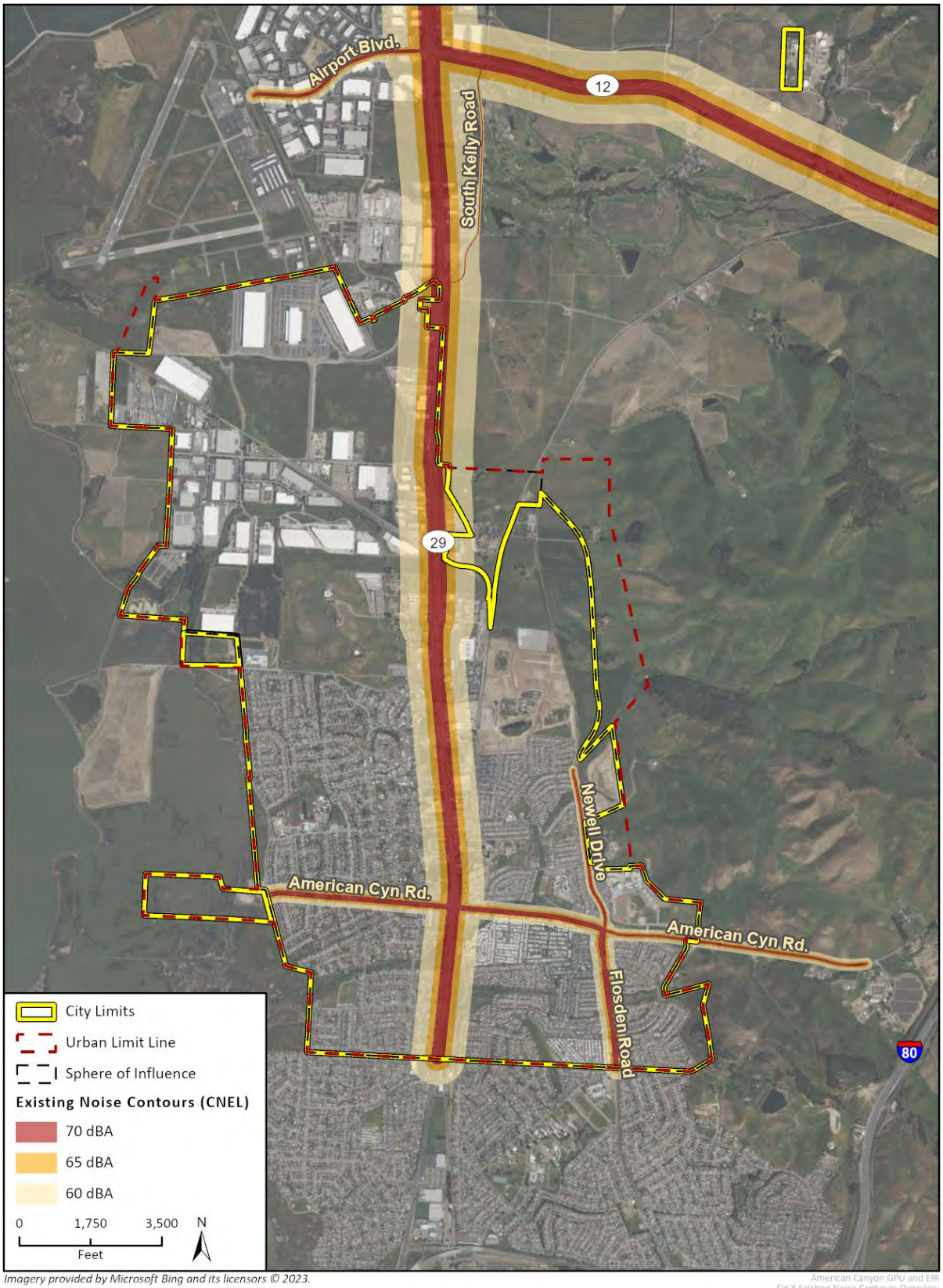
4.7.2 Regulatory Setting

a. Federal Regulations

Occupational Health and Safety Administration

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the United State Environmental Protection Agency. Noise limitations would apply to the operation of construction equipment and could also apply to any proposed industrial land uses. Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan, as required under OSHA, and is not addressed further in this analysis. Since the federal government has preempted setting noise level standards for transportation sources, local jurisdictions are limited to regulating noise generated by the transportation system through nuisance abatement ordinances and land use planning.

Figure 4.7-1 Existing Traffic Noise Contours



US Department of Housing and Urban Development

The US Department of Housing and Urban Development (HUD) has set the goal of 65 dBA Ldn as a desirable maximum exterior standard for residential units developed with HUD funding (this level is also generally accepted within the State of California). Although HUD does not specify acceptable interior noise levels, standard construction of residential dwellings typically provides 20 dBA or more of attenuation with the windows closed. Based on this premise, the interior Ldn should not exceed 45 dBA.

b. State Regulations

California General Plan Guidelines

State law requires general plans to include a Noise Element under Government Code Section 65302(f). The California General Plan Guidelines, published by the Governor's Office of Planning and Research, indicate acceptable, specific land use types in areas with specific noise exposure. The guidelines also offer adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. These guidelines are advisory, and local jurisdictions have the authority to set specific noise standards based on local conditions.

California Building Code

California Code of Regulations Title 24, Building Standards Administrative Code, Part 2, Chapter 12, and the California Building Code codify the State noise insulation standards. These noise standards apply to new construction in California to control interior noise levels as they are affected by exterior noise sources and interior noise sources from separate areas. The regulations specify that interior noise levels shall not exceed 45 dB CNEL/L_{dn} in any habitable room, as well as specifying sound transmission class requirements for walls, floors, and ceilings around sleeping units.

In addition, the standards require an acoustical analysis that demonstrates the manner dwelling units will meet the interior standard, when units are proposed with exterior noise levels greater than 60 dBA CNEL. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

California Green Building Code

California Green Building Standards Code 2019 (CALGreen) Section 5.507.4, Acoustical Control, regulates construction of non-residential uses within the 65 dBA CNEL/L_{dn} contour of an airport, freeway, expressway, railroad, industrial noise source, or other fixed source. According to Section 5.507.4.1.1: buildings exposed to a noise level of 65 dB L_{eq}(1-hr) during any hour of operation shall employ sound-resistant assemblies as determined by a prescriptive method (CALGreen Section 5.507.4.1) or performance method (CALGreen Section 5.507.4.2).

Projects may demonstrate compliance through the prescriptive method if wall and roof-ceiling assemblies exposed to the noise source meet a composite sound transmission class (STC) rating of at least 50 or a composite outdoor/indoor transmission class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30. Projects may demonstrate compliance through the performance method if wall and roof-ceiling assemblies exposed to the noise source

are constructed to provide an interior noise environment that does not exceed 50 dB $L_{eq\text{-}1Hr}$ in occupied areas during hours of operations.

California Airport Noise Standards

California Code of Regulations Title 21, Subchapter 6, Airport Noise Standards, establishes 65 dBA CNEL as the acceptable level of aircraft noise for persons living in the vicinity of airports. Noise-sensitive land uses are generally incompatible in locations where the aircraft exterior noise level exceeds 65 dBA CNEL. This standard remains unless an aviation easement for aircraft noise has been acquired by the airport proprietor, or the residence is a high-rise with an interior CNEL of 45 dBA or less in all habitable rooms. Assembly Bill (AB) 2776 requires any person who intends to sell or lease residential properties in an airport influence area to disclose that fact to the person buying the property.

c. Regional

Napa County Airport Land Use Compatibility Plan

The Napa County Airport Land Use Compatibility Plan (ALUCP) governs land use around the Napa County Airport. The ALUCP was adopted by the Napa County Airport Land Use Commission in April 1991 and revised in December 1999. It identifies acceptable aviation noise levels by land use.

d. Local Regulations

City of American Canyon Municipal Code

Section 8.12.070 of the American Canyon Municipal Code identifies that no person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards shown in Table 4.7-4 due to stationary sources.

Section 8.12.080 of the American Canyon Municipal Code identifies the following requirements.

- Section 8.12.080 (B)(2)(a). Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of 7:00 p.m. and 7:00 a.m., such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance issued by the appropriate authority.
- Section 8.12.080 (B)(2)(b). Noise Restrictions at Affected Properties. Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum noise levels at affected properties will not exceed those listed in Table 4.7-5.

Table 4.7-4 Exterior Noise Limits for Stationary Sources

Zone	Time	Allowable Noise Limit (L_{50})
Residential Single and Double	Nighttime (10:00 p.m. to 7:00 a.m.)	50
	Daytime (7:00 a.m. to 10:00 p.m.)	60
Residential Multiple	Nighttime (10:00 p.m. to 7:00 a.m.)	55
	Daytime (7:00 a.m. to 10:00 p.m.)	60

Source: Section 8.12.070 of American Canyon Municipal Code

Table 4.7-5 Noise Limits for Construction Activities

Time	Noise Limit by Receiving Land Use (L_{max})		
	Residential	Commercial	Industrial
7:00 a.m. to 7:00 p.m.	75	80	85
7:00 p.m. to 7:00 a.m.	60	65	70

Source: Section 8.12.080 of American Canyon Municipal Code

4.7.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on noise if it would:

1. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
2. Generate excessive groundborne vibration or groundborne noise levels
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels

Construction Noise Thresholds

The City has adopted construction noise limits, as shown in Table 4.7-5 above. Project impacts would be significant if construction noise exceeds these standards.

Operational Noise Thresholds

The City has adopted noise standards in the American Canyon Municipal Code that regulate stationary operational noise sources in the City. The project would result in a significant impact if it generates noise from stationary sources in excess of the standards shown in Table 4.7-4.

For traffic noise, the following thresholds of significance similar to those recommended by the Federal Aviation Administration (FAA) are used to assess traffic noise impacts at sensitive receiver locations:

- Greater than 1.5 dBA increase for ambient noise environments of 65 dBA CNEL and higher;
- Greater than 3 dBA increase for ambient noise environments of 60 - 64 CNEL; and
- Greater than 5 dBA increase for ambient noise environments of less than 60 dBA CNEL.

Groundborne Vibration Thresholds

The City has not adopted a significance threshold to assess vibration impacts. Therefore, the *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) is used to evaluate potential construction vibration impacts. Construction vibration impacts would be significant if vibration levels exceed the FTA criteria shown in Table 4.7-1. For example, impacts would be significant if vibration levels exceed 0.2 in/sec PPV for residential structures and 0.3 in/sec PPV for commercial

structures, which is the limit where minor cosmetic (i.e., architectural) damage may occur to these buildings.

Methodology

Construction Noise

Construction noise levels that could occur with implementation of the project are based on reference noise levels published by the FTA.

Operational Stationary Noise

Stationary noise (i.e., on-site operational noise) were analyzed in context of typical mechanical equipment on commercial, industrial, residential, and mixed-use development such as heating, ventilation, and air conditioning (HVAC) units.

Operational Traffic Noise

Development facilitated by the project would generate motor vehicle trips, thereby increasing off-site traffic on area roadways. The project's traffic noise impacts are analyzed based on data provided by the City's traffic engineer GHD, which is included as Appendix C to this EIR. Traffic noise levels for existing and project conditions were estimated using the FHWA traffic noise prediction model methodology. Traffic noise impacts are analyzed based on average daily traffic (ADT) roadway volume for existing and future conditions, as well as speeds, and number of lanes data. The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, traffic volumes, vehicle speeds, car/truck mix, number of lanes, and road width.

Groundborne Vibration

Future development facilitated by the project would not include substantial vibration sources associated with operation. Construction activities have the greatest potential to generate groundborne vibration affecting nearby noise-sensitive receivers. Construction vibration levels that could occur due to buildout of the project are based on reference vibration levels published by the FTA.

Impact of the Environment on the Project

As a result of the Supreme Court decision regarding the assessment of the environment's impacts on projects (California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD), 62 Cal. 4th 369 (No. S 213478) issued December 17, 2015), it is generally no longer the purview of the CEQA process to evaluate the impact of existing environmental conditions on a proposed project. Therefore, this environmental analysis does not consider the potential impacts of the environment (i.e., existing noise) on the project.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

IMPACT NOI-1 CONSTRUCTION OF DEVELOPMENT FACILITATED BY THE PROJECT WOULD TEMPORARILY INCREASE NOISE LEVELS, POTENTIALLY AFFECTING NEARBY NOISE-SENSITIVE LAND USES. DEVELOPMENT FACILITATED BY THE PROJECT WOULD ALSO INTRODUCE NEW NOISE SOURCES AND CONTRIBUTE TO INCREASES IN OPERATIONAL NOISE. THE CONTINUED REGULATION OF NOISE, CONSISTENT WITH THE CITY MUNICIPAL CODE AND IMPLEMENTATION OF PROPOSED POLICIES IN THE 2040 GENERAL PLAN WOULD MINIMIZE IMPACTS TO ADJACENT LAND USES. HOWEVER, CONSTRUCTION AND OPERATIONAL TRAFFIC NOISE COULD EXCEED STANDARDS EVEN AFTER IMPLEMENTATION OF MITIGATION. THIS IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE.

Construction

Noise from individual development facilitated by the project would temporarily increase noise levels at nearby noise-sensitive receivers. Since project-level details are not available for future development, it is not possible to determine exact noise levels, locations, or time periods for construction. However, noise estimates have been developed for typical construction activities that are expected to occur due to the 2040 General Plan.

Construction activities would generate noise from demolition, site preparation, grading, building construction, and paving activities. Each phase of construction has a specific mix of construction equipment and associated noise characteristics, depending on the equipment used during that phase. Construction noise would typically be higher during the initial phases of construction (i.e., demolition, site preparation, and grading work) and would be lower during the later construction phases (i.e., building construction and paving). Table 4.7-6 illustrates typical noise levels associated with construction equipment at 50 feet and 100 feet.

Table 4.7-6 Typical Noise Levels for Construction Equipment

	Estimated Noise Levels (dBA L_{eq})	
Equipment	**50 feet**	**100 feet**
Air Compressor	80	74
Backhoe	80	74
Concrete Mixer	85	79
Dozer	85	79
Grader	85	79
Jack Hammer	88	82
Loader	80	74
Paver	85	79
Pile-drive (Impact)	101	95
Pile-driver (Sonic)	95	89

Equipment	Estimated Noise Levels (dBA L_{eq})	
	50 feet	100 feet
Roller	85	79
Saw	76	70
Scarified	83	77
Scraper	85	79
Truck	84	78

Source: FTA 2018.

The American Canyon Municipal Code Section 8.12 includes quantitative limits for construction noise at residential, commercial, and industrial receiving land uses. These construction noise limits are used to assess construction noise impacts.

Noise would typically drop at a rate of approximately 6 dBA per doubling of distance. Therefore, noise levels would be approximately 6 dBA lower than shown in Table 4.7-6 at 200 feet from the noise source and 12 dBA lower at a distance of 400 feet from the noise source. As shown in Table 4.7-6, construction noise may exceed the City's daytime and nighttime construction noise thresholds for residential, commercial, and industrial land uses, depending on the equipment used and the distance of equipment to noise-sensitive receivers.

The 2040 General Plan would include the following proposed goal and policy, which would minimize construction noise from individual development facilitated by the project:

Goal S-8: A comfortable community environment that is free from excessive stationary and mobile noise and vibration.

- **Policy S-8.10: Construction Noise.** Minimize exposure of sensitive receivers and enforce the limits in Section 8.12 of the municipal code for construction noise and vibration through methods such as restricting construction to daytime hours, use of sound barriers and/or other methods to dampen noise from construction equipment, and public notification prior to construction activities.

At this stage of planning, project-level details are not available for future projects and it is not possible to determine noise levels from construction of future development. Therefore, construction noise levels associated with future projects may exceed the City's construction noise limits, and impacts would be potentially significant.

Implementation of Mitigation Measure NOI-1 would reduce construction noise impacts associated with future projects in American Canyon. However, even with implementation of mitigation, there is still the possibility that future development could exceed the City's construction noise thresholds due to pile driving or other intensive construction activities, or due to construction occurring during sensitive nighttime hours. Therefore, the 2040 General Plan construction noise impacts would be significant and unavoidable.

Operational Stationary Noise

Stationary sources of noises may occur on different types of land uses. Residential uses would generate noise from landscaping, maintenance activities, and mechanical equipment such as ground-level and rooftop HVAC systems. Commercial uses would generate noise from HVAC

systems, loading docks, and other sources. Industrial uses may generate noise from HVAC systems, loading docks, and possibly machinery. Noise generated by residential or commercial uses is generally short and intermittent. Industrial uses may generate noise on a more continual basis. Nightclubs, outdoor dining areas, gas stations, car washes, fire stations, drive-throughs, swimming pool pumps, school playgrounds, athletic and music events, and public parks are other common noise sources. The proposed Safety Element contains goals, policies, and programs that require local planning and development decisions to consider noise-related impacts from stationary sources. The following proposed goal, policies, and programs in the 2040 General Plan would minimize potential adverse noise-related impacts from stationary sources:

Goal S-8: A comfortable community environment that is free from excessive stationary and mobile noise and vibration.

- **Policy S-8.1: Land Use Compatibility.** Use the land use-noise compatibility matrix in Table S-1 to guide the siting of future land uses.
- **Policy S-8.2: Sensitive Facilities**. Ensure appropriate noise mitigation is incorporated into the design of noise- sensitive facilities.
- **Policy S-8.3: Site Design**. Minimize noise impacts to adjacent noise-sensitive land uses in site planning and project design.
- **Policy S-8.12: Residential Outdoor Mechanical Equipment**. Require air conditioning units and pool equipment within residential areas be designed and sited in a manner that does not intrude upon the peace and quiet of adjacent noise-sensitive uses.
- **Program PPP: Noise Compatibility Matrix.** Continue to enforce Chapter 8.12 *Community Noise* of the municipal code.
- **Program QQQ: Acoustical Analyses.** Require applicants to submit an acoustical analysis for projects near sensitive land uses or involving new or expanded sensitive land uses and require appropriate mitigation measures to reduce noise impacts if necessary to less than significant levels.
- **Program RRR: Noise Insultation.** Require new residential development meet the California Noise Insulation Standards (Title 24 of the California Administrative Code) for interior and exterior noise levels.

Implementation of these policies and compliance with the City's exterior noise standards for stationary sources would ensure that noise from new developments is analyzed and mitigated to acceptable levels prior to the approval of future development. Therefore, noise impacts from operational use of residential-scale HVAC units, industrial equipment, and other stationary noise sources would be reduced by proposed policies and programs in the 2040 General Plan, and impacts would be less than significant.

Operational Traffic Noise

Implementation of the project would result in additional buildout, which would generate new vehicle trips that could incrementally increase operational traffic noise. Figure 4.7-2 shows the 60, 65, and 70 dBA CNEL noise contours from roadways and highways that are projected for 2040. The complete distances to the 60, 65, and 70 dBA CNEL noise contours for roadway segments are included in Appendix C. Table 4.7-7 shows the estimated roadway vehicle noise level increases on study roadway segments over existing conditions, at 50 feet from the centerline of the nearest travel lane.

In addition, the proposed Newell Drive extension would add new sources of roadway traffic noise. Traffic noise levels for 2040 Buildout conditions were estimated using the FHWA traffic noise prediction model methodology and data provided by GHD. Under 2040 Buildout conditions, the Newell Drive extension is estimated to have up to 26,519 vehicles per day. The nearest sensitive receptor to the proposed Newell Drive extension are residences adjacent to the proposed roadway extension at the north end of Newell Drive (e.g., residences on Farentino Place and Cantada Court). At a nominal distance of 50 feet from the roadway centerline, traffic noise from the proposed Newell Drive extension would result in noise levels of up to 68.4 dBA CNEL, as shown in Table 4.7-7, which would exceed the City's exterior standard of 60 dBA CNEL. Traffic noise impacts from the proposed Newell Drive extension would be potentially significant.

As shown in Table 4.7-7, significant traffic noise increases are anticipated along SR 37 east of Fairgrounds Road; American Canyon Road east of Flosden Road and west of I-80; Flosden Road south of American Canyon Road; Newell Drive north of American Canyon Road, and South Kelly Road south of SR 12. Along all other roadway study segments, roadway vehicle noise increases would be less than significant.

Figure 4.7-2 2040 Traffic Noise Contours

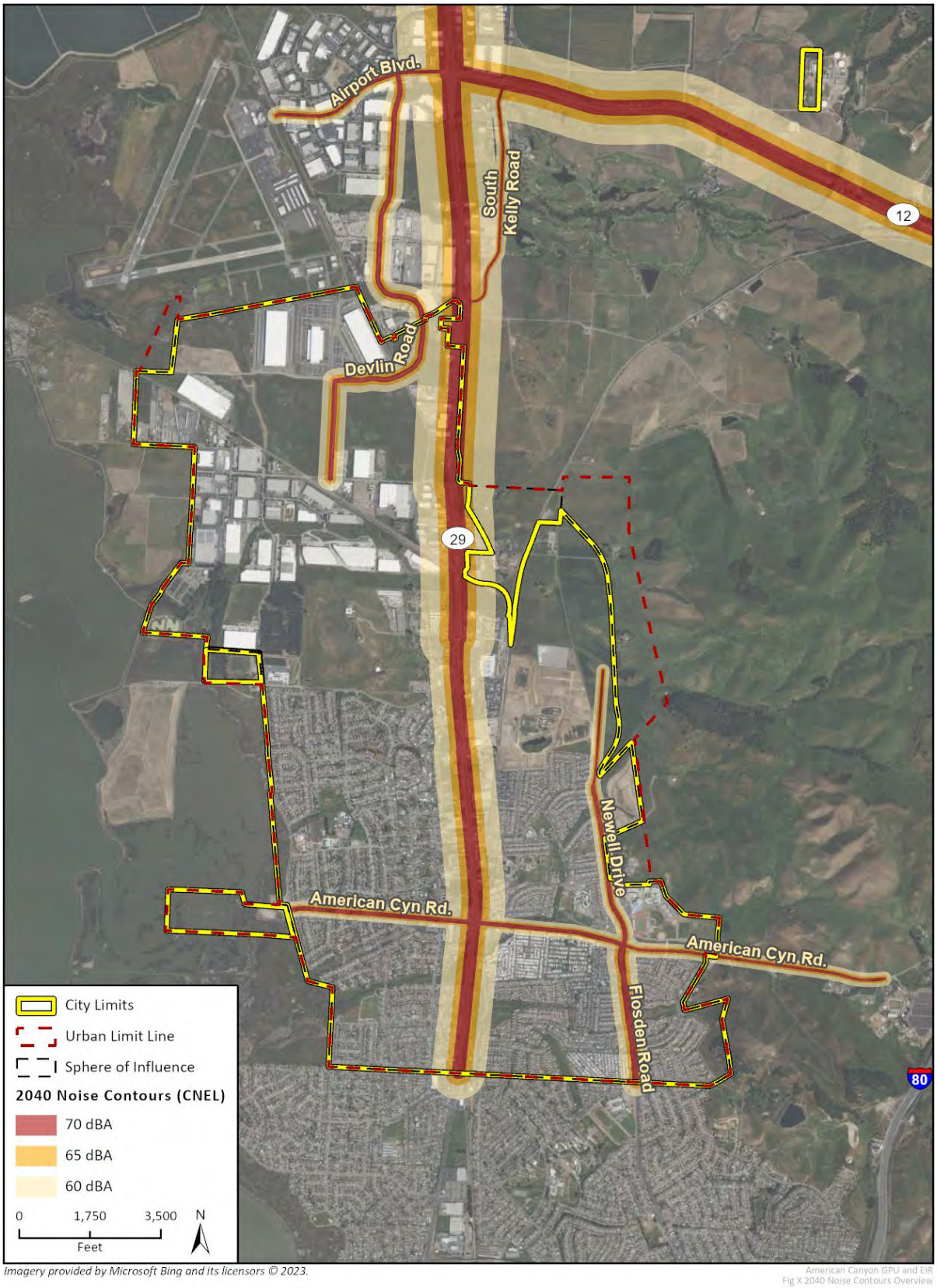


Table 4.7-7 Roadway Vehicle Noise Increase Along Roadway Segments

Roadway Segment	Existing ADT	2040 Buildout ADT	Existing Roadway Vehicle Noise Level at 50 feet (dBA CNEL)	2040 Roadway Vehicle Noise Level at 50 feet (dBA CNEL)	Roadway Vehicle Noise Increase (dBA CNEL)	Significant? Y/N
I-80 – South of SR 37	110,006	146,018	83.6	84.8	1.2	N
I-80 - South of American Canyon Road	109,042	147,666	83.4	84.8	1.3	N
I-80 - South of Red Top Road	112,650	149,993	83.6	84.9	1.2	N
I-80 - South of SR 12	97,782	135,651	83.0	84.4	1.4	N
I-80 - North of SR 12	136,706	183,562	84.9	86.2	1.3	N
SR 29 - South of SR 37	24,051	31,935	73.2	74.4	1.2	N
SR 29 - North of SR 37	43,483	48,337	77.1	77.5	0.5	N
SR 29 - South of Mini Drive	37,492	40,554	76.3	76.7	0.3	N
SR 29 - North of Mini Drive	43,469	46,425	76.6	76.8	0.3	N
SR 29 - North of American Canyon Road	49,579	52,117	77.1	77.3	0.2	N
SR 29 - South of Napa Junction Road	40,762	41,222	77.1	77.1	0.0	N
SR 29 - North of Napa Junction Road	59,044	66,806	78.6	79.2	0.5	N
SR 29 - North of Green Island Road	60,263	66,145	79.2	79.6	0.4	N
SR 29 - South of SR 12	59,200	66,059	78.9	79.4	0.5	N
SR 29 - North of SR 12	88,600	113,419	80.4	81.4	1.1	N
Airport Boulevard - West of SR 29	10,500	10,837	69.5	69.6	0.1	N
SR 12 - East of North Kelly Road	35,033	41,815	78.8	79.6	0.8	N
SR 12 - West of Red Top Road	37,179	43,770	78.9	79.6	0.7	N
SR 37 - West of SR 29	39,980	53,018	77.0	78.2	1.2	N
SR 37 - East of SR 29	62,495	79,835	78.8	79.9	1.1	N
SR 37 - East of Fairgrounds Road	69,800	104,578	79.4	81.1	**1.8**	Y
SR 37 - East of I-80	42,000	55,652	76.6	77.8	1.2	N
American Canyon Road - West of SR 29	15,330	18,166	69.5	70.3	0.7	N
American Canyon Road - East of Flosden Road	10,771	19,057	67.1	69.6	**2.5**	Y

Roadway Segment	Existing ADT	2040 Buildout ADT	Existing Roadway Vehicle Noise Level at 50 feet (dBA CNEL)	2040 Roadway Vehicle Noise Level at 50 feet (dBA CNEL)	Roadway Vehicle Noise Increase (dBA CNEL)	Significant? Y/N
American Canyon Road - West of I-80	4,076	16,044	66.0	71.9	**6.0**	Y
Hiddenbrook Parkway - East of I-80	6,023	7,962	64.5	65.7	1.2	N
Flosden Road - South of American Canyon Road	21,510	31,811	71.1	72.8	**1.7**	Y
Newell Drive - North of American Canyon Road	9,685	34,091	64.0	69.5	**5.5**	Y
Newell Drive – South of Napa Junction Road	-	26,519	-	68.4	-	N
South Kelly Road - South of SR 12	1,602	13,336	59.2	68.4	**9.2**	Y
Devlin Road - North of Green Island Road	-	10,312	-	74.7	-	N

Notes:

Neither Newell Drive – South of Napa Junction Road nor Devlin Road – North of Green Island Road exist in 2022.

ADT = average daily trips

Bold and underlined = significant increase

Source: GHD 2024

The following proposed policies in the 2040 General Plan would reduce traffic noise:

Goal S-8: A comfortable community environment that is free from excessive stationary and mobile noise and vibration.

- **Policy S-8.4: Roadway Noise**. Encourage nonmotorized transportation alternatives for local trips and decrease excessive motor vehicle noise by implementing traffic-calming road design, lateral separation, natural buffers, and setbacks.
- **Policy S-8.5: Highway Noise**. Continue to coordinate with California Department of Transportation (Caltrans) and the NVTA to complete the American Canyon SR 29 Corridor Improvement Project.
- **Policy S-8.7: Mobile Noise Sources.** Minimize exposure of sensitive receptors to noise from roads through land use decisions, by encouraging the siting of sensitive noise receptors away from high traffic roadways.
- **Policy S-8.8: Noise Mitigation Measures.** Require heavy trucks to use designated truck routes that avoid residential and other sensitive land uses to the maximum degree feasible. When not feasible, investigate noise mitigation strategies such as noise barriers or truck travel restrictions, especially in areas of concern such as along American Canyon Road.

In addition, the following proposed goals, policies, and implementation programs in the 2040 General Plan would encourage active transportation modes, such as walking and bicycling, as well as the use of public transit, thereby reducing vehicle trips and traffic noise in American Canyon:

Goal LU-1: Establish American Canyon as a "complete city" with a diversity of distinct land uses that serve the needs of residents, businesses, and visitors.

- **Policy LU-1.4: Compact Development Pattern**. Maintain a compact development pattern that fosters a walkable and bikeable urban form.

Goal MOB-1: Provide safe and convenient access throughout the community with a citywide network of complete streets that meet the needs of all users and reduce vehicle miles traveled (VMT).

- **Policy MOB-1.7: Promote Walking and Bicycling.** Promote walking and bicycling for transportation, recreation, and improvement of public health.
- **Policy MOB-1.11: Reduce the Need to Drive.** Implement land use policies designed to create a pattern of activity that makes it easy to shop, play, visit friends, and conduct personal business without driving.
- **Policy MOB-1.12: Neighborhood Context.** Support safe, complete, and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.
- **Policy MOB-1.17: Reduce Vehicle Miles Traveled.** Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop.
- **Policy MOB-1.22: Non-motorized Circulation System.** Provide safe and direct pedestrian routes and bikeways between places.
- **Policy MOB-1.23: Pedestrian Connections to Employment Destinations**. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their

workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.

- **Policy CIR-1.24: Bicycle Facilities.** Bicycle facilities shall be provided to complete a continuous bikeway system, consistent with state standards, as shown on the Bikeway Plan Map. In cases where existing right of way constraints limit development of Class II or Class IV facilities, Class Ill signage and demarcation may be permitted at the discretion of the City Engineer. Deviations from these standards and from the routing shown on the diagram shall be permitted with the approval of the City Engineer.
- **Policy CIR-1.27: Sustainable Roadway Expansion.** Monitor the effects of roadway expansion on air, noise, seismic and archeological resources, and nesting habitat.

Goal MOB-5: Support increased public transit to improve mobility, improve air quality, and support efforts to reduce vehicle miles traveled (VMT).

- **Policy MOB-5.2: Existing Transportation Demand Management Efforts**. Continue to support the implementation of existing local and regional efforts to manage traffic demand, such as the Napa Logistics Park trip monitoring program, and employer TDM provisions of the Bay Area Air Quality Management District (BAAAQMD).
- **Policy MOB-5.3: Multi-agency Transit support.** Continue to cooperate with other agencies and jurisdictions to promote local and regional public transit, including ACT and VINE serving American Canyon.
- **Policy MOB-5.5: Transit Stops.** Work with NVTA to situate transit stops at locations that are convenient for transit users and promote increased transit ridership through the provision of shelters, benches, bike racks on buses, and other amenities.
- **Policy CIR-5.7: Future Transit Links.** Consider orienting transit system expansion to link with other potential future commuter bus and/or rail services.
- **Program C: Active Transportation Plan.** Prepare and update every five years an Active Transportation Plan to replace the Bicycle Master Plan and include pedestrian facilities. The Plan should include a full range of facilities for bicycle travel, including Class I bike/multiuse paths, Class II bike lanes, Class Ill bike routes, and Class IV separated bikeway to provide a continuous system of bikeways throughout the city.
- **Program H: Bicycle Facility Development and Maintenance.** Prepare and update every five years a bike facility development and maintenance program that includes the following provisions:
  - signage consistent with according to Caltrans or City standards
  - lighting where needed;
  - bicycle paths and lanes on bridges and overpasses;
  - bicycle-safe drainage grates;
  - bikeways free of hazards such as uneven pavement or gravel;
  - merging or crossing signage where bike routes and paths make transitions into or across roadways;
  - promoting classes on bicycle safety in the schools in coordination with the Napa Valley Unified School District; and
  - sweeping debris from and repairing bicycle paths and lanes

- **Program K: Pedestrian Connections to Schools.** Continue developing the existing network of walkways between schools and residential uses, and encourage the development of new continuous walkways between schools and residential uses. Where possible, route pedestrians to grade separated crossings over State Route 29.

Implementation of these proposed policies and programs would reduce vehicle trips and associated traffic noise. However, implementation of these proposed policies and programs would not guarantee that traffic noise impacts would be less than significant. Mitigation Measure NOI-2 would be required to minimize roadway vehicle noise impacts on roadways that would generate significant traffic noise increases.

Implementation of Mitigation Measure NOI-2 would reduce operational traffic noise. Notable reductions in tire noise have been achieved via the implementation of special paving materials, such as rubberized asphalt or open-grade asphalt concrete overlays. For example, Caltrans conducted a study of pavement noise along I-80 in Davis and found an average improvement of 6 to7 dBA reduction compared to conventional asphalt overlay (Caltrans 2011). This would reduce impacts along American Canyon Road east of Flosden Road and west of I-80; Flosden Road south of American Canyon Road; and Newell Drive north of American Canyon Road/the proposed Newell Drive Extension to less than significant.

However, SR 37 east of Fairgrounds Road and South Kelly Road south of SR 12 is outside of the City's jurisdiction and the City is not able to add physical improvements along this roadway segment to reduce traffic noise. As the City has no jurisdiction over this roadway, it would be infeasible to implement mitigation measures to reduce traffic noise on SR 37 east of Fairgrounds Road and South Kelly Road south of SR 12. Therefore, this impact is considered significant and unavoidable.

Mitigation Measures

NOI-1 Conduct Construction Noise Analysis

The City shall review future developments within 1,000 feet of a sensitive receiver, and where applicable, require the following feasible measures as standard conditions of approval to reduce construction noise levels below a level of significance:

- **Mufflers.** During excavation and grading construction phases, all construction equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards.
- **Stationary Equipment.** All stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers.
- **Equipment Staging Areas.** Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receivers.
- **Smart Back-up Alarms.** Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction in compliance with applicable safety laws and regulations.
- **Electrically-Powered Tools and Facilities.** Electrical power shall be used to run air compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities, where feasible.

- **Noise Disturbance Coordinator.** The project applicant shall designate a "noise disturbance coordinator" responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint and shall require that reasonable measures be implemented to correct the problem. A telephone number for the disturbance coordinator and the City shall be posted at the construction site.
- **Temporary Noise Barriers.** Erect temporary noise barriers, where feasible, when construction noise is predicted to exceed the City's construction standards and when the anticipated construction duration is greater than is typical (e.g., two years or greater). Temporary noise barriers shall be constructed with solid materials (e.g., wood) with a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. If a sound blanket is used, barriers shall be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain or equivalent absorptive material rated sound transmission class (STC) 32 or higher.

Mitigation Measure NOI-2 Implement Roadway Vehicle Noise Reduction Measures

The City shall install "quiet pavement" roadway improvements, such as rubberized asphalt or open-grade asphalt concrete overlays along impacted roadway segments (American Canyon Road east of Flosden Road and west of I-80; Flosden Road south of American Canyon Road; and Newell Drive north of American Canyon Road). The program may be funded by "fair share" developer contributions for proposed projects along impacted roadways to pay for the "quiet pavement" roadway improvements.

Significance After Mitigation

Construction noise impacts would be significant and unavoidable even with implementation of Mitigation Measure NOI-1. Operational traffic noise impact would be significant and unavoidable even with implementation of Mitigation Measure NOI-2. Operational stationary noise impacts would be less than significant without mitigation.

Threshold 2:	Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

IMPACT NOI-2 CONSTRUCTION OF DEVELOPMENT FACILITATED BY THE PROJECT WOULD TEMPORARILY GENERATE GROUNDBORNE VIBRATION AND NOISE, POTENTIALLY AFFECTING NEARBY LAND USES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION. OPERATION OF DEVELOPMENT FACILITATED BY THE PROJECT WOULD NOT RESULT IN SUBSTANTIAL GROUNDBORNE VIBRATION AND NOISE AND THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction of development facilitated by the proposed 2040 General Plan could intermittently generate groundborne vibration at nearby properties. Table 4.7-8 identifies groundborne vibration levels from various types of construction equipment at various distances.

As shown in Table 4.7-8, buildings and structures could experience the strongest vibration during the use of pile-drivers and vibratory rollers. Vibration levels from pile-drivers could approach 1.519 in/sec PPV at 25 feet from the source and 0.190 in/sec at 100 feet, and vibration levels from vibratory rollers could approach 0.21 in/sec PPV at 25 feet and 0.026 at 100 feet. The threshold for

historic structures is 0.12 in/sec PPV; the threshold is higher for residential buildings at 0.2 in/sec PPV.

Vibration levels from typical equipment such as bulldozers and jackhammers would not exceed FTA thresholds for historic structures and residential buildings at a distance of 25 feet or greater. However, vibration levels from pile driving equipment and vibratory rollers may exceed FTA thresholds.

Table 4.7-8 Vibration Source Levels for Construction Equipment

Equipment		Approximate Vibration Level (in/sec PPV)			
		25 feet from Source	50 feet from Source	100 feet from Source	200 feet from Source
Caisson Drilling		0.089	0.031	0.011	0.004
Jackhammer		0.035	0.012	0.004	0.002
Large Bulldozer		0.089	0.031	0.011	0.004
Loaded Truck		0.076	0.027	0.010	0.003
Pile Driver (impact)	Upper range	1.519	0.537	0.190	0.067
	Typical	0.644	0.228	0.081	0.028
Pile Driver (sonic)	Upper range	0.734	0.260	0.092	0.032
	Typical	0.170	0.060	0.021	0.008
Small Bulldozer		0.003	0.001	<0.001	<0.001
Vibratory Roller		0.21	0.074	0.026	0.009

Source: FTA 2018.

Implementation of the following proposed goal, policy, and program in the 2040 General Plan would reduce construction vibration in residential areas:

Goal S-8: A comfortable community environment that is free from excessive stationary and mobile noise and vibration.

- **Policy S-8.13: Vibration Impacts.** Require project specific vibration impact assessments for projects involving the use of vibration generating equipment such as pile drivers and vibratory rollers that could generate groundborne vibration levels. For projects with significant vibration impacts, require feasible mitigation measures to reduce ground vibration levels and exposure to sensitive receptors.
- **Program TTT: Vibration Impact Assessment.** Require project specific vibration impact assessments and vibration impact reduction measures for new development projects using major vibration generating equipment.

Proposed policy S-8.13 and proposed Implementation Program TTT would require a vibration impact assessment be prepared to ensure that significant vibration impacts are mitigated and that vibration levels and exposure to sensitive receivers are reduced. Typical vibration minimization techniques include (1) limiting construction activities with the highest potential to produce vibration to hours with the least potential to affect nearby institutional, educational, and office uses and (2) notifying neighbors of scheduled construction activities that would generate vibration. Since at this stage of planning, project-level details are not available for individual development, it is not possible to determine which projects may use pile driving or other vibration generating equipment, or their

exact vibration levels, locations, or time periods for construction. Therefore, even after implementation of proposed policy S-8.13, construction vibration impacts may exceed the FTA's vibration levels for preventing architectural building damage, and impacts would be potentially significant. Implementation of Mitigation Measure NOI-3 would reduce construction groundborne vibration and noise impacts to less than significant.

Operation

Residential, commercial, industrial, and retail land uses facilitated by the project would not involve substantial vibration sources associated with operation such subways and would not directly increase the amount of railroad traffic on rail lines in the plan area. Therefore, project operational groundborne vibration and noise impacts would be less than significant.

Mitigation Measures

NOI-3 Construction Vibration Control Plan

Prior to issuance of a building permit for a project that includes the following, the project applicant shall prepare a groundborne noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these construction activities:

- Pile driving within:
  - 135 feet of fragile structures such as historical resources;
  - 100 feet of non-engineered timber and masonry buildings (e.g., most residential buildings); or
  - 75 feet of engineered concrete and masonry (no plaster);
- A vibratory roller within:
  - 40 feet of fragile historical resources; or
  - 25 feet of any other structure
- A dozer or other large earthmoving equipment within:
  - 20 feet for a fragile historical structure; or
  - 15 feet of any other structure

The noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed FTA architectural damage thresholds (e.g., 0.12 in/sec PPV for fragile or historical resources, 0.2 in/sec PPV for non-engineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses such as drilling piles as opposed to pile driving, static rollers as opposed to vibratory rollers, and lower horsepower earthmoving equipment shall be used. If necessary, construction vibration monitoring shall be conducted to ensure FTA vibration thresholds are not exceeded.

Significance After Mitigation

Construction vibration impacts would be less than significant with implementation of Mitigation Measure NOI-3, which requires measures to reduce construction vibration.

Threshold 3:	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

IMPACT NOI-3 DEVELOPMENT FACILITATED BY THE PROJECT WOULD NOT RESULT IN A SIGNIFICANT INCREASE IN AIRPORT OR AIRSTRIP ACTIVITY. THE CONTINUED REGULATION OF AIRPORT NOISE CONSISTENT WITH STATE AND FEDERAL REGULATIONS, THE IMPLEMENTATION OF PROPOSED POLICIES IN THE 2040 GENERAL PLAN, AND COMPLIANCE WITH NAPA COUNTY AIRPORT LAND USE COMPATIBILITY PLAN WOULD MINIMIZE DISTURBANCE TO PEOPLE RESIDING OR WORKING WITHIN PROXIMITY OF THE NAPA COUNTY AIRPORT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The Napa County Airport does not offer commercial airline service and would not serve residents and businesses associated with development facilitated by the 2040 General Plan. As such, implementation of the project would not increase airport activities or airport noise.

Existing requirements for airports would reduce the noise impacts of airport activity on residents and workers. Title 21 of the California Code of Regulations establishes noise standards for airports and the responsibilities of the regional Airport Land Use Commissions, which prepare land use compatibility plans with thorough evaluations of airport noise, as described above in Section 4.7.2, *Regulatory Setting*. Additionally, the Federal Aviation Administrative Regulation Part 150 Airport Noise Compatibility Program is designed to reduce the effect of airport noise on the surrounding communities as airports expand.

Furthermore, individual development would be subject to all development standards for each compatibility zone, and other policies contained within the Napa County ALUCP intended to reduce land use conflicts with airport operations. Lastly, the following proposed goals and policies in the 2040 General Plan would reduce noise from the Napa County Airport through airport land use consistency, mitigation, and coordination with the Napa County Airport:

Goal S-6: A community protected from loss of life, injury, and property damage from aircraft operations.

- **Policy S-6.1: Airport Land Use Consistency.** Review all applications for new development, expansion of existing uses, and re-use within Napa County Airport Compatibility Zones "A" through "E" for compliance with the appropriate use and development conditions.
- **Policy S-6.2: Adverse Airport Impact Mitigation.** Work with the Napa County Airport Authority to ensure that onsite ground activities of the Airport do not adversely impact (e.g., noise, vibration, air emissions, or other pollution) the City of American Canyon.

Goal S-9: Limit aircraft noise impacts consistent with the Napa Airport Land Use Compatibility Plan (ALUCP).

- **Policy S-9.1: Land Use Compatibility.** Restrict development of uses within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses.
- **Policy S-9.2: Development Requirements.** Require development in the vicinity of Napa Airport comply with the Airport Land Use Compatibility Plan (ALUP) noise standards.
- **Policy S-9.3: Napa County Airport.** Work closely with Napa County Airport to ensure the airport's operations do not generate adverse noise conditions in the City of American Canyon.

Given the existing regulations and implementation of proposed goals and policies in the 2040 General Plan, airport activity would not expose residents and workers to excessive noise levels, and impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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4.8 Paleontological Resources

This section summarizes the potential to encounter paleontological resources in the Planning Area and analyzes the impacts on paleontological resources due to the project.

4.8.1 Setting

a. Regional Geology

The City of American Canyon is in the Coast Ranges geomorphic province, one of the eleven geomorphic provinces of California (California Geological Survey 2002). The Coast Ranges extend along most of California's coast from the California-Oregon border to Point Arguello in Santa Barbara County, and consist of northwest-trending mountain ranges and valleys. The Coast Ranges are composed of Mesozoic and Cenozoic sedimentary, igneous, and metamorphic strata. The eastern side is characterized by strike-ridges and valleys in the Upper Mesozoic strata. The Coast Ranges province runs parallel to and overlaps the San Andreas Fault in some areas (California Geological Survey 2002). The City of American Canyon is located on the northeastern shore of San Pablo Bay on the east side of Napa Slough, the outlet of the Napa River.

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (SVP 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources.

b. Geologic Units

The geology of the region surrounding the Planning Area was mapped at a scale of 1:100,000 by Graymer et al. (2002), who identified the following 12 distinct geologic units underlying the Planning Area:

- Artificial fill
- Quaternary stream channel deposits
- Bay Mud
- Quaternary alluvial fan deposits (Holocene)
- Quaternary alluvial fan deposits (Pleistocene)
- Huichica Formation
- Cierbo Sandstone, intercalated basalt
- Markley Sandstone
- Markley Sandstone, Jameson Shale Member
- Domengine Sandstone

- Great Valley Complex, sandstone and shale
- Great Valley Complex, serpentinite

The following section discusses the geographic distribution, lithologic characteristics, and paleontological sensitivity of each of these geologic units. Figure 4.8-1 identifies the geologic units in the Planning Area.

Artificial Fill (af)

Artificial fill is found in a small part of western American Canyon (Figure 4.8-1). Artificial fill consists of human-deposited sediments (Graymer et al. 2002), which have no paleontological sensitivity.

Quaternary Stream Channel Deposits (Qhc)

Quaternary stream channel deposits underlie American Canyon Creek, which primarily runs westward toward North Slough (Figure 4.8-1). Quaternary stream channel deposits consist of unconsolidated cobbles, gravel, and sand, with minor amounts of clay and silt that is deposited by active stream channels (Graymer et al. 2002). Quaternary stream channel deposits are undergoing active deposition, which means they are too young to preserve paleontological resources. Therefore, Quaternary stream channel deposits have low paleontological sensitivity.

Bay Mud (Qhbm)

Bay Mud is found in much of western American Canyon beneath North Slough (Figure 4.8-1). Bay Mud consists of blue, gray, green, or black, bedded to massive, poorly to well-consolidated, silty clay with interspersed layers of sand, gravel, peat, and preserved shells (Graymer et al. 2002). Bay Mud is Holocene in age, meaning it is likely too young (i.e., less than 5,000 years old) to preserve paleontological resources (Society of Vertebrate Paleontology [SVP] 2010). Therefore, Bay Mud has low paleontological sensitivity.

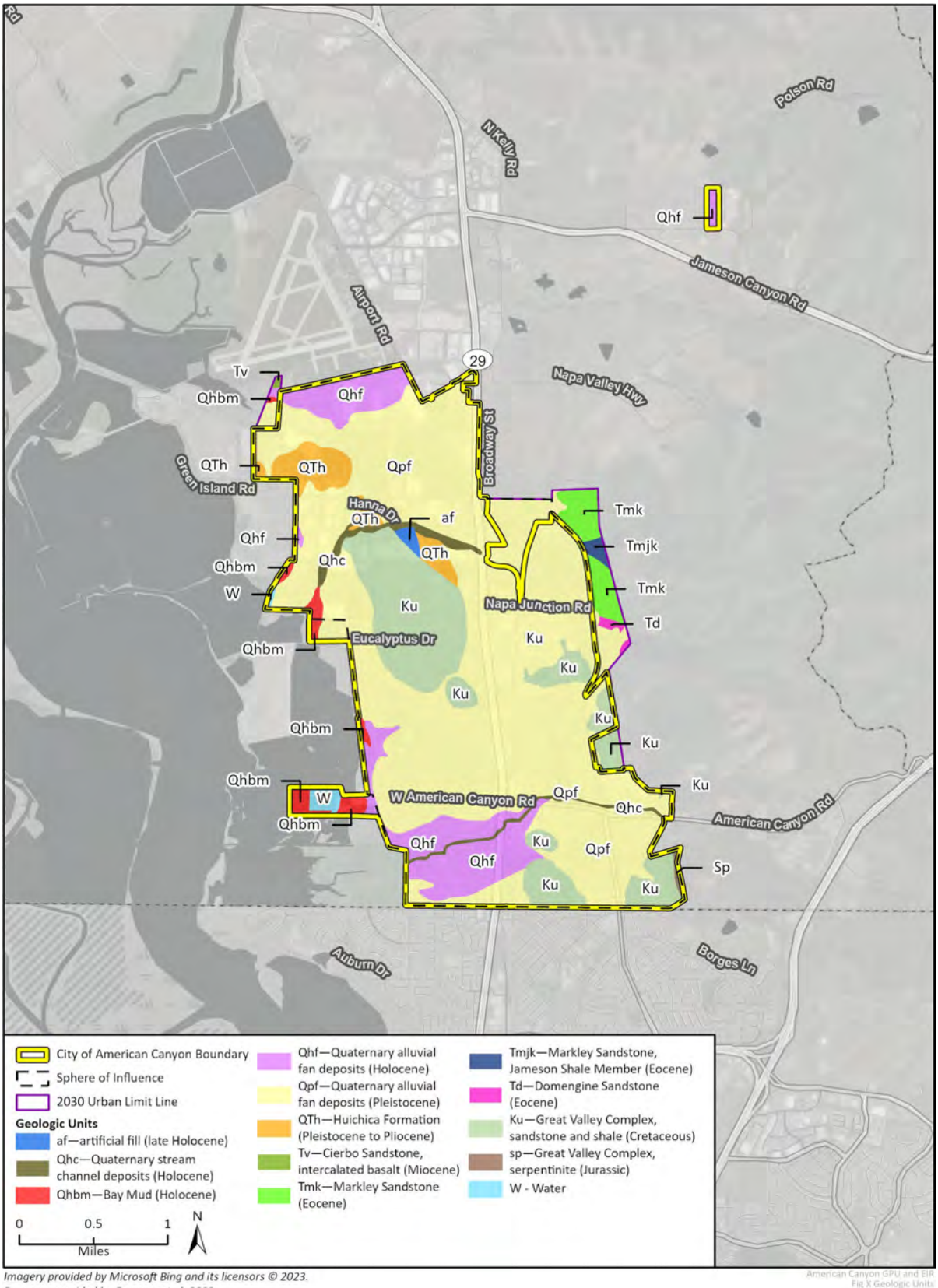
Quaternary Alluvial Fan Deposits (Holocene) (Qhf)

Quaternary alluvial fan deposits (Holocene) are found in parts of central American Canyon (Figure 4.8-1). Quaternary alluvial fan deposits (Holocene) consist of moderately to poorly sorted, moderately to poorly bedded, gravel, sand, silt, and clay (Graymer et al. 2002). Quaternary alluvial fan deposits (Holocene) are likely too young (i.e., less than 5,000 years old) to preserve paleontological resources (SVP 2010); therefore, they have low paleontological sensitivity.

Quaternary Alluvial Fan Deposits (Pleistocene) (Qpf)

Quaternary alluvial fan deposits (Pleistocene) underlie much of central American Canyon (Figure 4.8-1). Quaternary alluvial fan deposits (Pleistocene) consist of poorly sorted, moderately to poorly bedded, gravel, silt, sand, and clay (Graymer et al. 2002). Quaternary alluvial fan deposits (Pleistocene) have produced significant paleontological resources throughout the San Francisco Bay region, including mammoth (*Mammuthus*), ground sloth (*Paramylodon*), mastodon (*Mammut*), horse (*Equus*), rodents, reptiles, and birds (Jefferson 2010; Paleobiology Database [PBDB] 2022; University of California Museum of Paleontology [UCMP] 2022). Given this fossil-producing history, Quaternary alluvial fan deposits (Pleistocene) have high paleontological sensitivity.

Figure 4.8-1 Geologic Units in the Planning Area



Imagery provided by Microsoft Bing and its licensors © 2023.
Basemap provided by Graymer et al. 2002.

Huichica Formation (QTh)

The Huichica Formation underlies part of northwestern American Canyon (Figure 4.8-1). The Huichica Formation consists of yellow, massively bedded siltstone; well-sorted sandstone; or poorly consolidated gravel, that is early Pleistocene to Pliocene in age (Graymer et al. 2002). There are no known significant fossil localities from the Huichica Formation; therefore, it has low paleontological sensitivity.

Cierbo Sandstone, Intercalated Basalt (Tv)

As shown in Figure 4.8-1, a small part of northwestern American Canyon is mapped as a late Miocene, black basaltic deposit within outcrops of the Cierbo Sandstone (Graymer et al. 2002). Basalt is an igneous rock, which forms through the cooling of lava at Earth's surface. Therefore, intercalated basalt of the Cierbo Sandstone cannot preserve paleontological resources and has no paleontological sensitivity.

Markley Sandstone (Tmk) and Markley Sandstone, Jameson Shale Member (Tmjk)

The Markley Sandstone and the Jameson Shale Member of the Markley Sandstone are found in eastern American Canyon (Figure 4.8-1). The Markley Sandstone consists of white to light gray, buff-weathering micaceous sandstone (Graymer et al. 2002). The Jameson Shale Member of the Markley Sandstone consists of brown, laminated, siliceous mudstone (Graymer et al. 2002). Although they differ in lithology, they are historically considered part of the same geologic formation; therefore, fossils are generally identified as coming from the 'Markley Sandstone' in general. The Markley Sandstone has produced numerous fossil localities throughout California, yielding taxa such as sharks, ray-finned fish, plants, gastropods, bivalves, and microfossils (Graymer et al. 2002; PBDB 2022; UCMP 2022). Given this fossil-producing history, the Markley Sandstone and the Jameson Shale Member of the Markley Sandstone have high paleontological sensitivity.

Domengine Sandstone (Td)

The Domengine Sandstone underlies a small part of eastern American Canyon (Figure 4.8-1). The Domengine Sandstone consists of white, gray-weathering, semi-friable, locally cross-bedded sandstone, that is also known as the Domengene Sandstone or Muir Sandstone (Graymer et al. 2002). The Domengine Sandstone is middle Eocene in age. The Domengine Sandstone (and Domengene/Muir Sandstone) have produced many bivalve, annelid, gastropod, and echinoid fossils throughout California (PBDB 2022; UCMP 2022). Given this fossil-producing history, the Domengine Sandstone has high paleontological sensitivity.

Great Valley Complex, Sandstone and Shale (Ku)

Sandstone and shale of the Great Valley Complex underlies parts of eastern and central American Canyon (Figure 4.8-1). These sandstone and shale beds are Late Cretaceous in age and consist of various interbedded lithologies, including carbonaceous biotite wacke; laminated fine sandstone; greenish-gray mudstone; greenish-gray, gray, or black shale; or white-mica sandstone (Graymer et al. 2002). Late Cretaceous sedimentary rocks of the Great Valley Complex (some of which are assigned to named units such as the Moreno, Panoche, or Yolo formations) have produced fossils throughout California, including dinosaurs (Hadrosauridae), mosasaurs, sharks, ray-finned fish, bivalves, gastropods, and cephalopods (PBDB 2022; UCMP 2022). However, the beds mapped within

American Canyon cannot be confidently assigned to these or any other named geologic unit of the Great Valley Complex. Therefore, sandstone and shale of the Great Valley Complex have undetermined paleontological sensitivity.

Great Valley Complex, Serpentinite (sp)

Serpentinite of the Great Valley Complex underlies parts of eastern American Canyon (Figure 4.8-1). Serpentinite is a metamorphic rock (Graymer et al. 2002), meaning it was formed by the alteration of pre-existing rock by intense heat or pressure. This metamorphic process would destroy any fossils that may have been present within that original rock. Therefore, serpentinite of the Great Valley Complex has no paleontological sensitivity.

Summary of Paleontological Sensitivity

The Planning Area is underlain by 12 distinct geologic units, four of which have high paleontological sensitivity and one of which has undetermined paleontological sensitivity. Table 4.8-1 summarizes the paleontological sensitivity of geologic units in the Planning Area.

Table 4.8-1 Paleontological Sensitivity in the Planning Area

Geologic Unit	Age	Paleontological Sensitivity
Artificial fill (af)	Late Holocene	Low
Quaternary stream channel deposits (Qhc)	Holocene	Low
Bay Mud (Qhbm)	Holocene	Low
Quaternary alluvial fan deposits (Holocene) (Qhf)	Holocene	Low
Quaternary alluvial fan deposits (Pleistocene) (Qpf)	Pleistocene	High
Huichica Formation (QTh)	Pleistocene to Pliocene	Low
Cierbo Sandstone, intercalated basalt (Tv)	Miocene	None
Markley Sandstone (Tmk)	Eocene	High
Markley Sandstone, Jameson Shale Member (Tmjk)	Eocene	High
Domengine Sandstone (Td)	Paleocene	High
Great Valley Complex, sandstone and shale (Ku)	Late Cretaceous	Undetermined
Great Valley Complex, serpentinite (sp)	Jurassic	None

4.8.2 Regulatory Setting

a. Federal

The following federal regulations would apply for projects that receive federal funding, are located on federal lands, or are subject to the National Environmental Policy Act.

National Historic Preservation Act of 1966

The National Historic Preservation Act applies to paleontological resources that are found in culturally-related contexts; such related materials qualify as cultural resources. Consequently, recovery and treatment protocols included in the project-specific Cultural Resources Management Plan should be followed for discoveries of paleontological resources in culturally-related contexts.

Paleontological Resources Preservation Act of 2009

The Paleontological Resources Preservation Act (PRPA) is part of the Omnibus Public Land Management Act of 2009 (PL 111-011 Subtitle D). This act directs the Secretary of the Interior or the Secretary of Agriculture to manage and protect paleontological resources on federal land and to develop plans for inventorying, monitoring, and deriving the scientific and educational use of such resources. It prohibits the removal of paleontological resources from federal land without a permit issued under this act, establishes penalties for violation of this act, and creates a program to increase public awareness about these resources. A paleontological resource use permit is required to collect paleontological resources of scientific interest. The act requires that paleontological resources collected under a permit remain United States property, preserved for the public in an approved repository, and available for scientific research and public education. The act also requires that the nature and location of paleontological resources on public lands remain confidential as a means of protecting the resources from theft and vandalism. Section 6301 of the PRPA and Departmental Proposed Rule at 43 CFR Part 49 define a paleontological resource as:

> Any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, except that the term does not include— (A) any materials associated with an archaeological resource… (B) any cultural item… (3) Resources determined in writing by the authorized officer to lack paleontological interest or not provide information about the history of life on earth, based on scientific and other management considerations.

Consistent with the definition of a paleontological resource under the PRPA, those paleontological resources that lack scientific interest (e.g., resources that are ubiquitous or do not provide information about the history of life on earth) are considered scientifically non-significant fossils.

b. State

California Public Resources Code

Section 5097.5 of the Public Resources Code states the following:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

The term "public lands" means those owned by, or under the jurisdiction of, the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, and for permit actions (e.g., encroachment permits) undertaken by others.

c. Local

There are no local regulations related to paleontological resources.

4.8.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

According to Appendix G of the CEQA Guidelines, impacts related to paleontological resources from implementation of the project would be significant if it would:

1. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Methodology

The paleontological sensitivity of the geologic units that underlie the Planning Area were evaluated to assess the project's potential for significant impacts to scientifically important paleontological resources. The analysis was based on the results of a review of existing information in the scientific literature regarding known fossils within geologic units mapped in the Planning Area. According to the SVP (2010) classification system, geologic units can be assigned a high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. Following the literature review, a paleontological sensitivity classification was assigned to each geologic unit mapped within the Planning Area. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

a. Project Impacts and Mitigation Measures

Threshold 1:	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact PAL-1 THE PROJECT HAS THE POTENTIAL TO RESULT IN IMPACTS TO PALEONTOLOGICAL RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Ground disturbance in previously undisturbed portions of the Planning Area underlain by geologic units with high paleontological sensitivity may result in potentially significant impacts to paleontological resources. The 2040 General Plan contains the following proposed policy related to reducing impacts to paleontological resources.

- **Policy ENV-5.1: Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Although this proposed policy would reduce impacts, potentially significant impacts to paleontological resources can only be determined once a specific project has been proposed. The potential effects of a project on paleontological resources are highly dependent on both the individual project site conditions (e.g., presence and depth of disturbed sediments or artificial fill) and the characteristics of the proposed ground-disturbing activity (i.e., depth of ground disturbance and construction activity). Therefore, ground disturbing construction activities in disturbed or developed areas may impact paleontological resources if previously undisturbed, high-sensitivity sediments are encountered below the surface.

Ground disturbing activities associated with construction facilitated by the project have the potential to damage or destroy paleontological resources that may be present on or below the ground surface in areas of high paleontological sensitivity. Consequently, damage to or destruction of fossils could occur due to development facilitated by the project. Impacts would be potentially significant. Mitigation Measure PAL-1 would require future projects be assessed for their potential to significantly impact paleontological resources.

Mitigation Measure

PAL-1 Retention of Qualified Professional Paleontologist

Prior to submittal of a discretionary development application in areas underlain by high or undetermined sensitivity geologic units (i.e., Pleistocene alluvial fan deposits; Markley Sandstone; Jameson Shale Member of Markley Sandstone; Domengine Sandstone; and sandstone and shale of the Great Valley Complex), the City shall require a Qualified Professional Paleontologist [as defined by the Society of Vertebrate Paleontology (SVP) (2010)] be retained to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards. If necessary, the Qualified Professional Paleontologist shall recommend mitigation measures to reduce potential impacts to paleontological resources to a less than significant level. The City shall review and approve the Qualified Professional Paleontologist's findings and recommendation. All recommendations shall be incorporated into the project plans prior to issuance of a grading permit.

Significance After Mitigation

Implementation of Mitigation Measure PAL-1 would reduce adverse effects to paleontological resources and impacts would be less than significant with mitigation.

4.9 Population and Housing

This section summarizes existing and projected population and housing in the Planning Area and analyzes the impacts on population and housing due to the project.

4.9.1 Setting

a. Population

The City of American Canyon was incorporated in 1992. American Canyon was developed following World War II, with the McKnight Acres subdivision in the 1940s and Rancho Del Mar in the 1950s (City of American Canyon 2022). In 1992, when American Canyon was incorporated, the population was 8,341 (California Department of Finance [DOF] 2000). By the year 2000, the population grew approximately 17 percent to 9,774 (DOF 2000). From 2000 to 2010, the City experienced a rapid population growth and population increased approximately 99 percent to 19,454 (DOF 2010b). Growth after 2010 slowed and experienced an approximately seven percent population increase from 2010 to 2020 (DOF 2020a). From 2020 to 2024, the City's population continued to slowly increase from 21,544 residents in 2020 to 21,758 residents in January 2024, representing an approximately one percent increase (DOF 2024).

b. Housing

A household is defined as a group of people who occupy a housing unit (U.S. Census Bureau 2021). A household differs from a dwelling unit because the number of dwelling units includes both occupied and vacant dwelling units. Typically, not all the population in a given area lives in households. A portion of the population lives in group quarters, such as board and care facilities, while others are homeless.

Housing Units

Table 4.9-1 shows the growth in number of housing units in the City, County, and State between 2010 and 2024. As shown in Table 4.9-1, between 2010 and 2024, 643 units were added to the City's housing inventory resulting in an overall growth of 10.2 percent during this period. Between 2010 and 2024, the County grew at a slower rate of 2.6 percent. The State also grew at a slower rate of 8.1 percent.

Table 4.9-1 Housing Inventory in the City, County, and State

	American Canyon		Napa County		California	
	2010	2024	2010	2024	2010	2024
Total Housing Units	5,982	6,625	54,759	56,181	13,670,304	14,824,827
Occupied	5,657	6,473	48,876	50,544	12,568,167	13,880,371
Vacancy Rate	5.4%	2.3%	10.7%	10%	8.1%	6.4%
Percent Change in Total Housing Units from 2010 to 2024	10.2%		2.6%		8.1%	

Note: The number of housing units added to American Canyon exceeds that of the total number of housing units added to Napa County. This can be attributed to the removal of housing units in Napa County between 2010-2022.
Source: DOF 2010a (for 2010 data) and DOF 2024 (for 2024 data)

In January 2024, approximately 5,174 of the housing units in the City were single-family detached homes, approximately 51 units were single-family attached homes, approximately 572 units were multi-family units (buildings of at least two units), and approximately 828 units were mobile homes (DOF 2024).

Household Size

Small households (one to two persons per household [pph]) traditionally occupy units with zero to two bedrooms; family households (three to four pph) normally occupy units with three to four bedrooms. Large households (five or more pph) typically occupy units with four or more bedrooms. The number of units in relation to the household size may reflect preference and economics. Many small households obtain larger units, and some large households live in small units, for economic reasons. Table 4.9-2 compares the size of households in the City, County, and State in 2010 and 2024.

Table 4.9-2 Household Size in the City, County, and State

	American Canyon		Napa County		California	
	2010	2024	2010	2024	2010	2024
Household Size (pph)	3.43	3.35	2.69	2.55	2.90	275
Percent Change from 2010 to 2022	2.4%		5.3%		5.4%	

Source: DOF 2020b (for 2010 data) and DOF 2024 (for 2024 data)

As shown in Table 4.9-2 the average household size in American Canyon decreased from 3.43 pph in 2010 to 3.35 in 2024. Over the same period, household size in the County decreased from 2.69 to 2.55, a decrease of approximately 5.3 percent. Household size in the State decreased from 2.90 to 2.75, a decrease of approximately 5.4 percent. Between 2010 and 2024, the City maintained a higher average household size in comparison to the County and State average household sizes.

c. Jobs Housing Ratio

Information on the jobs-housing ratio is provided for informational purposes only. The jobs-household ratio in a jurisdiction is an overall indicator of jobs availability within the area. A balance of jobs and housing can give residents an opportunity to work locally and avoid employment commutes to other places in the region. DOF estimates that American Canyon has a ratio of 0.95 jobs per dwelling unit. The Association of Bay Area Governments' (ABAG) regional map depicting projected household and job growth also illustrates a 1 percent job growth in south Napa County, including American Canyon, as a share of the regional job growth (ABAG 2021). That amounts to more than one job per household, which means that workers do not have to travel to other communities to find employment. Most households have more than one worker; therefore, a ratio of jobs to housing should be above 1:1 to have a balance of jobs to households.

d. Projections

Table 4.9-3 presents population, dwelling units, and employment projections by DOF and ABAG through 2040 for American Canyon. It is estimated the population of American Canyon will grow approximately 15 percent between 2024 and 2040 (DOF 2024, ABAG 2019). This translates to an estimated 3,522 new residents by 2040. The available data shows dwelling units decreasing in American Canyon; however, this is unlikely the case because the American Canyon Regional Housing Needs Allocation (RHNA) is 622 residential units and the city anticipates 1,055 new dwelling units in

the next 8 years. The City's Housing Element is the 6th Cycle State requirements for the 2023-2031 planning horizon. The City's Housing Element will help facilitate the development of housing. Jobs are expected to increase 31 percent between 2021 and 2040. American Canyon's jobs-housing ratio would increase by approximately 0.32. However, these projections included within this Setting do not represent the projections that the City of American Canyon anticipates from implementation of its updated General Plan. A discussion of the City's anticipated projections is included within Section 2, *Project Description*, and discussed in Impact POP-1.

Table 4.9-3 American Canyon Estimated Population, Dwelling Units, and Employment

American Canyon	2022	2040	Change 2022 to 2040	Percent Change 2022 to 2040
Population	21,758	25,280	3,522	15%
Dwelling Units	6,625	6,420	-205	-3.1%
Jobs	6,210[1]	8,165	1,955	31%
Jobs-Housing Ratio	0.95	1.27	0.32	14%

Source: ABAG 2019, DOF 2024

[1] Data is from most recent projections for the year 2020 (ABAG 2019)

4.9.2 Regulatory Setting

a. Federal Regulations

There are no federal regulations that would be applicable to the project.

b. State Regulations

California Relocation Assistance Act

The California Relocation Assistance Act of 1971 (Government Code Section 7260 et seq.) applies to State and local program that receive State funding. This Act requires notification, counseling, social services, and financial assistance for persons displaced by transportation and land redevelopment projects. These procedural protections and benefits apply when the project causing the displacement has received State funding during any phase of the program or project.

Housing Element Law

First enacted in 1969, housing element law (Government Code Sections 65580–65589.8) mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law acknowledges that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly constrain, housing development. As a result, housing policy in the State rests largely upon the effective implementation of local general plans and, in particular, local housing elements. Housing element law also requires the California Department of Housing and Community Development (HCD) to review local housing elements for compliance with State law and to report its written findings to the local government.

California Government Code Section 65583 specifies the State Housing Element requirements. The Housing Element is one of the State-mandated elements of the General Plan and is updated every eight years. HCD is responsible for reviewing Housing Elements to ensure compliance with State law.

Senate Bill 375

Senate Bill 375 (SB 375) is summarized in Section 4.6, *Land Use and Planning.*

c. Regional and Local Regulations

City of American Canyon Housing Element

The Housing Element is one of the seven State-mandated elements of the General Plan (Government Code Sections 65300 through 65303.4). The Housing Element serves as a tool to identify and provide for the housing needs of the community. It identifies recent demographic and employment trends that may affect existing and future housing demand and supply. California law requires the Housing Element to establish policies and programs that will support the provision of an adequate housing supply for citizens of all income levels. The Housing Element is the only element that requires review by the State. The element addresses the city's ability to meet the regional housing needs as determined by the State of California. American Canyon's 6th cycle Housing Element was adopted on January 31, 2023 and certified by the State Department of Housing and Community Development (HCD) on June 30, 2023.

4.9.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on population and housing if it would:

1. Induce substantial unplanned population growth in an area either directly or indirectly; or
2. Displace substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere.

For purposes of this analysis, substantial population growth is defined as growth exceeding ABAG population forecasts for American Canyon. Substantial displacement would occur if implementation of the project would displace more residences than would be accommodated through growth accommodated by the project.

Methodology

Population and housing trends in the City were evaluated by reviewing the most current data available from the DOF, ABAG, and the City's Housing Element. Impacts related to population are generally social or economic in nature. Under CEQA, a social or economic change generally is not considered a significant effect on the environment unless the changes are directly linked to a physical change.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact POP-1 IMPLEMENTATION OF THE PROJECT WOULD FACILITATE THE CONSTRUCTION OF NEW HOUSING IN AMERICAN CANYON AND WOULD INCREASE POPULATION. THE 2040 GENERAL PLAN WOULD ACCOMMODATE AND PLAN FOR POPULATION GROWTH AND INCLUDES POLICIES TO MANAGE GROWTH AND DEVELOPMENT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

This EIR identifies a maximum buildout for the project and is a conservative assumption developed for this analysis, not meant to be a predictor of future growth. Overall, maximum buildout will be dependent on multiple factors, including local economic conditions, market demand, and other financing considerations. The maximum buildout scenario for this EIR is estimated to be approximately 3,204 net new residential units by the year 2040 (see Section 2, *Project Description*). According to the California Department of Finance's population estimates, the average persons per household in American Canyon was 3.35 in 2022 (DOF 2024). Assuming 3.35 persons per household, the 3,204 additional residential units could generate approximately 10,734residents. According to Plan Bay Area 2040[1], the population of American Canyon is expected to increase to 25,280 residents by the year 2040 (ABAG 2019). As described in Section 4.9.1, *Setting*, the population of the City of American Canyon in January 2024 was approximately 21,758 residents. Therefore, the addition of roughly 10,734 residents by the year 2040 would exceed ABAG projections by roughly 7,212 residents or 25 percent.

However, the population growth associated with the project would not be considered unplanned for several reasons. Buildout under the General Plan consists of projected growth facilitated by several approved plans and projects including the Broadway District Specific Plan, Watson Ranch Specific Plan, and Oat Hill Residential General Plan Amendment. These projects have undergone separate CEQA review and have been approved by the City of American Canyon. Cumulatively, these planned projects result in most of the projected growth. Furthermore, the State requires that all local governments adequately plan to meet the housing needs of their communities. Given that the State is currently in an ongoing housing crisis due to an insufficient housing supply, the additional residential units under the project would further assist in addressing the existing crisis and meeting the housing needs of the City's communities.

Finally, the following policies from the 6th Cycle Housing Element support the goals to direct future development to minimize the impacts of growth by emphasizing the intensification and reuse of already developed areas and redevelopment to infill areas:

- **Policy H-1.1: Sufficient Lower-Income Capacity.** Designate sufficient vacant land and underutilized sites with maximum densities to facilitate housing development affordable to lower-income households.
- **Policy H-1.3: Existing Residential Capacity.** Protect residentially designated sites from reclassification to nonresidential designations or downzoning to lower densities.

[1] Plan Bay Area 2040 population estimates were used instead of Plan Bay Area 2050 because the latter did not include population estimates at the city level.

- **Policy H-2.1: Diversity of Housing Types.** Promote a diversity of housing types, including large-lot development, single family detached and attached residences, mobile homes, manufactured homes, townhomes, multi-family rental and ownership units, accessory dwelling units, and units combined with nonresidential uses.
- **Policy H-2.2: Housing Type Flexibility.** Allow flexibility in the type of units developed on vacant, residentially designated properties in master-planned communities and other planned developments.
- **Policy H-2.6: Mixed Use Development.** Encourage development of residential uses in association with compatible nonresidential uses in commercial zones.

Therefore, because the project is designed for planned and orderly growth, as mandated by the State, development in accordance with the project would not indirectly induce growth in the City. Impacts would be less than significant.

In addition, the Mobility Element for the 2040 General Plan identifies major street improvements that the City has proposed. The street improvements include extension of roadways, such as Newell Drive and new pedestrian overcrossing. The roadway extensions would serve the existing population of American Canyon, as well as development that has already been planned and would not induce unplanned growth. For example, the Newell Drive Extension would serve the planned development for both the Watson Ranch Specific Plan and the Watson Lane Annexation Project. As such, the roadway improvement associated with the project would serve already planned growth. Impacts on indirect population growth due to roadway infrastructure would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2:	Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact POP-2 IMPLEMENTATION OF THE PROJECT WOULD NOT RESULT IN THE DISPLACEMENT OF SUBSTANTIAL NUMBERS OF HOUSING OR PEOPLE. THE PROJECT WOULD FACILITATE THE DEVELOPMENT OF NEW HOUSING IN ACCORDANCE WITH STATE AND LOCAL HOUSING REQUIREMENTS, WHILE PRESERVING EXISTING RESIDENTIAL NEIGHBORHOODS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As described in Impact POP-1, the conservative estimate of the maximum residential buildout for the project is an additional 3,204 housing units. In addition, as described in Chapter 2, *Project Description*, the conservative estimate of the maximum non-residential buildout (i.e., commercial, retail, hotel, industrial, warehouse, and research and development uses) is 5,704,000 square feet. It is not currently known whether future development projects would result in the displacement of housing. Nonetheless, the Housing Element includes the following proposed policies to minimize displacement of housing:

- **Policy H-1.3: Existing Residential Capacity.** Protect residentially designated sites from reclassification to nonresidential designations or downzoning to lower densities.

- **Policy H-2.9: Missing Middle Housing.** Encourage development of missing middle and workforce housing appropriate for households with incomes between 80 and 140 percent of the median household income.
- **Policy H-3.4: Older Neighborhood Infrastructure.** Through the Capital Improvement Program, as a social justice program measure maintain infrastructure of older neighborhoods in good condition.
- **Policy H-4.2: Neighborhood Rehabilitation.** Support rehabilitation in older residential neighborhoods and low resource areas.
- **Policy H-4.6 Housing Balance**. Promote a balance of rental and affordable ownership housing.
- **Policy H-6.3 Affordable Unit Replacement.** Require applicants to replace housing as a condition of development approval when discretionary development applications convert or remove housing units occupied by, and are affordable to, very low- or low-income households.
- **Policy H-6.5 Mobile Home Park Protection.** Protect mobile home park residents from involuntary displacement and unreasonable rent increases.

Overall, the Housing Element would promote infill development; the redevelopment of abandoned, obsolete, or underutilized properties; and the adaptation of existing residential units to support multi-family use. These development patterns would minimize displacement. Additionally, the Housing Element includes policies, such as those above, which would reduce the impacts of future development on existing neighborhoods and residents within the city. Furthermore, the California Relocation Assistance Act of 1971 would apply to potential future development facilitated by the General Plan and requires notification, counseling, social services, and financial assistance for persons displaced by transportation and land redevelopment projects. These procedural protections and benefits apply when the project causing the displacement has received State funding during any phase of the program or project. Through this program as well as the project objectives and policies stated above, the General Plan would not result in the net loss or displacement of housing and would not require the construction of replacement housing elsewhere. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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4.10 Public Services and Recreation

This section summarizes the public services, including recreational resources in the Planning Area and analyzes the potential effects on public services and recreation related to implementation of the project.

4.10.1 Setting

a. Fire Protection

Fire protection, emergency medical services, and technical rescue services in the City of American Canyon are provided by the American Canyon Fire Protection District (ACFPD). The ACFD provides a wide range of programs, including fire suppression, training, emergency medical services, hazardous materials cleanup, public education, and urban search and rescue. The ACFD provides a response to an approximately 15 square mile area that includes the city limits of the City of American Canyon and nearby unincorporated areas of southern Napa County (ACFD 2020). ACFPD is a subsidiary special District of the City of American Canyon, with the elected City Council members serving as the ex-officio Board of Directors. ACFPD is funded primarily through property taxes and voter approved special taxes, ACFPD's budget is separate and distinct from the City of American Canyon.

Personnel, Facilities, and Equipment

The ACFPD currently employs 23 career fire personnel (City of American Canyon 2022a) and is staffed daily with a minimum of six personnel, of which a minimum of two firefighters are Paramedics. Staffing is accomplished by having twenty-one career firefighters assigned to three platoons referred to as "A," "B," and "C" shift. All sworn ACFPD employees are trained to the level of Emergency Medical Technician or as an Emergency Medical Technician-Paramedic. ACFPD employees are able to provide advanced live support. In 2021, the ACFPD responded to 1,689 incidents in their jurisdiction, as well as 98 incidents in Napa County and 61 incidents in Vallejo (ACFPD 2022a). The typical response time by the ACFPD is approximately 5 minutes or less (ACFPD 2022a).

The ACFPD operates out of two stations located at 225 James Road and 911 Donaldson Way East, both located centrally within the City. Across the two locations, the AFCD is equipped with firefighting apparatuses and support vehicles. A fire engine is staffed by at least one firefighter who is also a licensed paramedic on a 24-7 basis. The ACFPD and American Medical Response (AMR) have established a public- private partnership that enhances the emergency medical system in Napa County and are working together to provide shorter response times. Table 4.10-1 details ACFPD equipment (ACFPD 2022a).

Table 4.10-1 ACFPD Equipment

Equipment	Equipment Features
Engine 211	▪ Spartan Cab and Chassis ▪ 1,500 Gallons Per Minute Single Stage Pump ▪ 500 Gallon Water Tank ▪ 20 Gallon of Class A Foam Tank ▪ Advanced Life Support

Equipment	Equipment Features
Engine 411	▪ 500 Gallon Water Tank ▪ 750 Gallon Per Minute Darley Pump
Truck 11	▪ 1,500 Gallon Per Minute Single Stage Pump ▪ 500 Gallon Water Tank ▪ 20 Gallons of Class A & B Foam
Rescue 11	▪ 25 Kilowatt Power Take Off Generator ▪ LED Telescopic Lighting System ▪ Cascade Self Contained Breathing Apparatus Breathing Air Fill System
Brush 11	▪ 350 Gallon Water Tank ▪ 10 Gallon Class A Foam ▪ 180 Gallon Per Minute Darley Pump ▪ Advanced Life Support
Engine 11	▪ 2018 Pierce Enforcer Cab and Chassis ▪ 1,500 Gallon per minute single stage pump ▪ 500 gallon water tank ▪ 20 gallon class A foam tank ▪ Advanced Life Support

Source: City of American Canyon 2022b

Services Provided

The Fire District provides emergency operations, fire suppression, advanced life support emergency medical care, and rescue in a public-private partnership with American Medical Response. Other services and functions include fire prevention, public education, business fire safety inspections, plan review, construction site inspection, code enforcement, fire investigation, public education outreach programs, disaster preparedness, emergency operations plan development, emergency operations center operations, and coordination of disaster preparedness training. The Fire District is also recognized by California Emergency Management Agency as a Type 1 (heavy) rescue single resource.

Aid Agreements

The ACFPD participates in the Napa Interagency Hazard Team which responds to hazardous materials incidents that occur within the County (ACFPD 2022a). The ACFPD also participates in the Napa Interagency Rescue Team which is a joint search and rescue team comprised of fire department personnel from other agencies within Napa County (ACFPD 2022a). The ACFPD also participates in both mutual aid and automatic aid agreements to multiple agencies in Napa and Solano Counties (City of American Canyon 2022a).

Incidents and Response Times

ACFPD responded to 1,868 incidents in 2021 (ACFPD 2022a). Rescues and emergency services accounted for 63 percent of the incidents (ACFPD 2022a). ACFPD has an established response time standard of first unit arrival within 5 minutes (total travel time) for 90 percent of all incidents (ACFPD 2022a).

Insurance Services Office Rating

ACFPD has an Insurance Services Office (ISO) rating of Class 2 on a scale of 1 to 10, with 1 being the best (City of American Canyon 2022a). An ISO rating accounts for factors such as emergency communication systems, personnel, training, equipment, and water supply.

b. Police Protection

The American Canyon Police Department (ACPD) provides police protection services within the City through a contract with the Napa County Sheriff's Office. As a result of this contract, the ACPD is staffed by Napa County Sheriff's Office personnel who wear ACPD uniforms. ACFPD officers serve a variety of roles including patrol, K-9, D.A.R.E., investigations, communications, and School Resource Officers.

The ACPD operates out of one station located at 911 Donaldson Way East. For the Fiscal Year 2021/2022 the ACPD was staffed with 24 sworn officers, two police technicians, and one administrative clerk (ACPD 2022). At a minimum, there are three officers on duty 24 hours a day, 7 days a week and the ACDP ratio is 1.1 offers per 1,000 residents (County of Napa 2022a). Sworn staffing was comprised of the following: 1 chief; 4 sergeants; 2 traffic officers; 2 k-9 handlers; 2 school resource officers; 1 community resource officer; and 12 patrol officers. Between 2014 and 2021, ACPD responded to between 15,903 and 18,698 calls for service annually (ACPD 2022).

c. Schools

Napa Valley Unified School District (NVUSD) provides elementary school (Kindergarten through 12th grade), Transitional Kindergarten, independent study, and one adult education program that serve the residents of the City. There are 27 schools in NVUSD, five of which are in the City: American Canyon High, American Canyon Middle, Canyon Oaks Elementary, Donaldson Way Elementary, and Napa Junction Elementary (National Center for Education Statistics [NCES] 2022a). Table 4.10-2 shows enrollment trends for these five schools. As shown in Table 4.10-2, enrollment at all middle and elementary schools has decreased and enrollment at American Canyon High school has increased between the 2017-2018 and 2020-2021 school years.

Table 4.10-2 Enrollment Trends for NVUSD Schools in American Canyon

School Name	Grades	2017-2018	2018-2019	2019-2020	2020-2021	Percent Change 2017-2018 to 2020-2021
American Canyon High	9-12	1,572	1,617	1,670	1,707	8.6%
American Canyon Middle	6-8	1,041	1,013	1,025	1,011	-2.9%
Canyon Oaks Elementary	K-5	682	682	681	674	-1.2%
Donaldson Way Elementary	K-5	602	591	574	524	-13.0%
Napa Junction Elementary	K-5	446	409	417	420	-5.8%

Source: California Department of Education [CDE] 2022; NCES 2022b, 2022c, 2022d, 2022e, 2022f

d. Parks and Recreation

American Canyon has multiple recreational opportunities. The Planning Area has three mini-parks[1], fifteen neighborhood parks[2],and five community parks[3]. These 23 parks total approximately 102 acres and are identified in Table 4.10-3. Amenities at these parks include picnic areas, diamond baseball fields, rectangle fields, outdoor basketball multi-use courts, tennis courts, playgrounds, dog parks/off leash areas, skate parks, swimming pool, and trails.

The City of American Canyon's Parks and Recreation Department is responsible for the maintenance of park land and City recreation facilities as well as planning all City-sponsored recreation classes, programs, and special events. The City also jointly manages 10 miles of the Napa River Bay Trail with the California Department of Fish and Wildlife, and the Napa County Parks and Open Space District (City of American Canyon 2022c). Additionally, the Newell Open Space Preserve includes 642 acres of open space east of the City and is connected via Newell Creek (City of American Canyon 2022d). In addition, American Canyon also has Wetlands Edge Park, which provides trails and offers opportunities to view marshland and the Napa River. Furthermore, the Napa County Regional Parks and Open Space District is in the process of acquiring the Suscol Ridge Regional Park, which totals 711 acres. According to the Bay Area Open Space Council, there are almost 1.4 million acres of regional trails and open space areas that are currently provided in the Bay Area (Bay Area Open Space Council 2014). By 2027, the Bay Open Space Council predicts that 2 million acres of regional trails and open space areas would be available for users.

There are also several additional nearby open space areas, including Lynch Canyon Open Space, Napa-Sonoma Marshes Wildlife Area, Fagan Marsh Ecological Reserve, and Bull Island. Beyond the nearby open space areas and trails provided in Napa and Solano Counties, there are also other nearby regional parks in Sonoma and Marin counties, as well as park and open space amenities provided through the East Bay Regional Parks District, California State Parks system, and the National Parks Service lands.

In December 2015, the City published a Parks and Recreation Needs Assessment that compared the City's park system to other similar cities nearby and determined the City ranks higher in terms of total park acreage, but ranks lower in terms of total park and facility sites due to its lack of indoor facilities (City of American Canyon 2015). The assessment determined that residents of the City have an unmet need for outdoor exercise and fitness areas, covered picnic areas, adventure areas, Napa River access, mountain biking trails, sports complexes, off-leash dog parks, community gardens, and community center space. Specifically, the assessment concluded that by 2030 the City should develop 77 additional acres of community parkland, four adult softball diamonds, three basketball multi-use outdoor courts, two off-leash dog parks, 23,305 square feet of indoor recreation space, and 3,927 square feet of indoor recreation space dedicated to senior citizens (City of American Canyon 2015).

[1] As identified in the Environment, Parks and Recreation Element of the 2040 General Plan, mini-parks are not designed for active recreational uses but do provide passive open space.
[2] As identified in the Environment, Parks and Recreation Element of the 2040 General Plan, neighborhood Parks are usually two and a half to five acres in size and primarily planned for children five to fourteen years of age.
[3] As identified in the Environment, Parks and Recreation Element of the 2040 General Plan, community Parks are designed to serve several neighborhoods and parks are planned for youths and adults and provide for a wider range of activities than the neighborhood park or playground.

Table 4.10-3 Parks in the Planning Area

Name	Address/Location	Acreage
Mini Parks		
Bedford & Kensington	323 Bedford Lane	0.14
Nottingham & Bently	270 Nottingham Lane	0.10
Danrose Sports Court	785 Danrose Drive	1.24
Neighborhood Parks		
Banbury Park	100 Banbury Way	8.83
Elliott Park	2234 Elliott Drive	2.83
Gadwall Park	161 Gadwall Street	2.0
Linwood Park	285 Linwood Lane	1.32
Main Street Park	5050 Main Street	3.0
Melvin Park	19 Melvin Road	1.3
Montecarlo Park	54 Montecarlo Way	2.75
Northampton Park	243 Northampton Drive	4.0
Pelleria Park	54 Pelleria Drive	1.0
Quarry Park (Proposed)	N/A	7.1
Shenandoah Park	100 Sonoma Creek Way	6.0
Silver Oak Park	485 Silver Oak Drive	5.0
Via Bellagio Park	100 Via Bellagio	1.0
Watson Ranch Center Park (Proposed)	Marcus Road	3.8
Watson Ranch Newell Park (Proposed)	Newell Drive	7.4
Community Parks		
Community Park I	1400 Rio Grande Drive	8.0
Community Park II	20 Benton Way	6.3
Kimberly Park	600 Kimberly Way	10.0
Little League Complex	280 Napa Junction Road	10.0
Veterans Memorial Park	2801 Broadway	9.0

e. Library Services

Library services in the City are provided by the Napa County Library system at the American Canyon Library. This library, located at 300 Crawford Way, is part of the four libraries within the Napa County Library system. The library consists of a 55,550-piece collection (books, DVDs, music CDs, audiobooks, magazines, and subscriptions to area newspapers), a group study area that can accommodate 18 people, 28 computers, and a meeting room, which can seat up to 100 people for a total of 16,000 sf of usable space. During fiscal year 2017/2018, the library had approximately 8,669 registered users (County of Napa 2022b).

4.10.2 Regulatory Setting

a. Federal Regulations

There are no federal regulations that would be applicable to the project.

b. State Regulations

Fire Protection

California Fire and Building Codes

The State of California provides minimum standards for building design through the California Building Code (CBC), which is located in Part 2 of Title 24, California Building Standards Code, of the California Code of Regulations. The CBC is based on the International Building Code but has been amended for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Code of Regulations

The California Code of Regulations, Title 5 Education Code, governs all aspects of education within the State. California State Assembly Bill 2926 (AB 2926) – School Facilities Act of 1986 – was enacted by the State of California in 1986 and added to the California Government Code (Section 65995). It authorizes school districts to collect development fees, based on demonstrated need, and generate revenue for school districts for capital acquisitions and improvements. It also established that the maximum fees which may be collected under this and any other school fee authorization are $1.50 per square foot for residential development and $0.25 per square foot for commercial and industrial development. AB 2926 was expanded and revised in 1987 through the passage of AB 1600, which added Section 66000 et seq. of the Government code. Under this statute, payment of statutory fees by developers serves as total mitigation under CEQA to satisfy the impact of development on school facilities. However, subsequent legislative actions have alternatively expanded and contracted the limits placed on school fees by AB 2926.

California Senate Bill 50

As part of the further refinement of the legislation enacted under AB 2926, the passage of SB 50 in 1998 defined the Needs Analysis process in government Code Sections 65995.5-65998. Under the provisions of SB 50, school districts may collect fees to offset the costs associated with increasing school capacity as a result of development. SB 50 generally provides for a 50/50 State and local school facilities match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether State funding is available; whether the school district is eligible for State funding; and whether the school district meets certain additional criteria involving bonding capacity, year-round schools, and the percentage of moveable classrooms in use.

California Government Code sections 65995-65998 sets forth provisions to implement SB 50. Specifically, in accordance with section 65995(h), the payment of statutory fees is “deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization…on the provision of adequate school facilities.” The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Pursuant to Government Code section 65995(i), "A State or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in section 56021 or 56073 on the basis of a person's refusal to provide school facilities mitigation that exceeds the amounts authorized pursuant to this section or pursuant to section 65995.5 or 65995.7, as applicable."

California Education Code section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. NVUSD has developed an impact fee schedule with requires a payment of $0.66 per square foot of commercial and industrial development.

Quimby Act

The Quimby Act (California Government Code Section 66477) establishes guidelines for developers' exactions and in-lieu fees that may be used for parkland development. The act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate land for parks, pay an in-lieu fee, or perform a combination of the two. The Quimby Act provides two standards for the dedication of land for use as parkland (1) if the existing area of parkland in a community is three acres or more per 1,000 persons, then the community may require dedication based on a standard of 5 acres per 1,000 persons residing in the subdivision, (2) if the existing amount of parkland in a community is less than three acres per 1,000 persons, then the community may require dedication based on a standard of only three acres per 1,000 persons residing in the subdivision. The Quimby Act also requires a city or county to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance. The amount of land dedicated, or fees paid, shall be based upon the residential density, determined based on the approved or conditionally approved tentative map or parcel map and the average number of persons per household.

c. Local Regulations

City of American Canyon General Plan

The City's Public Services and Facilities Element of the General Plan include the following policies (City of American Canyon 1994):

- **Policy 6.3.1:** Require that City planning staff work closely with Fire District officials to ensure that fire facilities and personnel are expanded commensurably to serve the needs of the City's growing population and development base.
- **Policy 6.3.3:** Continue to respond to 90% of all calls within five minutes or less.
- **Policy 6.7.1:** Periodically evaluate population growth, development characteristics, level of service (response time and staffing), and incidence of crime in the City to ensure that an adequate level of police protection is maintained.
- **Policy 6.8.1:** Annually monitor the adequacy of policing services to ensure that they are commensurate with the needs of the City, as judged by response times, types and quality of service, personnel skills, the crime rate and other relevant criteria.

American Canyon Fire Protection District Long-Range Master Plan

The ACFPD Long-Range Master Plan, (LRMP) guides the efficient future growth and development of the Fire District to provide the community of American Canyon with the highest possible level of service balanced with long term financial sustainability. Adopted in October 2022, (Resolution 2022-26) the LRMP identifies recommendations to improve long-range planning and delivery of fire and emergency services to the community (ACFPD 2022b).

The Plan recommendations relate to operations, procedures, and community involvement to deliver desired levels of service at the most efficient cost. To maintain long-range service levels, the LRMP recommends construction of a new relocated Fire Station 211.

City of American Canyon Impact Fees

Measure B, 1980 and Resolution 83-4 as amended by Resolution 2022-11

In 1980, voters approved Measure B, a special tax assessment to maintain levels of fire protection services in American Canyon. All property and mobile homeowners in American Canyon are required to pay this fee. The fee is calculated based on the physical building characteristics of a project, its use, and its immediate surroundings, to determine the gallons per minute that would be utilized to put out the most serious fire likely to occur near the development. Currently, single-family residential pays $0.2585 per square foot, multi-family residential pays $0.3154 per square foot, commercial uses pay $0.4731 per square foot, and industrial uses pay $0.5738 per square foot.

American Canyon Municipal Code Chapter 15.08

Chapter 15.08 of the American Canyon Municipal Code establishes the Civic Facility and Park Impact Fee for all residential, accessory dwelling unit, commercial, office, and industrial developments. The fee is calculated by unit or by square foot depending on the type of development. The Civic Facility and Park Impact Fees collected are utilized for the expansion of City Hall, provision of additional support for the police station, support for the Aquatic Center offices, construction of the City library, corporate yard expansion, public parks, park facilities, and other offsite improvements.

4.10.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on public services and recreation if it would:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
    a. Fire protection;
    b. Police protection;
    c. Schools;

d. Parks;

e. Other public facilities.

2. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;
3. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Methodology

The assessment of potential environmental impacts related to public services and recreation is based on a review of existing services within the Planning Area. As a programmatic document, this Program EIR presents a City-wide assessment of the project. Because the Program EIR is a long-term document intended to guide actions for many years into the future, this analysis relies on program-level and primarily qualitative evaluation.

Threshold 1a:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?
Threshold 1b:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?
Threshold 1e:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-1 DEVELOPMENT FACILITATED BY THE PROJECT WOULD INCREASE THE POPULATION IN THE PLANNING AREA, WHICH WOULD RESULT IN AN INCREASE IN DEMAND FOR FIRE, POLICE, AND LIBRARIES. COMPLIANCE WITH PROPOSED POLICIES IN THE 2040 GENERAL PLAN AND CONTINUED ENVIRONMENTAL REVIEW WOULD MINIMIZE ADVERSE ENVIRONMENTAL EFFECTS ASSOCIATED WITH THE PROVISION OF NEW OR PHYSICALLY ALTERED FIRE, POLICE, OR LIBRARY FACILITIES. THESE IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Future development facilitated by the project would result in an increase in the Planning Area's population, which would result in an incremental increase in demand for fire protection, police protection, and other public services such as libraries.

The Planning Area would be served with fire protection and emergency medical services provided by ACFPD. As future buildout occurs in accordance with the project, the City would evaluate operations and deployment of fire protection services. Future development would be required to meet the standard fire code safety and access requirements administered by the City of American Canyon Building Division and specified by the California Building Code. In accordance with standard practices, ACFPD would review project plans before permits are issued to ensure compliance with all applicable fire and building code standards and ensure adequate emergency access is provided to

the site. The project would be required to pay two separate special assessments to fund fire protection and emergency medical services. The first is the "Fire Mitigation Fee," a one-time assessment to all new development. The second is the "Fire Service Fee" and an annual assessment for each parcel based on a formula that includes structure construction type, the fire flow area (square feet), proximity of other structures, the type of occupancy, and the presence of fire protection devices. In addition, the Public Services and Facilities Element includes policies 6.3.1 and 6.3.3, which requires that planning staff work closely with Fire District officials to ensure that fire facilities and personnel are expanded commensurably to serve the needs of the City's growing population and development base and that 90 percent of calls are responded to within five minutes or less.

The Planning would be served with police protection provided by the ACPD. The Police Department is staffed by the Napa County Sheriff's Office, which provides law enforcement services on a contract basis to the City of American Canyon. Development facilitated by the project would increase the number of annual incidents. The Police Department will have the opportunity to review and comment on security measures during the plan check review process for future development. In addition, the Public Services and Facilities Element includes policies 6.7.1 and 6.8.1, which required periodically evaluating population growth, development characteristics, level of service (response time and staffing), and incidence of crime in the City to ensure that an adequate level of police protection is maintained and annually monitoring the adequacy of policing services to ensure that they are commensurate with the needs of the City.

Future development facilitated by the project would result in an increase in population which could result in an increased demand for library services. Pursuant to the City's 2022 Civic Facilities Fees, future development would be required to pay fees that are collected and used to fund expanded library services in the City.

The City has identified the requirements for additional personnel and equipment as functions of fees implemented through Resolution 2022-11 and American Canyon Municipal Code Chapter 15.08. New development is required to pay impact fees and contribute their fair share to the cost of funding fire protection, police protection, and library services in American Canyon. The 2040 General Plan Land Use Element provides the following proposed policy that would ensure adequate fire and police protection is provided in American Canyon:

- **Policy LU-1.8: Infrastructure Coordination.** Ensure that new development consistent with the Land Use Plan is coordinated with the provision of adequate public infrastructure (e.g., transportation facilities, capital improvements, wastewater collection and treatment, water supply, electrical, natural gas, telecommunications, solid waste disposal, and storm drainage) and public services (e.g., governmental administrative, police, fire, recreation)

Given the demand for fire, police, and library services in the City, fire and police staffing needs in American Canyon are likely to increase, which could require the construction of new facilities. Future facilities could be located within the Planning Area but would require adherence to all applicable building and zoning codes and additional CEQA review to analyze project and location specific impacts. It is not possible to identify the specific nature, extent, and significance of physical impacts on the environment that could result from the construction and operation of future fire facilities without knowing the size and nature of the facility, or its location. For example, future facilities could feasibly be housed in an existing building, which would have less of a physical impact on the environment than the construction of a new facility. As such, impacts related to fire, police, and library services would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 1c:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Impact PS-2 FUTURE DEVELOPMENT FACILITATED BY THE PROJECT WOULD BE REQUIRED TO PAY IMPACT FEES THAT WOULD PROVIDE FUNDING FOR THE PROVISION OR EXPANSION OF NEW SCHOOL FACILITIES, PURSUANT TO GOVERNMENT CODE SECTION 65995(B). IMPACTS FROM THE PROJECT WOULD BE OFFSET BY THE PAYMENT OF IMPACT FEES AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Future development facilitated by the project would result in an increase in population in the Planning Area, which would contribute to an increase in students who would be served by NVUSD. Future residential, commercial, and industrial development in American Canyon would be required to pay state-mandated impact mitigation fees to provide funding for additional schools to serve the area, pursuant to Senate Bill 50. Pursuant to Section 65995(h) of the California Government Code the payment of statutory fees "… is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." The mandatory payment of impact mitigation fees would serve as full and complete mitigation for future development. Therefore, future development facilitated by the project would not result in substantial adverse physical impacts associate with the provision of or need for new or physically altered schools, the construction of which could cause significant environmental impacts. This impact would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 1d:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?
Threshold 2:	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
Threshold 3:	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact PS-3 Development facilitated by the project would increase the population in the Planning Area, which would increase the use of parks and recreational facilities. Adherence to American Canyon Municipal Code regulations and proposed 2040 General Plan policies would ensure impacts related to parks and recreational facilities would be less than significant.

Future development facilitated by the project would result in an increase to the Planning Area's population, which would result in an incremental increase in demand on existing public parks or other recreational facilities. The City's existing service ratio is approximately 34.4 acres per 1,000 residents for the existing population of 21,758.[4] With the project, the addition of a maximum of 10,734 residents would decrease the service ratio to 22.9 acres per 1,000 residents.[5] Although there would be a reduction, this would still be consistent with the City's proposed goal of 5 acres of parkland per 1,000 residents (see proposed Policy ENV-6.1 below). The population growth associated with the project would not require the need for new recreational facilities.

The 2040 General Plan provides the following proposed policies that would ensure adequate park and recreation facilities are provided in the Planning Area:

- **Policy LU-1.8: Infrastructure Coordination.** Ensure that new development consistent with the Land Use Plan is coordinated with the provision of adequate public infrastructure (e.g., transportation facilities, capital improvements, wastewater collection and treatment, water supply, electrical, natural gas, telecommunications, solid waste disposal, and storm drainage) and public services (e.g., governmental administrative, police, fire, recreation).
- **Policy ENV-6.1: Park Standards.** Provide a variety of mini, neighborhood, community, and regional park facilities to achieve a minimum standard of 5 acres of parkland per 1,000 residents.
- **Policy ENV-6.3: Parks System**. Work toward the establishment of a of public parks system interconnected by off-street trails or bicycle lanes.
- **Policy ENV-6.9: Broadway District Specific Plan Parks.** Evaluate feasible locations for public parks to serve residents in the Broadway District Specific Plan area.
- **Policy ENV-6.10: Watson Ranch Specific Plan.** Incorporate by reference the Watson Ranch Specific Plan recreation program which includes private recreation facilities, public parks, trails, and community center and plaza.
- **Policy ENV-6.12: Park Dedications.** Review the Subdivision Ordinance as necessary to ensure park dedication requirements remain consistent with the Subdivision Map Act.

[4] 34.4 acres per 1,000 residents = (744 acres of parks / 21,758 persons) * 1,000 persons
[5] 22.4 acres per 1,000 residents = (744 acres of parks / 32,492 persons) * 1,000 persons

- **Policy ENV-6.14: Park Fee Revenue.** Periodically review the parks and recreation fee structure to ensure it is meeting established cost-recovery objectives without placing an excessive financial burden on residents. (Source: Existing Policy 7.8.5 modified)
- **Policy ENV-6.15: Park Impact Fee.** The City shall update, as needed and appropriate, the park in-lieu fee assessed to all new development.
- **Policy ENV-6.26: Park Maintenance.** Rehabilitate existing American Canyon parks based on such measures as increased public access, lower maintenance costs and increased service delivery.

In addition, pursuant to Chapter 15.08 of the American Canyon Municipal Code, future development facilitated by the project would be required to pay impact fees, which would promote the maintenance and expansion of public parks. The project does not include any specific development proposals for parks or recreational facilities; however, any future development proposals for parks and/or recreational facilities would be subject to City review, including environmental analysis pursuant to CEQA. Therefore, development facilitated by the project would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered parks or result in substantial adverse impacts due to the construction or expansion of recreational facilities. These impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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4.11 Transportation

This section summarizes the transportation network that serves the Planning Area and analyzes the impacts on transportation due to the project.

4.11.1 Setting

a. Streets and Highways

The City of American Canyon is located in southern Napa County, approximately 35 miles northeast of San Francisco. Adjacent and south of the City limits is the City of Vallejo in Solano County. North of the City limits, a succession of cities in Napa County are located along State Route (SR) 29, which serves the main commercial corridor through the center of American Canyon. SR 29 is a main route to wine country destinations. These cities include Napa, Yountville, St. Helena, and Calistoga. As with American Canyon, these cities are bisected by SR 29.

The transportation network serving the area includes a network of city and county-maintained streets and state-maintained highways. SR 29 bisects the City at grade with one bridge over the Union Paciific Railroad. SR-29 serves as a main thoroughfare for local and pass-through traffic to regional connections and access to local properties . In addition, the City of American Canyon streets serve a variety of users, including pedestrians, bicyclists, transit riders, passenger cars, and heavy trucks for freight with a mix of local, recreational, and regional trips. American Canyon Road is a major east-west arterial street that connects with the Interstate (I-) 80 freeway to the east. The City lies generally northwest of the I-80/ SR 37 interchange.

b. Pedestrian and Bicycle Facilities

The Highway Design Manual, published by the California Department of Transportation (Caltrans), classifies bikeways into four categories:

- Class I Multiuse Path: a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- Class II Bike Lane: a striped and signed lane for one-way bike travel on a street or highway.
- Class III Bike Route: signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- Class IV Bikeway: also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

There are currently over 13 miles of bicycle network within the City of American Canyon, including over 8 miles of Class I multiuse paths, 2.8 miles of Class II bike lanes, and over 2 miles of Class III designated bicycle routes on public roadways. While most of the City has sidewalks, , several older neighborhoods of the City have limited or lack pedestrian infrastructure. There is minimal sidewalk infrastructure along SR 29.

c. Transit Services

Public transportation within the City is provided by American Canyon Transit, which is a part of the Napa Valley Transportation Authority (NVTA) Vine Transit system. American Canyon Transit is a fixed route and on-demand, door-to-door, transit service within specific areas of the city. Vine Transit's Route 29 (Napa-BART) Express connects the BART Station in El Cerrito to the Redwood Park-n-Ride in the City of Napa and stops in American Canyon at the Post Office on Crawford Way.

d. Taxi and On-demand Ride-hailing

On-demand private taxi services are available in the project site 24 hours a day. Taxis can be used for trips within the Planning Area and farther destinations, including nearby airports. Other ride-hailing applications are also available in the Planning Area and provide transportation throughout the Bay Area.

e. Rail Transportation

Rail transportation in the City is currently limited to freight service only. No commuter rail service exists in the City or County. The main rail line in the City is owned by Union Pacific Railroad Company and enters the City parallel to and on the east side of SR 29 at the Solano County line.

f. Aviation

The Napa County Airport is northwest of the City limits in unincorporated lands. It is a General Aviation airport with charter flights available, but no scheduled commercial flights. The airport can accommodate most private aircraft including jets, up to 120,000 pounds. The airport was built by the United States Army Air Force in 1942 and was deeded to Napa County after World War II for civilian use. In 1971 International Air Services Company opened a flight training school at the airport.

4.11.2 Regulatory Setting

a. Federal Regulations

Americans with Disabilities Act of 1990

The Americans with Disabilities Act (ADA) of 1990 provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for people with disabilities. To implement this goal, the United States Access Board, an independent Federal agency created in 1973 to ensure accessibility for people with disabilities, has created accessibility guidelines for public rights-of-way. While these guidelines have not been formally adopted, they have been widely followed by jurisdictions and agencies nationwide in the last decade. The guidelines, last revised in July 2011, address various issues, including roadway design practices, slope and terrain issues, pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way. The guidelines apply to all proposed roadways in the City.

Federal Highway Administration

The Federal Highway Administration (FHWA) is the agency of the U.S. Department of Transportation (DOT) responsible for the federally funded roadway system, including the interstate highway network and portions of the primary state highway network. FHWA funding is provided through the Moving Ahead for Progress in the 21st Century Act (MAP-21). MAP-21 can be used to fund local transportation improvement projects, such as projects to improve the efficiency of existing roadways, traffic signal coordination, bikeways, and transit system upgrades.

b. State Regulations

California Department of Transportation

Caltrans is responsible for planning, designing, constructing, and maintaining all state highways. The jurisdictional interest of Caltrans includes state highways and facilities and extends to improvements to roadways at the interchange ramps serving area freeways. Any federally funded transportation improvements would be subject to review by Caltrans staff and the California Transportation Commission.

Circulation Element

California law mandates the development of a Circulation Element as part of General Plans (often titled as the "Transportation Element" or "Mobility Element"). The Circulation Element must contain the "general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities," all correlated with the land use element of the General Plan per Government Code Section 65302 (b). In addition, the General Plan must incorporate "Complete Streets" policies, as described in the section below.

Complete Streets Act

The California Complete Streets Act (AB 1358) adopted in 2008, requires that cities and other public agencies incorporate "Complete Street" policies when updating their General Plan Circulation Element. The term "Complete Streets" refers to a balanced, multimodal transportation network that meets the needs of all users of streets, including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, public transportation, and seniors. A "Complete Street" is one that provides safe and convenient travel in a manner that is suitable to the local context. Complete Streets make travel safe for all users, including bicyclists, pedestrians, motorists, transit vehicles, and people of all ages and abilities. Each street does not need to provide dedicated space to all users, but the network must accommodate the needs of all users.

Capital Improvement Programs

California Government Code Section 65401 specifies that public works projects must be in conformity with the General Plan. In practice, this requires that the City, during each adoption of the Five-Year Capital Improvement Program (CIP), make findings that the proposed City of American Canyon Five-Year CIP is in conformance with the General Plan, including the Mobility Element.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) is the State agency responsible for rail safety. The CPUC's jurisdiction includes railroad interlocking plants and public highway grade crossings. CPUC approval is required to modify a railroad interlocking plant (including construction of a new spur track) or modification to an existing public railroad grade crossing. Completion and submittal of a General Order 33-B is required for any proposed work to a railroad interlocking plant (e.g., spur track), and a General Order 88-B is required for any proposed work to a public highway grade crossing.

Senate Bill 743

California Senate Bill (SB) 743, passed in 2013, addresses a range of topics and aims to better promote statewide policies that (a) combat climate change by reducing greenhouse gas emissions and particulates; (b) encourage infill development and a diversity of uses instead of sprawl; and (c) promote multi-modal transportation networks, providing clean, efficient access to destinations and improving public health through active transportation.

SB 743 changed the way transportation impact analyses are conducted as part of compliance with the California Environmental Quality Act (CEQA). These changes eliminated automobile delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts under CEQA. Prior rules treated automobile delay and congestion as an environmental impact. SB 743 required the CEQA Guidelines to prescribe an analysis that better accounts for transit and reducing greenhouse gas emissions. In December 2018, Office of Planning and Research (OPR) released the final update to CEQA Guidelines consistent with SB 743 that went into effect statewide on July 1, 2020, which state that vehicle miles traveled (VMT) is "generally" the most appropriate metric of transportation impacts to align local environmental review under CEQA with California's long-term greenhouse gas emissions reduction goals. At the same time as the release of the updated CEQA Guidelines, OPR also released a non-binding *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which outlines potential VMT analysis methodologies and thresholds of significance for use by agencies in California based on substantial evidence developed by OPR related to achievement of the State's greenhouse gas emissions reductions targets.

Although OPR provides recommendations for adopting new impact analysis guidelines, lead agencies have the final say in designing their methodology, provided that the selected analysis methodology aligns with the SB 743 goals to promote infill development, reduce greenhouse gases, and reduce VMT. The City's approved methodology and thresholds for transportation impacts consistent with SB 743 are described in Section 4.11.3, *Impact Analysis*.

c. Regional Transportation Plans

Plan Bay Area 2050

The Regional Transportation Plan and Sustainable Community Strategy (RTP/SCS) for the San Francisco Bay Area, named Plan Bay Area 2050 was jointly produced and adopted by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) on October 21, 2021. Plan Bay Area 2050 is the strategic update to Plan Bay Area 2040, and it connects the elements of housing, the economy, transportation, and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face

of unexpected challenges. It is a roadmap to help Bay Area cities and counties preserve the character of our diverse communities while adapting to the challenges of future population growth. The SR 29 corridor has been designated by MTC and ABAG as a Priority Development Area (PDA), meaning that it is recognized as an area with substantial opportunity for infill development near transit. PDAs play a critical role in accommodating future growth in the regional agencies' SCS plans.

Countywide Transportation Plan

The NVTA oversees the countywide transportation plan for Napa County. The countywide transportation plan outlines priorities for the NVTA and Napa County's transportation system to relieve congestion, improve traffic safety, create more active transportation infrastructure, provide more reliable and frequent bus service, and maintain and repair the existing transportation system. Local planning efforts led by NVTA have resulted in the development of preliminary concepts for SR 29 that have been presented to the public through workshops for input and comment. Some of these initial concepts were evaluated in more detail through the regional NVTA study and subsequent public workshops. Options already discussed with the community include creative intersection capacity enhancements, including roundabout options.

d. Local Regulations

American Canyon Bicycle Plan

The City of American Canyon updated the Bicycle Plan in February 2020. The Bicycle Plan was prepared in accordance with the California Bicycle Transportation Act as part of the Napa Countywide Bicycle Plan and was coordinated with existing City and Regional Plans at the time of its adoption. The Bicycle Plan adoption was one of several City actions implementing SB 375, the Sustainable Communities Strategy Act (City of American Canyon 2020).

American Canyon Pedestrian Plan

The City of American Canyon adopted a Pedestrian Plan in June 2017. Together with the Bicycle Plan, the Pedestrian Plan creates an Active Transportation Plan that will position American Canyon to effectively compete for project funding. This plan follows the Caltrans Active Transportation Program (ATP) Guidelines, which outline statewide requirements for what should be included in active transportation plans (City of American Canyon 2017).

American Canyon Vehicle Miles Travelled Policy

SB 743 also requires local jurisdictions to reduce automobile travel by replacing LOS from transportation analysis under CEQA with Vehicle Miles Traveled ("VMT"), or another measure that "promote(s) greenhouse gas emissions reduction, development of multimodal transportation networks, and a diversity of land uses." In August 2023, the City of American Canyon adopted a Vehicle Miles Travelled (VMT) policy (Resolution 2023-72).

The City's Traffic Model calculates the existing rate of residential VMT per capita to be 16.6 miles and the existing daily rate of VMT per employee is estimated to be 34.1 miles. The VMT policy requires new development to improve the existing citywide VMT rate by 19 percent, consistent with the California Air Resources Board (CARB) 19 percent reduction target in per capita greenhouse gas emissions from passenger vehicles by 2035, when compared to 2005 for the nine-county San Francisco Bay Area region. The VMT threshold standard applies to all General Plan amendments, long-range plans, discretionary development applications, and transportation projects.

4.11.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on transportation if it would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
2. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment); or
4. Result in inadequate emergency access

Methodology

The methodology for assessing impacts under thresholds 1, 3 and 4 is qualitative in nature and considers the existing regulations in place that would minimize potential impacts related to transit, roadway, bicycle and pedestrian facilities; geometric design features; and emergency access.

Impact TRA-2 evaluates whether the project would conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), which describes specific considerations for analyzing transportation impacts as amended on July 1, 2020 pursuant to SB 375. CEQA Guidelines Section 15064.3(b) states that VMT is "generally" the most appropriate measure of transportation impacts. No particular methodology or metric is mandated by Section 15064.3(b) and the methodology or metric is left to the lead agency, bearing in mind the criteria the legislature had in mind for determining the significance of transportation impacts in SB-743. These were expressed in Public Resource Code section 21099(b)(1), which states: "[t]hose criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

The assessment of VMT impacts for this EIR under Impact TRA-2 was determined by utilizing the American Canyon travel demand model to forecast the typical daily weekday rates of VMT per capita attributable to the residential population of American Canyon, and VMT per employee attributable to jobs in American Canyon. The American Canyon travel demand model is a trip-based model and identifies the following estimates:

- Residential VMT per capita was estimated based on the VMT attributable to home-based trip productions, to and from residences in American Canyon.
- VMT per employee was estimated based on the VMT associated with home-based work (HBW) trips, to and from places of employment in American Canyon.

VMT impacts would be considered potentially significant if the forecasted rate of residential VMT per capita or VMT per employee for the project were to exceed 81 percent of the existing rate of VMT in each category for American Canyon, based on the American Canyon travel demand model.

Table 4.11-1 summarizes the existing weekday daily rates of VMT and corresponding significance thresholds. There are an estimated 22,959 residents[1] and 4,442 jobs in American Canyon under existing conditions according to the City's Traffic Model (based on U.S. Census Bureau estimates for the years 2017 and 2018, which were adjusted to reflect land use changes since 2018). The existing rate of residential VMT per capita is estimated to be 16.6 miles and the existing daily rate of VMT per employee is estimated to be 34.1 miles per employee. VMT impacts resulting from the proposed 2040 General Plan would therefore be considered significant if the forecasted year 2040 rate of residential VMT per capita under the proposed General Plan were to exceed 13.4 miles, or if the forecasted year 2040 rate of VMT per employee were to exceed 27.6 miles.

Table 4.11-1 VMT Impact Thresholds

Scenario	Residential VMT per Capita	VMT per Employee
Existing Conditions	16.6	34.1
Significant Impact Threshold (81 percent of Existing rate)	**13.4**	**27.6**

Source: American Canyon Travel Demand Model, GHD, December 2022

b. Project Impacts and Mitigation Measures

Threshold 1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact TRA-1 THE PROJECT WOULD NOT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING THE CIRCULATION SYSTEM AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The 2040 General Plan would be consistent with the California Complete Streets Act (AB 1358), which requires that cities and other public agencies incorporate "Complete Street" policies when updating their General Plan Circulation Element. Complete Streets make travel safe for all users, including bicyclists, pedestrians, motorists, transit vehicles, and people of all ages and abilities. The Mobility Element incorporates the recommendations of the American Canyon Bicycle Plan and American Canyon Pedestrian Plan. The circulation network plan identified in the Mobility Element is consistent with recent regional planning efforts for SR 29 that would maintain its current 4-lane configuration. The proposed Mobility Element includes the following proposed policies that are relevant to ensuring consistency with other applicable programs and plans that emphasize multi-modal transportation, including the Complete Streets Act, American Canyon Bicycle Plan, and American Canyon Pedestrian Plan:

- **MOB-1.1: Complete Streets.** Maintain and update street standards that that serves not just automobile operations, but also multi-modal movement and adjacent land uses, including pedestrians, motorists, bicyclists, and transit riders of all ages and abilities, in a form that is compatible with and complementary to adjacent land uses, and promotes connectivity between uses and areas.
- **MOB-1.4: Development Review**. Evaluate new development to ensure that the safety, comfort, and convenience of pedestrians, bicyclists and transit users are given equal level of consideration to motor vehicle operators.

[1] These estimates are based on the City's Traffic Model, which included some properties outside the City limits. For this reason, this population number does not match the population number identified in other sections of this environmental impact report. Nonetheless, both estimates are similar.

- **MOB-1.6: Transportation Facility Construction and Modification.** When constructing or modifying transportation facilities, strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists, and pedestrians appropriate for the road classification and adjacent land use.
- **MOB-1.7: Promote Walking and Bicycling.** Promote walking and bicycling for transportation, recreation, and improvement of public health.
- **MOB-1.9: SR 29 Mobility.** Work with regional partners, including Caltrans, NVTA, and other agencies to explore a complete streets approach that will expand the travel capacity of SR 29.
- **MOB-1.16: Agency Coordination.** Coordinate with State, Regional, County, and neighboring agencies to ensure highway improvements (i.e.: SR-12, SR-29, and SR-37) appropriately consider impacts to American Canyon.
- **MOB-1.17: Reduce Vehicle Miles Traveled.** Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop.
- **MOB-1.20: Bicycle Plan Funding.** Include funding for the City's Bicycle Plan updates and bikeway improvements consistent with the Bicycle Plan in the City's transportation financing program and TIF, recognizing the multi-modal travel needs of the City.
- **MOB-1.21: Address Mobility Needs.** Recognize and meet the mobility needs of persons using wheelchairs and those with other mobility limitations.
- **MOB-1.22: Non-motorized Circulation System.** Provide safe and direct pedestrian routes and bikeways between places.
- **MOB-1.23: Pedestrian Connections to Employment Destinations**. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.
- **MOB-1.24: Bicycle Facilities.** Bicycle facilities shall be provided to complete a continuous bikeway system, consistent with state standards, as shown on the Bikeway Plan Map. In cases where existing right of way constraints limit development of Class II or Class IV facilities, Class Ill signage and demarcation may be permitted at the discretion of the City Engineer. Deviations from these standards and from the routing shown on the diagram shall be permitted with the approval of the City Engineer.
- **MOB-1.26: Universal Design.** Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts such as bus pullouts and shelters, street lighting, and curbside management features such as pickup/drop-off locations for shared ride/ transit network companies and spaces for delivery vehicles to park safely for short durations. *(Source: Modified Existing Policy 2.7)*
- **MOB-1.28: Coordination with Adjacent Jurisdictions**. Coordinate with adjacent jurisdictions to ensure connected and consistent non-vehicular facilities, including bridges, grade-separate crossings, as appropriate.

Compliance with these proposed policies would ensure that the project is consistent with other applicable programs and plans that emphasize multi-modal transportation and impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2:	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Impact TRA-2 The future (2040) citywide rate of Residential VMT per Capita with the proposed 2040 General Plan would be higher than the significance threshold. The project would therefore conflict with or be inconsistent with CEQA Guidelines 15064.3(b) and impacts would be significant.

As described in the Methodology subsection of Section 4.15.3, *Impact Analysis,* VMT impacts from the project were analyzed using the City of American Canyon travel demand model. VMT impacts would be considered potentially significant if the forecasted rate of VMT per employee for the project exceed 27.6 miles or the rate of residential VMT per capita of the project exceeded 13.4 mile.

Currently, the existing rate of residential VMT per capita exceeds the significance thresholds for both VMT per Resident and VMT per Employee. Overall, future development is anticipated to add significant employment opportunities to an area that currently has fewer jobs than employed residents. As such, a larger share of future residents of American Canyon and adjacent communities would be able to reduce their work commute distance by being employed closer to their residence, supporting regional efforts to reduce VMT. Table 4.11-2 compares the model-forecasted rates of residential VMT per capita and VMT per employee under both Existing and Future (Year 2040) conditions. As shown the citywide rate of residential VMT per capita would be reduced by more than four percent from Existing/Baseline Conditions but would continue to exceed the significance threshold. VMT per employee would be reduced by more than 24 percent from Existing/Baseline Conditions and would be below the significance threshold. Therefore, transportation impacts associated with VMT would be potentially significant since the forecasted rate of 15.9 VMT per resident would exceed the significance threshold of 13.4.

Table 4.11-2 Project VMT

Scenario	VMT per Resident	VMT per Employee
Existing/Baseline Conditions	16.6	34.1
Future (2040) Conditions	15.9	25.7
Significance Threshold	13.4	27.6
Impact Finding	**Significant**	Less than Significant

Source: American Canyon Travel Demand Model, GHD, July 2024.

The 2040 General Plan also includes the following proposed policies that are potentially self-mitigation by increasing the use of multi-modal transportation which would reduce VMT:

- **MOB-1.1: Complete Streets.** Maintain and update street standards that that serves not just automobile operations, but also multi-modal movement and adjacent land uses, including

pedestrians, motorists, bicyclists, and transit riders of all ages and abilities, in a form that is compatible with and complementary to adjacent land uses, and promotes connectivity between uses and areas.

- **MOB-1.4: Development Review.** Evaluate new development to ensure that the safety, comfort, and convenience of pedestrians, bicyclists and transit users are given equal level of consideration to motor vehicle operators.
- **MOB-1.6: Transportation Facility Construction and Modification.** When constructing or modifying transportation facilities, strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists, and pedestrians appropriate for the road classification and adjacent land use.
- **MOB-1.7: Promote Walking and Bicycling.** Promote walking and bicycling for transportation, recreation, and improvement of public health.
- **MOB-1.9: SR 29 Mobility.** Work with regional partners, including Caltrans, NVTA, and other agencies to explore a complete streets approach that will expand the travel capacity of SR 29.
- **MOB-1.16: Agency Coordination.** Coordinate with State, Regional, County, and neighboring agencies to ensure highway improvements (i.e.: SR-12, SR-29, and SR-37) appropriately consider impacts to American Canyon.
- **MOB-1.17: Reduce Vehicle Miles Traveled.** Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop.
- **MOB-1.20: Bicycle Plan Funding.** Include funding for the City's Bicycle Plan updates and bikeway improvements consistent with the Bicycle Plan in the City's transportation financing program and TIF, recognizing the multi-modal travel needs of the City.
- **MOB-1.21: Address Mobility Needs.** Recognize and meet the mobility needs of persons using wheelchairs and those with other mobility limitations.
- **MOB-1.22: Non-motorized Circulation System.** Provide safe and direct pedestrian routes and bikeways between places.
- **MOB-1.23: Pedestrian Connections to Employment Destinations.** Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.
- **MOB-1.24: Bicycle Facilities.** Bicycle facilities shall be provided to complete a continuous bikeway system, consistent with state standards, as shown on the Bikeway Plan Map. In cases where existing right of way constraints limit development of Class II or Class IV facilities, Class Ill signage and demarcation may be permitted at the discretion of the City Engineer. Deviations from these standards and from the routing shown on the diagram shall be permitted with the approval of the City Engineer.
- **MOB-1.26: Universal Design.** Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts such as bus pullouts and shelters, street lighting, and

curbside management features such as pickup/drop-off locations for shared ride/ transit network companies and spaces for delivery vehicles to park safely for short durations. (Source: Modified Existing Policy 2.7)

- **MOB-1.28: Coordination with Adjacent Jurisdictions**. Coordinate with adjacent jurisdictions to ensure connected and consistent non-vehicular facilities, including bridges, grade-separate crossings, as appropriate.

Compliance with these proposed policies combined with the increased provision of jobs in American Canyon would support efforts to reduce VMT. However, VMT would still exceed the significance threshold of 13.4. Typical VMT mitigation would require the implementation of transportation demand management (TDM) programs as a condition of approval for new residential development projects to achieve specific reductions in VMT. However, most successful TDM programs focus on employment sites rather than residential development. TDM programs are intended to maximize travel choices, while focusing on trip reduction and parking needs. These types of VMT reduction programs, when focused on residential development are challenging to implement and monitor. Further, the General Plan policies identified above already encompass those policies and programs that may have some likelihood of success that would otherwise be incorporated into a TDM.

As discussed above, VMT per employee would be below the significance threshold but VMT per resident would exceed the significance threshold by 2.5. As such, it is unlikely that such measures would be effective in lowering the citywide rate of VMT per resident below the applicable threshold. "an EIR need not analyze every imaginable alternative or mitigation measure, its concern is with feasible means of reducing environmental effects." *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal.App.5th 63, 159–161. Here, there are no additional known policies or mitigations measures that could feasibly be implemented that would further reduce the citywide rate of VMT per resident, more than it has already been reduced, to a less than significant level.

Mitigation Measures

Potentially self-mitigating measures are included within the 2040 General Plan which would increase the use of multi-modal transportation and could reduce VMT. However, measures to reduce specific VMT per resident are challenging to implement and monitor in a meaningful way. Other than the self-mitigating measures and policies outlined above, there is no known additional feasible mitigation that is likely to further reduce the citywide rate of VMT per resident.

Significance After Mitigation

The 2040 General Plan includes policies which would reduce VMT. However, because there is no specific mitigation to reduce VMT per resident and the General Plan policies cannot realistically enforce mitigation programs or policies that might reduce VMT below the threshold, impacts would remain significant and unavoidable.

Threshold 3:	Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Impact TRA-3 THE PROJECT WOULD NOT SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project is a program-level planning effort which does not directly address geometric design features. The 2040 General Plan includes proposed polices that would ensure efficient circulation and adequate access are provided in the city, which would minimize hazards.

Future development would be required to comply with street design standards, Manual of Uniform Traffic Control Devices (MUTCD) requirements, fire code requirements and zoning regulations, ensuring that the adoption of the 2040 General Plan would minimize design hazards. In addition, the Mobility Element includes Vision Zero goals and policies. Vision Zero aims to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility for all. The proposed Mobility Element includes the following key policies focusing on safety:

- **MOB-2.1: Vision Zero.** Strive for the elimination of all traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all.
- **MOB-2.2: Context Sensitive Design.** Improve multimodal transportation safety by expanding the City's non-motorized transportation infrastructure using context sensitive design.
- **MOB-2.3: Bicycle Safety.** Increase the safety of those traveling by bicycle by sweeping debris from and repairing bicycle paths and lanes.
- **MOB-2.4: Improved Bikeway Visibility.** Use visual cues, such as brightly colored paint on bike lanes or a one-foot painted buffer strip, along bicycle routes to provide a visual signal to drivers to watch out for bicyclists and nurture a "share the lane" ethic, prioritizing bikeways with recent automobile-bicycle collisions.
- **MOB-2.5: Speeds on Residential and Arterial Streets**. Explore innovative ways to reduce vehicular speeds through residential neighborhoods to posted speed limits, such as implementing traffic calming strategies such as: enhanced cross walks, lighted crosswalks, reducing lane widths, and others).
- **MOB-2.6: Site Designs and Safety**. Ensure, through the development review process, that development projects follow best design practices to reduce conflicts between multiple travel modes.

Compliance with these proposed policies, as well as compliance with existing design standards, MUTCD requirements, fire code requirements, and zoning regulations, would ensure that implementation of the project would not substantially increase hazards due to a geometric design feature or incompatible use. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 4: Would the project result in inadequate emergency access?

Impact TRA-4 THE PROJECT WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Implementation of the project would result in increased development and facilitate population growth, which would increase the number of users on the City's transportation system. The existing street and highway system (including SR 29, American Canyon Road, and streets connecting to

Vallejo streets) has sufficient capacity to ensure adequate emergency access provisions to accommodate increased population and growth. Future development would be required to comply with existing regulations, including fire code, building code, street design standards, and zoning regulations that address site-specific provisions related to emergency access. This will further ensure that the adoption of the proposed General Plan would minimize impacts on emergency access. In addition, the proposed Mobility Element includes the following policies to support a key goal of ensuring adequate evacuation routes in the event of an emergency:

- **MOB 3.1: Parallel North-South Roadway**. Prioritize construction of roadways that provide alternate vehicle access parallel to Highway 29 through American Canyon and coordinate continuation of parallel routes outside the City with Regional Agencies.
- **MOB-3.2: Evacuation Routes.** Identify important roadways that would serve as evacuation routes in the event of an emergency.
- **MOB-3.3: Natural Hazard Awareness Week.** Coordinate with the American Canyon Fire Protection District to conduct outreach to the community on emergency evacuation routes in our community.
- **MOB-3.4: Evacuation Route Obstacles.** Evaluate potential physical conditions that could impede an evaluation route. Examples include overhead utility poles, dead/ dying trees, aging infrastructure.

Compliance with these proposed policies, as well as compliance with existing regulations (i.e., fire code, building code, street design standards, and zoning regulations) that address site-specific provisions related to emergency access, would ensure that implementation of the project would not result in inadequate emergency access. Impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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4.12 Tribal Cultural Resources

This section summarizes the potential tribal cultural resources in the Planning Area and analyzes the impacts on tribal cultural resources due to the project.

4.12.1 Setting

a. Ethnographic Overview

The Planning Area is in the traditional tribal territory of the Patwin, members of the larger Wintun Tribe. Patwin territory extends from Clear Lake to the San Pablo and Suisun bays. The Patwin may be further separated into River Patwin along Sacramento River, as well as in the Sacramento and Suisun valleys towards the San Pablo and Suisun bays; and the Hill Patwin along the northern Coast Ranges, closer to Clear Lake Basin (Elliott 2011). Patwin language is a subgroup of the Penutian language family along with Wintun (Johnson 1978). Historically, the southern Patwin were distinguished from the northern Wintun, based on the linguistically distinct words for people: Win-tun or Win-tu in the north and Pat-win in the south (Kroeber 1925). For this discussion, Patwin refers to both Patwin and Wintun peoples.

Political organization consists of small tribelets and several satellite settlements. A male chief would head each tribelet and direct activities. Their main purpose was to govern ceremonial and economic activities of the village. His administration included tree grove and fishing ownership, how food would be distributed among the villagers, and what ceremonies would be held and who would be invited to join (McKern 1922, Johnson 1978). This position typically passed down patrilineally. Yet, the village could determine a chief to be incompetent and village elders would then elect a new Chief based on qualifications (McKern 1922).

The Patwin family unit had three levels. The first is the paternal family, which includes the extended family following male blood relations. The second is the family social group that dictated marital matrilocality, with the husband moving to the area of his wife. On the third level, the household of the nuclear family would situate in proximity of the family social group. Other types of family-like units would take part in specific activities. Paternal families participated in one of four practices that passed down secret medicines and charms. Trade families engaged in producing or consolidating resources, such as hunted animals or musical instruments for distribution. Shamanistic families utilized supernatural powers to influence the spirits. Official families held one individual that served in an official capacity, such as ceremonial song leader or hesi dance fire tender (McKern 1922). Additionally, a series of ceremonial dances took place from October to May related to the Kuksu Cult. These dances would take place in a small and secret ceremonial dance hall with an earth-covered roof (Kroeber 1925).

Patwin residential structures were typically elliptical or circular shaped and earth-covered or semi-subterranean. The earth covering was imported from outside the villages. Villages consisted of family homes, a ceremonial dance house, menstrual hut, and a sweat lodge.

Patwin subsistence practices centered on the use of acorns and other seeds as a primary food source. River Patwin would process these foods with wooden log mortars, while Hill Patwin preferred flat stone slab-and-basket hopper mortars (Elliott 2011). Both groups engaged in hunting of deer, tule elk, antelope, bear, turtles, and various species of waterfowl. Hunting was done typically with a sinew-backed bow and arrow. Fishing was a particularly important activity for the Patwin, using gates and pens to catch salmon and sturgeon, while pike, steelhead, trout, and smaller

salmon were caught with nets. Additionally, tobacco was collected from along the river and dried for smoking but not cultivated (Johnson 1978).

The Patwin made both twined and coiled basketry, usually from willow and redbud. Baskets were an important tool in their daily lives for transporting, preparing, and storing foods and burial remains. They utilized animal hides for bedding, floor mats, skirts, burial robes, and tobacco sacks. Tule balsa rafts were crafted and used to navigate rivers. Bone, mussel shell, and stone tools were used as knives (Johnson 1978).

4.12.2 Regulatory Setting

a. Federal Regulations

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of the ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native groups to believe, express, and exercise their traditional religions. These rights include but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally-funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

b. State Regulations

Assembly Bill 52

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands the California Environmental Quality Act (CEQA) by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect

on the environment" (Public Resources Code [PRC] Section 21084.2). AB 52 further states when feasible, the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe," and meets either of the following criteria:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k).
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments and with respect to the interests and roles of project proponents, it is the intent AB 52 to accomplish all the following:

1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
2. Establish a new category of resources in CEQA called "Tribal Cultural Resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3. Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
4. Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated (because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources).
5. In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, early in the CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.
6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7. Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.

8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency.

Senate Bill 18

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill [SB] 18) requires local governments to contact, refer plans to and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

CEQA Guidelines 15064.5(c)—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine whether they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a "unique archaeological resource" as defined in PRC Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines Section 15064.5(d); PRC Section 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the

treatment and disposal of the human remains and any associated burial items (CEQA Guidelines Section 15064.5(d); PRC Section 5097.98).

- If human remains are accidentally discovered, the County Coroner must be contacted. If the County Coroner determines that the human remains are Native American, the Coroner must contact the NAHC within 24 hours. The NAHC must identify the Most Likely Descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC Section 5097.98).

c. Local Regulations

City of American Canyon General Plan

The City's Housing Element of the General Plan includes the following policy(City of American Canyon 2023):

- **H-8.12 Yocha Dehe Wintun Nation Treatment Protocol.** In the event any Native American human remains, grave goods, ceremonial items, and items of cultural patrimony are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity, the "Yocha Dehe Wintun Nation Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation" shall be implemented as included as Appendix A to the Housing Element Background Report.

4.12.3 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

Appendix G of the CEQA Guidelines identifies the following criteria for determining whether a project's impacts would have a significant impact to tribal cultural resources:

1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
    b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Methodology

The presence and significance of a potential tribal cultural resource is determined through consultation between lead agencies and local California Native Americans. Impacts to tribal cultural resources are highly dependent on the nature of the resource but, in general, could occur if there is destruction or alteration of the resource and its surroundings, access restrictions to the resource, or other disturbances.

b. Project Impacts and Mitigation Measures

Threshold 1a:	Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?
Threshold 1b:	Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Impact TCR-1 THE PROJECT COULD ADVERSELY IMPACT TRIBAL CULTURAL RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT THROUGH CONSULTATION CONDUCTED PURSUANT TO AB 52.

On August 16, 2022 the City mailed and emailed out letters to the Cortina Band of Indians, Federated Indians of Graton Rancheria, and Yocha Dehe Wintun Nation to inform them of the proposed General Plan Update. To date, one response dated September 14, 2022 was received on from the Yocha Dehe Wintun Nation which stated that the project is within the aboriginal territories of the Yocha Dehe Wintun Nation. The Tribe requested formal consultation with the lead agency, a project timeline, detailed project information, and the latest cultural study conducted for the project. On November 16, 2022; December 9, 2022; and December 12, 2022, the City communicated with the Tribe to coordinate a date and time to meet regarding the General Plan Update. A consultation meeting was held on January 12, 2023 between City staff and representatives of the Yocha Dehe Wintun Nation. During the consultation meeting, the representatives of the Yocha Dehe Wintun Nation identified their want to take a proactive approach related to tribal cultural resources, considering that the area around American Canyon is sensitive and tribal cultural resource finds have occur. City staff identified that the 2040 General Plan would include a policy to follow the Yocha Dehe Wintun Nation Treatment Protocol in the event tribal cultural resources are found. On January 13, 2023, City staff emailed the Yocha Dehe Wintun Nation with the policies that are proposed in the 2040 General Plan to minimize impacts on tribal cultural resources.

The Environment Element of the 2040 General Plan contains the following proposed goals and policies, which would minimize impacts to tribal cultural resources within the City of American Canyon:

Goal ENV-4: Protect cultural and tribal resources.

- **Policy ENV-4.1: Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

- **Policy ENV-4.2: Development.** Ensure that human remains are treated with sensitivity and dignity and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.
- **Policy ENV-4.3: Yocha Dehe Wintun Nation Treatment Protocol**. In the event any Native American human remains, grave goods, ceremonial items, and items of cultural patrimony are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity, the "Yocha Dehe Wintun Nation Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation" shall be implemented as included as Appendix A to the Housing Element.

It remains a possibility that tribal cultural resources may be present within geographic areas affiliated with tribal organizations. In compliance with AB 52, a determination of whether project-specific substantial adverse effects on tribal cultural resources would occur, along with identification of appropriate project-specific avoidance, minimization, or mitigation measures. Due to the programmatic nature of the environmental analysis, it is not possible to fully determine impacts on tribal cultural resources. The project would have a less than significant impact to tribal cultural resources because project-specific tribal cultural resource consultation would occur when specific projects are implemented and because the approved 2023 Housing Element and proposed 2040 General Plan includes policies to comply with the Yocha Dehe Wintun Nation Treatment Protocol (Policy ENV-4.3).

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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4.13 Utilities and Service Systems

This section analyzes the potential effects on utilities and service system related to implementation of the project.

4.13.1 Setting

a. Water Supply and Delivery

The City of American Canyon supplies water service to residential, commercial, and industrial users within the City and its sphere of influence (SOI). The City's potable water service area is approximately 30 square miles. The City water supply is provided from purchased or imported water sources, mainly State Water Project (SWP) water and the City of Vallejo, in addition to supplemental imported water sources. Table 4.13-1 identifies the City's current sources of water, which are discussed in detail after the table.

Table 4.13-1 Current and Projected Sources of Water Supply

Source		Contracted Volume/Capacity (Acre feet/Year)
State Water Project (Table A Allotment) [a]		5,200
Vallejo Permit Water [b]		500
Vallejo Treated Water	2011-2015	2,074
	2016-2021	2,640
	2021-Onward	3,206
Vallejo Emergency Water [c]		500
Groundwater [d]		0
American Canyon Recycled Water [e]		1,241
Napa Sanitation District-Produced Recycled		591

Notes:
[a] Includes allotment for American Canyon and additional supply from Kern County Water Agency
[b] Raw Water delivered pursuant to Vallejo's appropriative right (License 007848), provided pursuant to Addendum 2 dated June 4, 1998.
[c] Available only in dry years
[d] No groundwater is used for citywide supply
[e] As reported 2020 Urban Water Management Plan (UWMP), approximately 1,241 AFY of recycled water are projected by 2035. Maximum capacity of the City's recycled water treatment system by 2035.

Source: City of American Canyon 2023

State Water Project

A significant portion of the City's water supply is obtained through various indirect contracts for water from the SWP. The Napa County Flood Control and Water Conservation District is the State Water Contractor with the California Department of Water Resources (DWR), and the City receives its water through subcontracts with the Napa County Flood Control and Water Conservation District.

Table A Allocation

In January 1967, the American Canyon County Water Agency[1] entered into an agreement with the Napa Flood Control and Water Conservation District for water supply from the North Bay Aqueduct. In 2010, the agreement allowed for the delivery of up to 5,200 acre-feet of water per year.[2] This contract runs through 2035 with provisions for extension. The actual amount of SWP water available to the City under the "Table A" allocation process (the method used by the DWR to allocate water in the SWP system) varies from year-to-year due to hydrologic conditions, water demands of other contractors, SWP facility capacity, and environmental/regulatory requirements. Deliveries have varied between 5 percent (in 2014) and 100 percent (last occurring in 2006) of the contracted amount.

City of Vallejo

In 1996, the City of American Canyon entered into an agreement with the City of Vallejo to allow the purchase of additional water supply. Vallejo receives its water from a variety of sources, including SWP water and an appropriative water right.

Licensed Vallejo Water (Raw)

The City of Vallejo holds an appropriative right for Sacramento Bay-Delta water from the California State Water Resources Control Board (State Water Board) that pre-dates the construction of the SWP (License 7848). The City of American Canyon has an agreement with the City of Vallejo for delivery of up to 500 acre-feet of water per year under this permit. This source of water is more reliable than the City's Table A supply, but the agreement with Vallejo still allows for reductions. Addendum 2 to the 1996 Vallejo Agreement states that "[i]n the event the State Water Resources Control Board, or any other agency, restricts Vallejo's diversion of water [under the appropriative pre-SWP permit] for any reason whatsoever, American Canyon's diversions will be reduced in the same proportion." As such, curtailment of this supply occurs less often than reductions of the City's Table A supply due to environmental or other constraints. Nevertheless, it is possible that the City may not receive its full allotment under this agreement during dry years.[3]

Vallejo Treated Water (Potable)

In 1996, the City of American Canyon entered into an agreement with the City of Vallejo to purchase up to 629 acre-feet per year of potable treated water supply.[4] This agreement included the option for additional (cumulative) purchases in 5-year increments through 2021. Ultimately, this results in a total of 3,206 acre-feet of treated water available for purchase each year by the City from Vallejo for 2021-2040. Under certain conditions, the maximum delivery of this supply may be "reduced in the same proportions as any reduction to Vallejo customers inside the Vallejo city limits."[5]

[1] A predecessor local agency to the City of American Canyon, which was not incorporated until 1992.
[2] A total of 500 acre-feet of this water was obtained through a purchase of water, by the Napa Sanitation District, from Kern County Water Agency in 2000.
[3] For example, Vallejo Permit Water delivery was curtailed in both 2014 and 2015 as well as in 2021 and 2022.
[4] The 1996 Vallejo Agreement is currently the subject of litigation pending in Sacramento Superior Court (Case No. 34-2022-00327471-CU-CO-GDS). While it is speculative to discuss any potential outcome from the litigation, it should be noted that neither party seeks recission of the underlying agreement.
[5] Vallejo Water Service Agreement. May 1, 1996 (Page 7-7 in the 2015 American Canyon UWMP).

Vallejo Emergency Water (Raw)

When the City's Table A water allotment is curtailed, the City of American Canyon has the option to purchase up to 500 acre-feet of emergency raw water supply from Vallejo under an addendum to the 1996 Vallejo Agreement. The 2020 Urban Water Management Program (UWMP) assumes that this water would be available under dry year and multiple dry year scenarios but not during a normal year. During consecutive dry years 3 to 5, the 2020 UWMP assumes a reduction to 400 AF.

Groundwater

The City of American Canyon does not currently rely on groundwater as a source of water, though the 2020 UWMP states that the City remains open to the possibility and will consider potential supply opportunities as they present themselves.

Other Sources of Potable Supply

Dry Year Water Bank

In 2009, the City of American Canyon (along with other SWP contractors) entered into an agreement with DWR to obtain emergency supplies if rice farmers in the Sacramento Valley are willing to make their supplies available. The year-to-year availability of this supply is not known.

Turn-Back Water Pool Program

DWR has a program for interested SWP contractors called the Turn-back Water Pool Program. SWP contractors may choose to sell Table A water or purchase turn-back pool water that is available through the program. The amount of pool water available to the City of American Canyon is not a significant amount. For example, during 2010 the City purchased 17 acre-feet, and in 2012 it purchased 64 acre-feet. The City of American Canyon has not purchased water through this program since 2016.

Napa Treated Water

The City has an agreement with the City of Napa for the purchase of treated (potable) water under emergency conditions, or when the North Bay Aqueduct system is off-line for maintenance or other reasons. Napa treated water provides operational flexibility (such as providing water to customers even when the City's water treatment plant is off-line for an extended period of time). During 2010, the City purchased 306 acre-feet of treated water when the plant was off-line for maintenance-related issues. Under this informal arrangement, the Napa treated water purchase counts against the City's SWP Table A allotment. The City of American Canyon has not purchased water through this program since 2014.

Dry Year Transfer Program

During dry years, varying amounts of additional water may be made available to SWP contractors through DWR's Dry Year Transfer Program, which allows for transfers through a combination of crop idling, groundwater substitution, and changes in reservoir operation. For example, in 2015 the City of American Canyon purchased 92 acre-feet of additional supply (for that year) through this program. Because this option is available to the City on a per year authorization, the long-term reliability of this supply is not known. The City of American Canyon has not purchased water through this program since 2015.

Single Year Transfers

Single year water transfers, typically between agricultural water users and urban suppliers, are commonly used to supplement municipal supplies during dry years. Such transfers are negotiated between parties and may be subject to State Water Board approval, which is routinely granted. In adopting the most recent amendments to the Bay Delta Water Quality Control Plan, the State Water Board assumed such transfers would be employed to meet municipal demand during times of shortage.

Yuba Accord

In 2008, the DWR adopted the Lower Yuba River Accord, an agreement to settle issues related to instream flows in the Yuba River and fisheries habitat. As part of that agreement, the DWR is able to purchase water from the Yuba River Water Agency to, in part, offer to participating SWP contractors as a transfer during dry years. The Napa County Flood Control and Water Conservation District has authorized the execution of Yuba Accord Dry-year Water Purchase Agreement, and the City of American Canyon has the option to purchase water through this agreement in dry years, though at a cost that is considerably higher than under normal conditions. In 2015, the City authorized the purchase of 124 acre-feet through this program to cover projected water supply shortfalls during the drought. The City of American Canyon has not purchased water through this program since 2015.

Recycled Water

American Canyon Recycled Water

The City of American Canyon completed the first phase of its Recycled Water Distribution System Project in 2010, which included a 1-million-gallon reservoir, distribution piping, and associated improvements at the City's water treatment plant. Initially, 13 users were connected to the system and 73 acre-feet of water was delivered in 2010. The Recycled Water Master Plan projected over 1,200 acre-feet of water demand at buildout in 2035 for landscaping and agricultural irrigation (City of American Canyon 2016a). However, utilization of this supply is dependent on connection of additional users and completion of additional distribution pipe segments. Currently, the City produces recycled water to meet demand on an as needed basis. The 2020 UWMP identifies 1,241 acre-feet per year (AFY) as the full system capacity by 2035. In 2022, the Recycled Water Delivery Program allowed American Canyon to conserve more than 3-million gallons of potable water during emergency drought conditions (City of American Canyon 2024). However, due to plentiful rain and increased Sierra snowpack during the winter of 2023, the Department of Water Resources announced a 100 percent allocation from the State Water Project this year. As such, American Canyon did not continue the Recycled Water Delivery Program into 2023 or 2024 (City of American Canyon 2024).

Water Treatment Plant

The City owns, maintains, and operates the Water Treatment Plant (WTP), which has a maximum capacity of 5.5 million gallons per day (mgd) with an average daily demand of approximately 3 mgd. Treated water is delivered by gravity to the 2.5-million-gallon (MG) water storage tank located at the WTP and flows from the tank to the distribution system. The potable water distribution system consists of approximately 102 miles of water mains, 3 storage tanks, and 2 booster pump stations.

The total demand (potable and non-potable) in 2020 was approximately 2,613 acre-feet (AF) (City of American Canyon 2023). Residential demands account for 1,454 AF (56 percent) of the total demand; while commercial, industrial, and institutional demands account for 763 AF (29 percent); and landscape irrigation demands account for 139 AF (5 percent) (City of American Canyon 2023). Raw water for agricultural irrigation was 63 AF (2 percent). The remaining balance is attributed to other uses (fire hydrants, construction) at 73 AF (3 percent) and water loss of 121 AF (5 percent) (American Canyon 2023). The per capita water demand was 116 gallons per capita per day in 2020.

b. Wastewater

Introduction

The City and NapaSan provide municipal wastewater and recycled water services within the City's water service area. The City's wastewater collection system consists of gravity pipelines, two force mains (the Main and Industrial Basins from the southern and northern ends of the City, respectively) and a series of pump stations. The wastewater is conveyed to the City's Water Reclamation Facility (WRF) for treatment. Wastewater collected in the NapaSan systems is conveyed to NapaSan's Soscol Water Recycling Facility, which produces treated wastewater and recycled water. The City's recycled water distribution system includes approximately 13 miles of pipeline, a pump station, and two storage tanks with capacities of 1 million gallons and 1.5 million gallons. The City's and relevant portions of the NapaSan's sewer/recycled water service area is shown in Figure 4.13-1.

Water Reclamation Facility

The City owns, maintains, and operates the Water Reclamation Facility (WRF) located near the Napa River. The WRF treats both domestic and industrial wastewater flows and is a secondary/tertiary treatment plant. It began operations in 2002 and employs a Membrane Bio Reactor and ultraviolet light disinfection. Treated wastewater discharges are regulated under National Pollutant Discharge Elimination System (NPDES) Waste Discharge Requirements Order No. R2-2022-2019. The WRF has a total wastewater treatment capacity of 2.5 mgd at average dry weather flow conditions and 5.0 mgd at peak wet weather flow conditions. In 2020, the City treated 1,625 AF of wastewater, which is equivalent to 1.45 mgd (City of American Canyon 2023).[6] In 2020, there was 1.05 mgd of remaining capacity for wastewater treatment.

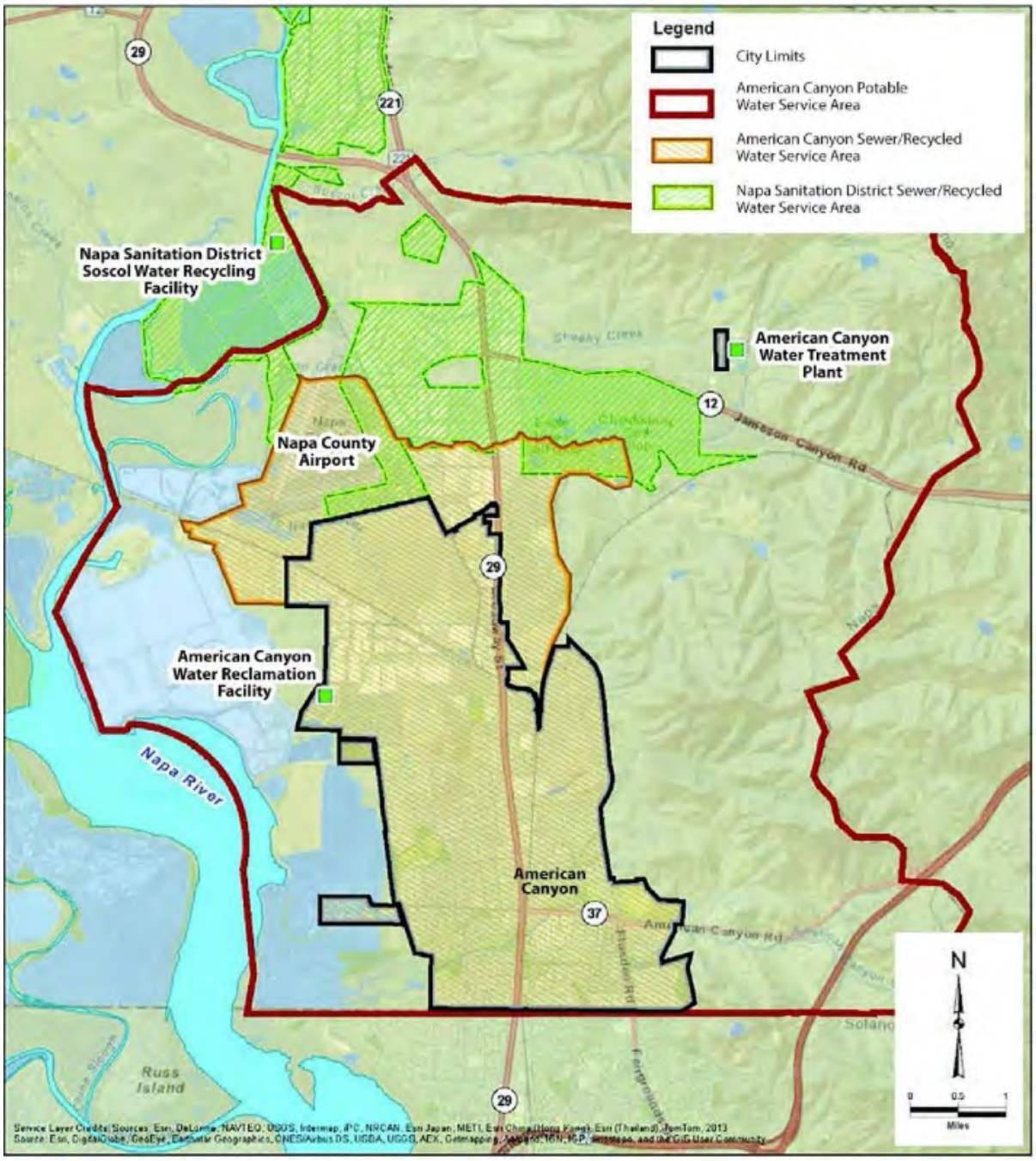
Approximately 17 percent of total influent inflow received at the WRF becomes recycled water. In 2019, 282 acre-feet of recycled water were delivered to various users for non-potable use. The remaining effluent is treated and discharged to the Napa River.

Collection System

The City's wastewater collection system consists of gravity pipelines (53 miles), force mains (5 miles), and five pump stations that convey wastewater to the City's WRF. The City's system operates its collection system to segregate domestic water from high strength industrial wastewater flows. The Kimberly Pump Station and the Sunset Meadows Pump Station collect wastewater from residential areas and deliver 75 percent of the flow to the wastewater treatment plant. The Tower Road and Green Island Sewer Pump Stations transport wastewater from industrial areas in the northern part of the City. These two stations discharge a combination of domestic and industrial wastewater to a common force main and deliver the remaining 25 percent of the flow to the WRF.

[6] 1.45 mgd = [1,625 AF * (325,851 gallons pe 1 acre foot) / 1,000,000 gallons] / 365 days per year

Figure 4.13-1 Water Service Area



a. Storm Drainage

The City of American Canyon is located along the alluvial marshlands of the east bank on the Napa River and the lower slopes of the Sulphur Springs Mountain Range. The watersheds within the City include tributary areas of five creeks. The creeks all drain in a westerly direction from the rolling hills in the east to the Napa River on the west. The existing drainage system in the City consists of natural creeks in the hilly areas, with improved channels in the upland areas and levied channels and sloughs in the lower marshlands near the Napa River.

Developed subdivisions in the City are served by piped drainage facilities that discharge into the creek channels. Watershed boundaries follow ridgelines in the upper elevations, and follow levees, roadways, and other manmade obstructions in the upland and lower watershed areas. The watershed drainages of the five primary creeks in the City are American Canyon Creek, Walsh Creek, North Slough, Fagan Creek, and Sheehy Creek.

An overview of the natural drainage systems and man-made drainage systems are provided in Section 4.15, *Effects Found To Be Less Than Significant* (see subsection 4.15.5). Major storm drainage infrastructure within the City is owned and operated by the City of American Canyon and maintained by the City's Department of Public Works. Storm drainage infrastructure includes drainpipes, concrete channels, culverts, and swales, which convey storm drainage to Rio Del Mar Creek, American Canyon Creek or North Slough before joining Napa River in the west, and then to San Francisco Bay.

The City maintains a Storm Drainage Master Plan and engineering standards that guide the development of the municipal storm drainage system (City of American Canyon 1996). The City requires stormwater discharges to comply with San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) permit requirements and establishes non-point source pollution control measures as required by federal and State law. Stormwater pollution prevention measures for new development projects, such as bioswales, detention ponds, erosion, and sedimentation control, are incorporated in the planning, design, construction, and operation of projects with the potential to create pollutants in stormwater runoff.

b. Solid Waste and Recycling

Residential and commercial trash and recycling services in the City are provided by American Canyon Recology through a franchise waste hauling agreement with the City of American Canyon. Recology transports solid waste from American Canyon to the Devlin Road Recycling & Transfer Facility (DRRTF) where it is loaded into trucks and sent to Potrero Hills Landfill (PHLF) in Suisun (Solano County).

The DRRTF is a 35-acre regional transfer station operated by the Napa-Vallejo Waste Management Authority (NVWMA), a joint powers agency. NVWMA members include the cities of Napa, American Canyon, and Vallejo (in Solano County), and County of Napa. The DRRTF is permitted by the Napa County Local Enforcement Agency as Large Volume Transfer Processing Facility. DRRTF receives solid waste primarily from NVWMA member jurisdictions and a much smaller portion of the waste stream is received from twenty to thirty non-member jurisdictions in the surrounding area. The DRRTF is permitted to receive 1,440 tons of solid waste per day (County of Napa 2008).

According to the Solid Waste Facility Permit for the PHLF, the peak tonnage of incoming waste is not to exceed 4,330 tons per day. The maximum permitted capacity of the landfill is 83.1 million cubic yards or 87.1 million tons. According to the California Department of Resources Recycling and Recovery (CalRecycle), the remaining capacity of the landfill is 13.9 million tons (CalRecycle 2022a).

PHLF is designated as a Class III landfill. This means that the landfill can accept only nonhazardous waste for disposal. The San Francisco Bay RWQCB may also, at its discretion, allow Class III landfills to accept certain types of "designated wastes." Designated waste is defined (in the California Water Code, Section 13173) as either: (1) non-hazardous waste that consists of or contains pollutants that, under ambient environmental conditions at a waste management unit could be released in concentrations exceeding applicable water quality objectives, or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan; or (2) hazardous waste that has been granted a variance from hazardous waste management requirements pursuant to Section 25143 of the Health and Safety Code.

c. Natural Gas/Electricity

Since 2016, the City has been enrolled in the Marin Clean Energy (MCE) Light Green Program, MCE's default energy plan that offers 60 percent renewable energy. Before switching to MCE, the City was enrolled in the Pacific Gas and Electric (PG&E) 29 percent renewable option. MCE is an alternative to PG&E for energy generation. All residents and local businesses are automatically enrolled in the Light Green Program and have the option to opt up to the Deep Green Program, which offers 100 percent renewable energy. In 2021, American Canyon City Council voted to supply the City's facilities with MCE Deep Green 100 percent renewable energy.

Some electrical and all natural gas service in the City of American Canyon is provided by PG&E. The company provides natural gas and electric service to approximately 16 million people throughout a 70,000-square-mile service area in northern and central California. PG&E maintains and services all transmission and distribution lines within the region. These transmission lines traverse the plan area, both underground and above ground. Of particular note are the high-power electrical transmission lines which run northeast by southwest through the plan area. (PG&E 2022a). A natural gas transmission pipeline runs north to south through the eastern part of the Planning Area along Newell Drive and Flosden Road (PG&E 2022b).

d. Telecommunications

Telecommunication utilities, including phone, internet, and television, are mainly a privately owned enterprise and are offered by a variety of companies in the City and its surrounding area. The number of providers offering the service, the type of service available, and the transmission speed of the service all affect the quality of telecommunications. This approach differs from that of most other utilities, which are generally publicly owned or offered by limited or individual service providers in a given area. Telecommunications providers will usually complete infrastructure and other service improvements for an area as the need arises to meet customer demand.

4.13.2 Regulatory Setting

a. Protection of Underground Infrastructure

California Government Code Section 4216

California Government Code Section 4216 et seq. requires that persons planning to conduct any excavation first contact the regional notification center. Section 4216 includes several related

requirements, including requirements for excavations near "high priority utilities,"[7] which include high-pressure natural gas pipelines and other pipelines that are potentially hazardous to workers or the public if damaged or ruptured. Underground Service Alert North (USA North) is the regional notification center for the areas where the project would be located. USA North receives planned excavation reports and transmits the information to all participating members that may have underground facilities at the location of excavation. The USA North members then mark or stake their facility, provide information about the location, or advise the excavator of clearance.

b. Water Supply and Quality

Federal

National Pollutant Discharge Elimination System

Pursuant to Section 402 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in American Canyon are regulated under the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, MS4 Order No. 2013-001 (General Permit). In 1987, Congress amended the Clean Water Act to mandate controls on discharges from Municipal Separate Storm Sewer Systems (MS4s). Acting under the federal mandate and the California Water Code, RWQCBs require cities, towns, and counties to regulate activities that can result in pollutants entering their storm drains. All municipalities prohibit non-stormwater discharges to storm drains and require residents and businesses to use Best Management Practices (BMPs) to minimize the amount of pollutants in runoff. The Municipal Regional Permit is overseen by the San Francisco Bay RWQCB. On February 5, 2013, the State Water Board reissued the Phase II Stormwater NPDES Permit for small MS4s. Provision E.12, "Post-Construction Stormwater Management Program," mandates municipalities to require specified features and facilities–to control pollutant sources, to control runoff volumes, rates, and durations, and to treat runoff before discharge from the site–be included in development plans of projects that create or replace 5,000 square feet or more impervious surface as conditions of issuing approvals and permits. The new requirements continue a progression of increasingly stringent requirements since 1989.

Provision E.12 requires all municipal permittees to implement these requirements by June 30, 2015, to the extent allowed by applicable law. This includes projects requiring discretionary approvals that have not been deemed complete for processing and discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals. In July of 2014, the Bay Area Stormwater Management Agencies Association (BASMAA), through the BASMAA Phase II Committee, created the BASMAA Manual to assist applicants for development approvals to prepare submittals that demonstrate their project complies with the NPDES permit requirements. Applicants who seek development approvals for applicable projects should follow the manual when preparing their submittals. The manual is designed to ensure compliance with the requirements and promote integrated Low Impact Development (LID) design.

Section E.12.c of the NPDES Permit pertains to LID and how it relates to hydromodification management. This permit provision requires that stormwater discharges not cause an increase in the erosion potential of the receiving stream over the existing condition. Increases in runoff flow

[7] Consistent with California Government Code Section 4216(e), high priority utilities include natural gas pipelines carrying petroleum with normal operating pressures greater than 415kPA (60 pounds per square inch gauge); petroleum pipelines; pressurized sewage pipelines; high voltage electric supply lines, conductors, or cables that have a potential to ground of greater than 60 kilovolt; and hazardous materials pipelines that are potentially hazardous to workers or the public if damaged.

and volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

State

Sustainable Groundwater Management Act

In September 2014, the governor signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans to be developed for medium- and high-priority groundwater basins, as defined by the California Department of Water Resources. American Canyon underlies the Napa Sonoma Lowlands Subbasin, which is classified as a Very Low Priority basin by the DWR (DWR 2022).

California Water Code

The California Water Code contains regulations including, but not limited to water supply, safe drinking water, clean water, and water quality. More specifically, Division 24, Chapter 6, contains provisions for water supply reliability through water conservation and groundwater recharge, local projects, feasibility projects, management of Sacramento Valley water and habitat protection measures, and implementation of the river parkway program.

California Plumbing Code

The California Plumbing Code is codified in Title 24, California Code of Regulations, Part 5. The Plumbing Code contains regulations including, but not limited to, plumbing materials, fixtures, water heaters, water supply and distribution, ventilation, and drainage. More specifically, Part 5, Chapter 4, contains provisions requiring the installation of low flow fixtures and toilets. Existing development will also be required to reduce its wastewater generation by retrofitting existing structures with water efficient fixtures (Senate Bill [SB] 407 [2009] Civil Code Sections 1101.1 et seq.).

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code, Section 10610 et seq.), which requires urban water suppliers to develop water management plans to actively pursue the efficient use of available supplies. Every five years, water suppliers are required to develop Urban Water Management Plans to identify short-term and long-term water demand management measures to meet growing water demands.

In preparing a UWMP, an urban water supplier must describe or identify the following, among other things (as set forth in Water Code Section 10631):

- "The service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning."
- "Projected population estimates" based on "data from the State, regional, or local service agency population projections within the service area," in "five-year increments to 20 years or as far as data is available."
- "Past and current water use" and "projected water use."

- "Existing and planned sources of water" for each five-year increment of the 20-year planning period.
- Specific detailed information about groundwater where it is identified as "an existing or planned source of water available to the supplier."
- "All water supply projects and water supply programs" that may be undertaken to meet "total projected water use," including "specific projects" and the "increase in water supply" expected from each project.
- An estimate of "the implementation timeline for each project or program."
- "Plans to supplement or replace" any "water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors" with "alternative sources or water demand management measures, to the extent practicable."
- "The reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable," for (i) an "average water year," (ii) a "single dry water year," and (iii) "[m]ultiple dry water years."
- "Opportunities for exchanges or transfers of water on a short-term or long-term basis."
- "Opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply."
- "Water demand management measures."

Senate Bill 610: Water Supply Assessments

As revised by Senate Bill (SB) 610 (Stats. 2002, ch. 643), Section 10910, *et seq*. of the California Water Code set forth the circumstances in which California Environmental Quality Act (CEQA) lead agencies must seek preparation of, or prepare themselves, "water supply assessments" for defined proposed "projects." At the time a lead agency determines that a proposed project requires an Environmental Impact Report (EIR), the lead agency shall identify any "public water system" that would serve the project site and shall request that any such entity prepare a WSA for the project. In the absence of such a public water system, the city or county lead agency must prepare its own WSA. SB 610 functions together with CEQA, in that a WSA must be included in "any environmental document" for any "project" subject to SB 610 (Water Code Section 10911(b); see also State CEQA Guidelines Section 15155(e); see also *Id*. Section 15361 [defines "environmental documents" to include "Negative Declarations…[and] draft and final EIRs"]).

One of the fundamental tasks of a WSA is to determine whether "total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses" (Water Code Section 10910 (c)(3), (c)(4)). In making such a determination, the authors of the WSA must address several factors. Specifically, the WSA must contain information regarding existing water supplies, projected water demand, and dry year supply and demand. In *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 433 ("*Vineyard*"), the California Supreme Court briefly summarized the key content requirements as follows:

> With regard to *existing* supply entitlements and rights, a water supply assessment must include assurances such as written contracts, capital outlay programs and regulatory approvals for facilities construction . . . but as to additional *future* supplies needed to serve the project, the assessment need include only the public water system's plans for acquiring the additional

> supplies, including cost and time estimates and regulatory approvals the system anticipates needing (Water Code §§ 10910, subd. (d)(2), and 10911, subd. (a)). (Original italics.)

"Existing" water supplies can be based on different kinds of legal rights or arrangements, including entitlements, water rights, and water service contracts. In many cases, these supplies are likely already described in detail in the supplier's UWMP (Water Code Section 10631(b)). Suppliers are expressly permitted to rely on information contained in the most recently adopted UWMPs, provided that the water needed for proposed development project was accounted for therein (Water Code Section 10910(c)(2)).

In preparing a WSA, the public water system must disclose and document the quantity of water received from these various sources. Such supplies must be demonstrated by providing the following:

- Written contracts or other proof of entitlement to an identified water supply.
- Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.
- Federal, State, and local permits for construction of necessary infrastructure associated with delivering the water supply.
- Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

A finding of insufficiency in a WSA does not require a city or county to deny or downsize a proposed development project. Rather, after identifying a shortfall, the public water system must provide its plans for acquiring "additional supplies" (or what the California Supreme Court called "future" supplies) (Water Code Section 10911(a)). These plans should include information concerning the following:

1. The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies.
2. All federal, State, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.
3. Based on the considerations set forth in bullet points (1) and (2), the estimated timeframes within which the public water system, or the city and county . . . expects to be able to acquire additional water supplies.

These particular Water Code requirements for assessments are action-forcing, in that they require the public water system to lay out a roadmap for obtaining new water supplies once it becomes aware that existing supplies are insufficient for the proposed project together with other foreseeable planned growth.

Regardless of the information provided to a city or county in a WSA, SB 610 stops short of preventing cities and counties from approving the "projects" at issue absent "sufficient" water supplies. But where "existing water supply entitlements, water rights, or water service contracts" are "insufficient" to serve proposed projects, SB 610 does require that, in approving projects in the face of insufficient supplies, cities and counties must "include" in their "findings for the project[s]" their "determination[s]" regarding water supply insufficiency. SB 610 functions together with CEQA, in that a water supply assessment must be included in "any environmental document" for any "project" subject to SB 610. (*Id*. subd. (b); Guidelines, Section 15155, subd. (e); see also id. Section

15361 [defines "environmental documents" to include "Negative Declarations. . . [and] draft and final EIRs"]).

When a project is proposed in the Planning Area, the applicant may need to submit a WSA per SB 610 depending on the size of the project.

Recycled Water Policy

On February 3, 2009, by Resolution No. 2009-0011, the State Water Board adopted a Recycled Water Policy in an effort to move toward a sustainable water future. The Recycled Water Policy states "we declare our independence from relying on the vagaries of annual precipitation and move toward sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater." The following goals were included in the Recycled Water Policy:

- Increase use of recycled water over 2002 levels by at least 1 million AFY by 2020 and at least 2 million AFY by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 AFY by 2020 and at least 1 million AFY by 2030.
- Increase the amount of water conserved in urban and industrial areas by comparison to 2007 by at least 20 percent by 2020.
- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The Recycled Water Policy provides direction to the RWQCBs regarding issuing permits for recycled water projects, addresses the benefits of recycled water, addresses a mandate for use of recycled water and indicates the State Water Board will exercise its authority to the fullest extent possible to encourage the use of recycled water.

The Recycled Water Policy also indicates that some groundwater basins contain salts and nutrients that exceed or threaten to exceed water quality objectives established in basin plans and states that it is the intent of this Recycled Water Policy that all salts and nutrients be managed on a basin-wide or watershed-wide basis through development of regional or subregional management plans. Finally, the Recycled Water Policy addresses the control of incidental runoff from landscape irrigation projects, recycled water groundwater recharge projects, anti-degradation, control of emerging constituents and chemicals of emerging concern and incentives for use of recycled water.

In accordance with the provisions of the Recycled Water Policy, a Constituents of Emerging Concerns Advisory Panel was established to address questions about regulating constituents of concern (COCs) with respect to the use of recycled water. The Advisory Panel's primary charge was to provide guidance for developing monitoring programs that assess potential COC threats from various water recycling practices, including groundwater recharge/reuse and urban landscape irrigation. On June 25, 2010, the Advisory Panel provided recommendations to the State Water Board and California Department of Public Health in their Final Report "Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Scientific Advisory Panel". The State Water Board used those recommendations to amend the Recycled Water Policy in 2013 (State Water Board Resolution No. 2013-003).

The April 2013 amendment provides direction to the RWQCBs on monitoring requirements for COCs in recycled water. The monitoring requirements pertain to the production and use of recycled water

for groundwater recharge reuse by surface and subsurface application methods, and for landscape irrigation. The amendment identifies three classes of constituents to monitor:

- Human health-based COCs: COCs of toxicological relevance to human health.
- Performance indicator COCs: An individual COC used for evaluating removal through treatment of a family of COCs with similar physicochemical or biodegradable characteristics.
- Surrogates: A measurable physical or chemical property, such as chlorine residual or electrical conductivity, that provides a direct correlation with the concentration of an indicator compound. Surrogates are used to monitor the efficiency of COC treatment.

Only groundwater recharge reuse facilities would be required to monitor for COCs and surrogates. Surface application and subsurface application facilities would have different mandatory COCs and a different monitoring schedule. Monitoring is not required for recycled water used for landscape irrigation projects that qualify for streamlined permitting unless monitoring is required under the adopted salt and nutrient management plan. Streamlined permitting projects must meet the criteria specified in the Policy including compliance with Title 22, application at agronomic rates, compliance with any applicable salt and nutrient management plan, and appropriate use of fertilizers.

Water Conservation Act of 2009

Requirements regarding per capita water use targets are defined in the Water Conservation Act of 2009, which was signed into law in November 2009 as part of a comprehensive water legislation package. Known as SB X7-7, the legislation sets a goal of achieving a 20 percent reduction in urban per capita water use Statewide by 2020. SB X7-7 requires that retail water suppliers define in their 2010 UWMPs the gallons per capita per day targets for 2020, with an interim 2015 target.

Assembly Bill 1881

Assembly Bill (AB) 1881 expanded previous legislation related to landscape water use efficiency. AB 1881, the Water Conservation in Landscaping Act of 2006, enacted landscape efficiency recommendations of the California Urban Water Conservation Council for improving the efficiency of water use in new and existing urban irrigated landscapes in California. AB 1881 required the DWR to update the existing Model Local Water Efficient Landscape Ordinance and local agencies to adopt the updated model ordinance or an equivalent. The law also requires the California Energy Commission (CEC) to adopt performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Assembly Bill 2882

AB 2882 was passed in 2008 and encourages public water agencies throughout California to adopt conservation rate structures that reward consumers who conserve water. AB 2882 clarifies the allocation-based rate structures and establishes standards that protect consumers by ensuring a lower base rate for those who conserve water.

Local

American Canyon Municipal Code

Section 13.06.090 of American Canyon Municipal Code establishes that at the time of submission of an application for a building permit for connection to the city water system, an applicant shall be required to pay a water capacity fee, in proportion to the new connection's impact on the water system.

Section 13.10 of the American Canyon Municipal Code limits new industrial water users within the City's water service area to a net use of 650 gallons per acre per day (GPAD) and requires dual-plumbing with purple pipe.[8] For use greater than 650 GPAD, offset options include, but are not limited to, retrofit of existing residences with low flow fixtures, purchase of otherwise developable land as permanent open space, or acquisition of other water supply resources as provided for by a water supply analysis that follows the Zero Water Footprint (ZWF) methodology (see below).

American Canyon 2020 Urban Water Management Plan

The City's 2020 Urban Water Management Plan identifies the following policies that would apply to the project:

- ZWF Policy: This policy has a goal of no loss in reliability or increase in water rates for existing water service customers due to new demand for water within the City's water service area. Developers must ensure that all new developments offset the amount of increased potable water that will be consumed by their project on a one-to-one basis. Developers are required to minimize their demand for new potable water by using water efficient fixtures, consuming recycled water for non-potable uses when available, dual plumbing buildings, installing water wise landscaping and irrigation, and other appropriate measures. Methods for offsetting the increase in potable water consumption might include contributing to the City's existing conservation programs, converting an existing public use of potable water to recycled water, contributing to projects that reduce potable water demand, increase capacity to produce recycled water, or expand the reclaimed water system, or acquiring water supply from another source.

c. Wastewater

Federal

Federal Clean Water Act

In 1972, the 1948 Federal Water Pollution Control Act was amended to require that the discharge of pollutants into waters of the U.S. from any point source be effectively prohibited unless the discharge follows a National Pollutant Discharge Elimination System (NPDES) permit. This amendment became the basis for what was by 1977 referred to as the Clean Water Act (CWA). In 1987, the CWA was again amended to require that the USEPA establish regulations for the permitting of stormwater discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The regulations require that discharges to

[8] Purple pipe allows for use of recycled water for landscaping.

surface waters from municipal separate storm sewer system (MS4)[9] be regulated by an NPDES permit.

Regulations on storm water discharges from MS4s were implemented with a two-phased program. Phase I, promulgated by USEPA in November 1990, requires NPDES permits for storm water discharges from MS4s serving populations of 100,000 or greater, construction sites disturbing greater than 5 acres of land, and ten categories of industrial activities. The USEPA recognized that smaller construction projects (disturbing less than 5 acres) and small MS4s (serving populations smaller than 100,000) were also contributing substantially to pollutant discharges nationwide. Therefore, to further improve storm water quality, the USEPA promulgated the NPDES Phase II program (*Federal Register* Vol. 64, No. 235, December 8, 1999). The Phase II regulations became effective on February 7, 2000, and require NPDES permits for storm water discharges from regulated small MS4s and for construction sites disturbing between 1 acre and 5 acres of land.

State and Regional

Standards for wastewater treatment plant effluent are established using State and federal water quality regulations. After treatment, wastewater effluent is either disposed of or reused as recycled water. The Regional Water Quality Control Board (RWQCBs) set the specific requirements for community and individual wastewater treatment and disposal and reuse facilities through the issuance of Waste Discharge Requirements, required for wastewater treatment facilities under the California Water Code Section 13260.

The California Code of Regulations Title 22, Division 4, Chapter 3, Sections 60301 through 60355 are used to regulate recycled wastewater and are administered by the RWQCBs. Title 22 contains effluent requirements for four levels of wastewater treatment, from un-disinfected secondary recycled water to disinfected tertiary recycled water. Higher levels of treatment have higher effluent standards, allowing for a greater number of uses under Title 22, including irrigation of freeway landscaping, pasture for milk animals, parks and playgrounds, and vineyards and orchards for disinfected tertiary recycled water.

Local

American Canyon Municipal Code

Section 14.06.020 establishes that at the time of submission of application for building permit for connection to the city wastewater collection system, an applicant shall pay a wastewater capacity fee in proportion to use of the capacity of the wastewater system.

d. Stormwater

Federal

Federal Clean Water Act

The federal Clean Water Act is described above.

[9] An MS4 is a conveyance or system of conveyances designed or used to collect or convey stormwater (e.g., storm drains, pipes, ditches) that are that owned by a state, city, town, or other public entity and discharge to waters of the United States.

State

General Construction Activity Storm Water Permit

The *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*, Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (Construction General Permit), adopted by the State Water Board, regulates construction activity that includes clearing, grading, and excavation resulting in soil disturbance of at least one acre of total land area. The Construction General Permit authorizes the discharge of stormwater to surface waters from construction activities. The Construction General Permit requires that all developers of land where construction activities will occur over more than 1 acre do the following:

- Complete a Risk Assessment to determine pollution prevention requirements pursuant to the three risk levels established in the General Permit;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States;
- Develop and implement a construction Storm Water Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) that will reduce pollution in stormwater discharges to the Best Available Technology/ Economically Achievable/Best Conventional Pollutant Control Technology standards;
- Perform inspections and maintenance of all BMPs; and
- Conduct stormwater sampling, if required based on risk level.

To obtain coverage under the Construction General Permit, a project applicant must electronically file all permit registration documents with the State Water Board prior to the start of construction. Permit registration documents must include a:

- Notice of Intent (NOI),
- Risk Assessment,
- Site map,
- Construction SWPPP,
- Annual fee, and
- Signed certification statement.

Typical BMPs contained in construction SWPPPs are designed to minimize erosion during construction, stabilize construction areas, control sediment, and control pollutants from construction materials. The construction SWPPP must also include a discussion of the program to inspect and maintain all BMPs.

Local

American Canyon Municipal Code

Section 14.28.082 of the American Canyon Municipal Code identifies that the City may establish volume and rate of stormwater controls from new developments and redevelopment as may be appropriate to minimize peak flows or total runoff volume, and to mimic the pre-development site

hydrology. This section also includes the requirement that qualifying projects prepare a SCP that meets the criteria in the BASMAA Post Construction Manual.

e. Solid Waste

Federal

Title 40 of the Code of Federal Regulations

Title 40 of the Code of Federal Regulations, Part 258 (Resource Conservation and Recovery Act, Subtitle D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the Federal landfill criteria.

State

California Code of Regulations Tile 14

The California Code of Regulations Title 14, Division 7, outlines current CalRecycle regulations pertaining to non-hazardous waste management in California, which includes minimum standards for solid waste handling and disposal; compostable materials handling operations and facilities regulatory requirements; standards for handling and disposal of asbestos containing waste; resource conservation programs; enforcement of solid waste standards and administration of solid waste facility permits; special waste standards; used oil recycling program; electronic waste recovery and recycling; mandatory commercial recycling; and short-lived climate pollutants.

Assembly Bill 341

The purpose of Assembly Bill (AB) 341 of 2011 (Public Resource Code [PRC] Chapter 476, Statutes of 2011) is to reduce greenhouse gas emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 of 2016 (PRC Chapter 395, Statutes of 2016) established the following goals: a 50-percent reduction in the level of the statewide disposal of organic waste from 2014 levels by 2020, and a 75-percent reduction in the level of the statewide disposal of organic waste from 2014 levels by 2025. This bill also authorized CalRecycle to adopt regulations, to take effect on or after January 1, 2022, to achieve these targets.

Assembly Bill 939

AB 939 (PRC 41780) requires cities and counties to prepare integrated waste management plans and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. AB 939 also requires cities and counties to prepare source reduction and recycling elements as part of the integrated waste management plans. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the purchase of recycled products.

Assembly Bill 1826

AB 1826 of 2014 (PRC Chapter 727, Statutes of 2014) requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, and that jurisdictions implement a recycling program to divert organic waste from businesses subject to the law. The jurisdictions must report to CalRecycle on their progress in implementing an organic waste recycling program. As of January 1, 2017, businesses that generate four cubic yards or more of organic waste per week shall arrange for organic waste recycling services.

Senate Bill 1016

SB 1016 requires that the 50 percent solid waste diversion requirement established by AB 939 be expressed in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's integrated waste management plan. After an initial determination of diversion requirements in 2006 and establishing diversion rates for subsequent calendar years, the Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. Since January 1, 2018, the Board is required to review a jurisdiction's source reduction and recycling element and hazardous waste element once every two years.

Local

American Canyon Municipal Code

Section 8.20 of the American Canyon Municipal Code includes requirements for mandatory municipal solid waste, recycling, and composting material disposal reductions. Section 8.20.030 includes the requirements for commercial businesses, which would apply to the project. Section 8.20.100 requires new buildings to comply with California Green Building Standards (CALGreen), including the requirements for new commercial buildings to provide readily accessible areas identified for blue container and green container material storage and collection, consistent with the three-container collection program offered by the city, as well as compliance with CALGreen requirements for diverting construction and demolition debris.

f. Electric Power and Natural Gas

State

California Energy Commission

As the State's primary energy policy and planning agency, the CEC collaborates with State and federal agencies, utilities, and other stakeholders to develop and implement State energy policies. Since 1975, the CEC has been responsible for reducing the State's electricity and natural gas demand, primarily by adopting new Building and Appliance Energy Efficiency Standards that have contributed to keeping California's per capita electricity consumption relatively low. The CEC is also responsible for the certification and compliance of thermal power plants 50 megawatts and larger, including all project-related facilities in California (CEC 2022).

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates investor-owned electric and natural gas utilities operating in California. The energy work responsibilities of the CPUC are derived from the California State Constitution, specifically Article XII, Section 3 and other sections more generally, numerous State legislative enactments and various Federal statutory and administrative

requirements. The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from PG&E and other natural gas utilities across California (CPUC 2022a).

Local

American Canyon Municipal Code

Section 18.40.120 of the American Canyon Municipal Code requires that all utilities be installed underground in accordance with the provisions of the American Canyon Municipal Code. It also requires that all underground utilities be installed before preparation of subgrade for paving or any other site improvements that may affect the orderly installation of the underground utilities.

4.13.3 Impact Analysis

a. Significance Thresholds and Methodology

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on utilities and service systems if it would:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
2. Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
4. Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Methodology

This analysis considers the existing capacity of utilities serving the City, estimates qualitatively and quantitively the potential additional demand on utilities, and identifies whether the existing system can serve the demand of the existing demand plus the project's estimated demand.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

IMPACT UTL-1 DEVELOPMENT FACILITATED BY THE PROJECT WOULD INCREASE DEMAND FOR WATER, WASTEWATER, ELECTRIC POWER, TELECOMMUNICATIONS, AND STORMWATER DRAINAGE; HOWEVER, NO ADDITIONAL RELOCATION OR CONSTRUCTION OF UTILITY SERVICES WOULD BE REQUIRED TO SERVICE THE PROJECT BEYOND CONNECTIONS TO EXISTING UTILITIES. THE PROJECT WOULD RESULT IN A MINIMAL INCREASE IN NATURAL GAS DEMAND. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Water and Wastewater

Growth and development facilitated by the 2040 General Plan would create additional demand for water. Development facilitated by the 2040 General Plan would occur within developed areas of the City, generally as infill development or redevelopment. Therefore, water infrastructure exists and is available for new development. Water infrastructure, such as pipelines, could require upgrades for future development. Installation of upgraded infrastructure would result in ground disturbance. Generally, this ground disturbance would occur in previously disturbed or developed areas, reducing the potential for environmental impacts. Such facilities would be installed during individual project construction and generally within the disturbance area of such projects or the rights-of-way of previously disturbed roadways; therefore, the construction of these infrastructure improvements would not substantially increase the project's disturbance area or otherwise cause significant environmental effects beyond those already identified throughout this EIR.

In addition, the City of American Canyon has several policies to address and minimize additional water demand, as well as wastewater. Sections 13.06.090 and 14.06.020 of the American Canyon Municipal Code require any applicants for development within the City or its sphere of influence that will be served by the City to pay a water capacity fee and wastewater capacity fee, respectively in proportion to the new connection's impact on the water and wastewater system. The payment of this fee will help ensure that the City has sufficient capacity within its water and wastewater system to accommodate the project. In addition, and as described in further detail in Impact UTL-2, all projects must implement the ZWF policy to have a net zero water demand. Furthermore, the 2040 General Plan includes the following proposed policies related to water and wastewater facilities:

Goal U-1: Water Reliability. Establish and maintain a secure water supply and treatment, distribution, and storage system to serve the land uses proposed under the general plan.

- **Policy U-1.2: Facility Upgrades.** Require construction of upgraded and expanded, distribution, storage, and treatment facilities to support existing and new development.
- **Policy U-1.3: Upgrade Responsibilities.** Ensure that improvements to the existing water supply, distribution, storage, and treatment facilities are borne by project proponent in proportion to benefit; either through the payment of fees, or by the actual construction of the improvements.
- **Policy U-1.5: Adequate Supply Prior to Occupancy.** Implement a Will Serve Process to ensure adequate water supply, distribution, storage, and treatment facilities is available to serve a project prior to the issuance of certificates of occupancy.

Goal U-2: Water Conservation. Establish policies that make the most efficient use of our water resources to for a variety of public benefits, such as: improve water reliability, reduce greenhouse gas emissions, and minimize environmental impacts from drawing water from the environment.

- **Policy U-2.1: Zero Water Footprint.** Ensure new development offsets potable water demand by funding or constructing potable water conservation efforts elsewhere in the water delivery system.
- **Policy U-2.2: City Facilities Retrofits.** Improve water use efficiency at City facilities through retrofits, recycled water usage, and employee education.
- **Policy U-2.3: Retrofits Existing Buildings.** Promote existing buildings upgrades to support water conservation by encouraging owners of residential, commercial, and industrial properties to replace inefficient plumbing fixtures, install drought-tolerant and water-wise landscaping, and harvest rainwater for landscaping and other household uses.

Goal U-3: Wastewater Treatment Capacity. Establish and maintain adequate planning, construction, maintenance, and funding for wastewater collection and treatment facilities to support land uses; upgrading existing deficient systems, and expanding, where necessary, in the City's service area.

- **Policy U-3.1: Demand Requirements for Facilities.** Through the Capital Improvement Plan process, ensure wastewater collection and treatment facilities are installed, maintained, and upgraded in a timely manner to meet usage requirements and maximize cost efficiency.
- **Policy U-3.2: Capacity Demand.** Require all new development to evaluate sewer capacity demand during the discretionary review process.

Implementation of the 2040 General Plan would result in new connections to the existing water and wastewater system but would not create a substantial water demand (due to implementation of the American Canyon Municipal Code and policies), such that new or expanded water or wastewater facilities would be needed. The water connections associated with the project would not cause significant environmental effects beyond those already identified throughout this EIR. As such, impacts related to potential new water and wastewater facilities would be less than significant.

Stormwater

As discussed in Section 4.15, *Effects Found To Be Less Than Significant*, runoff associated with future development and mobility improvements would be regulated by Section 14.28 of the American Canyon Municipal Code, which ensure compliance with the Phase II MS4 Permit. Compliance with these regulations would ensure that future development facilitated by the 2040 General Plan would mimic the pre-development site hydrology, which would ensure that there is proper stormwater drainage on the project site and would minimize any operational impacts related to water quality or flooding. The project would not require any new or expanded stormwater facilities, beyond what would be installed pursuant to the regulatory requirements in Section 14.28 of the American Canyon Municipal Code. Furthermore, the 2040 General Plan includes the following proposed policies related to stormwater facilities:

Goal U-4: Flood Control. Establish and maintain adequate planning, construction, maintenance, and funding for storm drain and flood control facilities to support permitted land uses and preserve public safety.

- **Policy U-4.1: Storm Drainage Maintenance.** Maintain existing public storm drains and flood control facilities and construct upgraded and expanded storm drain and flood control facilities, where necessary, to protect existing and accommodate new permitted development.

- **Policy U-4.3: Financial Obligations.** Ensure new storm drain and flood control facility costs are borne by the project proponent in proportion to benefit; either through the payment of fees, or by constructing new improvements.
- **Policy U-4.9: Floodwater Diversions.** Implement engineering standards that prevent new development from increasing historical stormwater flows onto neighboring properties.

Goal U-5: Stormwater Quality. Maintain the quality of surface and subsurface water resources within the City of American Canyon and its Planning Area.

- **Policy U-5.1: Passive Treatment Systems.** Consistent with engineering standards and water quality regulations, reduce pollutant loading through passive treatment systems such as vegetated filter strips, grass swales, and infiltration/sedimentation areas in suitable open space areas and incorporated into landscaping adjacent to parking lots and streets.
- **Policy U-5.2: Water Detention Facilities.** Consistent with engineering standards and water quality regulations, require new and existing development to include drainage detention facilities that enhance the quality of water discharges from the facility.
- **Policy U-5.4: Storm Water Permitting.** Require industrial operations to obtain coverage under the State Storm Water Permit For Industrial Activities, and comply with provisions of the Permit, through notification and educational activities.

These policies would ensure current and future development in the City of American Canyon would comply with stormwater facilities. Therefore, impacts related to potential new stormwater facilities would be less than significant.

Electricity/Natural Gas

The project would require connections to existing electrical transmission and distribution systems in the City to serve development facilitated by the project. This service would be provided in accordance with the rules and regulations of both MCE and PG&E and under the authority of the CPUC. Based on the availability of existing electrical infrastructure, it is not anticipated that the construction of new electrical transmission and distribution lines would be required, and all sites would be able to connect to existing infrastructure. Furthermore, the 2040 General Plan includes the following proposed policies related to electrical facilities:

Goal U-9: Energy Resilience and Conversation. Improve energy system resilience with energy conservation and access to renewable energy sources.

- **Policy U-9.2: Electric Energy Systems.** Coordinate with Pacific Gas and Electric Company (PG&E) to ensure that electrical energy systems do not adversely impact land uses and population in the City of American Canyon.
- **Policy U-9.3: Resilient Grid.** Cooperate with PG&E to obtain applicable City permit approvals that improve electric grid resilience to natural hazards (seismic events, flooding, wildfires, extreme wind events).
- **Policy U-9.4: Overhead Utility Undergrounding**. Develop a comprehensive strategy to underground existing overhead utilities.

These policies would ensure current and future development in the City of American Canyon would lessen impacts on electrical facilities. In addition, as required by proposed Policy U-9.4, future

development would be subject to review for utility undergrounding which would further reduce impacts such as wildfire. Therefore, there would be adequate electrical facilities to serve development facilitated by the project. Impacts related to potential new electrical facilities would be less than significant.

The following proposed policy from the Utilities element would reduce demand on natural gas:

- **Policy U-9.1: Reach Building Code.** Reduce energy use in new development by considering a local amendment that requires a 15% energy efficient standard improvement over the California Building Code.

If future development requires natural gas, then development facilitated by the project would connect to existing natural gas infrastructure to meet the needs of residents and tenants. Based on the availability of existing natural gas infrastructure, construction of new natural gas pipelines would not be required, and development would be able to connect to existing infrastructure. Therefore, there would be adequate natural gas facilities to serve the development facilitated by the project and impacts related to potential new natural gas facilities would be less than significant.

Telecommunications

Implementation of the project would require connections to existing utility infrastructure to meet the needs of future development. Based on the availability of existing telecommunications infrastructure, construction of new telephone and cable lines would not be required, and all sites would be able to connect to existing infrastructure. Development facilitated by the project would be required to adhere to applicable laws and regulations related to the connection to existing telecommunication infrastructure. Therefore, there would be adequate telecommunications facilities to serve the development facilitated by the project and impacts related to potential new telecommunications facilities would be less than significant.

Conflicts with Existing Utilities

Existing underground utilities are located within the Planning Area. Because development facilitated by the project would require excavation, construction could result in conflicts to underground utilities. As required by Government Code Section 4216, applicants for development would be required to contact USA North to avoid underground utilities during construction. As such, impacts on underground utilities would be less than significant.

Mitigation Measure

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2: Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

IMPACT UTL-2 THE PROJECT WOULD INCREASE DEMAND FOR WATER. WATER SUPPLY FOR THE PROJECT WOULD BE PROVIDED BY THE CITY OF AMERICAN CANYON FROM EXISTING AND PLANNED SUPPLY SOURCES INCLUDING IMPORTED WATER AND SUPPLEMENTAL WATER PURCHASED FROM THE CITY OF VALLEJO AS WELL AS LOCALLY DEVELOPED RECYCLED WATER. POTENTIAL IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Development facilitated by the project would create additional demand for water. The water demand for the project was estimated using water demand rates for land use types identified in the American Canyon Potable Water Master Plan and the Broadway District Specific Plan EIR (City of American Canyon 2016, 2019). Each development type has its own associated water use factor by unit, which were used to calculate projected water demand volumes for each type of development. Table 4.13-2 summarizes the estimated water demand from the project. Overall, the project is estimated to increase annual water demand by 0.18 mgd or 207 AFY, in addition to existing demand.

Table 4.13-2 Projected Water Demand

Development Type	Estimated Project Buildout [b]	Water-use factor [c]	Projected Water Demand [a]		
			gpd	mgd	AFY [d]
Residential					
Single-Family	238 units	266 gpd/unit	63,308	0.05	56
Multi-Family [e]	513 units	160 gpd/unit	82,080	0.07	78
Non-Residential					
Office	65,000 sf	0.21 gpd/sf	13,650	0.01	11
Commercial	4 acres [f]	1,445 gpd/acre	5,780	0.005	6
Industrial	99 acres [g]	650 gpd/acre	64,350	0.05	56
Total			**229,168**	**0.18**	**207**

Source: City of American Canyon 2016, 2023

Notes:
a. gpd = gallons per day; sf = square foot; mgd = million gallons per day; AFY = acre feet per year
b. The total estimated project buildout has been revised to exclude two projects previously evaluated in the 2020 UWMP: the Watson Ranch Project and the Broadway District Specific Plan because these two projects were considered within total projects demand and supply for the city through 2040. Therefore, the estimated project buildout reflects the net additional projected water demand of the project.
c. The single-family, multi-family, and office water use factors are from the Broadway District Specific Plan EIR (City of American Canyon 2019). The commercial and industrial water use factors are from the City of American Canyon Potable Water Master Plan (City of American Canyon 2016).
d. AFY Calculated by dividing mgd by 0.000892, which is the amount of mgd that are in 1 AFY.
e. Moderate- and high-density residential water-use rate.
f. The acreage of commercial buildout was calculated by 189,000 sf / 43,560
g. The acreage of industrial buildout was calculated by 4,310,000 sf / 43,560

The City's UWMP identifies the existing and projected supply and water demand for normal, dry, and multiple dry years. These projections are summarized in Table 4.13-3, which accounts for water supply sources including imported SWP water purchased from the City of Vallejo and supplemental water supply purchased from the City of Vallejo (City of American Canyon, 2023).

Table 4.13-3 2020 UWMP Projected Water Supply and Demand

	2025	2030	2035	2040
Normal Years				
Supply Totals (af/yr)	4,959	4,959	5,575	5,575
Demand Totals (af/yr)	3,543	3,785	4,580	4,822
Difference	**1,416**	**1,174**	**994**	**753**
Single-Dry Year				
Supply Totals (af/yr)	1,897	1,897	2.132	2,132
Demand Totals (af/yr)	3,543	3,785	4,580	4,822
Difference	**-1,646**	**-1,888**	**-2,448**	**-2,689**
Multiple Dry Years (First Year)				
Supply Totals (af/yr)	3,359	3,359	3,776	3,776
Demand Totals (af/yr)	3,543	3,785	4,580	4,822
Difference	**-184**	**-426**	**-804**	**-1,046**
Multiple Dry Years (Second Year)				
Supply Totals (af/yr)	3,359	3,359	3,776	3,776
Demand Totals (af/yr)	3,543	3,785	4,580	4,822
Difference	**-184**	**-426**	**-804**	**-1,046**
Multiple Dry Years (Third Year)				
Supply Totals (af/yr)	3,251	3,251	3,655	3,655
Demand Totals (af/yr)	3,543	3,785	4,580	4,822
Difference	**-291**	**-534**	**-925**	-1,167
Multiple Dry Years (Fourth Year)				
Supply Totals (af/yr)	3,251	3,251	3,655	3,655
Demand Totals (af/yr)	3,543	3,785	4,580	4,822
Difference	**-291**	**-534**	**-925**	**-1,167**
Multiple Dry Years (Fifth Year)				
Supply Totals (af/yr)	3,251	3,251	3,655	3,655
Demand Totals (af/yr)	3,543	3,785	4,580	4,822
Difference	**-291**	**-534**	**-925**	**-1,167**

Source: City of American Canyon 2023

As shown in Table 4.13-2, the proposed project would increase water demands projected in the City's UWMP by approximately 207 AFY; as shown in Table 4.13-3, which accounts for imported water and supplemental water purchased from the City of Vallejo, the UWMP projects water supply shortages during single-dry and multiple-dry year conditions. As discussed in Chapter 8 of the UWMP and Municipal Code Chapter 13.14, the City addresses dry-year conditions through implementation of its Water Shortage Contingency Plan (WSCP) to conserve water and reduce demand such that available water supply is sufficient to meet demands.

In addition to purchased water and water savings from conservation, the City also produces recycled water and plans to produce up to 1,000 AFY of recycled water with buildout of 15 capital improvement projects to expand its existing recycled water capabilities. Table 6-2 of the UWMP shows that approximately 1,625 acre-feet of wastewater was collected within the City of American

Canyon in 2020; Table 6-5 of the UWMP shows that 513 acre-feet of recycled water was projected for use in 2020, while only 151 acre-feet of recycled water was used in 2020 (City of American Canyon, 2023). These rates demonstrate there is capacity to expand the existing recycled water system and increase existing rates of recycled water use. This would occur through implementation of recycled water projects listed in Table 6-6 of the UWMP, which would provide up to 988 AFY of additional water supply as recycled water. Recycled water can be used for non potable purposes including landscaping and irrigation, offsetting demands for potable water uses.

As discussed above, the proposed project would increase local water demands by approximately 207 AFY beyond the demands accounted for in the UWMP, which projects water supply shortages during single-dry and multiple-dry years. However, the supply projections shown above do not account for buildout of the City's planned recycled water projects, which would provide approximately 988 AFY of recycled water that can be used to offset potable water demands. In addition, implementation of the City's existing WSCP during dry year conditions reduces water demands through conservation to ensure supply reliability from existing sources including imported water and supplemental water purchased from the City of Vallejo.

Furthermore the City's ZWF Policy requires the potable water demands of new development within the City's service area to be offset on a one-to-one basis, ensuring no net increase of potable water demands. This may be accomplished by using water efficient fixtures, using recycled water for non-potable uses when available, dual plumbing buildings, installing water wise landscaping and irrigation, and other appropriate measures (City of American Canyon 2023). Other methods for offsetting potable water use under the ZWF Policy include contributing to the City's existing conservation programs; converting an existing public use of potable water to recycled water; contributing to projects that reduce potable water demand; increasing capacity to produce recycled water; expanding the reclaimed water system; or acquiring water supply from another source.

In addition, the American Canyon Municipal Code Chapter 13.10 (New Water and Sewer Connections and Services) limits new industrial water users within the City's water service area to a maximum of 650 gallons per acre per day and requires dual plumbing with purple pipe.[10] For use greater than 650 gallons per acre per day, offset options include but are not limited to, retrofit of existing residences with low flow fixtures, purchase of otherwise developable land as permanent open space, or acquisition of other water supply resources as provided for by a water supply analysis that follows the ZWF methodology (City of American Canyon 2023).

The 2040 General Plan also includes the following proposed policies related to water supply:

Goal U-1: Water Reliability. Establish and maintain a secure water supply and treatment, distribution, and storage system to serve the land uses proposed under the general plan.

- **Policy U-1.1: Supplemental Surface Water.** Support efforts to increase water supply from a variety of sources, such as participation in programs with other NBA users to obtain supplemental surface water through a water transfer from another area, investment in the Sites Reservoir, local rainwater capture, and other feasible sources.
- **Policy U-1.4: Urban Water Management Plan.** Prepare a framework for long-term water planning consistent with the State Urban Water Management Planning Act (UWMP Act), by preparing and adopting an Urban Water Management Plan (UWMP) once every five years.

[10] Purple pipe allows for use of recycled water for landscaping.

- **Policy U-1.5: Adequate Supply Prior to Occupancy.** Implement a Will Serve Process to ensure adequate water supply, distribution, storage, and treatment facilities is available to serve a project prior to the issuance of certificates of occupancy.
- **Policy U-1.6: Water Service Priority**. Consistent with State Law, in times of constrained water service expansion capacity, prioritize affordable housing developments as defined in California Government Code 65589.7 or any successor statute. The second priority is provided to water connections and services to residences and businesses located within the city corporate boundaries.

Goal U-2: Water Conservation. Establish policies that make the most efficient use of our water resources for a variety of public benefits, such as: improve water reliability, reduce greenhouse gas emissions, and minimize environmental impacts from drawing water from the environment.

- **Policy U-2.1: Zero Water Footprint.** Ensure new development offsets potable water demand by funding or constructing potable water conservation efforts elsewhere in the water delivery system.
- **Policy U-2.3: Retrofit Existing Buildings.** Promote existing buildings upgrades to support water conservation by encouraging owners of residential, commercial, and industrial properties to replace inefficient plumbing fixtures, install drought-tolerant and water-wise landscaping, and harvest rainwater for landscaping and other household uses.
- **Policy U-2.5: Recycled Water Use.** Subject to State regulations and organizational capacity, consider new ways that recycled water can replace potable water.

As discussed above, the proposed project would increase local water demands by approximately 207 AFY beyond the demands accounted for in the 2020 UWMP, which projects water supply shortages during single-dry and multiple-dry years. However, the supply projections shown above do not account for buildout of the City's planned recycled water projects or implementation of the City's existing WSCP during dry year conditions to reduce dry-year water demands. Further, compliance with the existing ZWF Policy and proposed General Plan policies related to water supply further support reliable water supply availability for the proposed project. In addition to the aforementioned programs, the City is participating in the Sites Reservoir project, a potential future source that would provide an additional 4,000 AFY of supply to the City, which has been approved and funded and is proceeding to obtain required permits. Although not necessary to support development under the project, the successful completion of the Sites project would provide additional water security for the City. Therefore, potential impacts associated with water supply availability would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 3:	Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

IMPACT UTL-3 DEVELOPMENT FACILITATED BY THE PROJECT WOULD INCREASE DEMAND FOR WASTEWATER TREATMENT. THE TIMING, INTENSITY, AND LOCATION OF AN EXPANSION OF WASTEWATER TREATMENT FACILITIES IS UNKNOWN AT THIS TIME, BUT AN EXPANSION WOULD REQUIRE ADDITIONAL CEQA REVIEW AND COMPLIANCE WITH EXISTING BUILDING AND ZONING CODES. AS SUCH, IMPACTS RELATED TO EXPANSION OF WASTEWATER TREATMENT FACILITIES AS A RESULT OF THE 2040 GENERAL PLAN WOULD BE LESS THAN SIGNIFICANT.

The amount of wastewater generated by the project was estimated based on the estimated water demand calculated in Impact UTL-2 and the principle that water demand is 120 percent of wastewater generation (due to evaporation and system losses, meaning that not all water that is used ends up going to the wastewater treatment plan). The total wastewater demand due to the project is estimated to be approximately 4.3 mgd.[11] However, this is a conservative calculation that does not account for the reductions in wastewater demand from implementing the ZWF Policy. It is expected that the project's demand on wastewater would be substantially less than 4.3 mgd. Nonetheless, this number is used to provide a conservative analysis.

The WRF had an existing wastewater treatment capacity of 2.5 mgd in 2020 at average dry weather flow conditions. In 2020, the City treated 1,625 AF of wastewater, which is equivalent to 1.45 mgd (City of American Canyon 2015). In 2020 there was 1.05 mgd of remaining capacity for wastewater treatment. As such, there is not currently sufficient capacity in the WRF to accommodate the additional demand from the maximum buildout scenario in the 2040 General Plan.

Nonetheless, the Utilities Element of the 2040 General Plan contains the following proposed goals and associated proposed policies to ensure new development is connected to the existing sanitary sewer system and that wastewater service is adequate.

Goal U-3. Wastewater Treatment Capacity: Establish and maintain adequate planning, construction, maintenance, and funding for wastewater collection and treatment facilities to support land uses; upgrading existing deficient systems, and expanding, where necessary, in the City's service area.

- **Policy U-3.1: Demand Requirements for Facilities.** Through the Capital Improvement Plan process, ensure wastewater collection and treatment facilities are installed, maintained, and upgraded in a timely manner to meet usage requirements and maximize cost efficiency.
- **Policy U-3.2: Capacity Demand.** Require all new development to evaluate sewer capacity demand during the discretionary review process.
- **Policy U-3.3: Fiscal Obligations.** Ensure wastewater infrastructure impact fees reflect the proportional increase in demand from new development.
- **Policy U-3.4: Alternatives Sustainable Approaches.** Consistent with best practices, evaluate environmentally and economically efficient wastewater treatment systems, such as the artificial marshland wastewater treatment system.

[11] 4.3 mgd = 5.24 mgd / 1.2

- **Policy U-3.5: Wastewater Service Priority.** Consistent with State Law, in times of constrained wastewater service expansion capacity, prioritize affordable housing developments as defined in California Government Code 65589.7 or any successor statute. The second priority is provided to sewer connections and services to residences and businesses located within the city corporate boundaries.

As shown through 2040 General Plan proposed Goal U-3 and its corresponding proposed policies, the City would maintain wastewater treatment infrastructure to accommodate additional growth from the 2040 General Plan. However, there are no new facilities proposed at this time. Generally, it is anticipated that construction of new facilities would result in similar physical impacts discussed throughout this EIR (i.e., impacts to biological resources, water quality and hydrology, air quality, etc.), but impacts could also be reduced depending on location and intensity. As such, it is not possible to identify the specific nature, extent, and significance of physical impacts on the environment that could result from the construction and operation of an expanded WRF without knowing the size and nature of the facility, or its location. Regardless, new facilities would require adherence to all applicable building and zoning codes, and additional CEQA review to analyze project and location specific impacts. As such, impacts related to wastewater facilities would be less than significant.

Mitigation Measure

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 4:	Would the General Plan generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
Threshold 5:	Would the General Plan comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

IMPACT UTL-4 THE PROJECT WOULD NOT GENERATE SOLID WASTE IN EXCESS OF STATE OR LOCAL STANDARDS, WOULD NOT EXCEED THE CAPACITY OF LOCAL INFRASTRUCTURE, AND WOULD NOT IMPAIR THE ATTAINMENT OF SOLID WASTE REDUCTION GOALS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Implementation of the project would generate additional solid waste. Construction of future development would create construction debris, such as scrap lumber and flooring materials. Operation of future development would create typical household wastes associated with residential, office, and commercial uses. Future industrial development would also generate solid waste.

As described in Section 4.13.1, *Setting*, the DRRTF is permitted to receive 1,440 tons of solid waste per day (County of Napa 2008). Between 2020 and 2021, the City of American Canyon disposed a total of approximately 17,128 tons (CalRecycle 2022d). Per capita waste disposal averaged averages 4.40 pounds per person per day (CalRecycle 2022e). As described in Section 4.9, *Population and Housing,* the project is expected to generate 3,204 net new residential units and result in approximately 10,734 new residents by the year 2040. The total additional waste generation, based

on the number of residents, would be approximately 23.6[12] tons per day, which would represent approximately 1.6 percent of the permitted daily solid waste allowed at the DRRTF.[13] While it is anticipated that the project would increase solid waste generation, it is expected that solid waste facilities would have enough capacity.

AB 939 requires the City to divert 50 percent of solid waste from landfills, and SB 1383 would require the City to reduce organic waste disposal by 75 percent by 2025. New development would be required to comply with Section 8.20 of the American Canyon Municipal Code, which includes requirements for mandatory municipal solid waste, recycling, and composting material disposal reductions, as well as compliance with CALGreen requirements for diverting construction and demolition debris.

Furthermore, the 2040 General Plan includes proposed goals and policies to support the provision of adequate service, reduction, and diversion of waste from landfills, and expansion of recycling programs for residents and businesses. Although the DRRTF currently has sufficient landfill capacity for the growth facilitated by the project, the policies in the 2040 General Plan are consistent with American Canyon's desire to promote sustainability and reduce the need for landfills. These proposed policies are provided in the Utilities Element of the 2040 General Plan and are listed below:

Goal U-7. Solid Waste Collection: Maximize source reduction, recycling, and composting in the solid waste disposal programs.

- **Policy U-7.1: Waste Management Services.** Continue waste management service contracts to provide quality and cost-effective solid waste removal throughout the city and require all residents and businesses to comply with solid waste collection and recycling service requirements.
- **Policy U-7.2: Levels of Service.** Conduct monitoring solid waste collection contractor operations to ensure franchise agreement service levels are maintained.
- **Policy U-7.3: Landfill Coordination.** Coordinate with the Napa-Vallejo Waste Management Authority (NVWMA) concerning the City's continuing use of the Potrero Hills Landfill.

Goal U-8. Solid Waste Source Reduction: Achieve maximum public participation in source reduction, recycling, and composting activities through outreach programs.

- **Policy U-8.1: Recycling Education and Information.** Coordinate with Napa-Vallejo Waste Management Authority (NVWMA) and Recology to expand public information and education programs to complement source reduction, recycling, and composting efforts.
- **Policy U-8.2: Expansion of Recycling Programs.** Expand recycling programs through the local waste hauler.
- **Policy U-8.3: Promotion of Recycling.** Promote the recycling of solid waste including but not limited to paper, metals, aluminum cans, green waste, cardboard, plastic and glass.
- **Policy U-8.4: Outreach to Schools.** Coordinate efforts at the local elementary and intermediate school level to provide youth education programs.
- **Policy U-8.5: Recycling Receptacles and Biodegradable/Recycled-Materials Products.** Require the availability of recycling and composting receptacles and use biodegradable or recycled-

[12] 23.6 tons per day = (4.4 lbs. per person per day * 10,734 persons) / 2,000 lbs. per ton
[13] 1.6 percent = (23.6 tons per day / 1,440 tons per day) * 100

material products instead of single-use plastic products at all City facilities and City-sponsored events.

- **Policy U-8.6: Zero Waste Community.** Support American Canyon in implementing policies and programs to become a Zero Waste Community.
- **Policy U-8.7: Food Waste Collection.** Ensure food waste collection is available and convenient to residents and businesses.
- **Policy U-8.8: Green Business Program.** Encourage local businesses to participate in the Napa County Green Business Program to minimize waste generation and create recycling and composting programs to reduce waste.
- **Policy U-8.9: Demolition and Construction Waste.** Require all new development to comply with the current CALGreen requirements for construction and demolition waste diversion.

Proposed Goals U-7 and U-8, as well as their corresponding proposed policies would ensure that solid waste is disposed of in an environmentally sound manner, and that State solid waste diversion goals and County recycling and composting requirements are met. Overall, local infrastructure would have the capacity to accommodate solid waste generated by development facilitated by the project. With adherence to Section 8.20 of the American Canyon Municipal Code and the 2040 General Plan proposed policies, impacts related to solid waste would be less than significant.

Mitigation Measure

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.14 Wildfire

This section summarizes the wildfire risks in and near the Planning Area and analyzes the impacts related to wildfire risks due to the project.

4.14.1 Setting

a. Overview of Wildfire

Wildfires are a regular feature of the ecosystem in large parts of California and many of the State's native species have evolved to cope with the natural fire cycle, although increasing development into wildfire-prone areas makes wildfires a hazard of concern. A wildfire is an uncontrolled fire in an area of combustible vegetation that is generally extensive in size. Wildfires differ from other fires in that they take place outdoors in areas of grassland, woodlands, brush land, scrubland, peatland, and other wooded areas that act as a source of fuel, or combustible material. Buildings may become involved if a wildfire spreads to adjacent communities.

Wildland-urban interface fires are hazards because they threaten areas located near the border between urban and wildlands. The primary factors that increase an area's susceptibility to wildfire include slope and topography, vegetation type and condition, and weather and atmospheric conditions. Factors such as narrow, winding roads and vegetation also can slow response to fire, increasing risk of spread. Wildfires that burn exclusively in natural areas generally pose little risk to lives or property, although the smoke from such fires may cause respiratory problems for people nearby. The fire season in the State of California is starting earlier and ending later each year, with climate change considered to be a key factor for this phenomenon (California Department of Forestry and Fire Protection [CalFire] 2022a).

b. Wildfire Factors

Slope and Aspect

According to CalFire, sloping land increases susceptibility to wildfire because fire typically burns faster up steep slopes (CalFire 2018). Additionally, steep slopes may hinder firefighting efforts. Following severe wildfires, sloping land is also more susceptible to landslide or flooding from increased runoff during substantial precipitation events. Aspect is the direction that a slope faces, and it determines how much radiated heat the slope will receive from the sun. Slopes facing south to southwest will receive the most solar radiation. As a result, such slopes are warmer and the vegetation drier than on slopes facing a northerly to northeasterly direction, increasing the potential for wildfire ignition and spread (CalFire 2018).

Generally, the urbanized area of the City is located west of Newell Drive/Flosden Road. Topography in this area of the City is nearly flat with a slight westward slope towards the Napa-Sonoma Marshes Wildlife Area (U.S. Geological Survey [USGS] 2022). The La Vigne neighborhood, American Canyon High School, and Canyon Estates neighborhood are located east of Newell Drive/Flosden Road, closer to the hillside areas just outside of the City. In this area the topography is slightly sloping upwards to the rolling hills east of the City.

Vegetation

Vegetation is "fuel" to a wildfire and it changes over time. The relationship between vegetation and wildfire is complex, but generally some vegetation is naturally fire resistant, while other types are very flammable. For example, cured grass is much more flammable than standing trees (CalFire 2018). Grass is considered an open fuel, in which oxygen has free access to promote the spread of fire. Additionally, weather and climate conditions, such as drought, can lead to increasing dry vegetation with low moisture content, increasing its flammability. In addition, wildfire behavior depends on the type of fuel present, such as ladder, surface, and aerial fuels. Ladder fuels provide a path for a surface fire to climb upward, into the crowns of trees. Surface fuels include grasses, logs, and stumps low to the ground. Aerial fuels include limbs, foliage, and branches not in contact with the ground (CalFire 2022b).

Naturally occurring (native and exotic non-native) vegetation cover within the City, consists of wetlands, and annual grasslands at the western edge of the City along the Napa-Sonoma Marshes Wildlife Area. This vegetation cover does not present a high risk of wildland fire fuel because of the wet conditions typical of marshes. Along the hillside area on the eastern edge of the city, the two dominant vegetation communities are Oak Woodlands and Annual/Native Grasslands. Both of these vegetation communities, as well as the other minor vegetation communities mapped within the hillside area are susceptible to wildfire.

Weather and Atmospheric Conditions

Wind, temperature, and relative humidity are the most influential weather elements in fire behavior and susceptibility (CalFire 2018). Fire moves faster under hot, dry, and windy conditions. Wind may also blow embers ahead of a fire, causing its spread. Drought conditions also lead to extended periods of excessively dry vegetation, increasing the fuel load and ignition potential.

According to the Western Regional Climate Center, average annual precipitation in American Canyon is 20.26 inches. Generally, in an average or typical year, most precipitation is received from October through April (Western Regional Climate Center 2016). May through September are the driest parts of the year and coincide with what has traditionally been considered the fire season in California. However, increasingly persistent drought and climatic changes in California have resulted in drier winters and fires during the autumn, winter, and spring months are become more common.

Power Lines

Above-ground power lines have the potential to contribute to wildfire risk, especially when they are near or traverse wilderness areas. In some instances, high winds can blow nearby trees and branches into powerlines, sparking fires. Wind can also snap wooden poles, causing live wires to fall onto nearby grass or other fuel, igniting it. While the California Public Utilities Commission estimates only about 10 percent of California's wildfires are triggered by power lines, the frequency and severity of these wildfires has spurred the agency to make new requirements for power line safety practices.

Pacific Gas and Electricity (PG&E) transmission lines traverse the City, both underground and above ground. Of note are the high-power electrical transmission lines which run northeast by southwest through the City (California Energy Commission 2022).

c. Wildfire Hazards

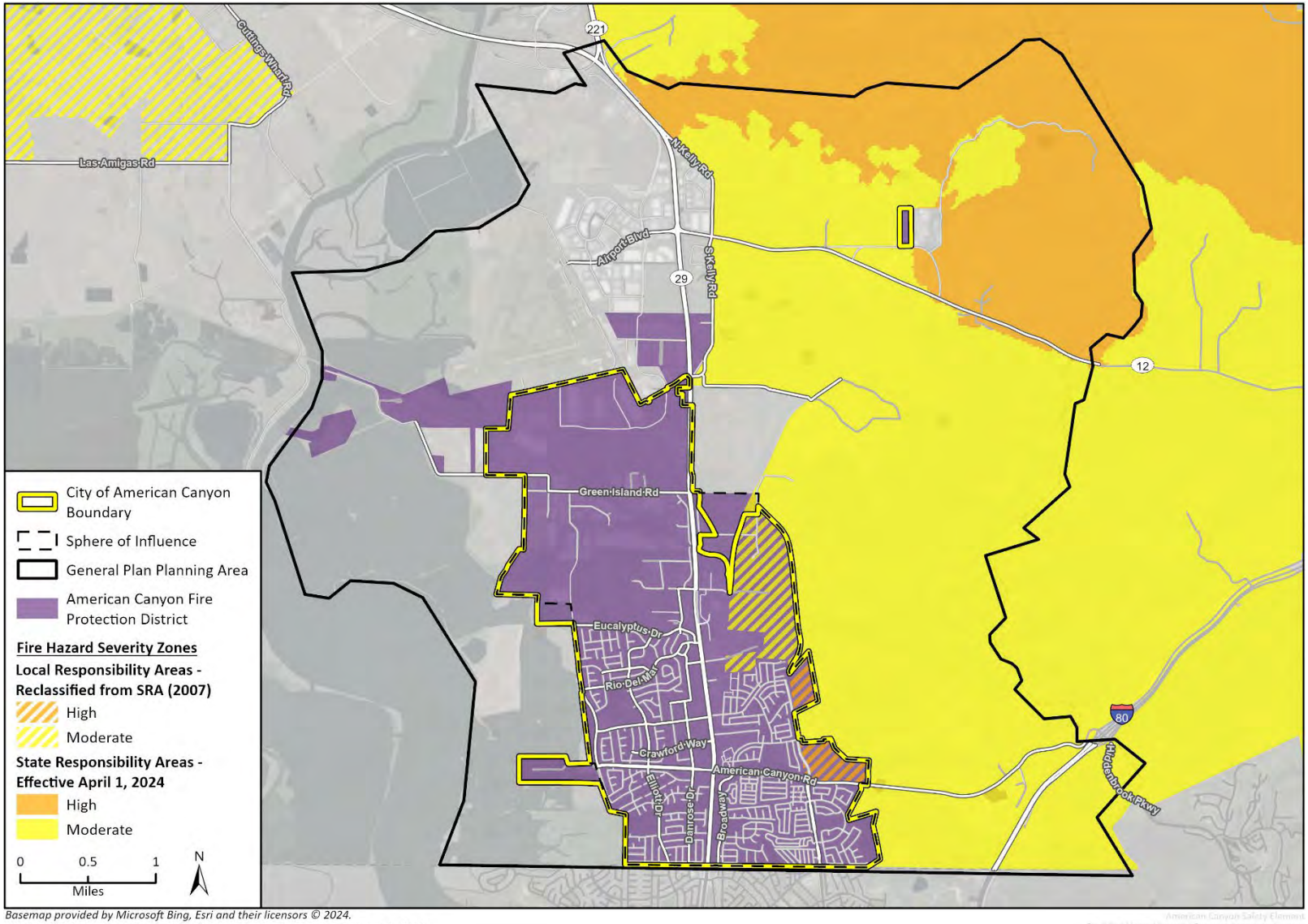
Once a fire is started, the spread and behavior of a fire become a function of fuel characteristics, terrain, and weather conditions. Fires are typically classified by type and intensity. Fire types may include understory fires, crown fires, surface fires, and broadcast fires, among others. Fire intensity, or severity, is the heat energy released by a fire either during a smoldering or raging fire event (CalFire 2022b).

Wildfire activity is closely related to temperature and drought conditions, and in recent decades, increasing drought frequency and warming temperatures have resulted in increased fire activity and the largest, most destructive, and deadliest wildfires in the State's history. Climate change will continue to produce conditions that facilitate a longer fire season, which, when coupled with human-caused changes in the seasonality of ignition sources, will produce more, longer, and bigger fires during more times of the year. According to California's Fourth Climate Change Assessment, Statewide Summary Report (OPR 2018), if greenhouse gas emissions continue to rise, the frequency of extreme wildfires burning over 25,000 acres could increase by 50 percent by 2100, and the average area burned Statewide could increase by 77 percent by the end of the century.

CalFire has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program. These maps place areas of the state into different Fire Hazard Severity Zones (FHSZ) based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather. Typically, these classifications include Non-Wildland, Non-Urban, Moderate, High and Very High. As part of this mapping system, land where CalFire is responsible for wildland fire protection and generally located in unincorporated areas is classified as a State Responsibility Area (SRA), which are managed by CalFire. Where local fire protection agencies are responsible for wildfire protection, the land is classified as a Local Responsibility Area (LRA) (CalFire 2020). CalFire responds to wildland fires from several fire stations, depending on their proximity and availability. The closest station to the Planning Area is the Napa County Fire Department at 1820 Monticello Road in Napa, California, approximately 10 miles north of the Planning Area.

CalFire maps three zones within SRA: 1) Moderate FHSZ; 2) High FHSZ; and 3) Very High FHSZ. Each of the zones influence recommended methods of building construction and property protection to reduce risk associated with wildland fires. Under state regulations, areas within very high fire hazard risk zones must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life within these areas. Figure 4.14-1 shows the FHSZs in the General Plan Planning Area. Recent CalFire mapping displays adopted Fire Hazard Severity Zones (FHSZ) in the State Responsibility Area (SRA), effective April 1st 2024. It also displays recommended FHSZ in the Local Responsibility Area (LRA) from 2007-2011. For that reason, Figure 4.14-1 identifies areas within the ACFPD Service Area that are within a LRA. Due to regulatory processes, there are lands that are no longer classified as SRA and have become classified as LRA yet had a FHSZ designation from the 2007 SRA FHSZ map adoption. These areas are shown on the map with hatched symbology.

Figure 4.14-1 Fire Hazard Severity Zones



Basemap provided by Microsoft Bing, Esri and their licensors © 2024.
Additional data provided by CALFIRE, 2024; Napa County and Mintier Harnish, 2022.

4.14.2 Regulatory Setting

a. Federal Regulations

The Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 requires a state-level mitigation plan as a condition of disaster assistance. There are two different levels of state disaster plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act also established new requirements for local mitigation plans.

National Fire Plan

The National Fire Plan was developed in August 2000, following a historic wildfire season. Its intent is to establish plans for active response to severe wildfires and their impacts to communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

b. State Regulations

California Board of Forestry

The Board of Forestry maintains fire safe road regulations, as part of Title 14 of the California Code of Regulations (CCR). This includes requirements for road width, surface treatments, grade, radius, turnarounds, turnouts, structures, driveways, and gate entrances. These regulations are intended to ensure safe access for emergency wildland fire equipment and civilian evacuation.

California Fire Code

The California Fire Code (Fire Code) is Chapter 9 of CCR Title 24. It establishes the minimum requirements consistent with nationally-recognized best practices to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structure, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The Fire Code is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The Fire Code regulates the use, handling and storage requirements for hazardous materials at fixed facilities. The Fire Code and the California Building Code (CBC) use a hazard classification system to determine what protective measures are required to protect property and life from fire hazards. These measures may include construction standards, separations from property lines and specialized equipment. To ensure that these safety measures are met, the Fire Code employs a permit system based on hazard classification. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout California.

More specifically, the Fire Code is included in Title 24 of the CCR. Title 24, part 9, Chapter 7 addresses fire-resistance-rated construction; CBC (Part 2), Chapter 7A addresses materials and construction methods for exterior wildfire exposure; Fire Code Chapter 8 addresses fire related

Interior finishes; Fire Code Chapter 9 addresses fire protection systems; and Fire Code Chapter 10 addresses fire related means of egress, including fire apparatus access road width requirements. Fire Code Section 4906 also contains existing regulations for vegetation and fuel management to maintain clearances around structures. These requirements establish minimum standards to protect buildings located in all FHSZs within SRAs and Wildland-Urban Interface Fire Areas. This Fire Code includes provisions for ignition-resistant construction standards for new buildings.

The City adopted the most recent 2019 California Fire Code under Ordinance No. 2019-03.

California Fire Plan

The Strategic Fire Plan for California is the State's road map for reducing the risk of wildfire. The most recent version of the Plan was finalized in August 2018 and directs each CalFire Unit to prepare a locally specific Fire Management Plan (CalFire 2018). In compliance with the California Fire Plan, individual CalFire units are required to develop Fire Management Plans for their areas of responsibility. These documents assess the fire situation within each of the 21 CalFire units and six contract counties. The plans include stakeholder contributions and priorities, and identify strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire problem. The plans are required to be updated annually.

California Office of Emergency Services

The California Office of Emergency Services (OES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks, and includes a vulnerability analysis and a hazard mitigation strategy (OES 2018). The SHMP is federally required under the Disaster Mitigation Act of 2000 in order for the State to receive Federal funding. The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance (Federal Emergency Management Agency 2022).

State Emergency Plan

The foundation of California's emergency planning and response is a statewide mutual aid system, which is designed to ensure that adequate resources, facilities, and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with an emergency situation.

The California Disaster and Civil Defense Master Mutual Aid Agreement (California Government Code Sections 8555–8561) requires signatories to the agreement to prepare operational plans to use within their jurisdiction, and outside their area. These operational plans include fire and non-fire emergencies related to natural, technological, and war contingencies. The State of California, all State agencies, all political subdivisions, and all fire districts signed this agreement in 1950.

Section 8568 of the California Government Code, the "California Emergency Services Act," (Act) states that "the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof." The Act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager. The provisions of the act are further reflected and expanded on by appropriate local emergency ordinances. The Act further describes the function and operations of government at all levels during extraordinary emergencies, including war.

All local emergency plans are extensions of the State of California Emergency Plan. The State Emergency Plan conforms to the requirements of California's Standardized Emergency Management System (SEMS), which is the system required by Government Code 8607(a) for managing emergencies involving multiple jurisdictions and agencies. The SEMS incorporates the functions and principles of the Incident Command System (ICS), the Master Mutual Aid Agreement, existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination. Local governments must use SEMS to be eligible for funding of their response-related personnel costs under state disaster assistance programs. The SEMS consists of five organizational levels that are activated as necessary, including: field response, local government, operational area, regional, and state. OES divides the state into several mutual aid regions. The City is located in Mutual Aid Region II, which includes Del Norte, Humboldt, Mendocino, Sonoma, Lake, Napa, Marin, Solano, Contra Costa, San Francisco, San Mateo, Alameda, Santa Clara, Santa Cruz, San Benito, and Monterey counties (OES 2018).

Government Code Sections 65302 and 65302.5, Senate Bill 1241 (Kehoe) of 2012

Senate Bill (SB) 1241 requires cities and counties to address fire risk in SRAs and Very High FHSZs in the safety element of their general plans. The bill also amended CEQA to direct amendments to the *CEQA Guidelines* Appendix G environmental checklist to include questions related to fire hazard impacts for projects located in or near lands classified as SRAs and Very High FHSZs. In adopting these Guidelines amendments, the Governor's Office of Planning and Research recognized that generally, low-density, leapfrog development may create higher wildfire risks than high-density, infill development.[1] Zoning around the project site is low density housing, allowing up to six dwelling units per acre.

California Public Utilities Commission General Order 166

General Order 166 Standard 1.E requires that investor-owned utilities develop a Fire Prevention Plan which describes measures that the electric utility will implement to mitigate the threat of power-line fires generally. Additionally, this standard requires that investor-owned utilities outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning in a high fire threat area. Fire Prevention Plans created by investor-owned utilities are required to identify specific parts of the utility's service territory where the conditions described above may occur simultaneously. Standard 11 requires that utilities report annually to the California Public Utilities Commission regarding compliance with General Order 166. In compliance with Standard 1.E of this General Order, PG&E adopted a Fire Prevention Plan dated October 31, 2018.

c. Regional and Local Regulations

Napa County Operational Area Multi-Jurisdictional Hazard Mitigation Plan

In 2020, the Napa County prepared an updated Multi-Jurisdictional Hazard Mitigation Plan (HMP) to guide County and City Officials and Special Districts Managers in protecting the people and property within the County from the effects of natural disasters and hazards events. The HMP provides an explanation of prevalent hazards within the County and how hazards may affect the County and

[1] "Leapfrog development" describes the construction of new development at a distance from existing developed areas, with undeveloped land between the existing and new development.

participating cities and special districts differently based upon proximities to natural hazards. The HMP also identifies risks to vulnerable assets, both people and property. Most importantly, the mitigation strategy presented in the HMP responds to the identified vulnerabilities within each community and provides prescriptions or actions to achieve the greatest risk reduction based upon available resources.

The City of American Canyon (Resolution No. 2020-44) and the American Canyon Fire Protection District adopted the HMP on June 2, 2020 (Resolution No. 2020-08). The HMP includes an Annex that details the hazard mitigation planning elements specific to the City. The Annex identifies that American Canyon is required to update building codes to meet the minimum standards to those required in the California Building Code last updated in 2019, which reduce risk from wildfire. Chapter 16.02 of the American Canyon Municipal Code adopts the 2019 California Building Code.

Sonoma-Lake-Napa Unit Strategic Fire Plan

The CalFire Strategic Fire Plan for the Sonoma-Lake-Napa Unit, last updated in 2020, applies to Napa County as well as neighboring Sonoma and Lake counties. This plan documents an assessment of wildfire hazards in the Sonoma-Lake-Napa Unit and identifies strategic targets to minimize fire risks, such as fire prevention and vegetation management.

American Canyon Fire Protection District Strategic Plan

The ACFPD Long-Range Master Plan (LRMP) guides the efficient future growth and development of the Fire District to provide the community of American Canyon with the highest possible level of service balanced with long term financial sustainability. Adopted in October 2022 (Resolution 2022-26), the LRMP identifies recommendations to improve long-range planning and delivery of fire and emergency services to the community (ACFPD 2022a).

The LRMP recommendations relate to operations, procedures, and community involvement, to deliver desired levels of service at the most efficient cost. To maintain long-range service levels, the LRMP recommends construction of a new relocated Fire Station 211.

American Canyon Municipal Code

Chapter 8.08 of the American Canyon Municipal Code contains ordinances relating to fire regulations including fire protection district regulations and the authority of the designated fire chief to enforce the Uniform Fire Code within city limits.

Section 18.40.120 of the American Canyon Municipal Code requires that all utilities be installed underground in accordance with the provisions of the American Canyon Municipal Code. It also requires that all underground utilities be installed before preparation of subgrade for paving or any other site improvements that may affect the orderly installation of the underground utilities.

Ordinance 2022-02

The ACFPD Board adopted the most recent 2022 California Fire Code under Ordinance No. 2022-02. Section 4904 of the California Fire Code calls for a fire protection plan that addresses water supply, access, building ignition and fire-resistance factors, fire protection systems and equipment, defensible space, and vegetation management for any new residential building within a wildland-urban interface fire area.

4.14.3 Impact Analysis

a. Methodology and Thresholds of Significance

Significance Thresholds

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on wildfire if it would:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan.
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.
5. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Methodology

The assessment of impacts related to wildfire hazards and risks were evaluated using FHSZ mapping for Napa County, aerial imagery, and topographic mapping. Additionally, weather patterns related to prevailing winds and precipitation trends were evaluated as they relate to the spread and magnitude of wildfire.

In addition, on October 10, 2022, the State's Office of the Attorney General issued guidance for analyzing wildfire impacts in a document titled *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects under the California Environmental Quality Act* (State's Office of the Attorney General 2022). This analysis in this section used the following guidance from State's Office of the Attorney General in considering the potential impacts of the project.

- Project Density: Project density influences how likely a fire is to start or spread, and how likely it is that the development and its occupants will be in danger when a fire starts.
- Project Location: Project placement in the landscape relative to fire history, topography, and wind patterns also influences wildfire risk.
- Water Supply and Infrastructure: The analysis should consider the adequacy of water supplies and infrastructure to address firefighting within the project site.
- Evacuation and Emergency Access: Local governments should consider placing developments close to existing road and evacuation infrastructure, and where appropriate, constructing additional roads to facilitate evacuations.
- Fire Hardening Structures: Home hardening has been shown to be an extremely effective measure for preventing structure loss during a wildfire. Local governments should require developers to upgrade building materials and use installation techniques to increase the development's resistance to heat, flames, and embers beyond what is required in applicable building codes.

b. Project Impacts and Mitigation Measures

Threshold 1:	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact W-1 THE 2040 GENERAL PLAN PROPOSED POLICIES ADDRESS EMERGENCY ACCESS, RESPONSE, AND PREPAREDNESS. THEREFORE, THE PROJECT WOULD NOT IMPAIR AN EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As shown in Figure 4.14-1, there are portions of the Planning Area where development could occur (i.e., City limits and SOI) that are mapped within an LRA with moderate and high fire risk. In addition, there are areas mapped within an SRA with moderate and high fire risk, adjacent to the eastern City limits. However, development would not occur within any areas mapped within an SRA or within a very high FHSZ. The nearest very high FHSZ is located approximately 5.7 miles northeast of the Planning Area.

Nonetheless, development facilitated by the project could introduce new residents or employees who would require emergency response evacuation in the case of a wildfire. The Safety Element of the 2040 General Plan includes the following proposed goals and policies to ensure safe and efficient evacuation and emergency response.

Goal S-1: Prepare and equip American Canyon to minimize loss of life, injury, property damage, and disruption of vital services from disasters and emergencies.

- **Policy S-1.7: Public Awareness.** Increase public awareness of City and Fire District emergency response plans, evacuation routes and shelters, and ways to reduce risks at the home and office, focusing on the most vulnerable populations such as older adults and individuals with chronic health conditions. Offer informational materials in multiple languages.
- **Policy S-1.8: Emergency Access.** Work with the American Canyon Fire Protection District (ACFPD) and the Napa County Sheriff's Department to identify and regularly evaluate emergency access routes to improve accessibility throughout the city in the event of a disaster.
- **Policy S-1.9: Essential Facilities.** Work with service providers to maintain the reliability of essential facilities, such as communications towers, electrical substations, water services, and first-response buildings in the event of an emergency through promoting grid resilience and energy independence. Work to implement on-site power generation through solar photovoltaic systems and battery storage.
- **Policy S-1.10: Communication.** Evaluate the potential to utilize a comprehensive emergency communication system to ensure effective communication between City departments, outside organizations and agencies, and with the community before, during, and to accelerate recovery following a disaster.
- **Policy S-1.11: City Employee Emergency Preparedness.** Increase City employee capacity to respond to emergencies through the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) compliant training drills to identify hazards and assist in emergency preparedness, response and recover.
- **Policy S-1.12: Local Partnerships.** Coordinate with citizen groups and organizations, such as the American Canyon Community Response team (CERT) to identify, prepare for, and respond to emergency assistance in the event of a natural disaster.

- **Policy S-1.13: Emergency Evacuation Protocols for Single Access Neighborhoods.** Update emergency evacuation protocols and relevant evacuation plans to address and support neighborhoods with fewer than two ingress/egress routes.
- **Policy S-1.14: Communication and Outreach for Single Access Neighborhoods.** Establish and maintain communication and outreach protocols with the public that include tailored evacuation messaging to residents that live in identified neighborhoods with fewer than two ingress/egress routes. Outreach should include support for preventative home hardening and defensive space standards and conduct emergency preparedness and response trainings.
- **Policy S-1.15: Expand Access for Single Access Neighborhoods.** Assess options for expanding **Policy** ingress/egress options for residents in the identified access-limited areas in coordination, as necessary, with Napa Valley Transportation Authority, Caltrans, California Highway Patrol, adjacent cities, and Napa County.
- **Policy S-1.16: Zone-Based Evacuation Plans.** Establish specific "zone-based" evacuation plans and protocols that address the specific needs of residents in identified areas with fewer than two ingress/egress routes.
- **Policy S-1.17: Critical Infrastructure Siting.** Whenever feasible, locate the following critical facilities outside of flood, seismic, and high fire hazard zones: health care facilities, schools, emergency shelters, fire stations, emergency command centers, and emergency communications facilities.
- **Policy S-1.18: Emergency Operations Plan.** Update the City's Emergency Operations Plan every five years and maintain consistency with the County's Emergency Operations Plan.
- **Policy S-1.19: Multi-Jurisdictional Hazard Mitigation Plan Updates.** Continue to fully participate in, support, and implement the five-year updates of the Napa County Multi-Jurisdictional Hazard Mitigation Plan.
- **Policy S-1.20: Funding for Critical Facilities.** Direct the dedication of funds to upgrade and maintain City owned critical facilities, including the Emergency Operations Center, fire and police departments, and City Hall, to make them more resilient to the potential impacts of natural disasters.
- **Policy S-2.4: Residential Evacuation Routes.** Require that all new residential development have at least two emergency evacuation routes.
- **Policy S-2.13: Emergency Roadways.** Maintain roadways used for emergency access by emergency response vehicles as necessary and appropriate to ensure ongoing serviceability.

Furthermore, the Napa County Emergency Operations Plan (EOP) provides a framework for Napa County to use in performing emergency functions before, during, and after an emergency event (County of Napa 2020). The EOP aims to protect and preserve life, property, and the environment in Napa County, as well as the City. The project would not conflict with this plan and would not impair evacuation, as described in detail below.

The City has identified evacuation procedures in the event of a natural disaster, including a wildfire. During an emergency, individuals would receive notifications from emergency sirens, alarms, or local radio stations. In addition, the City has partnered with the Napa County Office of Emergency Services to provide residents with official evacuation order notifications supported by Zonehaven, a California-based company under contract with Napa County. The City identifies the following three different evacuation alerts that would be provided to residents and employees in the City:

- Evacuation Warning: This is a precautionary notice designed to give residents time to prepare for a possible evacuation.
- Evacuation Order: This is a notice where danger is imminent and a person should find their emergency supply kit and leave the area immediately.

The roadway that would primarily be used for evacuation in the event of a wildfire would be SR 29. The City would review and approve development facilitated by the project to ensure that emergency access meets City standards. Development facilitated by the project, as well as all development in the city, must comply with road standards, and are reviewed by the ACFPD to ensure development would not interfere with evacuation routes or impede the effectiveness of evacuation plans. In addition, the 2040 General Plan identifies mobility improvements that would provide additional emergency access. Because the City would review development facilitated by the project to ensure that emergency access meets City standards, impacts related to impairing an adopted emergency response plan or emergency evacuation plan would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2:	Would the General Plan, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
Threshold 5:	Would the proposed project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact W-2 THE PROJECT COULD EXPOSE PEOPLE AND STRUCTURES TO WILDFIRE RISK; HOWEVER, WILDFIRE RISKS WOULD BE REDUCED WITH MITIGATION AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Development could be in LRA lands with moderate and high fire risk. Wildfire risk in American Canyon is generally concentrated on the hillside area east of the City. This area is largely undeveloped and contains large tracts of vegetation cover that can act as fire fuel. This area is also adjacent to large areas of vegetation cover and open space outside of the City limits, which further increases the potential for wildfires. A total of 526 acres of land burned in 2019 during a wildfire known as the American Fire incident (CalFire 2019; ACFPD 2019). This fire was located east of the City limits.

Prevailing winds in American Canyon generally blow from the west during the summer months, which is typically fire season, moving west to east across the city (Western Regional Climate Center 2022). Therefore, the prevailing winds would move wildfire in the hillside area and the related smoke and air pollutants, eastward, away from the urbanized areas of the city. Additionally, fire tends to burn and spread uphill, and the hillside area generally slopes uphill toward the east, away from the developed areas of the city.

Construction of development facilitated by the project would use equipment with combustion engines, which are known to create fires. As such, there is a potential wildfire risk, especially during

dry months, that could result in a potentially significant impact. Therefore, Mitigation Measure WF-1 would be required to reduce wildfire risk from construction activities.

Development could be located in proximity to agricultural and undeveloped areas with flammable vegetation. As such, operation of development facilitated by the project could result in potentially significant wildfire impacts, including exposure of people to pollutant concentrations from a wildfire or a significant risk from a wildfire. New structures would be constructed following the current fire and building codes and safety standards. Construction of development would be subject to the California Fire Code, which includes safety measures to minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves and vents to prevent intrusion by flame or embers. In addition, American Canyon Municipal Code Section 16.02.130 requires the installation of fully automatic fire sprinkler systems for new buildings. The Board of Forestry, via California Code of Regulations Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures and life by reducing wildfire hazards in areas designated as VHFHSZs. These codes and regulations would reduce the risk of loss, injury, or death from wildfire for new developments facilitated by the project in VHFHSZs. In addition, any electrical lines associated with development would be undergrounded, pursuant to Section 18.40.120 of the American Canyon Municipal Code, as well as the following proposed policy in the 2040 General Plan.

- **Policy U-9.4: Overhead Utility Undergrounding.** Develop a comprehensive strategy to underground existing overhead utilities.

In addition, the 2040 General Plan would also include the following proposed polices that would minimize potential wildfire risks through structural hardening, updating development standards, ensuring that there is adequate water supply, and encouraging the development of fire breaks:

- **Policy S-2.7: Building and Fire Code Compliance.** Require new development to meet or exceed structural hardening requirements in the most current version of the California Building Codes and California Fire Code.
- **Policy S-2.8: Development Standards Update.** Incorporate relevant new legislative requirements and best practices into the City's development standards.
- **Policy S-2.11: Fire Suppression.** Coordinate with the Fire District to ensure adequate, water supply to suppress wildfire, as part of the next Napa County Multi-jurisdictional Hazard Mitigation Plan update.
- **Policy S-2.12: Peakload Water Supply.** Support measures to provide adequate water availability throughout the city to meet future peak fire demand during times of peak domestic demands.
- **Policy S-2.14: Community Fire Breaks.** Coordinate with the American Canyon Fire Protection District to encourage property owners to maintain fire breaks and fuel modification/reduction zones on their property.

Finally, Mitigation Measure WF-2 would include a requirement for the landscaping in development to be consistent with applicable Building and Fire Codes.

Mitigation Measures

WF-1 Wildfire Risk Reduction During Construction

For projects located in proximity to agricultural or undeveloped areas (including hillside areas) with flammable vegetation, prior to issuance of a grading or building permit, whichever occurs first, the applicant shall submit documentation that they will implement the following measures to reduce risk of loss, injury, or death from wildfire during construction:

1. Construction equipment powered by internal combustion engines shall be equipped with spark arresters. The spark arresters shall be maintained pursuant to manufacturer recommendations to ensure adequate performance.
2. Certain project construction activities with potential to ignite wildfires during red-flag warnings issued by the National Weather Service for the project site location shall be prohibited. Example activities that shall be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings, mowing, chain sawing, chipping, the use of any equipment with the potential to introduce sparks.
3. Fire extinguishers shall be required to be onsite during construction. Construction vehicles shall be equipped with at least one (1) functioning fire extinguisher and one (1) shovel or McLeod firefighting tool. Heavy machinery or equipment (e.g., tractors, grinders, tree chippers, excavators, bulldozers) shall be equipped with one (1) shovel, McLeod firefighting tool, or Pulaski; one (1) functioning fire extinguisher; and at least one 5-gallon backpack pump or larger capacity water (or CAFS) pump/delivery system. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher.

WF-2 Fire Resistant Vegetation and Landscaping

For projects located in proximity to agricultural or undeveloped areas (including hillside areas) with flammable vegetation, prior to issuance of a building permit for development located within or adjacent to a VHFHSZ, the applicant shall submit landscape plans prepared by a registered Landscape Architect that are consistent with applicable Building and Fire Codes.

Significance After Mitigation

With implementation of Mitigation Measures WF-1 and WF-2 the risk of loss of structures and the risk of injury or death due to wildfires would be reduced. These measures would make structures more fire resistant and less vulnerable to loss in the event of a wildfire. These mitigation measures would also reduce the potential for construction to inadvertently ignite a wildfire and require the use of fire-resistant native vegetation. Given the risk for wildfires in the Planning Area and that mitigation would be implemented to reduce the risk, impacts would be less than significant.

Threshold 3:	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact W-3 THE PROJECT WOULD INCLUDE THE INSTALLATION OF UTILITIES AND FUTURE MOBILITY IMPROVEMENTS; HOWEVER, COMPLIANCE WITH THE HMP AND PROPOSED POLICIES IN THE 2040 GENERAL PLAN WOULD REDUCE IMPACTS TO LESS THAN SIGNIFICANT.

As discussed in Section 4.13, *Utilities and Service Systems*, development facilitated by the project would require connections to existing utilities. The only utility that poses a potential wildfire risk are electrical lines; however, electrical lines associated with development would be undergrounded, pursuant to Section 18.40.120 of the American Canyon Municipal Code, as well as the following proposed policy in the 2040 General Plan.

- **Policy U-9.4: Overhead Utility Undergrounding.** Develop a comprehensive strategy to underground existing overhead utilities.

As such, the project would not exacerbate fire risk from the installation of electrical lines. In addition to utility connections, the 2040 General Plan also envisions future mobility improvements as discussed within Section 4.11, *Transportation*. Mobility improvements facilitated by the project, including improvements to roadways, and bicycle and pedestrian facilities would primarily consist of improvements such as repaving roads and bicycle lanes, installing roundabouts, and repainting median strips. Such projects would provide egress in the case of a wildfire or other emergency and would be designed in such a way to allow for simultaneous egress and ingress during an evacuation which would not exacerbate a fire risk. Furthermore, the 2040 General Plan includes the following proposed goals and policies to ensure safe and adequate preparation for wildfires:

Goal S-2: A City safe and adequately prepared for urban and wildfire emergencies.

- **Policy S-2.1: Fire Safe Site Design.** Develop site design and ongoing maintenance standards for new development in the moderate and high fire hazard zones to mitigate wildfire risk.
- **Policy S-2.2: Utility Undergrounding.** Develop a comprehensive plan to underground overhead utilities in new development projects and throughout the City.
- **Policy S-2.4: Residential Evacuation Routes.** Require that all new residential development have at least two emergency evacuation routes.
- **Policy S-2.7: Building and Fire Code Compliance.** Require new development to meet or exceed hardening requirements in the most current version of the California Building Codes and California Fire Code.
- **Policy S-2.8: Development Standards Update.** Incorporate relevant new legislative requirements and best practices into the City's development standards.
- **Policy S-2.10: Fire Protection Plans.** Coordinate with the American Canyon Fire Protection District to consider developing fire protection plan guidelines and standards for new construction projects.

For the reasons mentioned above, impacts related to the installation of infrastructure would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 4:	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact W-4 THE PLANNING AREA IS RELATIVELY FLAT AND COMPLIANCE WITH PROPOSED POLICIES IN THE 2040 GENERAL PLAN AND THE AMERICAN CANYON MUNICIPAL CODE WOULD ENSURE THAT RISKS FROM FLOODING OR LANDSLIDES DUE TO A WILDFIRE WOULD BE LESS THAN SIGNIFICANT.

Topography in the city is relatively flat with hills to the east. Severe wildfires damage the forest or shrub canopy, the plants below, as well as the soil. In general, this can result in increased runoff after intense rainfall, which can put residences and other structures below a burned area at risk of localized floods and landslides. As discussed in Section 4.15, *Effects Found To Be Less Than Significant,* development facilitated by the project within flood hazard zones or areas at risk of landslides would adhere to the requirements of the American Canyon Municipal Code and the following 2040 General Plan Policies:

Goal S-4: A community adequately prepared for natural hazards related to landslides, geologic instability, and seismic activity.

- **Policy S-4.1: Geologic Hazard Identification.** Reference current local and California Geologic Survey seismic and geologic hazards map surveys.
- **Policy S-4.3: Structure Protection.** Develop inventories of at-risk public buildings and infrastructure and seek funding to bring existing City-owned structures into compliance with updated seismic safety standards.
- **Policy S-4.7: Geotechnical Review.** Continue to require preliminary investigations of tract sites by State-registered geotechnical engineers and certified engineering geologists (Chapter 70 County Building Code) and ensure regular inspection of grading operations**.**
- **Policy S-4.8: Landslide Activity.** Restrict new development in areas of known landslide activity unless adequate mitigation is incorporated.

Furthermore, development would be required to develop a Stormwater Control Plan, which is discussed in detail in Section 4.15, *Effects Found To Be Less Than Significant* (subsection 4,15.5, *Hydrology and Water Quality*), and would further minimize adverse impacts of flooding following a wildfire. The city's generally flat grade and drainage policies would prevent exposure of people or residences to downslope landslides and flooding. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

4.15 Effects Found To Be Less Than Significant

During evaluation of the project, certain impact areas included in the California Environmental Quality Act (CEQA) Appendix G checklist were found to have a less than significant impact or no impact. As allowed under CEQA Guidelines Section 15128, this section discusses why impacts to these environmental topics were determined to have a less than significant impact or no impact and therefore are not discussed in detail in the Draft Environmental Impact Report (EIR) as individual sections.

4.15.1 Agriculture and Forestry Resources

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on agricultural and forestry resources if it would:

1 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use; or

2 Conflict with existing zoning for agricultural use, or a Williamson Act Contract; or

3 Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)); or

4 Result in the loss of forest land or conversion of forest land to non-forest use; or

5 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

Based on the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program, the current City limits are mapped as primarily as Urban and Built-Up land, with small pockets of Farmland of Local Importance and grazing land (DOC 2018). The current City limits do not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Pursuant to the CEQA Guidelines, Farmland of Local Importance is not considered agricultural land and the conversion of Farmland of Local Importance would not trigger a substantial adverse impact (California Public Resources Code Division 13, Chapter 2.5, Section 21060.1). No land within the current City limits is zoned for agricultural use. The City does not contain forest land, timberland, or land zoned for timberland production (City of American Canyon 2015). In order to qualify for a Williamson Act contract in Napa County, a parcel must be zoned Agricultural Preserve or Agricultural Watershed, be 40 acres in size for non-prime agricultural land or 10 acres in size for prime agricultural land, and contain current agricultural use (County of Napa 2022a). Accordingly, there are no lands under Williamson Act contract within the current City limits.

There is land within the City's Sphere of Influence (SOI) and Urban Limit Line zoned as Agricultural Watershed and under a Williamson Act contract (County of Napa 2022b; County of Napa 2018). In addition, Prime and Unique Farmland is present within the Urban Limit Line, east of Watson Lane (DOC 2018). Annexation of land within these areas would be consistent with the planned development anticipated in the Napa County General Plan because the Napa County General Plan Policy AG/LU-130 supports the City's annexation of unincorporated land located with the City's growth boundary (County of Napa 2009). The lands within the City's SOI and proposed Urban Limit Line are within Napa County's jurisdiction and would need to be incorporated into the City prior to

development occurring in these areas. The potential environmental effects from future development within the City's SOI and proposed Urban Limit Line are speculative. Pursuant to CEQA Guidelines Section 15145, speculative impacts should not be discussed. Potential environmental effects associated with development on land within the City's SOI and proposed Urban Limit Line would be evaluated and mitigated as necessary as part of the County, City, and Napa County Local Agency Formation Commission review of individual development applications. Accordingly, the project would not result in the conversion of Farmland, conflict with existing zoning or Williamson Act contracts, result in the loss of forest land, or involve other changes which could result in the conversion of Farmland to non-agricultural use or the conversion of forest land to non-forest use.

4.15.2 Energy

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on energy if it would:

1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;

2 Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Since 2016, the City has been enrolled in the Marin Clean Energy (MCE) Light Green Program, MCE's default energy plan that offers 60 percent renewable energy. Before switching to MCE, the City was enrolled in the Pacific Gas and Electric (PG&E) 29 percent renewable option. MCE is an alternative to PG&E for energy generation. All residents and local businesses are automatically enrolled in the Light Green Program and have the option to opt up to the Deep Green Program, which offers 100 percent renewable energy. In 2021, American Canyon City Council voted to supply the City's facilities with MCE Deep Green 100 percent renewable energy. Some electrical service in Planning Area is still provided by PG&E.

Construction activities associated with development facilitated by the project would require energy resources in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. It is reasonable to assume that manufacturers of concrete, steel, lumber, or other building materials would employ energy conservation practices to minimize their cost of doing business. It also is reasonable to assume that non-custom building materials, such as drywall and standard-shaped structural elements, would be manufactured regardless of the project and, if not used for the project, would be used elsewhere. Development facilitated by the project would be required to comply with a variety of statewide, regional, and local renewable energy and energy efficiency plans, including the following:

- **Assembly Bill 2076: Reducing Dependence on Petroleum.** Pursuant to AB 2076, the California Energy Commission (CEC) and California Air Resources Board prepared and adopted a joint-agency report in 2023: *Reducing California's Petroleum Dependence*. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita vehicle miles traveled. One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand.
- **California Renewable Portfolio Standard.** California's Renewable Portfolio Standard obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent total retail sales of electricity from renewable energy sources by 2020, 60 percent by 2030, and 100 percent by 2045.

- **Energy Action Plan.** In the October 2005, the CEC and California Public Utilities Commission updated their energy policy vision by adding some important dimensions to the policy areas included in the original Energy Action Plan (EAP), such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change. The nine major action areas in the EAP include energy efficiency, demand response, renewable energy, electricity adequacy/reliability/infrastructure, electricity market structure, natural gas supply/demand/infrastructure, transportation fuels supply/demand/infrastructure, research/development/demonstration, and climate change.
- **AB 1007: State Alternative Fuels Plans.** The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-State production of biofuels without causing a significant degradation of public health and environmental quality.
- **Bioenergy Action Plan, Executive Order S-06-06.** The Executive Order establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050.
- **California Code of Regulations Title 24 – Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen).** The 2022 Building Energy Efficiency Standards move toward cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less.

The CALGreen Standards establish green building criteria for residential and nonresidential projects. The 2022 Standards include the following: increasing the number of parking spaces that must be prewired for electric vehicle chargers in residential development; requiring all residential development to adhere to the Model Water Efficient Landscape Ordinance; and requiring more appropriate sizing of heating, ventilation, and air conditioning ducts.

Development in the Planning Area would need to comply with the energy efficiency and reduction policies within the 2040 General Plan, which would include the following proposed policies:

- **Policy U-8.9**: **Demolition and Construction Waste.** Require all new development to comply with the current CALGreen requirements for construction and demolition waste diversion.
- **Policy U-9.1: Reach Building Code.** Reduce energy use in new development by considering a local amendment that requires a 15% energy efficient standard improvement over the California Building Code.
- **Policy U-9.2: Electric Energy Systems.** Coordinate with Pacific Gas and Electric Company (PG&E) to ensure that electrical energy systems do not adversely impact land uses and population in the City of American Canyon.
- **Policy U-9.3: Resilient Grid.** Cooperate with PG&E to obtain applicable City permit approvals that improve electric grid resilience to natural hazards (seismic events, flooding, wildfires, extreme wind events).
- **Policy U-9.5: Electric Energy Systems.** Coordinate with Pacific Gas and Electric Company (PG&E) to ensure that electrical energy systems do not adversely impact land uses and population in the City of American Canyon.

- **Policy U-9.6: Passive Solar Heating and Cooling.** Consistent with the California Subdivision Map Act, require new subdivisions to examine the feasibility of incorporating site layouts that allow passive solar heating and cooling.
- **Policy U-9.7: Residential Energy Efficiency.** Seek grant funds that help low and moderate-income residents obtain low or no-cost loans to increase energy efficiency of their homes through weatherization, insulation, solar energy generation and energy battery backup storage; and assist utility providers with outreach on home energy efficiency rebates and programs for all residents, regardless of income.
- **Policy ENV-10.6: Reach Building Code.** Consider feasibility of adopting a "reach" local amendment to the California building code to require a 15% or greater energy efficiency than the State standard.
- **Policy ENV-10.8: Building Electrification.** Consider a Reach Building Code that would prohibit installation of natural gas in all new construction.
- **Policy ENV-11.1: Energy Efficiency.** Require developers employ energy-efficient site planning methods and building design, including building orientation, shading, landscaping, building reflectance, and passive solar heating and hot water systems.
- **Policy ENV-11.1: Renewable Energy Sources.** Work with other agencies and utility companies to develop safe, economical, and renewable energy resources.
- **Policy ENV-11.2: Renewable Energy Program.** Support installation of renewable energy and battery storage for homes and businesses.
- **Policy ENV-11.3: Energy Retrofit Program.** Develop an energy retrofit program and incentives for homeowners and building owners to encourage energy efficiency improvements such as fixture and appliance upgrades.
- **Policy ENV-11.4: Energy Efficiency City Operations.** Increase energy efficiency of City operations and evaluate the feasibility of installing renewable energy at city facilities.

Energy use would be reduced further by General Plan policies that encourage reductions in inefficient energy allocations related to transportation, which include:

- **Policy MOB-1.7: Promote Walking and Bicycling.** Promote walking and bicycling for transportation, recreation, and improvement of public health.
- **Policy MOB-1.11: Reduce the Need to Drive.** Implement land use policies designed to create a pattern of activity that makes it easy to shop, play, visit friends, and conduct personal business without driving.
- **Policy MOB-1.17: Reduce Vehicle Miles Traveled.** Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop.
- **Policy MOB-1.20: Bicycle Plan Funding.** Include funding for the City's Bicycle Plan updates and bikeway improvements consistent with the Bicycle Plan in the City's transportation financing program and TIF, recognizing the multi-modal travel needs of the City.
- **Policy MOB-1.22: Non-motorized Circulation System.** Provide safe and direct pedestrian routes and bikeways between places.
- **Policy MOB-1.23: Pedestrian Connections to Employment Destinations**. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their

workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.

- **Policy MOB-1.24: Bicycle Facilities.** Bicycle facilities shall be provided to complete a continuous bikeway system, consistent with state standards, as shown on the Bikeway Plan Map. In cases where existing right of way constraints limit development of Class II or Class IV facilities, Class Ill signage and demarcation may be permitted at the discretion of the City Engineer. Deviations from these standards and from the routing shown on the diagram shall be permitted with the approval of the City Engineer.
- **Policy MOB-4.1: Transit Electrification.** Support NVTA in its efforts to electrify the transit fleet.
- **Policy MOB-4.2: Municipal Fleet**. Prepare a plan to systematically replace the City's vehicle fleet to electric.
- **Policy MOB-4.3: Effects of New Technologies**. Monitor and evaluate the development of convenient new electric mobility technologies (e.g., scootershare and bikeshare).
- **Policy MOB-4.4: Expand Electric Charging Stations**. Evaluate regulatory and incentivized processes and funding mechanisms to streamline new electric vehicle charging stations at the lowest possible cost.
- **Policy MOB-6.1: VMT Thresholds**. Establish vehicle miles traveled (VMT) thresholds and Transportation Demand Management (TDM) mitigation requirements for the purposes of environmental review under the California Environmental Quality Act (CEQA). The City shall continue to maintain LOS standards for the purposes of planning and designing street improvements on Green Island Road, Devlin Road, and American Canyon Road.
- **Policy ENV-10.3: Gas Station Limits.** Recognizing that the transportation sector is the largest source of GHG emissions in American Canyon and in California more broadly, prohibit construction of new fossil-fuel stations in American Canyon.
- **Policy ENV-10.4: Expand Zero Emission Vehicles.** Consider feasible methods to foster widespread use of Zero Emission Vehicles (ZEVs) to improve air quality and help meet California's GHG reductions targets by expanding availability of non-fossil vehicle fuel infrastructure, such as public and private electric vehicle charging stations, and hydrogen facilities for fuel cell electric vehicles throughout American Canyon.
- **Policy ENV-10.5: Vehicle Miles Travelled Reduction**. Reduce vehicle miles travelled by encouraging future land uses that feature a compact mixed-use urban form connected with pedestrian and bicycle trails.
- **Policy ENV-10.7: Vehicle Idling.** Reduce vehicle engine idling in American Canyon by educating the broader community (i.e.: businesses, commuters, residents) on the greenhouse gas impacts caused by engine idling and implementing feasible commercial vehicle regulations.
- **Policy ENV-12.4: EV Charging Station Requirements.** Consider adopting voluntary measures from CalGreen Tier 1 and/or Tier 2 to implement stricter electric vehicle charging requirements for new development.
- **Policy ENV-12.6: City Vehicle Fleet.** Transition the municipal fleet to electric or alternative-fuel vehicles.
- **Policy ENV-12.8: Commute Reduction.** Support programs that reduce commuter vehicle trips.

The project would encourage the development of modern buildings, which would consume less energy in the forms of electricity than existing, older buildings in the Planning Area. The project would also support transportation systems that rely less heavily on internal combustion vehicles and

more on active transportation, transit, and electric vehicles, which would consume less energy in the form of petroleum. The development facilitated by the project would not result in a wasteful, inefficient, or unnecessary consumption of energy, and would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. Impacts would be less than significant.

4.15.3 Geology and Soils

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on geology and soils if it would:

1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
   i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?
   ii. Strong seismic ground shaking?
   iii. Seismic-related ground failure, including liquefaction?
   iv. Landslides?

2 Result in substantial soil erosion or the loss of topsoil?

3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potential result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

4 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

5 Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

An analysis of impacts to paleontological resources and unique geologic features resulting from project implementation is contained in Section 4.8, *Paleontological Resources*. The significance criterion related to paleontological resources is addressed in Section 4.8, *Paleontological Resources*.

Earthquake Fault Rupture

American Canyon is in a seismically active region of northern California. Moderate to strong earthquakes can occur on numerous local faults. Alquist-Priolo earthquake fault zones are regulatory zones that surround the surface traces of active faults in California, created in the Alquist-Priolo Earthquake Fault Zoning Act (Department of Conservation [DOC] 2019). For the purposes of the Alquist-Priolo Earthquake Fault Zoning Act, an active fault is defined as a fault that has ruptured in the past 11,000 years (DOC 2019).

The Planning Area is intersected by the West Napa Fault Zone, an identified Alquist-Priolo Earthquake Fault Zone (DOC 2022). Development facilitated by the project could occur in areas with the potential for fault rupture and associated risk of loss, injury and death. However, development facilitated by the project would not involve mining operations that require deep excavations thousands of feet into the earth, or boring of large areas that could create unstable seismic

conditions or stresses in the Earth's crust. In addition, the following 2040 General Plan proposed policies would reduce impacts by identifying and investigating sites prone to fault ruptures and reducing impacts of fault rupture by protecting new and expanded development, including infrastructure, within areas known to experience fault ruptures:

- **Policy S-4.1: Geologic Hazard Identification**. Reference current local and California Geologic Survey seismic and geologic hazards map surveys.
- **Policy S-4.3: Structure Protection.** Develop inventories of at-risk public buildings and infrastructure and seek funding to bring existing City-owned structures into compliance with updated seismic safety standards.
- **Policy S-4.4: Infrastructure Protection.** Support earthquake strengthening and provision of alternative or backup services, for at-risk infrastructure such as water, sewer, electricity, and natural gas pipelines and connections, for critical facilities especially in areas of high seismic or geologic high hazard or where weak segments are identified by existing or future studies. =
- **Policy S-4.5: Earthquake Protection.** Enforce seismic design provisions all relevant building codes reduce the risk of damage associated with seismic activity in all new and expanded development and ensure adequate review and inspection.
- **Policy S-4.6: Alquist-Priolo Act**. Implement mandatory development restrictions and investigation requirements (by the state, under the Alquist-Priolo Act, or by the City) on the West Napa fault zone located within American Canyon and its Planning Area.
- **Policy S-4.7: Geotechnical Review.** Continue to require preliminary investigations of tract sites by State-registered geotechnical engineers and certified engineering geologists (Chapter 70 County Building Code) and ensure regular inspection of grading operations.

As such, development facilitated by the project would not directly or indirectly cause or increase potential substantial adverse effects involving the rupture of a known earthquake fault. Impacts would be less than significant.

Seismic Ground Shaking

The West Napa Fault Zone runs through the Planning Area and would be capable of producing strong seismic ground shaking in the event of an earthquake. Additionally, the Planning Area is in a seismically active region of northern California where several fault systems are considered to be active or potentially active. Development within the Planning Area may be subject to ground shaking in the event of an earthquake originating along one of the faults designated as active in the vicinity of American Canyon. Nearby active faults include the Cuttings fault (approximately 1.7 miles west), Green Valley fault (approximately 6.2 miles east), Cordelia fault (approximately 6.7 miles northeast), Concord fault (11.5 miles southeast), Hayward fault (approximately 12.4 miles southwest), and the Rodgers Creek fault (approximately 10.4 miles west) (DOC 2022).

Development facilitated by the project would not exacerbate a risk to public safety or destruction of property than what is already present in the region. Residential development would be required to adhere to the standards of the California Building Code (CBC) which provides earthquake design requirements, including earthquake loading specifications for design and construction to resist effects of earthquake motions in accordance with the American Society of Civil Engineers Standard 7-05. The CBC also regulates the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking. The impact to people, buildings, or structures from strong seismic ground shaking would be reduced by

mandatory conformance with applicable building codes, and accepted engineering practices. In addition, 2040 General Plan proposed Policies S-4.1, S.4-6, and S-4.7 would reduce impacts by identifying and investigating sites prone to seismic ground shaking. 2040 General Plan proposed policies S-4.3, S-4.4, and S-4.5 would reduce impacts of seismic ground shaking by protecting new and expanded development, including infrastructure, within areas known to experience seismic ground shaking. Therefore, impacts would be less than significant.

Liquefaction

Liquefaction is a phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subjected to high-intensity ground shaking. Liquefaction occurs when three general conditions exist: shallow groundwater; low density, fine, clean sandy soils; and strong ground motion. Liquefaction-related effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures.

According to the DOC, the Planning Area has not been evaluated for seismically-induced liquefaction risk (DOC 2022). However, according to the United States Geologic Survey (USGS), most of the Planning Area is within low susceptibility liquefaction zones; portions of the city south of American Canyon Road are within moderate susceptibility liquefaction zones; and a small portion of the city along American Canyon Road is classified as very high susceptibility (USGS 2006). Development facilitated by the project is required to adhere to the standards of the CBC, which includes mandatory site-specific geotechnical investigations for individual projects. Compliance with applicable building codes would reduce seismic ground shaking impacts with current engineering practices, and the project would not exacerbate liquefaction potential in the Planning Area. In addition, the following 2040 General Plan proposed policies would minimize impacts from liquefaction:

- **Policy S-4.2: Liquefaction**. Require special site-specific studies in areas potentially subject to liquefaction to determine engineering mitigations and development siting measures for new development.

Compliance with the CBC and the proposed policy in the 2040 General Plan would ensure that impacts related to liquefaction would be less than significant.

Landslides

The geologic character of an area determines its potential for landslides. Steep slopes, the extent of erosion, and the rock composition of a hillside all contribute to the potential for slope failure and landslide events. In order to fail, unstable slopes need to be disturbed; common triggering mechanisms of slope failure include undercutting slopes by erosion or grading, saturation of marginally stable slopes by rainfall or irrigation; and, shaking of marginally stable slopes during earthquakes. Due to the varied topography of the Planning Area, there is potential for landslides within the city and to the immediate east (City of American Canyon 1994).

Pursuant to the City of American Canyon Municipal Code Section 18.02.070, development facilitated by the project would be required to perform soils tests within thirty days prior to the issuance of a building permit. If future development under the project were to occur in a landslide area, it would be subject to further study and approval. In addition, the following 2040 General Plan proposed policies would minimize impacts from landslides:

- **Policy S-4.8: Landslide Activity.** Restrict new development in areas of known landslide activity unless adequate mitigation is incorporated.

Compliance with the City of American Canyon Municipal Code and the proposed policy in the 2040 General Plan would ensure that impacts related to landslides would be less than significant.

Erosion

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events mobilize disturbed soils, resulting in their transport offsite. Ground disturbing activities associated with development facilitated by the project would have the potential to result in the removal and erosion of topsoil during grading and excavation. Construction activities that disturb one or more acres of land are subject to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which would require development of a Stormwater Pollution Prevention Plan (SWPPP) that outlines project-specific Best Management Practices (BMPs) to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants from construction into stormwater. Typical BMPs include, but are not limited to, installation of silt fences, erosion control blankets, and anti-tracking pads at site exits to prevent off-site transport of soil material.

For construction activities, the City of American Canyon Municipal Code Chapter 14.28 requires implementation of stormwater pollution control requirements for construction activities. Construction activities would also be required to comply with CBC Chapter 70 standards, which are designed to ensure implementation of appropriate measures during grading and construction to control erosion and storm water pollution.

Therefore, erosion from ground-disturbing activities associated with future development from the project would be controlled through implementation of the requirements and BMPs in existing regulations, including the Construction General Permit and City of American Canyon Municipal Code. Compliance with the regulations discussed above would reduce the risk of soil erosion from construction activities and impacts would be less than significant.

Geologic or Soil Instability and Expansive Soils

Impacts related to landslides and liquefaction are discussed above; therefore, this discussion focuses on impacts related to unstable or expansive soils because of lateral spreading, subsidence, or collapse. Lateral spreading occurs because of liquefaction; accordingly, liquefaction-prone areas would also be susceptible to lateral spreading. Subsidence occurs at great depths below the surface when subsurface pressure is reduced by the withdrawal of fluids (e.g., groundwater, natural gas, or oil) resulting in sinking of the ground. Soils that volumetrically increase (swell) or expand when exposed to water and contract when dry (shrink) are considered expansive soils. A soil's potential to shrink and swell depends on the amount and types of clay in the soil. Highly expansive soils can cause structural damage to foundations and roads without proper structural engineering and are generally less suitable or desirable for development than non-expansive soils.

Development facilitated by the project would not affect existing conditions (unless development is improperly constructed) related to unstable or expansive soils since the land use pattern emphasizes infill development. Implementation of 2040 General Plan proposed Policy S-4.7 would require a geotechnical investigation to ensure geologic stability prior to ground disturbance, which would reduce impacts of unstable soils. Future development would be required to comply with the CBC's minimum standards for structural design and site development. The CBC provides standards for excavation, grading, and earthwork construction; fills and embankments; expansive soils; foundation investigations; and liquefaction potential and soils strength loss. Thus, CBC-required incorporation of soil treatment programs (replacement, grouting, compaction, drainage control,

etc.) in the excavation and construction plans can achieve an acceptable degree of soil stability to address site-specific soil conditions. Adherence to these requirements would achieve accepted safety standards for unstable geologic units or soils. In addition, although reasonably foreseeable development under the project would potentially be subject to these hazards, it would not increase the potential for lateral spreading, subsidence, or collapse. Therefore, impacts would be less than significant.

Septic Systems

The project would emphasize development within the Planning Area where existing infrastructure exists. New development under the project is not anticipated to include the use of septic systems. Therefore, there would be no impact related to the use of septic tanks or alternative wastewater disposal systems.

4.15.4 Hazards and Hazardous Materials

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on hazards and hazardous materials if it would:

1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

4 Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;

5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area;

6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

An analysis of the risk of exposure to wildland fires resulting from project implementation is contained in Section 4.14, *Wildfire*. The significance criterion related to wildfire is addressed in Section 4.14, *Wildfire*.

Hazardous Materials Transport, Use, and Disposal

Future development facilitated by the project would involve the use of potentially hazardous materials, such as vehicle fuels and fluids, which could be released, should a spill or leak occur. Contractors of individual development projects would be required to implement standard construction BMPs for the use or handling of such materials to avoid or reduce the potential for such conditions to occur. Any transport, use, or disposal of hazardous materials would be carried out in accordance with applicable local, State, and federal regulations regarding the handling of

potentially hazardous materials. These include the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, and California Code of Regulations Title 22. Hazardous materials transported on State highways, such as State Route 29, would be subject to California Department of Transportation (Caltrans) requirements, as described in Title 49 of the Code of Federal Regulations. The American Canyon Municipal Code Chapter 19.14.040 requires all operations in industrial districts, which involve the storage, use, or transport of flammable or explosive materials or gases obtain adequate safety devices to prohibit hazard release and adequate firefighting equipment. Mandatory compliance with all applicable local, State, and federal laws and regulations relating to the transport, use, and disposal of hazardous materials during construction and operation of future development facilitated by the project would minimize the potential to create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials. Therefore, this impact would be less than significant.

Upset and Accident Conditions

As described above in the *Hazardous Materials Transport, Use, and Disposal* section, the transport, use, and disposal of hazardous material would be conducted in accordance with all applicable laws and regulations, including the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, California Code of Regulations Title 22, and Title 49 of the Code of Federal Regulations. Additionally, the Napa County Office of Emergency Services has protocols to remedy the accidental release of hazardous materials, as set forth in the County of Napa Emergency Operations Plan (County of Napa 2016). These regulatory safeguards minimize exposure of the public and environment to a potential release of hazardous materials.

Future development facilitated by the project that requires demolition or redevelopment of existing structures, particularly old structures, has the potential to expose workers and the public to asbestos. The California Health and Safety Code Section 19827.5 requires local agencies not issue a demolition or alteration permits until an applicant has assessed the potential for a structure to contain asbestos and demonstrated compliance with notification requirements under federal regulations involving hazardous air pollutants, including asbestos. California Code of Regulations Section 1532.1 requires testing, monitoring, containment, and disposal of lead-based materials, such that exposure levels do not exceed California Occupational Safety and Health Administration (CalOSHA) standards. Similarly, California Code of Regulations Section 1529 sets requirements for asbestos exposure assessments and monitoring, methods of complying with exposure requirements, safety wear, communication of hazards, and medical examination of workers. The control of asbestos-containing material during demolition or renovation activities is regulated under the federal Clean Air Act which requires thorough inspection for asbestos where demolition will occur and specifies work practices to control emissions, such as removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers, and disposing of the asbestos-containing waste material as expediently as practicable (United States Environmental Protection Agency [U.S. EPA] 2022). Furthermore, demolition, renovation, and manufacturing activities would be regulated by the Bay Area Air Quality Management District (BAAQMD) through adherence to Regulation 11 Rule 2 which sets standard procedures to prevent emissions from asbestos-containing materials (BAAQMD 1998). As such, the potential for release of asbestos would be minimized.

Future development facilitated by the project could involve the use, storage, disposal, or transportation of hazardous materials. Some potential commercial, residential, and visitor-serving uses do not generally involve the use, storage, disposal, or transportation of significant quantities of hazardous materials. Hazardous material use and storage would primarily consist of common household hazardous materials such as solvents, paints, and chemicals used for cleaning and building maintenance, and landscaping supplies. These materials would not be different from household hazardous materials currently in use throughout the Planning Area. Residents and workers are anticipated to use limited quantities of products that could contain hazardous materials routinely for periodic cleaning, repair, and maintenance, or for landscaping and pest control. The disposal of household hazardous materials would be conducted in compliance with applicable regulations, pursuant to American Canyon Municipal Code 14.16.400.

Future development facilitated by the project could include industrial uses which could sell, use, store, transport, or release substantial quantities of hazardous materials. Businesses that handle certain chemicals over threshold quantities are required to abide by the Napa County Division of Environmental Health programs, such as preparation of a Hazardous Materials Business Plan (HMBP). The HMBP consists of basic information on the location, type, quantity, and health risks of hazardous materials, and emergency response and training plans (California Environmental Protection Agency [CalEPA] 2022). Hazardous materials must be reported in a HMBP if they are handled in quantities equal or greater than 55 gallons of a liquid, 200 standard cubic feet of a compressed gas, or 500 pounds of a solid (CalEPA 2022). Mandatory reporting in HMBPs would reduce potential hazards to workers and the general public near industrial development from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Overall, applicable federal, State, and local regulations would minimize the potential for future development facilitated by the project to create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, this impact would be less than significant.

Schools

Future development facilitated by the project could include facilities which transport, use, handle, or dispose of hazardous materials. There are three elementary schools, one middle school, and one high school that serve American Canyon (Napa Valley Unified School District 2022). As described under the *Hazardous Materials Transport, Use, and Disposal* discussion, any transport of hazardous materials would be required to comply with applicable regulations for the use, transport, and disposal of hazardous materials. Future development facilitated by the project, which would be reasonably anticipated to emit hazardous air emissions or would handle a hazardous substance within 0.25-mile of an existing school would be required to notify the affected school district, pursuant to Public Resources Code Section 21151.4. Compliance with existing regulations would reduce the potential for a school to be exposed to hazardous materials.

The project would involve land use changes that could result in the construction of up to 25 residential units near Napa Junction Elementary School and up to 150 residential units near American Canyon High School. Housing is not a land use typically associated with the use, transportation, storage, or generation of significant quantities of hazardous materials. Operation of new housing development in accordance with the proposed land use changes may result in an incremental release in the use of common household hazardous materials such as cleaning and degreasing solvents, but these materials are not anticipated to be used in substantial quantities

such that their use poses a hazard to students at Napa Junction Elementary School or American Canyon High School. Furthermore, the construction of residences would occur in accordance with applicable regulations for the use, transport, and disposal of hazardous materials and would be subject to City-review, which would minimize the potential for temporary construction-related impacts regarding hazardous materials. Therefore, the proposed land use changes would not result in a hazard to school facilities.

Regarding future schools that may be developed to accommodate forecasted population increases in American Canyon, provisions of the California Education Code Section 17213 would apply. Section 17213 requires the City to ensure the chosen site for a proposed school is not built on current or hazardous waste disposal sites, is not on a hazardous substance release site identified by the California Department of Toxic Substances Control (DTSC), and does not contain pipelines that carry hazardous substances. Assessment of any contamination is conducted in coordination with the DTSC's Brownfields Restoration and School Evaluation Branch which is responsible for assessing, investigating, and cleaning up proposed school sites (DTSC 2022a). The DTSC ensures that selected sites are free of hazardous materials, or if the sites were previously contaminated, have been remediated to a level that protects future students and staff who will occupy a new school. Therefore, the project would not result in the handling of hazardous or acutely hazardous materials substances or waste within 0.25 mile of an existing or proposed school. This impact would be less than significant.

Hazardous Materials Sites

The DTSC's EnviroStor database and the State Water Resource Control Board's (SWRCB) GeoTracker database were reviewed to determine the locations of potentially hazardous materials sites in the Planning Area. The results of this search are provided in Table 4.15-1 below.

Table 4.15-1 Identified Hazardous Materials Sites in American Canyon

Site Name	Address	Site Type	Status
Beacon #3710 (Former) and Tesoro # 67050, Case #2	3438 Hwy 29	LUST Cleanup Site	Completed - Case Closed
Arco	3462 Hwy 29	LUST Cleanup Site	Completed - Case Closed
Caltrans Route 29 Post Mile 1.13 (At Napa Valley Casino)	3466 Broadway Street	LUST Cleanup Site	Completed - Case Closed
Doshier Property	5365 Hwy 29	LUST Cleanup Site	Completed - Case Closed
Evan Athan Enterprises	4381 Hwy 29	LUST Cleanup Site	Completed - Case Closed
Golden State Lumber Inc	150 Napa Junction Road	LUST Cleanup Site	Completed - Case Closed
Golden State Lumber Inc	150 Napa Junction Road - South	LUST Cleanup Site	Completed - Case Closed
Independent Stave Company	4391 Hwy 29	LUST Cleanup Site	Completed - Case Closed
Jaeger Vineyards	658 Napa Junction Road	LUST Cleanup Site	Completed - Case Closed
Medeiros Property	289 Napa Junction Road	LUST Cleanup Site	Completed - Case Closed
Sunshine Auto Salvage	1578 Green Island Road	Cleanup Program Site	Completed - Case Closed
American Canyon High School	3000 Newell Drive	School Cleanup	Certified/Operation & Maintenance
Canyon Crossings	Napa Junction Road	Voluntary Cleanup	Active

LUST = Leaking Underground Storage Tank

Source: DTSC 2022b; SWRCB 2022

Future development facilitated by the project could occur on sites with underground storage tanks (USTs). Tank removal activities could pose both health and safety risks from tank contents or vapors to workers, tank handling personnel, and the public. Potential risks, if any, posed by USTs could be minimized by managing the tank according to existing standards contained in California Health and Safety Code Division 20, Chapters 6.7 and 6.75 (UST Program), as enforced and monitored by the Environmental Programs Division. The extent to which groundwater may be affected by an UST or other potential contamination source depends on the type of contaminant, the amount released, the duration of the release, distance from source, and depth to groundwater. If contamination exceeds regulatory action levels, future developers would be required to undertake remediation procedures prior to grading and development under the supervision of the San Francisco Bay Regional Water Quality Control Board, depending on the nature of any identified contamination. Furthermore, the 2040 General Plan would include the following proposed policy and Implementation Program to minimize impacts related to hazardous materials.

- **Policy S-5.6: Hazardous Material Review.** Review new development sites for potential presence of hazardous materials.
- **Implementation Program TT: Environmental Site Assessment.** If determined by the City to be necessary, a Phase I Environmental Site Assessment in accordance with ASTM International methodologies shall be completed for a development proposal prior to project approval. If the Phase I Environmental Site Assessment determines hazardous materials may be present, a Phase II Environmental Site Assessment may be required. If the Phase II ESA for the development site indicates that contaminants are detected in the subsurface at the project site, the project applicant shall prepare a Soil Management Plan for impacted soils prior to the start of construction.

Future development facilitated by the project would be required to identify hazardous materials sites in accordance with proposed Policy S-5.6 and Implementation Program TT and remove such hazardous materials in accordance with applicable State and local regulations. As a result, the project would not create a significant hazard to the public or the environment due to being located on a hazardous materials site. This impact would be less than significant.

Airport Land Use Hazards

The Napa County Airport is located approximately 0.4 mile north of American Canyon. Development within the Napa County Airport's sphere of influence is governed by the Napa County Airport Land Use Compatibility Plan (ALUCP) (Napa County Airport Land Use Commission [ALUC] 1991). Future development facilitated by the project could occur within the noise contours delineated in the ALUCP. In accordance with California Public Utilities Code 21676, ALUCs must review general plans for consistency with the ALUCP.

The ALUC would review the 2040 General Plan for consistency with the Noise Compatibility Guidelines provided in the ALUCP, which indicates light industrial and commercial noise exposure is normally or clearly acceptable at under 65 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) and marginally acceptable at under 75 dBA CNEL. Within the ALUCP's sphere of influence zones, identified as Zone D in the ALUCP, a 35-foot height restriction for development is implemented which ensures safety hazards from building heights are minimized. A permit to exceed the height limit may be obtained after approval from the ALUC. However, specific future development that may affect navigable airspace would still be subject to Federal Aviation Administration review, pursuant to the Code of Federal Regulations, Parts 77.5, 77.7, and 77.9.

In addition to review by the ALUC, the 2040 General Plan proposed policies would minimize loss of life, injury, and property damage resulting from aircraft operations. Specifically, 2040 General Plan proposed policies include the following:

- **Policy S-6.1: Airport Land Use Consistency.** Review all applications for new development, expansion of existing uses, and re-use within Napa County Airport Compatibility Zones "A" through "E" for compliance with the appropriate use and development conditions.
- **Policy S-6.2: Adverse Airport Impact Mitigation.** Work with the Napa County Airport Authority to ensure that onsite ground activities of the Airport do not adversely impact (e.g., noise, vibration, air emissions, or other pollution) the City of American Canyon.
- **Policy S-6.3: Airport Traffic Impacts.** Work with the Napa County Airport Authority to ensure that airport vehicular access does not adversely impact the City of American Canyon.

Compliance with the ALUCP, review by the ALUC, and implementation of 2040 General Plan proposed policies would ensure the project would not result in a safety hazard or excessive noise for people residing or working in the project area. Therefore, this impact would be less than significant.

Impairment of Emergency Response Plans

Construction activities associated with future development facilitated by the project could interfere with adopted emergency response or evacuation plans because of temporary construction activities within rights-of-way, temporary construction barricades, or other obstructions that could impede emergency access. Any temporary construction barricades or other obstructions that could impede emergency access on State highway systems would be subject to the standards set forth in the California Manual of Uniform Traffic Control Devices (Manual) (Caltrans 2021). The Manual requires the creation and approval of temporary traffic control plans to be used for facilitating road users through a work zone (Caltrans 2021). Adherence to the Manual requirements for construction activities would minimize potential impacts associated with the impairment or physical interference of an adopted emergency response plan or evacuation procedures for State highways. Construction that would occur within a public easement or right-of-way would be required to obtain an encroachment permit. In order to obtain an encroachment permit, traffic control plans would need to be submitted to the City's Public Works Department for review and approval (City of American Canyon 2015). These regulations would ensure construction activities associated with future development would not impair emergency evacuation or emergency response plans.

Increased future development could result in additional traffic. However, 2040 General Plan proposed policies would support safe evacuation routes in the event of an emergency. Proposed policies include the following:

- **Policy MOB-3.1: Parallel North-South Roadway.** Prioritize construction of roadways that provide alternate vehicle access parallel to Highway 29 through American Canyon and coordinate continuation of parallel routes outside the City with Regional Agencies.
- **Policy MOB-3.2: Evacuation Routes.** Identify important roadways that would serve as evacuation routes in the event of an emergency.
- **Policy MOB-3.3: Natural Hazard Awareness Week.** Coordinate with the American Canyon Fire Protection District to conduct outreach to the community on emergency evacuation routes in our community.

- **Policy MOB-3.4: Evacuation Route Obstacles.** Evaluate potential physical conditions that could impede an evaluation route. Examples include overhead utility poles, dead/ dying trees, aging infrastructure.

Furthermore, development facilitated by the project must comply with road standards and would be reviewed by the American Canyon Fire Protection District to ensure development would not interfere with evacuation routes or impede the effectiveness of evacuation plans. Implementation of the 2040 General Plan would not introduce new features or policies that would preclude implementation of or alter these plans or procedures. Therefore, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact would be less than significant.

4.15.5 Hydrology and Water Quality

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on hydrology and water quality if it would:

1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i. Result in a substantial erosion or siltation on- or off-site;

   ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

   iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

   iv. impede or redirect flood flows.

4 In a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Water Quality Standards or Waste Discharge Requirements

Future development facilitated by the project and future mobility improvements (i.e., improvements to roadways, bicycle facilities, and pedestrian facilities) could result in construction activities which may contribute to soil erosion and degraded water quality. Pursuant to the Clean Water Act, construction activities that disturb one or more acres of land are subject to the NPDES Construction General Permit, which requires the development of a SWPPP developed by a certified Qualified SWPPP Developer. The SWPPP includes project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants from construction into stormwater. Typical BMPs include, but are not limited to, installation of silt fences, erosion control blankets, and anti-tracking pads at site exits to prevent off-site transport of soil materials. Chapter 14.28 of the American Canyon Municipal Code requires any construction activities in the City to

implement appropriate BMPs to prevent the discharge of sediment. The American Canyon Municipal Code Section 14.28.080 requires implementation of erosion and sediment control BMPs to further reduce discharge of sediment and other particulate matter into the City's water systems. In addition, future development facilitated by the project would be subject to the following 2040 General Plan proposed policy:

- **Policy U-4.1: Storm Drainage Maintenance.** Maintain existing public storm drains and flood control facilities and construct upgraded and expanded storm drain and flood control facilities, where necessary, to protect existing and accommodate new permitted development.

Compliance with the NPDES Construction General Permit, SWPPP, and City regulations would ensure BMPs are implemented during new construction to minimize potential impacts to water quality. Impacts would be less than significant during construction of future development and mobility improvements.

Operation of future development facilitated by the project would be required to comply with the provisions of California's Phase II Small Municipal Separate Storm Sewer System (MS4) Storm Water Permit. In addition, American Canyon Municipal Code Section 14.28.082 requires implementation of a Stormwater Control Plan (SCP) for all new development and redevelopment projects subject to post-construction stormwater control measure requirements. The SCP requires implementation of site design measures and treatment facilities meeting the criteria established by the Bay Area Stormwater Management Agencies Association (BASMAA), including minimization of impervious surfaces, retainment or detainment of stormwater, slow runoff rates, and a reduction in pollutants in post-development runoff (BASMAA 2019). If future development facilitated by the project were to be categorized under Standard Industrial Classification (SIC) codes, it would be subject to the Industrial General Permit, which requires development of a site-specific operational SWPPP. Implementation of the operational SWPPP would reduce the risk of water degradation on site and off site from soil erosion and other pollutants related to project operation because an operational SWPPP requires the design, installation, and maintenance of post-construction stormwater controls. The operational SWPPP identifies the site-specific sources of pollutants and describes the best management practices implemented at the facility to prevent dry weather runoff and to reduce pollutants in storm water discharges. In addition, future development facilitated by the project would be subject to the following 2040 General Plan proposed policy:

- **Policy U-4.8: Low Impact Development**. Require new developments to install green infrastructure consistent with the best management practices of the State and the San Francisco Bay Regional Water Quality Control Board, including but not limited to pervious pavement, infiltration basins, raingardens, green roofs, rainwater harvesting systems, and other types of low impact development (LID).

Implementation of permit requirements and 2040 General Plan proposed policies would minimize impacts related to water quality and ensure development facilitated by the project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, this impact would be less than significant.

Groundwater Supplies and Recharge

American Canyon underlies the Napa Sonoma Lowlands Subbasin which is classified as a Very Low Priority basin by the California Department of Water Resources (DWR) (DWR 2022). Development facilitated by the project would be served with potable water from the City, which does not utilize

local groundwater for municipal purposes (City of American Canyon 2016). Accordingly, development facilitated by the project would not substantially decrease groundwater supplies.

Future development facilitated by the project could introduce new impervious surfaces through the construction of paved areas; however, implementation of the SCP requires introduction of low-impact development site design measures, which would assist in groundwater recharge. These measures include, but are not limited to limiting impervious surfaces, routing runoff to bioretention facilities for groundwater storage, or requiring the use of pervious pavements (BASMAA 2019). Future development facilitated by the project would implement design standards pursuant to BASMAA standards and as a result, minimize the potential for substantial prevention of groundwater recharge. Furthermore, 2040 General Plan would implement proposed Policy U-4.8, as well as the following proposed policy that would promote groundwater recharge:

- **Policy U-4.2: Maximize Pervious Surfaces.** Consistent with engineering standards, minimize storm water runoff from new development with pervious surface materials (grass, ground cover, and other).

The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. This impact would be less than significant.

Alteration of Existing Drainage Patterns

Future mobility improvements facilitated by the project, including improvements to roadways, bicycle facilities, and pedestrian facilities would primarily consist of repaving roads, adding bicycle lanes, installing roundabouts, and repainting median strips. Such projects would not involve the addition of substantial impervious surfaces or alternation of the course of a stream or river. However, future development facilitated by the project could alter the existing drainage patterns on individual project sites by adding impervious surfaces. Chapter 14.28 of the American Canyon Municipal Code requires any construction activities in the City to implement appropriate BMPs to prevent the discharge of sediment. An Erosion and Sediment Control Plan is required for any project that is:

- Subject to a grading permit;
- Subject to a building permit that has the potential for significant erosion and/or significant non-stormwater discharges of sediment and/or construction site waste;
- Any other project as required by the authorized enforcement official considering factors such as whether the project involves hillside soil disturbance, rainy season construction, construction near a watercourse, or any other condition or construction site activity that could lead to a non-stormwater discharge to a storm drain.

The Erosion and Sediment Control Plan is required to include a description of soil disturbing activity, site-specific construction-phase BMPs, rationale for selecting BMPs, list of applicable permits, proof the applicant has obtained applicable permits, and project information consistent with the most recent version of the Napa Countywide Erosion and Sediment Control Plan Model Template checklist. For projects subject to the NPDES Construction General Permit, a SWPPP may be submitted in lieu of an Erosion and Sediment Control Plan. The SWPPP includes project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants from construction into stormwater. As stated in the *Flood, Tsunami, or Seiche Zones* discussion, American Canyon Municipal Code Chapter 8.16 requires flood control measures to be

implemented during construction for projects in flood hazard areas, including development to be elevated above the base flood elevation. Furthermore, the 2040 General Plan would include proposed PolicyU-4.1 and the following proposed policy for storm and flood control:

- **Policy S-3.1: Regulatory Compliance.** Coordinate with local, state, and federal agencies to ensure the City's flood control regulations comply with federal, State, and local standards.

Runoff during operation of the development facilitated by the project would be regulated under the Phase II MS4 Storm Water Permit, implemented by the American Canyon Municipal Code 14.28. American Canyon Municipal Code Section 14.28.082 requires an SCP. The SCP requires implementation of site design measures and treatment facilities meeting the criteria established by BASMAA, including minimization of impervious surfaces, retainment or detainment of stormwater, slow runoff rates, and a reduction in pollutants in post-development runoff (BASMAA 2019). In addition, the 2040 General Plan would implement proposed Policy U-4.8, which would require green infrastructure. Compliance with existing City regulations and 2040 General Plan proposed policies would ensure development facilitated by the project would not substantially alter the existing drainage pattern of a site or area such that substantial erosion or siltation on- or off-site; flooding on- or off-site; exceedance of the capacity of existing or planned stormwater drainage systems or provision of additional sources of polluted runoff; or impediment or redirection of flood flows would occur. Therefore, impacts would be less than significant.

Flood, Tsunami, or Seiche Zones

The nearest body of water subject to seiche is Lake Frey, located approximately 6.9 miles northeast of the northern border of the City limits. Given the proximity to Lake Frey, American Canyon is not at risk of seiche. American Canyon contains flood hazard zones designated by the Federal Emergency Management Agency (FEMA) which traverse east to west along American Canyon Creek and at the western border of the City limits near the Napa River (FEMA 2022). In addition, the southwestern portion of Planning Area is in a Tsunami Hazard Area as mapped by the California Department of Conservation (DOC) (DOC 2022).

Future mobility improvements facilitated by the project, including improvements to roadways, bicycle facilities, and pedestrian facilities would not create substantial pollutant risk due to inundation. The amount of pollution washed off a roadway in a flood would typically be the same as pollution washed off in a heavy rain, as most pollutants on roads, bicycle and pedestrian facilities consist of motor oil, metals from brake pads, and trash. While it is possible floodwaters could rise high enough to overcome drainage ditches, bioswales, and similar pollution-capturing systems alongside roadways, the 2040 General Plan would implement proposed Policies S-3.1 and U-4.1, which require storm drains be maintained and improved where necessary. As a result, inundation risk associated with mobility improvements facilitated by the project would be minimal.

Future development facilitated by the project in flood hazard zones or tsunami hazard areas could risk pollutant release due to inundation. However, American Canyon Municipal Code Chapter 8.16 sets floodplain management regulations that implement requirements for flood hazard reduction in flood hazard zones. Section 8.16.160 requires all new construction and substantial improvements in all areas of special flood hazards to be adequately anchored to prevent flotation, collapse, or lateral movement resulting from flood waters. All new construction and substantial improvements are required to utilize flood resistant materials as specified in FEMA Technical Bulletin 2-93, and both residential and nonresidential construction are required to be elevated above the base flood elevation. All development within a flood hazard zone is required to receive a certification by a

registered professional engineer or architect which states the City's floodplain requirements have been satisfied. Furthermore, the 2040 General Plan would include the following proposed policies for flood control:

- **Policy S-3.2: FEMA Coordination.** Coordinate with the Federal Emergency Management Agency (FEMA) to ensure that Federal Insurance Rate Maps correctly depict flood hazards in the City.
- **Policy S-3.5: Private Preventive Maintenance.** Require property owners keep natural drainage courses on their sites free of obstructions such as structures, dams, and debris, which may adversely affect flooding on the site or downstream properties.

Future development facilitated by the project within flood hazard zones or tsunami hazard areas would adhere to the requirements of the American Canyon Municipal Code and the 2040 General Plan. With adherence to applicable regulations, the project would not risk release of pollutants due to inundation. Therefore, this impact would be less than significant.

Conflicts with a Water Quality Control Plan or Sustainable Groundwater Management Plan

American Canyon underlies the Napa Sonoma Lowlands Subbasin which is classified as a Very Low Priority basin by the DWR (DWR 2022). The Sustainable Groundwater Management Act requires local agencies to form groundwater sustainability agencies to manage groundwater resources in high and medium priority basins. Accordingly, the Napa Sonoma Lowlands Subbasin is not subject to a sustainable groundwater management plan. Therefore, the project would not conflict with or obstruct implementation of a sustainable groundwater management plan.

The City is within the jurisdiction of the San Francisco Bay RWQCB. The San Francisco Bay RWQCB implements the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan), which functions as a master water quality control planning document. The Basin Plan includes programs of implementation to achieve water quality objectives (San Francisco Bay RWQCB 2019). As previously discussed, future development facilitated by the project and future mobility improvements would implement State and local regulatory requirements, including the provisions of the Construction General Permit, the Industrial General Permit, and Chapter 14.28 of the American Canyon Municipal Code. Furthermore, 2040 General Plan proposed Policy U-4.8 requires new development to install green infrastructure consistent with BMPs of the State and the San Francisco Bay RWQCB. 2040 General Plan proposed Policy U-4.8 would ensure future development facilitated by the project, including future mobility improvements, implement design features which promote the water quality goals of the Basin Plan. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan. This impact would be less than significant.

4.15.6 Mineral Resources

Based on Appendix G of the CEQA Guidelines a project may be deemed to have a significant impact on mineral resources if it would:

1 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;

2 Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

There are no areas within the Planning Area that contain known mineral resources (DOC 1983). Project implementation would not preclude mineral extraction or would result in development in areas with mineral resources. Therefore, the project would not result in the loss of availability of a known mineral resources that would be of value to the region or the loss of availability of a locally important mineral resource recovery site. No impacts would occur.

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5 Other CEQA Required Discussions

This section discusses other issues for which the California Environmental Quality Act (CEQA) requires, in addition to the specific issue areas discussed in Section 4, *Environmental Impact Analysis*. These additional issues include the project's potential to induce growth, create significant and irreversible impacts on the environment, and significant environmental effects which cannot be avoided if the project is implemented.

5.1 Growth Inducement

CEQA Guidelines Section 15126(d) requires a discussion of a project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. A project's growth inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population and Economic Growth

This environmental impact report (EIR) identifies a maximum buildout for the project, which is a conservative assumption developed for this analysis. Overall, maximum growth is dependent on multiple factors, including local economic conditions, market demand, and other financing considerations. The following conservative estimate of population growth is based on the project's maximum buildout scenario, which would accommodate approximately 3,204 additional housing units and 10,734 additional residents. The City has planned for the addition of new residences to the City through several plans which have undergone environmental review, including the Broadway District Specific Plan and Watson Ranch Specific Plan. Under the maximum buildout scenario, the project could result in an increase of approximately 5.7 million square feet of non-residential development that would generate permanent employment opportunities in American Canyon for residents. Though implementation of new and updated policies in the 2040 General Plan, the City would reduce significant physical effects on the environment resulting from population and economic growth. For example, as described in Section 4.10, *Public Services and Recreation* and Section 4.13, *Utilities and Service Systems*, the implementation of proposed policies in the 2040 General Plan would ensure that there are sufficient public services and utilities to meet the demand associated with population and economic growth. As such, the impacts from population and economic growth would be less than significant.

In addition, the project would generate temporary employment opportunities during construction of future residential and nonresidential projects. As construction workers would be expected to be drawn from the existing regional work force, construction of future development projects would not be considered growth-inducing. Therefore, the project would not induce uncontrolled population or economic growth and associated environmental impacts.

5.1.2 Removal of Obstacles to Growth

Development facilitated by the project would require new utility connections, including connections to water, hydrants, sewers, electricity, telecommunications, or other utilities like stormwater facilities. However, these connections would generally occur within individual footprints or rights-of-way that were previously disturbed, minimizing the impact of development on existing infrastructure and services. Development would use existing facilities and major infrastructure extensions would not occur in or be designed to serve areas beyond the sites analyzed in this EIR.

The project would result in some land use designation changes; however, these changes primarily resolve inconsistencies between existing land uses and land use designations in the General Plan. As such, the project would generally preserve the existing land use pattern in American Canyon. The project does not facilitate development within the sphere-of-influence (SOI) or urban limit line. Any future proposals to develop within the SOI or urban limit line would be subject to annexation to the City of American Canyon in compliance with procedures identified by the Napa County Local Agency Formation Commission, as well as additional environmental documentation.

In addition, as described in Chapter 2, *Project Description*, the 2040 General Plan includes mobility improvements, including roadway extensions. These roadway extensions would serve approved or pending development. For example, the Newell Drive Extension would serve, in part, the future development associated with the Watson Ranch Specific Plan.

For the reasons identified above, the project would not result in significant growth inducement due to the removal of an obstacle to growth.

5.2 Significant Irreversible Environmental Effects

CEQA Guidelines Section 15126(c) requires a discussion of significant irreversible environmental changes that would be involved in the project, should the project be implemented. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, environmental accidents, and irreversible impacts associated with the project.

The project would irreversibly increase local demand for non-renewable energy resources such as petroleum products and potentially natural gas. However, increasingly efficient building design would offset this demand to some degree by reducing energy demands of future development. As described in Section 4.15, *Effects Found to Be Less Than Significant*, development facilitated by the project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated buildings, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. Furthermore, the project would implement several policies which would require efficient energy use and promote renewable energy programs. Consequently, development facilitated by the project would not use unusual amounts of energy or construction materials and impacts related to consumption of non-renewable and renewable resources would be less than significant. Consumption of these resources would occur with any development in the region and is not unique to the project.

Growth facilitated by the project would require an irreversible commitment of fire protection, law enforcement, water supply, wastewater treatment, and solid waste disposal services. As discussed in Section 4.10, *Public Services and Recreation*, and Section 4.13, *Utilities and Service Systems*,

potential impacts to public services and utilities and service systems would be less than significant following implementation of 2040 General Plan proposed policies, as well as future project-specific environmental review that would be required for any future facilities constructed in accordance with the project.

Furthermore, as discussed in Section 4.15, *Effects Found to Be Less Than Significant*, regulatory requirements, including those from the Napa County Division of Environmental Health would minimize potential accidents related to the spills of hazardous materials. Therefore, the project would not lead to significant irreversible environmental changes due to environmental accidents.

The anticipated increase in vehicle trips associated with the project would incrementally contribute to local traffic, air quality emissions, and noise. As described in Section 4.11, *Transportation*, VMT-related impacts would be less than significant because the project would facilitate reduced work commute distances. As described in Section 4.2, *Air Quality*, the project would not result in a cumulatively considerable net increase of any criteria pollutant, and implementation of Mitigation Measures AQ-1 through AQ-3 would ensure the project would not result in people being exposed to substantial irreversible exposure to toxic air contaminants. However, as described in Section 4.7, *Noise*, the project would result in substantial increases in noise due to vehicle traffic. Although Mitigation Measure NOI-2 would reduce noise through implementation of roadway vehicle noise reduction measures, implementation of the project would result in an irreversible increase in noise due to vehicle traffic.

The project would cause an irreversible increase in greenhouse gas emissions. As discussed in Section 4.5, *Greenhouse Gas Emissions*, although implementation of Mitigation Measures GHG-2 and GHG-3 would ensure development facilitated by the project after 2024 would be consistent with the state's greenhouse gas emissions reduction goals, individual projects that may occur prior to 2024 would not be guaranteed to be consistent with State emissions goals, nor are exact emissions reductions known at the time of adoption of the 2040 General Plan. As a result, the project would cause a substantial irreversible increase in greenhouse gas emissions which may be inconsistent with Bay Area Air Quality Management District greenhouse gas emissions thresholds and the state's greenhouse gas emissions reduction goals, until the adoption and implementation of greenhouse gas emissions thresholds and a Climate Action Plan.

5.3 Significant Unavoidable Impacts

CEQA Guidelines Section 15126(b) requires a discussion of the significant environmental effects which cannot be avoided if the project is implemented. These significant and unavoidable impacts are identified in Section 4, *Environmental Impact Analysis* and summarized below. The project would have the following significant and unavoidable impacts:

- Impact GHG-1: Development facilitated by the project would make progress towards achieving state goals but would not necessarily meet State 2030 or 2045 goals. Mitigation Measures GHG-2 and GHG-3 would require implementation of CEQA thresholds and a Climate Action Plan (CAP); however, development facilitated by the project would not meet the 2030 or 2045 goals until the CAP is updated and adopted. This impact would be significant and unavoidable.
- Impact NOI-1: Construction of individual projects facilitated by the project would temporarily increase noise levels, potentially affecting nearby noise-sensitive land uses. Development facilitated by the project would also introduce new noise sources and contribute to increases in operational noise. Construction and operational traffic noise could exceed standards. This impact would be significant and unavoidable.

- Impact TRA-2: The 2040 General Plan includes policies which would reduce VMT. However, because there is no specific mitigation to reduce VMT per resident and the General Plan policies cannot realistically enforce mitigation programs or policies that might reduce VMT below the threshold, impacts would remain significant and unavoidable.

6 Alternatives

As required by California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this environmental impact report (EIR) examines a range of reasonable alternatives to the project that would attain most of the basic project objectives but would avoid or substantially lessen the significant adverse impacts.

As discussed in Section 2, *Project Description*, the 2040 General Plan will serve as a long-term framework for future growth and development, represent the community's view of its future, and contain the goals and policies upon with the City Council, Planning Commission, and the entire community will base land use and resource decisions. The 2040 General Plan will provide a contemporary plan that will guide American Canyon though the next 20 years. The primary objective of this project is to update the existing American Canyon General Plan in order for it to be compliant with State law.

The 2040 General Plan would implement the vision of the existing General Plan. The City identifies the following three fundamental roles of the City:

1. The City should be home for a residential population, internally accommodating a sufficient range of uses to support the needs of residents (including a mix of housing types, commercial services, entertainment, employment, recreation, education, health, religious, cultural facilities, transportation services, and open space). At the present time, many of these uses are located outside the City, which necessitates extensive travel by residents to access these services.
2. The City should be a center of employment and commerce for regional, as well as local residents. This will provide an opportunity to capitalize upon (1) the cluster of uses which have developed in the Green Island Industrial Park; (2) the proximity of the City to the Napa County Airport and Southern Pacific railroad, and (3) the relationship of the City to the agricultural and vineyard industries of Napa County.
3. The City can capture visitors to the Napa Valley by providing uses which capitalize on the unique environmental setting of the foothills, river valleys, and agriculture. Environmental educational facilities, such as wetlands interpretative centers, overnight camping and recreational vehicle facilities, river recreational facilities such as boating, golf courses, and hotel/motels and restaurants are representative of the range of uses which may be considered.

In addition, the City identifies the following ten visions and principles to guide development:

1. Existing residential neighborhoods should be preserved. Neighborhoods that deteriorate or decline should be improved or revitalized.
2. A variety of housing types should be provided to meet the diverse needs of existing and future residents. Multi-family units should be dispersed to prevent an overcrowding of density in isolated areas and improve the character of development.
3. New residential neighborhoods should incorporate a mixture of uses, services, and pedestrian amenities and corridors to reduce the use of the automobile.
4. Adequate open space and recreational amenities should be incorporated in new residential subdivisions to ensure that the needs of the residents are adequately served.

5. A "town center" should be established in proximity to the closed basalt plant which functions as the symbolic center of American Canyon. A wide diversity of uses characterized by a high level of activity should be accommodated, including government, retail, office, service, entertainment, housing, and open space. The center should be developed as a pedestrian-oriented village that is physically linked by pedestrian and bicycle trails and other elements to surrounding neighborhoods and districts.
6. Additional villages need to be established to accommodate the basic commercial uses necessary to support existing and future residents (grocery stores, household supplies, clothing, and similar uses). These would be located at two primary sites: the intersection of American Canyon Road and Highway 29 and adjacent to the Town Center on Highway 29.
7. Highway 29 should be reconfigured in a more effective land use pattern. The clustering of commercial uses would establish a critical mass of development that would improve the quality and economic viability of the area. The current pattern of dispersal substantially diminishes these areas.
8. Opportunities should be provided for the expansion of the existing industrial development at Green Island Industrial Park and in the vicinity of the Napa Airport and Southern Pacific Railroad.
9. Areas adjacent to the Napa River should afford the opportunity for the establishment of a wetlands interpretative and conference center, nature observation, hiking, camping, and water recreational (boating) uses.
10. Oat Hill offers the opportunity for the development of a restaurant or hotel that would take advantage of views of the Napa River and San Francisco Bay.

This analysis presents two alternatives, including the CEQA-required “no project” alternative, that involve changes to the project that may reduce the project-related environmental impacts identified in this EIR. These Alternatives have been developed to provide a reasonable range of options that would help decision-makers and the public understand the general implications of revising or eliminating certain components of the proposed project. The following alternatives are evaluated in this EIR:

1. Alternative 1: No Project
2. Alternative 2: Watson Ranch Natural Alternative
3. Alternative 3: Limited Growth

Table 6-1 provides a summary comparison of the proposed project and each of the alternatives considered. Detailed descriptions of the alternatives are included in the impact analysis for each alternative. The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.3.

Table 6-1 Comparison of Alternatives

	Proposed Project	Alternative 1: No Project	Alternative 2: Watson Ranch Natural Alternative	Alternative 3: Limited Growth
Total Allowable Dwelling Units Under[1] Alternative	3,204	3,204	3,975	2,971
Change in Total Maximum Dwelling Units Compared to Proposed Project	N/A	-175	+596	-408
Total Additional Residents Under Alternative[1]	10,734	10,990	12,790	10,190
Change in Population Potential Compared to Proposed Project (Number of Residents)	N/A	-600	+2,056	-1,400
Total Additional Non-Residential Square Footage Under Alternative[2]	5,704,000	5,704,000	5,704,000	5,639,000
Change in Total Additional Non-Residential Square Footage Compared to Proposed Project	N/A	N/A	N/A	-65,000
Updated Policies in General Plan	Yes	No	Yes	Yes

[1] The estimates for additional dwelling units, residences, and non-residential square footage are a conservative estimate based on the maximum buildout scenario. Overall, maximum growth will be dependent on multiple factors, including local economic conditions, market demand, and other financing considerations. These numbers are not meant to be a predictor of future growth.

[2] Non-residential square footage in Alternative 2 was assumed to be the same as the existing General Plan and only residential densities were changed.

6.1 Alternative 1: No Project Alternative

6.1.1 Description

The CEQA Guidelines (Section 15126.6[e][2]) require that the alternatives discussion include an analysis of a No Project Alternative. Pursuant to CEQA, the No Project Alternative refers to the analysis of existing conditions and what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. The No Project Alternative typically will proceed along one of two lines: (1) when a project is a revision of an existing regulatory plan or policy, the No Project Alternative will be continuation of the existing plan or policy; or (2) if a project is a development project on identifiable property, the No Project Alternative is the circumstance under which the project does not proceed. In this case, the No Project Alternative represents the continuation of existing zoning and General Plan designations within the City.

Assuming a maximum buildout scenario, buildout for the No Project Alternative would allow for 3,204 housing units and approximately 5.7 million square feet of additional non-residential land uses. Compared to the proposed project, the No Project Alternative would not include updated General Plan policies.

The No Project Alternative would not accomplish the primary objective of the project, which is to update the existing American Canyon General Plan in order for it to be compliant with State law. In addition, the No Project Alternative would not include the updated 2040 General Plan policies and programs pertaining to community development, preservation of natural resources, sustainability, and improvement of American Canyon's circulation network.

6.1.2 Impact Analysis

a. Aesthetics

Development under the No Project Alternative would continue the land use pattern that currently exists in American Canyon. Impacts to aesthetics would be similar to the proposed project. Development under the No Project Alternative could affect aesthetics compared to existing conditions due to buildout and would be required to comply with the same American Canyon Municipal Code regulations as the proposed project. Furthermore, the proposed project includes Mitigation Measures AES-1 and AES-2, which would require measures to minimize lighting impacts during construction and operation of projects. Both these mitigation measures would reduce impacts to light and glare to less than significant. However, the No Project Alternative would not include these mitigation measures and could result in a significant impact on light and glare. Therefore, the severity of the impact on aesthetics for the No Project Alternative would be greater than the proposed project.

b. Air Quality

Like the proposed project, the No Project Alternative would not preclude planned transit or bike pathways and would not disrupt regional planning efforts to reduce vehicle miles traveled (VMT) and meet federal and State air quality standards. The No Project Alternative would be consistent with applicable 2017 Clean Air Plan control measures, although not to the extent as the proposed project, as the No Project Alternative would not include 2040 General Plan proposed policies designed to reduce criteria pollutant emissions such as proposed Policy ENV-8.2, which would reduce construction pollutants as well as proposed Goal MOB-1 and its corresponding policies which would reduce transportation emissions:

- **Policy ENV-11.2: Construction Management Plans.** Require new development and redevelopment projects to prepare and implement a construction management plan that incorporates Best Available Control Measures and all best management practices in accordance with the Air District standards to reduce criteria pollutants.

Goal MOB-1: Provide safe and convenient access throughout the community with a citywide network of complete streets that meet the needs of all users and reduce vehicle miles traveled (VMT).

Impacts regarding conflict with applicable air quality plans would be less than significant, albeit greater than the proposed project.

Buildout under the existing General Plan land use and zoning designations would involve a similar amount of construction emissions as compared to the proposed project. . Like the proposed project, mitigation may be applied to individual projects that require CEQA review to comply with the Bay Area Air Quality Management District's (BAAQMD) current recommended basic control measures. The No Project Alternative would have similar overall construction-related impacts to air quality.

As stated in Section 4.2, *Air Quality,* the greatest source of criteria pollutants in American Canyon is from transportation sources, specifically mobile emissions from roadway traffic. The No Project Alternative would result in similar VMT impacts as compared to the proposed project. However, the No Project Alternative would not include proposed 2040 General Plan proposed policies MOB-1.17 and MOB-5.1, which both support VMT reduction.

- **Policy MOB-1.17: Reduce Vehicle Miles Traveled.** Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop.
- **Policy MOB-6.1: VMT Thresholds**. Establish vehicle miles traveled (VMT) thresholds and Transportation Demand Management (TDM) mitigation requirements for the purposes of environmental review under the California Environmental Quality Act (CEQA). The City shall continue to maintain LOS standards for the purposes of planning and designing street improvements on Green Island Road, Devlin Road, and American Canyon Road.

These policies would ultimately reduce VMT per capita. Overall, operational air quality impacts for the No Project Alternative would also be less than significant, similar to the proposed project.

The No Project Alternative would result in similar amounts of toxic air contaminants (TAC) near sensitive receptors when compared to the proposed project. However, as described in Section 4.2, *Air Quality*, the proposed project includes 2040 General Plan proposed goals and policies designed to promote clean air quality, protect public health and safety, and mitigate adverse air quality impacts, such as proposed policies ENV-11.1 and ENV-11.3.

- **Policy ENV-11.1: Regional Air Quality Efforts.** Support and coordinate with BAAQMD and State and Federal planning efforts aimed at reducing air pollution and management of major pollutants affecting American Canyon and the region, including the Clean Air Plan.
- **Policy ENV-11.3: Separate Sensitive Land Uses.** Separate sources of air pollution from sensitive land uses, such as residences, schools, day care centers, hospitals, and nursing homes.

The No Project Alternative would not implement these policies. Similar to the proposed project, mitigation may be applied to individual projects that require CEQA review to prepare a construction health risk assessment. The No Project Alternative would have similar overall construction-related TAC impacts to air quality as compared to the proposed project.

Like the proposed project, construction activities under the No Project Alternative would generate odors, which would be temporary and limited to the constructed period. Similar to the proposed project, mitigation may be applied to individual projects that require CEQA review. Similar to the proposed project, the No Project Alternative would have a less than significant with mitigation impact regarding creation of objectionable odors.

Overall, the No Project Alternative would have similar impacts to air quality as the proposed project but would not have the benefits associated with implementing the updated policies in the 2040 General Plan. As such, for the purposes of this analysis, the impacts from the No Project Alternative would be greater to the impacts from the proposed project.

c. Biological Resources

As described in Section 4.3, *Biological Resources*, potential habitat suitable for special-status species occurs in streams, grasslands, riparian woodland, and forests within the Planning Area. The No Project Alternative may still potentially impact special-status species or their habitat, including

riparian habitat and wildlife corridors. Furthermore, in contrast to the proposed project, the No Project Alternative would not include updated General Plan goals and policies, such as proposed Policy ENV-1.2 and Policy ENV-1.3 which are designed to preserve and protect biological resources in American Canyon.

- **Policy ENV-1.2: Sensitive Habitat Assessment and Impact Mitigation.** Require new development and redevelopment located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, vernal pools, and riparian habitats to provide a detailed assessment of the potential for impacts on these resources, and include measures to reduce any identifiable impacts.
- **Policy ENV-1.3: Habitat Conservation.** Support habitat conservation efforts to set aside and preserve suitable habitats, with priority given to habitats for rare and endangered species in American Canyon in accordance with state and federal resource agency requirements.

Nonetheless, similar to the proposed project, mitigation may be applied to individual projects that require CEQA review. Overall, the No Project Alternative would have similar impacts compared to the proposed project; however, the No Project Alternative would also not have the benefits associated with implementing the updated policies in the 2040 General Plan. As such, for the purposes of this analysis, the impacts from the No Project Alternative would be greater than to the impacts from the proposed project.

d. Cultural Resources

The No Project Alternative would have the potential to impact historic and archaeological resources in American Canyon through development of individual projects.. In contrast to the proposed project, the No Project Alternative would not include updated General Plan goals and policies designed to preserve and protect historic and archaeological resources in American Canyon such as proposed Goal ENV-5 and its corresponding policies.

Goal ENV-4: Protect cultural and tribal resources.

- **Policy ENV-4.1: Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.
- **Policy ENV-4.2: Development.** Ensure that human remains are treated with sensitivity and dignity and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.
- **Policy ENV-4.3: Yocha Dehe Wintun Nation Treatment Protocol**. In the event any Native American human remains, grave goods, ceremonial items, and items of cultural patrimony are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity, the "Yocha Dehe Wintun Nation Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation" shall be implemented as included as Appendix A to the Housing Element.

Nonetheless, similar to the proposed project, mitigation may be applied to individual projects that require CEQA review. Overall, the No Project Alternative would have similar impacts compared to the proposed project; however, the No Project Alternative would not have the benefits associated with implementing the updated policies in the 2040 General Plan. As such, for the purposes of this

analysis, the impacts from the No Project Alternative would be greater than the impacts from the proposed project.

e. Greenhouse Gas Emissions

The No Project Alternative would result in the same buildout as the proposed project. Temporary construction-related greenhouse gas (GHG) emissions from grading and construction of new housing and non-residential development, as well as long-term impacts resulting from building operation (such as energy use, maintenance, and traffic) would be similar to the proposed project. . However, the No Project Alternative would not include Mitigation Measures GHG-2 or GHG-3 which would require the adoption of a GHG threshold and Climate Action Plan (CAP) to meet the State's 2030 and 2045 GHG emissions goals.

American Canyon's existing General Plan does not outline how the City would meet State-mandated goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045. Therefore, the No Project Alternative would not be consistent with the California Executive Order B-55-18 goal of carbon neutrality by 2045 and would not include a qualified GHG reduction plan to guide progress towards State goals. Consequently, impacts related to generation of GHG emissions and consistency with State GHG reduction plans under the No Project Alternative would be potentially significant. Under the No Project Alternative, the CEQA GHG emissions threshold of significance and updated Climate Action Plan would not be implemented. As such, the No Project Alternative would result in greater impacts on GHG emissions compared to the proposed project, because CEQA GHG emissions threshold of significance and an updated Climate Action Plan would not be implemented.

f. Land Use and Planning

Under the No Project Alternative, there would be no changes to land use designations, zoning, or policies in the General Plan. The No Project Alternative would not alter connectivity with adjacent areas or divide established communities. Like the proposed project, future development under existing zoning would be required to comply with regulatory goals and policies, including Plan Bay Area 2050, as discussed in Impact LU-2 in Section 4.6, *Land Use and Planning*.. Overall, impacts regarding land use and planning would be less than significant, like the proposed project.

g. Noise

Buildout under the No Project Alternative would result in the same amount of development as the proposed project. Therefore, similar levels of construction and associated construction noise and vibration would occur from the No Project Alternative, compared to the proposed project. Like the proposed project, construction noise under the No Project Alternative could temporarily increase noise levels, potentially affecting nearby noise-sensitive land uses and leading to a significant and unavoidable impact. Similar to the proposed project, mitigation may be applied to individual projects that require CEQA review to implement construction noise reduction measures. However, construction noise could still exceed the significance thresholds and like the project, impacts would be significant and unavoidable.

Noise generated by on-site stationary equipment for new development would be subject to the City's noise limits, like the proposed project. Adherence to American Canyon Municipal Code noise limits for heating, ventilation, and air conditioning (HVAC) units and other stationary noise sources associated with future development would ensure that operational stationary noise under the No Project Alternative is less than significant. However, the No Project Alternative would not include

2040 General Plan proposed policies designed to reduce operational noise impacts such as proposed Policies S-8.1, S-8.3, and S-8.12 which include requirements for considering noise in land use compatibility and site design.

- **Policy S-8.1: Land Use Compatibility.** Use the land use-noise compatibility matrix in Table S-1 to guide the siting of future land uses.
- **Policy S-8.2: Sensitive Facilities**. Ensure appropriate noise mitigation is incorporated into the design of noise- sensitive facilities.
- **Policy S-8.3: Site Design**. Minimize noise impacts to adjacent noise-sensitive land uses in site planning and project design.

Stationary source noise impacts due to the No Project Alternative would be greater than the proposed project because the proposed policies and programs listed above would not be implemented.

Implementation of the No Project Alternative would result in buildout, which would generate new vehicle trips that could incrementally increase the exposure of land uses along roadways to traffic noise. The No Project Alternative would result in an increase in VMT compared to existing conditions and it is anticipated that a significant and unavoidable traffic noise impact would occur.

Development facilitated under the No Project Alternative could temporarily generate groundborne vibration during construction, potentially affecting nearby land uses. Similar to the proposed project, mitigation may be applied to individual projects that require CEQA review to prepare a construction vibration control plan. Operation of future development under the No Project Alternative would not involve substantial vibration or groundborne noise. Thus, impacts involving groundborne vibration and noise would be similar to the impacts of the proposed project.

Residents and businesses facilitated by the No Project Alternative would not be served by the Napa County Airport. Thus, development facilitated under this alternative would not result in significantly increased airport or airstrip activity. Continued regulation of airport noise consistent with State and federal regulations would minimize disturbance to people residing or working within proximity of the Napa County Airport. Impacts would be less than significant, like the proposed project.

Overall, the No Project Alternative would not have the benefits associated with implementing the updated policies in the 2040 General Plan. As such, for the purposes of this analysis, the impacts from the No Project Alternative would be greater than to the impacts from the proposed project.

h. Paleontological Resources

As discussed in Section 4.8, *Paleontological Resources*, portions of the city are underlain by geologic units with high paleontological sensitivity. Under the No Project Alternative, ground disturbance could still result in potentially significant impacts to paleontological resources. Similar to the proposed project, mitigation may be applied to individual projects that require CEQA review to minimize impacts on paleontological resources. The No Project Alternative would involvesimilar impacts to paleontological resources as compared to the proposed project.

i. Population and Housing

Assuming a maximum buildout scenario, implementation of the No Project Alternative would accommodate the same amount of housing units and residents as the proposed project. The No Project Alternative would result in similar population growth and would not induce substantial

unplanned population growth. The displacement of people or housing units under the No Project Alternative would be minimal, as development in American Canyon would continue in accordance with the existing General Plan. Impacts would be less than significant. When compared to the proposed project, the No Project Alternative would have equal impacts to population and housing.

j. Public Services and Recreation

Development allowed by existing land use and zoning regulations would occur under the No Project Alternative, which would result in an increase to emergency calls in the area, as well as an increase in additional demand for schools, parks, libraries, recreational facilities, or other public services. Assuming a maximum buildout scenario, the No Project Alternative would add approximately 11,590 which is the same as the proposed project. Thus, impacts to public services and recreation would be less than significant, similar to the proposed project.

k. Transportation

The No Project Alternative would result in development that follows the existing land use and zoning regulations. Goals and policies within the existing General Plan would apply under this alternative. Given the compliance with existing General Plan goals and policies that pertain to provision of "complete streets," increased connectivity, adequate emergency access, and safety design, the No Project Alternative would have a less than significant impact regarding conflict with circulation programs, plans, ordinances, or policies. The No Project Alternative would also have a less than significant impact regarding substantially increased transportation hazards and inadequate emergency access. Nonetheless, the proposed project prioritizes the provisions of "complete streets" to a greater extent than the No Project Alternative since the proposed project includes proposed Goal MOB-1 and its corresponding policies, which would provide a citywide network of complete streets. As such, the No Project Alternative would have greater impacts related to consistency with plans and safety, compared to the project.

In addition, the No Project Alternative would result in similar buildout as compared to the proposed project. As described in Section 4.11, *Transportation*, American Canyon currently has fewer jobs than employed residents. As such, the No Project Alternative would result in similar per capita VMT compared to the proposed project. However, the No Project Alternative would not include proposed 2040 General Plan policies MOB-1.17 and MOB-6.1 that support VMT reduction, which would ultimately reduce VMT per capita.

Overall, because the No Project Alternative would not include the proposed policies in the 2040 General Plan, the impacts from the No Project Alternative would be slightly greater compared to the proposed project.

l. Tribal Cultural Resources

As discussed in Section 4.12, *Tribal Cultural Resources*, impacts on tribal cultural resource (TCR) are highly dependent on the individual project site conditions and the characteristics of the proposed activity, including level of ground disturbance. Under the No Project Alternative, existing land use designations and zoning would continue to define the type of development that occurs throughout American Canyon. Development facilitated under the No Project Alternative may involve excavation, which could potentially impact previously unidentified TCRs. The No Project Alternative would not include updated General Plan policies designed to preserve and protect TCRs, which were developed in part through consultation with Native American Tribes, such as proposed Goal ENV-4 and Policy ENV-4.3, which requires the implementation of the Yocha Dehe Wintun Nation

Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation. Overall, because these policies would not be included in the No Project Alternative, impacts, the severity of the impact on TCRs for the No Project Alternative would be greater than the proposed project.

m. Utilities and Service Systems

Development facilitated under the No Project Alternative would create additional demand for water, wastewater, electricity, natural gas, telecommunication, and stormwater drainage facilities. Any utility expansion within City limits would be subject to existing General Plan policies, which are intended to reduce potential impacts of utility expansion. Although the No Project Alternative would not include 2040 General Plan proposed policies that require implementation of low impact development, energy conservation, and energy efficiency strategies, there are existing regulations that would require similar measures. Impacts involving utility expansion under the No Project Alternative would be less than significant, and similar to the proposed project.

As discussed in Section 4.13, *Utilities and Service Systems*, the City's Public Works Department would have adequate water supply to service the City's anticipated growth under the proposed project. Considering that development under the No Project Alternative would be the same as the proposed project, the No Project Alternative would also be accommodated by the City's existing water system. Although development under the No Project Alternative would increase water demand, the City would continue to have sufficient water supply during normal, dry, and multiple dry years, and impacts to water supply would be less than significant.

Development facilitated under the No Project Alternative would increase demand for wastewater treatment. Like the proposed project, the timing, intensity, and location of an expansion of wastewater treatment facilities is unknown at this time. Like the proposed project, wastewater expansion for the No Project Alternative would require additional CEQA review, would be advanced when the wastewater expansion is advanced, and impacts would be less then significant. Considering the No Project Alternative would add the same number of residents as the proposed project(assuming a maximum buildout scenario), demand for wastewater and overall wastewater impacts of the No Project Alternative would be similar to the proposed project.

Implementation of the No Project Alternative would generate solid waste from construction and operation of development (including typical residential, commercial, and office solid waste). As discussed in Section 4.13, *Utilities and Service Systems*, the Devlin Road Recycling & Transfer Facility (DRRTF) would have adequate capacity to serve the population growth under the proposed project. Considering the No Project Alternative would result in the same number of residents as the proposed project (assuming a maximum buildout scenario), the DRRTF would also accommodate population growth under this alternative. Like the proposed project, impacts involving solid waste under the No Project Alternative would be less than significant.

n. Wildfire

Under the No Project Alternative, development could still occur within or near fire risks in an LRA. In addition, under the No Project Alternative, development could still occur near fire risks in an SRA, which are located east of the city limits. Although the No Project Alternative would not include 2040 General Plan proposed policies S-2.7, S-2.8, and S-2.14, which include measures to reduce the risk of wildfire on persons and property, it would still be subject to the same regulations as described for the proposed project, including the American Canyon City Code.

- **Policy S-2.7: Building and Fire Code Compliance.** Require new development to meet or exceed structural hardening requirements in the most current version of the California Building Codes and California Fire Code.
- **Policy S-2.8: Development Standards Update.** Incorporate relevant new legislative requirements and best practices into the City's development standards.
- **Policy S-2.14: Community Fire Breaks.** Coordinate with the American Canyon Fire Protection District to encourage property owners to maintain fire breaks and fuel modification/reduction zones on their property.

Similar to the proposed project, mitigation may be applied to individual projects that require CEQA review to reduce construction and design wildfire risk. Overall, the No Project Alternative would have a similar impact on wildfire than the proposed project.

6.2 Alternative 2: Watson Ranch Natural Alternative

6.2.1 Description

Alternative 2 would assume maximum density on the Watson Ranch property which would result in an additional 596 dwelling units. Alternative 2 assumes that the General Plan would be updated like for the proposed project, (including the updated policies that make the General Plan consistent with State law). . Overall Alternative 2 assumes increased residential densities (3, units total) when compared to the proposed project (3,975 total units). In addition, because Alternative 2 would maintain the same designations as the General Plans for non-residential spaces, the buildout of non-residential space would be the same as the proposed project. Buildout under Alternative 2, assuming a maximum buildout scenario, would allow for 3,975 housing units and approximately 5,704,000 square feet of additional non-residential land uses. Alternative 2 would meet the objectives of the proposed project as it would increase residential buildout while accommodating the same amount of non-residential buildout as the proposed project.

6.2.2 Impact Analysis

a. Aesthetics

Development under Alternative 2 would continue the land use pattern that currently exists in American Canyon. Impacts to scenic vistas under this alternative would be increased when compared to the proposed project, as this alternative would involve more development. Development under Alternative 2 could affect aesthetics and would be required to comply with the same American Canyon City Code regulations as the proposed project. Impacts to aesthetics, including light and glare would be increased when compared to the proposed project, as Alternative 2 would entail more overall residential development.

b. Air Quality

Like the proposed project, buildout under Alternative 2 would not preclude planned transit or bike pathways and would not disrupt regional planning efforts to reduce VMT and meet federal and State air quality standards. Alternative 2 would be consistent with applicable 2017 Clean Air Plan control measures. Impacts regarding conflict with applicable air quality plans would be less than significant, the same as the proposed project.

Buildout from Alternative 2 would accommodate approximately 596 additional housing units than under the proposed project. Construction of these additional units could result in increased short-term emissions. Alternative 2 would implement Mitigation Measures AQ-1 through AQ-3, which would reduce construction impacts to air quality. Like the proposed project, air quality impacts from construction of Alternative 2 would be less than significant with mitigation; however, Alternative 2 would have more overall construction-related impacts to air quality due to the increased buildout.

As stated in Section 4.2, *Air Quality*, the greatest source of criteria pollutants in American Canyon is from transportation sources, specifically mobile emissions from roadway traffic. Considering 596 additional residential units would be constructed in American Canyon under this alternative, the long-term on-site emissions from vehicle use would be increased when compared to the proposed project. Like the proposed project, updates to the 2040 General Plan, including the new proposed policies to be consistent with State law would reduce operational impacts to air quality. These policies would ultimately reduce VMT per capita. Overall, like the proposed project, operational air quality impacts for Alternative 2 would be less than significant.

Overall, Alternative 2 would result in more development than the proposed project and would result in higher TAC near sensitive receptors when compared to the proposed project. Furthermore, Alternative 2 would include the 2040 General Plan proposed goals and policies designed to promote clean air quality, protect public health and safety, and mitigate adverse air quality impacts. Alternative 2 would implement these policies and would also require Mitigation Measure AQ-3 (Conduct Construction Health Risk Assessment) to reduce impacts to a less than significant level.

Like the proposed project, construction activities under Alternative 2 would generate odors, which would be temporary and limited to the constructed period. Alternative 2 would implement Mitigation Measure AQ-4 which would further reduce operational odor impacts. Similar to the proposed project, Alternative 2 would have a less than significant impact regarding creation of objectionable odors.

Overall, impacts from Alternative 2 would be increased compared to the proposed project due to the increase in buildout.

c. Biological Resources

As described in Section 4.3, *Biological Resources*, potential habitat suitable for special-status species occurs in streams, grasslands, riparian woodland, and forests within the Planning Area. Alternative 2 would result in overall increased development when compared to the proposed project. Development under Alternative 2 may potentially impact special-status species or their habitat, including riparian habitat and wildlife corridors. Like the proposed project, Mitigation Measures BIO-1 (Biological Resources Screening and Assessment), BIO-2 (Special-status Plant Species Surveys), BIO-3 (Special-status Plant Species Avoidance, Minimization, and Mitigation), BIO-4 (Habitat Restoration Plan), BIO-5 (Endangered/Threatened Special-status Species Habitat Assessments and Protocol Surveys), BIO-6 (Endangered/Threatened Animal Species Avoidance and Minimization), BIO-7 (Pre-Construction Bird Surveys, Avoidance, and Notification), BIO-8 (Roosting Bat Surveys and Avoidance Prior to Removal), and BIO-9 (Conduct Pre-construction Crotch's Bumblebee Surveys and Implement Avoidance Measures)), would be implemented for Alternative 2 and would help reduce associated biological resource impacts. Overall, impacts to biological resources under Alternative 2 would be less than significant with mitigation incorporated, like the proposed project. Impacts from Alternative 2 would be slightly increased compared to the proposed project due to the increase in buildout.

d. Cultural Resources

Under Alternative 2, more residential development would occur compared to the proposed project. Individual projects would have the potential to impact historic and archaeological resources. Alternative 2 would have potentially significant impacts to historic and archaeological resources. Like the proposed project, Alternative 2 would include Mitigation Measures CUL-1 (Historic Built Environment) and CUL-2 (Archaeological Resources Assessment), which require project applicants to investigate the potential to disturb historic or archaeological resources. Additionally, Alternative 2 would include Mitigation Measures CR-3 (Unanticipated Discoveries) and CR-4 (Human Remains) which would require applicants to pause work and investigate subsurface discoveries. Like the proposed project, Alternative 2 would include 2040 General Plan proposed goals and policies designed to preserve and protect historic and archaeological resources in American Canyon. Impacts from Alternative 2 would be increased as compared to the proposed project due to the increase in buildout.

e. Greenhouse Gas Emissions

Alternative 2 would result in more development, as well as more temporary construction-related GHG emissions (from grading and construction of new development) and long-term GHG emissions resulting (from building operations such as energy use, maintenance, and traffic), compared to the proposed project.

Under existing conditions, American Canyon's General Plan does not outline how the City would meet State-mandated goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045. Like the proposed project, Alternative 2 would implement Mitigation Measure GHG-2, which would require the City to implement a CEQA GHG emissions threshold of significance; and Mitigation Measure GHG-3, which would require the City to update American Canyon's Climate Action Plan to meet State goals of 40 percent below 1990 emissions levels and 2045 goal of carbon neutrality. Implementation of these mitigation measures would ensure development under Alternative 2 would be consistent with State emissions goals; however, individual projects that occur prior to adoption of the Climate Action Plan may not be consistent. Overall GHG emissions impacts under Alternative 2 would be increased when compared to the proposed project, and such impacts would remain significant and unavoidable.

f. Land Use and Planning

Under the Alternative 2, there would be no changes to land use designations, zoning, or policies in the General Plan. Alternative 2 would not alter connectivity with adjacent areas or divide established communities. Like the proposed project, future development under existing zoning would be required to comply with regulatory goals and policies, including Plan Bay Area 2050, as discussed in Impact LU-2 in Section 4.6, *Land Use and Planning*. Alternative 2 would provide 596 more housing units than the proposed project. Overall, impacts regarding land use and planning would be less than significant, like the proposed project.

g. Noise

Buildout under the Alternative 2 would result in increased development compared to the proposed project. Therefore, more construction and associated construction noise and vibration would occur from the Alternative 2, compared to the proposed project. Like the proposed project, construction noise under Alternative 2 could temporarily increase noise levels, potentially affecting nearby noise-

sensitive land uses and leading to a significant and unavoidable impact. Alternative 2 would implement Mitigation Measure NOI-1 (Conduct Construction Noise Analysis), which would reduce construction noise. However, construction noise could still exceed the significance thresholds and like the project, impacts would be significant and unavoidable.

Noise generated by on-site stationary equipment for new development would be subject to the City's noise limits, like the proposed project. Adherence to American Canyon Municipal Code noise limits for HVAC units and other stationary noise sources associated with future development would ensure that operational stationary noise under Alternative 2 is less than significant.

Implementation of Alternative 2 would result in increased buildout, which would generate new vehicle trips that could incrementally increase the exposure of land uses along roadways to traffic noise. Alternative 2 would implement Mitigation Measure NOI-2 (Implement Roadway Vehicle Noise Reduction Measures) which would reduce operational traffic noise. Alternative 2 would result in an increase in noise compared to existing conditions and a significant and unavoidable traffic noise impact would occur.

Development facilitated under Alternative 2 could temporarily generate groundborne vibration during construction, potentially affecting nearby land uses. Mitigation Measure NOI-3 (Construction Vibration Control Plan) would require implementation of measures to reduce vibration impacts during construction. Operation of future development under Alternative 2 would not involve substantial vibration or groundborne noise. Thus, like the proposed project, impacts involving groundborne vibration and noise would be less than significant with mitigation incorporated.

Residents and businesses facilitated by Alternative 2 would not be served by the Napa County Airport. Thus, development facilitated under this alternative would not result in significantly increased airport or airstrip activity. Continued regulation of airport noise consistent with State and federal regulations would minimize disturbance to people residing or working within proximity of the Napa County Airport. Like the proposed project, impacts would be less than significant. In addition, Alternative 2 would include 2040 General Plan proposed policies designed to reduce noise from the Napa County Airport through disclosure, attenuation, and studies. Impacts would be the same under this alternative as the proposed project.

Overall, impacts from Alternative 2 would be increased, compared to the proposed project due to the increase in buildout.

h. Paleontological Resources

As discussed in Section 4.8, *Paleontological Resources*, portions of the city are underlain by geologic units with high paleontological sensitivity. Alternative 2 would increase development by approximately 596 residential units on one site with high paleontological sensitivity [Quaternary alluvial fan deposits (Pleistocene) (Qpf)] based on the mapping provided in Figure 4.8-1 in Section 4.8, *Paleontological Resources*. Under Alternative 2, ground disturbance elsewhere could still result in potentially significant impacts to paleontological resources. Alternative 2 would implement Mitigation Measure PAL-1 (Retention of Qualified Professional Paleontologist) which would reduce effects to paleontological resources and impacts would be less than significant. Alternative 2 would involve more overall development than the proposed project, and thus would be more likely to impact paleontological resources.

i. Population and Housing

Under Alternative 2, existing General Plan land use designations would continue to define American Canyon's development pattern. Assuming a maximum buildout scenario, implementation of Alternative 2 would accommodate approximately 2,056 additional residents and 596 additional housing units than would be accommodated by implementation of the proposed project (refer to Table 6-1). Thus, compared to the proposed project, Alternative 2 would result in more population growth, however, this alternative would not induce substantial unplanned population growth. Displacement impacts for Alternative 2 would be the same as the impacts for the proposed project. Overall, when compared to the proposed project, Alternative 2 would have similar, but slightly increased impacts to population and housing.

j. Public Services and Recreation

Increased development would occur under Alternative 2, which could result in an increase to emergency calls in the area, as well as an increase in additional demand for schools, parks, libraries, recreational facilities, or other public services. Assuming a maximum buildout scenario, Alternative 2 would add approximately 12,790 new residents to American Canyon, which is 2,056 more residents than the proposed project's 10,734 new residents. Thus, the increased demand for public services under Alternative 2 would be more than the proposed project's increase in demand. Impacts to public services and recreation would be increased as compared to the proposed project.

k. Transportation

For the same reasons as the proposed project, Alternative 2 would have a less than significant impact regarding conflict with circulation programs, plans, ordinances, or policies; substantially increased transportation hazards; and inadequate emergency access. In addition, the Alternative 2 would result in an increase in residential growth by 596 units. This increase would likely result in increased per capita VMT because Watson Ranch is on the edge of the city center and adding additional units here would result in the need for more residents to make trips into the city center. Additionally, American Canyon currently has fewer jobs than employed residents, therefore it is likely additional residents will need to make trips outside the city for employment opportunities compared to the proposed project. As such, impacts from Alternative 2 would be increased compared to the proposed project and the impacts from Alternative 2 could be significant.

l. Tribal Cultural Resources

Like the proposed project, development facilitated under Alternative 2 may involve excavation, which could potentially impact previously unidentified TCRs. Alternative 2 would include 2040 General Plan proposed Goal ENV-5 and its corresponding policies, which protect cultural and tribal cultural resources. Implementation of these policies would reduce potential impacts to TCRs from development facilitated by this alternative by requiring avoidance and monitoring in areas identified as sensitive for TCRs (Policy ENV-5.3). Alternative 2 would include the same mitigation as the proposed project' therefore, impacts to TCRs would be less than significant with mitigation. Overall because Alternative 2 would result in more development than the proposed project, the severity of impacts would be slightly increased as compared to the proposed project.

m. Utilities and Service Systems

Like the proposed project, development facilitated under Alternative 2 would create additional demand for water, wastewater, electricity, natural gas, telecommunication, and stormwater drainage facilities. Any utility expansion would be subject to 2040 General Plan proposed policies and mitigation measures identified throughout the Alternative 2 analysis, which would reduce potential impacts from utility expansion. Thus, impacts involving utility expansion under Alternative 2 would be less than significant, the same as the proposed project.

As discussed in Section 4.13, *Utilities and Service Systems*, the City would have adequate water supply to service the City's anticipated growth under the proposed project. Considering that development under Alternative 2 would result in 2,056 additional residents (assuming a maximum buildout scenario) than the proposed project, growth under Alternative 2 would not be accommodated by the City's existing water system. Development under Alternative 2 would increase water demand, and the City would not have sufficient water supply during normal, dry, and multiple dry years, and impacts to water supply would be significant and unavoidable.

Development facilitated under Alternative 2 would increase demand for wastewater treatment. Like the proposed project, the timing, intensity, and location of an expansion of wastewater treatment facilities is unknown at this time. Like the proposed project, any expansion of wastewater facilities would require additional CEQA review and would be advanced when the wastewater expansion is advanced. Considering Alternative 2 would add 2,056 additional residents to American Canyon (assuming a maximum buildout scenario), demand for wastewater and overall wastewater impacts would be increased under Alternative 2 than for the proposed project.

Implementation of Alternative 2 would generate solid waste from construction and operation of development (including typical residential, commercial, and office solid waste). As discussed in Section 4.13, *Utilities and Service Systems*, the American Canyon Transfer Station would have adequate capacity to serve the population growth under the proposed project. While Alternative 2 would result in 2,056 additional residents, the DRRTF could still accommodate the increased population growth under this alternative. Furthermore, Alternative 2 would include the proposed goals and policies in the 2040 General Plan. Impacts involving solid waste would be slightly more than the proposed project.

Overall, impacts from Alternative 2 would be increased, compared to the proposed project due to the increase in buildout.

n. Wildfire

Under Alternative 2, development could still occur within or near fire risks in an LRA. In addition, under Alternative 2, development could still occur near fire risks in an SRA, which are located east of the city limits. Alternative 2 would include 2040 General Plan proposed policies that include measures to reduce the risk of wildfire. Furthermore, Alternative 2 would include Mitigation Measures WF-1 (Wildfire Risk Reduction During Construction) and WF-2 (Fire Resistant Vegetation and Landscaping) which would reduce the impacts of wildfires to a less than significant level. Additionally, like proposed project, Alternative 2 would still be subject to the same regulations as described for the proposed project, including the American Canyon City Code. Overall, impacts of Alternative 2, like the proposed project, would be less than significant with mitigation.

6.3 Alternative 3: Limited Growth

6.3.1 Description

The Limited Growth Alternative (Alternative 3) was developed to identify an alternative that would reduce potential construction impacts and operational impacts from a reduced buildout. Alternative 3 assumes that the General Plan would be updated to include the updated policies that make the General Plan consistent with State law. However, under Alternative 3, buildout would be limited to pipeline projects (i.e., project already identified by the City to be constructed in the future) and other projects that have already been approved or for which General Plan amendments have already been approved (e.g., Watson Ranch Specific Plan, Broadway District Specific Plan). As such, buildout would be reduced in the following ways:

- Residential buildout would be reduced by 408 dwelling units compared to the proposed project because (1) the land use designations for the two NVUSD would remain as Recreation and Public and would not be changed to Residential Medium, reducing the number of residential units by 175 units and (2) the buildout identified in the City's Traffic Impact Fee (TIF) Nexus Study would be reduced by 233 residential units.
- Non-residential area would be reduced by 65,000 square feet based on the buildout identified in the City's TIF Nexus Study.

Overall Alternative 3 assumes decreased residential densities (2,971 units total) when compared to the proposed project (3,379 total units), as well as decreased non-residential area (5,639,000 square feet) when compared to the proposed project (5,704,000 square feet).

Overall, Alternative 3 would require the City to limit growth to those projects that have already been approved by the City or identified as planned projects. While Alternative 3 would meet the objective of updating the General Plan so that it's consistent with State law, this alternative would not help meet the vision of American Canyon to the same extent as the proposed project. Alternative 3 would reduce the residential and non-residential buildout; therefore, compared to the proposed project, this alternative would reduce the ability for the City to meet its vision of accommodating a residential population with a range of uses; creating a center of employment and commerce; and capturing visitors to the Napa Valley. Overall, Alternative 3 would not meet the project objectives to the same extent as the proposed project.

6.3.2 Impact Analysis

a. Aesthetics

Development under Alternative 3 would continue the land use pattern that currently exists in American Canyon. Alternative 3 would reduce the residential and non-residential buildout compared to the proposed project. Impacts to scenic vistas under this alternative would be reduced when compared to the proposed project, as this alternative would involve less overall development. Impacts to aesthetics, including light and glare would be reduced when compared to the proposed project, as Alternative 3 would entail less overall development. Nonetheless, development under Alternative 3 could affect aesthetics and would be required to comply with the same American Canyon City Code regulations as the proposed project. Furthermore, Alternative 3 would include the updates to the 2040 General Plan, including the new policies to be consistent with State law. Therefore, because Alternative 3 would involve less overall development and include the updates to

the 2040 General Plan, the severity of the impact for Alternative 3 would be less than for the proposed project.

b. Air Quality

Like the proposed project, buildout under Alternative 3 would not preclude planned transit or bike pathways and would not disrupt regional planning efforts to reduce VMT and meet federal and State air quality standards. Alternative 3 would be consistent with applicable 2017 Clean Air Plan control measures. Impacts regarding conflict with applicable air quality plans would be less than significant, the same as the proposed project.

Buildout from Alternative 3 would accommodate approximately 408 fewer housing units and a reduction of approximately 65,000 square feet of non-residential area than under the proposed project. Short-term emissions that would occur from construction of the 408 housing units and non-residential area would be reduced by Alternative 3. Additionally, Alternative 3 would implement Mitigation Measures AQ-1 through AQ-3, which would further reduce construction impacts to air quality. Alternative 3 would have fewer overall construction-related impacts to air quality. Like the proposed project, air quality impacts from construction of Alternative 3 would be less than significant with mitigation; however, Alternative 3 would have fewer overall construction-related impacts to air quality due to the reduced buildout.

As stated in Section 4.2, *Air Quality*, the greatest source of criteria pollutants in American Canyon is from transportation sources, specifically mobile emissions from roadway traffic. Considering 408 fewer residential units and a reduction of 65,000 square feet of non-residential area would be constructed in American Canyon under this alternative, the long-term on-site emissions from vehicle use would be reduced when compared to the proposed project. An overall reduction in VMT would result in less operational emissions associated with mobile sources. Like the proposed project, updates to the 2040 General Plan, including the new proposed policies to be consistent with State law would further reduce operational impacts to air quality. These policies would ultimately reduce VMT per capita. Overall, like the proposed project, operational air quality impacts for Alternative 3 would be less than significant.

Overall, Alternative 3 would result in less development than the proposed project and would result in lower TACs near sensitive receptors when compared to the proposed project. Furthermore, Alternative 3 would include the 2040 General Plan proposed goals and policies designed to promote clean air quality, protect public health and safety, and mitigate adverse air quality impacts. Alternative 3 would implement these policies and would also require Mitigation Measure AQ-3 (Conduct Construction Health Risk Assessment) to reduce impacts to a less than significant level.

Like the proposed project, construction activities under Alternative 3 would generate odors, which would be temporary and limited to the constructed period. Alternative 3 would implement Mitigation Measure AQ-4 which would further reduce operational odor impacts. Similar to the proposed project, Alternative 3 would have a less than significant impact regarding creation of objectionable odors.

Overall, impacts from Alternative 3 would be reduced, compared to the proposed project due to the reduction in buildout.

c. Biological Resources

As described in Section 4.3, *Biological Resources*, potential habitat suitable for special-status species occurs in streams, grasslands, riparian woodland, and forests within the Planning Area. Alternative 3

would result in overall reduced development when compared to the proposed project; however, development under Alternative 3 may potentially impact special-status species or their habitat, including riparian habitat and wildlife corridors. Like the proposed project, Mitigation Measures BIO-1 (Biological Resources Screening and Assessment), BIO-2 (Special-status Plant Species Surveys), BIO-3 (Special-status Plant Species Avoidance, Minimization, and Mitigation), BIO-4 (Habitat Restoration Plan), BIO-5 (Endangered/Threatened Special-status Species Habitat Assessments and Protocol Surveys), BIO-6 (Endangered/Threatened Animal Species Avoidance and Minimization), BIO-7 (Pre-Construction Bird Surveys, Avoidance, and Notification), BIO-8 (Roosting Bat Surveys and Avoidance Prior to Removal), and BIO-9 (Conduct Pre-construction Crotch's Bumblebee Surveys and Implement Avoidance Measures), would be implemented for Alternative 3 and would help reduce associated biological resource impacts.. Overall, impacts to biological resources under Alternative 3 would be less than significant with mitigation incorporated, like the proposed project. Impacts from Alternative 3 would be less compared to the proposed project due to the reduction in buildout.

d. Cultural Resources

Under Alternative 3, less residential and non-residential development would occur compared to the proposed project; however, individual projects would have the potential to impact historic and archaeological resources. Alternative 3 would have reduced, but still potentially significant impacts to historic and archaeological resources. Like the proposed project, Alternative 3 would include Mitigation Measures CUL-1 (Historic Built Environment) and CUL-2 (Archaeological Resources Assessment), which require project applicants to investigate the potential to disturb historic or archaeological resources. Additionally, Alternative 3 would include Mitigation Measures CR-3 (Unanticipated Discoveries) and CR-4 (Human Remains), which would require applicants to pause work and investigate subsurface discoveries. Like the proposed project, Alternative 3 would include 2040 General Plan proposed goals and policies designed to preserve and protect historic and archaeological resources in American Canyon. Overall, impacts from Alternative 3 would be less, compared to the proposed project, due to the reduction in residential and non-residential area buildout.

e. Greenhouse Gas Emissions

Alternative 3 would result in less development, as well as less temporary construction-related GHG emissions (from grading and construction of new development) and long-term GHG emissions resulting (from building operations such as energy use, maintenance, and traffic), compared to the proposed project.

Under existing conditions, American Canyon's General Plan does not outline how the City would meet State-mandated goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045. Like the proposed project, Alternative 3 would implement Mitigation Measure GHG-2, which would require the City to implement a CEQA GHG emissions threshold of significance; and Mitigation Measure GHG-3, which would require the City to update American Canyon's Climate Action Plan to meet State goals of 40 percent below 1990 emissions levels and 2045 goal of carbon neutrality. Implementation of these mitigation measures would ensure development under Alternative 3 would be consistent with State emissions goals; however, individual projects that occur prior to adoption of the Climate Action Plan may not be consistent. Overall, buildout under Alternative 3 would be less than the proposed project, which would result in a reduction of GHG emissions. However, while overall GHG emissions impacts under Alternative 2

would be reduced when compared to the proposed project, such impacts would remain significant and unavoidable, for the same reasons as the proposed project.

f. Land Use and Planning

Under Alternative 3, there would be no changes to land use designations or zoning in the existing General Plan. Alternative 3 would not alter connectivity with adjacent areas or divide established communities. Like the proposed project, future development under existing zoning would be required to comply with regulatory goals and policies, including Plan Bay Area 2050, as discussed in Impact LU-2 in Section 4.6, *Land Use and Planning*. Alternative 3 would provide 408 fewer housing units and a reduction of approximately 65,000 square feet of non-residential area in comparison to the proposed project. Overall, impacts regarding land use and planning would be less than significant, like the proposed project.

g. Noise

Buildout under Alternative 3 would result in reduced development compared to the proposed project. Therefore, less construction and associated construction noise and vibration would occur from Alternative 3, compared to the proposed project. Like the proposed project, construction noise under Alternative 3 could temporarily increase noise levels. Alternative 3 would implement Mitigation Measure NOI-1 (Conduct Construction Noise Analysis), which would reduce construction noise. However, construction noise could still exceed the significance thresholds and like the proposed project, impacts would be significant and unavoidable.

Noise generated by on-site stationary equipment for new development would be subject to the City's noise limits, like the proposed project. Adherence to American Canyon Municipal Code noise limits for HVAC units and other stationary noise sources associated with future development would ensure that operational stationary noise under Alternative 3 is less than significant.

Implementation of Alternative 3 would result in less buildout than the proposed project, which would reduce the amount of new vehicle trips that would generate roadway traffic noise. Additionally, Alternative 3 would implement Mitigation Measure NOI-2 (Implement Roadway Vehicle Noise Reduction Measures), which would reduce operational traffic noise. Although Alternative 3 would result in reduced overall operational noise compared to the proposed project, there would still be an increase in noise compared to existing conditions and a significant and unavoidable traffic noise impact would occur.

Development facilitated under Alternative 3 could temporarily generate groundborne vibration during construction, potentially affecting nearby land uses. Mitigation Measure NOI-3 (Construction Vibration Control Plan) would require implementation of measures to reduce vibration impacts during construction. Operation of future development under Alternative 3 would not involve substantial vibration or groundborne noise. Thus, like the proposed project, impacts involving groundborne vibration and noise would be less than significant with mitigation incorporated.

Residents and businesses facilitated by Alternative 3 would not be served by the Napa County Airport. Thus, development facilitated under this alternative would not result in significantly increased airport or airstrip activity. Continued regulation of airport noise consistent with State and federal regulations would minimize disturbance to people residing or working within proximity of the Napa County Airport. Like the proposed project, impacts would be less than significant. In addition, Alternative 3 would include 2040 General Plan proposed policies designed to reduce noise

from the Napa County Airport through disclosure, attenuation, and studies. Impacts would be the same under this alternative as the proposed project.

Overall, impacts from Alternative 3 would be reduced, compared to the proposed project due to the reduction in buildout.

h. Paleontological Resources

As discussed in Section 4.8, *Paleontological Resources*, portions of the city are underlain by geologic units with high paleontological sensitivity. Alternative 3 would reduce development by approximately 408 fewer residential units and 65,000 square feet of non-residential area on two sites located on geologic units with high paleontological sensitivity [Quaternary alluvial fan deposits (Pleistocene) (Qpf)] and undetermined paleontological sensitivity [Great Valley Complex, sandstone and shale (Ku)], based on the mapping provided in Figure 4.8-1 in Section 4.8, *Paleontological Resources*. Under Alternative 3, ground disturbance elsewhere could still result in potentially significant impacts to paleontological resources. Alternative 3 would implement Mitigation Measure PAL-1 (Retention of Qualified Professional Paleontologist) which would reduce effects to paleontological resources and impacts would be less than significant. Alternative 3 would involve less overall development than the proposed project, and thus would be less likely to impact paleontological resources.

i. Population and Housing

Under Alternative 3, existing General Plan land use designations would continue to define American Canyon's development pattern. Assuming a maximum buildout scenario, implementation of Alternative 3 would accommodate approximately 1,400 fewer residents and 408 fewer housing units than would be accommodated by implementation of the proposed project (refer to Table 6-1). Thus, compared to the proposed project, Alternative 3 would result in less population growth, and would not induce substantial unplanned population growth. Displacement impacts for Alternative 3 would be the same as the impacts for the proposed project. Overall, when compared to the proposed project, Alternative 3 would have reduced impacts to population and housing.

j. Public Services and Recreation

Development allowed by existing land use and zoning regulations would occur under Alternative 3, which could result in an increase to emergency calls in the area, as well as an increase in additional demand for schools, parks, libraries, recreational facilities, or other public services. Assuming a maximum buildout scenario, Alternative 3 would add approximately 10,190 new residents to American Canyon, which is 1,400 fewer residents than the proposed project's 11,590 new residents. Thus, the increased demand for public services under Alternative 3 would be less than the proposed project's increase in demand. Impacts to public services and recreation would be less than the proposed project (both Alternative 3 and the proposed project would result in a less than significant impact).

k. Transportation

For the same reasons as the proposed project, Alternative 3 would have a less than significant impact regarding conflict with circulation programs, plans, ordinances, or policies; substantially increased transportation hazards; and inadequate emergency access. In addition, Alternative 3 would result in a reduction in residential growth by 408 units and 65,000 square feet of non-residential area. As described in Section 4.11, *Transportation*, American Canyon currently has fewer

jobs than employed residents. Alternative 3 would reduce the number of jobs compared to the proposed project, due to the reduction in non-residential area. Alternative 3 would also reduce the amount of residential units compared to the proposed project. Overall, due to the amount of jobs that would be offered under Alternative 3, the per capita VMT impacts for Alternative 3 are expected to be similar to the impacts of the proposed project. Like the proposed project, VMT impacts would be less than significant.

l. Tribal Cultural Resources

Like the proposed project, development facilitated under Alternative 3 may involve excavation, which could potentially impact previously unidentified TCRs. Alternative 3 would include 2040 General Plan proposed Goal ENV-4 and its corresponding policies, which protect cultural and tribal cultural resources. Implementation of these policies would reduce potential impacts to TCRs from development facilitated by this alternative by requiring avoidance and monitoring in areas identified as sensitive for TCRs (Policy ENV-4.3). Alternative 3 would include the same mitigation as the proposed project' therefore, impacts to TCRs would be less than significant with mitigation. Overall because Alternative 3 would result in less development than the proposed project, the severity of impacts would be less than the proposed project.

m. Utilities and Service Systems

Like the proposed project, development facilitated under Alternative 3 would create additional demand for water, wastewater, electricity, natural gas, telecommunication, and stormwater drainage facilities. Any utility expansion would be subject to 2040 General Plan proposed policies and mitigation measures identified throughout the Alternative 3 analysis, which would reduce potential impacts from utility expansion. Thus, impacts involving utility expansion under Alternative 3 would be less than significant, the same as the proposed project.

As discussed in Section 4.13, *Utilities and Service Systems*, the City would have adequate water supply to service the City's anticipated growth under the proposed project. Considering that development under Alternative 3 would result in 1,400 fewer residents (assuming a maximum buildout scenario) than the proposed project, growth under Alternative 3 would also be accommodated by the City's existing water system. Although development under Alternative 3 would slightly increase water demand, the City would continue to have sufficient water supply during normal, dry, and multiple dry years, and impacts to water supply would be less than significant.

Development facilitated under Alternative 3 would increase demand for wastewater treatment. Like the proposed project, the timing, intensity, and location of an expansion of wastewater treatment facilities is unknown at this time. Like the proposed project, any expansion of wastewater facilities would require additional CEQA review and would be advanced when the wastewater expansion is advanced. Considering Alternative 3 would add 1,400 fewer residents to American Canyon (assuming a maximum buildout scenario), demand for wastewater and overall wastewater impacts would be less under Alternative 3 than for the proposed project.

Implementation of Alternative 3 would generate solid waste from construction and operation of development (including typical residential, commercial, and office solid waste). As discussed in Section 4.13, *Utilities and Service Systems*, the American Canyon Transfer Station would have adequate capacity to serve the population growth under the proposed project. Considering Alternative 3 would result in 1,400 fewer people than the proposed project (assuming a maximum buildout scenario), the DRRTF would also accommodate population growth under this alternative.

Furthermore, Alternative 3 would include the proposed goals and policies in the 2040 General Plan. Impacts involving solid waste would be slightly less than the proposed project.

Overall, impacts from Alternative 3 would be reduced, compared to the proposed project due to the reduction in buildout.

n. Wildfire

Under Alternative 3, development could still occur within or near fire risks in an LRA. In addition, under Alternative 3, development could still occur near fire risks in an SRA, which are located east of the city limits. However, Alternative 3 would result in a reduction of 408 residential units and 65,000 square feet of non-residential area, which would reduce the risk of development occurring near an LRA or SRA. Furthermore, Alternative 3 would include 2040 General Plan proposed policies that include measures to reduce the risk of wildfire. Alternative 3 would also include Mitigation Measures WF-1 (Wildfire Risk Reduction During Construction) and WF-2 (Fire Resistant Vegetation and Landscaping), which would reduce the impacts of wildfires to a less than significant level. Additionally, like proposed project, Alternative 3 would be subject to the same regulations as described for the proposed project, including the American Canyon City Code. Overall, impacts of Alternative 3, like the proposed project, would be less than significant with mitigation.

6.4 Alternatives Considered but Rejected

The following summarizes those alternatives considered, but ultimately rejected for inclusion in the analysis as they would not meet most of the project objectives, would not substantially reduce impacts compared to the proposed project, or were determined to be infeasible.

In its efforts to identify alternatives that would reduce impacts on the environment, the City considered alternatives that would reduce impacts due to a reduced buildout. As such, the City considered an alternative that would limit buildout and growth altogether, such that no additional buildout would be allowed in the City. While this alternative would in theory reduce environmental impacts, it was rejected because it was infeasible. The City has already approved projects such as the Broadway District Specific Plan and the Watson Ranch Specific Plan, which provide a substantial amount of the buildout in the City. It would be infeasible for the City to stop buildout on these already approved projects. In addition, this alternative would not meet most of the project objectives because it would not help implement the vision for American Canyon. If there were no growth, this alternative would not accommodate a residential population with a range of uses; create a center of employment and commerce; or capture visitors to the Napa Valley. For these reasons, this alternative has been considered bur rejected.

6.5 Environmentally Superior Alternative

CEQA requires identification of the environmentally superior alternative among the alternatives to the proposed project. The environmentally superior alternative must be an alternative that reduces some of the project's environmental impacts, regardless of the financial costs associated. Identification of the environmentally superior alternative is an informational procedure and the alternative identified as the environmentally superior alternative may not be that which best meets the goals or needs of the proposed project. Table 6-2 indicates whether each alternative's environmental impact is greater than, less than, or equal to the proposed project for each of the issue areas studied.

Overall, none of the alternatives identified in this analysis changed the impact conclusions that were identified for the proposed project. However, some of the alternatives did reduce the severity of the impact; thus, this analysis considers the severity of the impact to identify the environmentally superior alternative. The No Project Alternative is not the environmentally superior alternative because the No Project Alternative would not include the updated proposed goals, policies, and programs in the 2040 General Plan.

Alternative 2 would not be the environmentally superior alternative because it would increase the severity of most of the proposed project impacts. This is because Alternative 2 would increase residential buildout and would result in 596 additional units compared to the proposed project.

Based on the analysis of alternatives in this section, Alternative 3 is the environmentally superior alternative as it lessens the severity of most impacts of the proposed project. Because Alternative 3 would reduce overall buildout by 408 units residential units and 65,000 square feet of non-residential area compared to the proposed project, the overall impacts from construction would also be reduced due to the reduction in construction. For example, potential impacts on air quality construction emissions, biological resources, cultural resources, temporary noise, tribal cultural resources, and paleontological resources would be reduced due to less area being affected (i.e., excavated, graded, etc.) and due to less use of construction equipment. In addition, operationally there would be reduced aesthetic impacts because there would be fewer buildings; less air quality emissions because there would be less overall VMT; less operational noise because there would be less traffic and fewer HVAC units; and less demand for public services, recreation, and utilities. Alternative 3 would meet the project objectives, as it would include updated to the General Plan so that it is consistent with State Law. Pursuant to CEQA requirements, Alternative 3 would be considered the environmentally superior alternative; however, the proposed project would offer benefits that would not be achieved by Alternative 3. Alternative 3 would require the City to limit growth to those projects that have already been approved by the City or identified as planned projects. Alternative 3 would reduce the residential and non-residential buildout; therefore, compared to the proposed project, this alternative would reduce the ability for the City to meet its vision of accommodating a residential population with a range of uses; creating a center of employment and commerce; and capturing visitors to the Napa Valley. Therefore, while Alternative 3 would be the environmentally superior alternative, it would not meet the project objectives to the same extent as the proposed project.

Table 6-2 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project	Alternative 2: Reduced Buildout	Alternative 3: Limited Growth
Aesthetics	LTSM	+	+	+
Air Quality	LTSM	+	+	+
Biological Resources	LTSM	+	+	+
Cultural Resources	LTSM	+	+	+
Greenhouse Gas Emissions	SU	+	+	+
Land Use and Planning	LTS	=	=	=
Noise	SU	+	+	+
Paleontological Resources	LTSM	=	+	+
Population and Housing	LTS	=	+	+
Public Services and Recreation	LTS	=	+	+

Issue	Proposed Project Impact Classification	Alternative 1: No Project	Alternative 2: Reduced Buildout	Alternative 3: Limited Growth
Transportation	LTS	-+	+	=
Tribal Cultural Resources	LTSM	+	+	+
Utilities and Service Systems	LTS	=	+	+
Wildfire	LTSM	=	=	=

NI = No Impact; LTS = Less than Significant; LTSM = Less than Significant with Mitigation; SU = Significant and Unavoidable

\+ Superior to the proposed project (reduced level of impact)

\- Inferior to the proposed project (increased level of impact)

= Similar level of impact to the proposed project

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7.2 List of Preparers

This EIR was prepared by the City of American Canyon, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

RINCON CONSULTANTS, INC.

Matt Maddox, Principal
Darcy Kremin, Director
Gianna Meschi, Project Manager
Hannah Bireschi, Assistant Project Manager
Leo Mena, Senior Environmental Planner
Jesse Voremberg, Environmental Planner
Ethan Knox, Environmental Planner
Matthew Gonzalez, Senior Archaeologist
Samantha Kehr, Biologist
Andrew McGrath, Paleontologist
Jen DiCenzo, Paleontological Program Manager
Josh Carman, Director – Noise, Air Quality & GHG
Jesse McCandless, Noise Environmental Planner
Hayley Rundle, Noise Environmental Planner

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American Canyon General Plan
Draft EIR Appendices

Appendix A

Notice of Preparation and Scoping Comments Recieved

NOTICE OF PREPARATION
City of American Canyon General Plan Update

Date: July 5, 2022

To: Reviewing Agencies, Interested Parties, and Organizations

Subject: Notice of Preparation of a Draft Environmental Impact Report for the City of American Canyon General Plan Update

The City of American Canyon (City) is preparing an update to the City's General Plan. The City has determined that a Program Environmental Impact Report (EIR) will be necessary to evaluate environmental impacts of the General Plan Update pursuant to the California Environmental Quality Act (CEQA). In compliance with CEQA, the City will be the Lead Agency and will prepare the Program EIR. The City is requesting comments and guidance on the scope and content of the Program EIR from responsible and trustee agencies, interested public agencies, organizations, and the general public (CEQA Guidelines Section 15082).

This Notice of Preparation (NOP) provides a summary of the General Plan Update; includes the City's preliminary identification of the potential environmental issues to be analyzed in the EIR; and provides information on how to comment on the scope of the EIR.

Notice of Preparation Public Review Period: July 5, 2022 to August 4, 2022

The City requests your careful review and consideration of this notice, and it invites any and all input and comments from interested agencies, persons, and organizations regarding the preparation of the Program EIR. Comments and responses to this notice must be in writing and submitted to the Lead Agency Contact through August 4, 2022 at 4:00 p.m. If applicable, please indicate a contact person for your agency or organization. If your agency is a responsible agency as defined by CEQA Guidelines Section 15381, your agency may use the environmental documents prepared by the City when considering permits or approvals for action regarding the proposed project.

Lead Agency Contact:

Brent Cooper, Community Development Director
City of American Canyon Community Development Department
4381 Broadway Street, Suite 201
American Canyon, California 94503
bcooper@cityofamericancanyon.org

Written Comments: Please submit written comments within 30 days of the date of this notice to any of the below by 4:00 p.m. on August 4, 2022:

- Email: njones@cityofamericancanyon.org
- Regular Mail: Nicolle Jones, Community Development Department, City of American Canyon, 4381 Broadway Street, Suite 201, American Canyon, California 94503

Public Scoping Meeting: The City will hold a virtual scoping meeting to provide an opportunity for agency staff and interested members of the public to submit written and oral comments on the scope of the environmental issues to be addressed in the EIR. The scoping meeting will be held on **July 28, 2022 at 6:30 p.m.** To attend the scoping meeting, go to https://zoom.us/join.

Webinar ID: 884 4514 1942
Passcode: 038881
Dial: (408) 638 0968

The scoping presentation will be available to view after July 28, 2022 on https://www.cityofamericancanyon.org/government/city-hall/city-clerk/meetings-agendas.

Project Background: The City must undertake a technical update to its General Plan to ensure the General Plan is internally consistent and maintains a balance of land uses; maintains and supports quality-of-life, community satisfaction, and safety for all residents; and meets new State requirements. A Regional Location map is included as Figure 1.

Project Location: The General Plan Update will encompass the City of American Canyon city limits, the Sphere of Influence, Urban Limit Line, and historic water service area (Figure 2).

Proposed Project: The American Canyon General Plan update will serve as a long-term framework for future growth and development. The General Plan represents the community's view of its future and contains the goals and polices upon which the City Council, Planning Commission, staff, and the entire community will base land use and resource decisions. To provide a contemporary plan that will guide the community through the next 20 years, the General Plan update will reflect recent development decisions and changes in State law. Major components of the comprehensive technical General Plan Update include:

- **Land Use Element.** This element will resolve inconsistencies between existing and General Plan land uses, expand the Urban Limit Line to include the "Hess/Laird Property," and accommodate land use amendments for certain properties owned by the Napa Valley Unified School District. Proposed land use amendments are depicted in Figure 3. The proposed Urban Limit Line is shown in Figure 4.
- **Circulation Element.** This element will incorporate Vehicle Miles Travelled policies consistent with Senate Bill 743 (SB 743); update street standards for all modes, including pedestrians, bicyclists, and transit consistent with the California Complete Streets Act; include two new Industrial Collector roadways: 1) a new "West Side Connector" roadway segment and 2) a Newell Drive roadway segment between Paoli Loop and S. Kelly Drive and delete former planned connection between Commerce Court and Eucalyptus Drive. See Figure 5.
- **Community Services Element.** This element will focus on goals and policies related to public services, including police, fire, and emergency services.

- **Open Space and Recreation Element.** This element will address the wide variety of parks, trails, and open spaces serving the diverse recreation needs of American Canyon residents, particularly youth, and emphasize the unique features of the City's natural environment – from the Newell Open Space to the east to the wetlands and trails to the west.
- **Conservation Element.** This element will consider the effects of existing and planned development on natural resources located on public lands, including military installations, consistent with Government Code Section 65302(d). This Element will address 5tate law requirements, including air quality, greenhouse gas emissions, and climate change adaptation.
- **Safety Element.** This element will cover seismic activity, other geologic hazards, fire hazards, hazardous materials, flooding, and other potential hazards, consistent with Government Code Section 65302(g). It will also address resiliency and risks from natural hazards in American Canyon, pursuant to Senate Bill (SB) 379. This element update will require a vulnerability analysis to comply with State law.
- **Noise Element.** This element will require, consistent with Government Code Section 65302(f), the inclusion of new existing noise contours as well as projected noise contours based on future traffic volumes projected to arise from improvements planned for in the Circulation Element.
- **Housing Element.** This element will be an update for the 2023-2031 RHNA cycle to adequately plan to meet the housing needs of everyone in the community, consistent with Government Code Section 65583. Due to State-Mandated deadlines, the Housing Element update is anticipated to be completed earlier than the rest of the comprehensive technical General Plan update.
- **Implementation.** This chapter will be a comprehensive implementation strategy with discrete, tangible actions that the City will undertake to carry out all the Plan's goals, policies, and objectives. It will also highlight goals, policies, and programs related to administration of the General Plan. The chapter will detail timing, potential funding sources, and the responsible parties for each implementation measure.

Project Alternatives: The EIR will evaluate a reasonable range of proposed project alternatives that, consistent with CEQA, meet most of the proposed project objectives and reduce or avoid potential environmental effects, including a required No Project Alternative.

Potential Environmental Effect Areas: The EIR will describe the reasonably foreseeable and potentially significant adverse effects of the proposed project (both direct and indirect). The EIR also will evaluate the cumulative impacts of the proposed project when considered in conjunction with other related past, present, and reasonably foreseeable future projects. The City preliminarily anticipates that the proposed project could result in potentially significant environmental impacts in the following topic areas, which will be further evaluated in the EIR.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Cumulative Effects
- Growth Inducing Effects

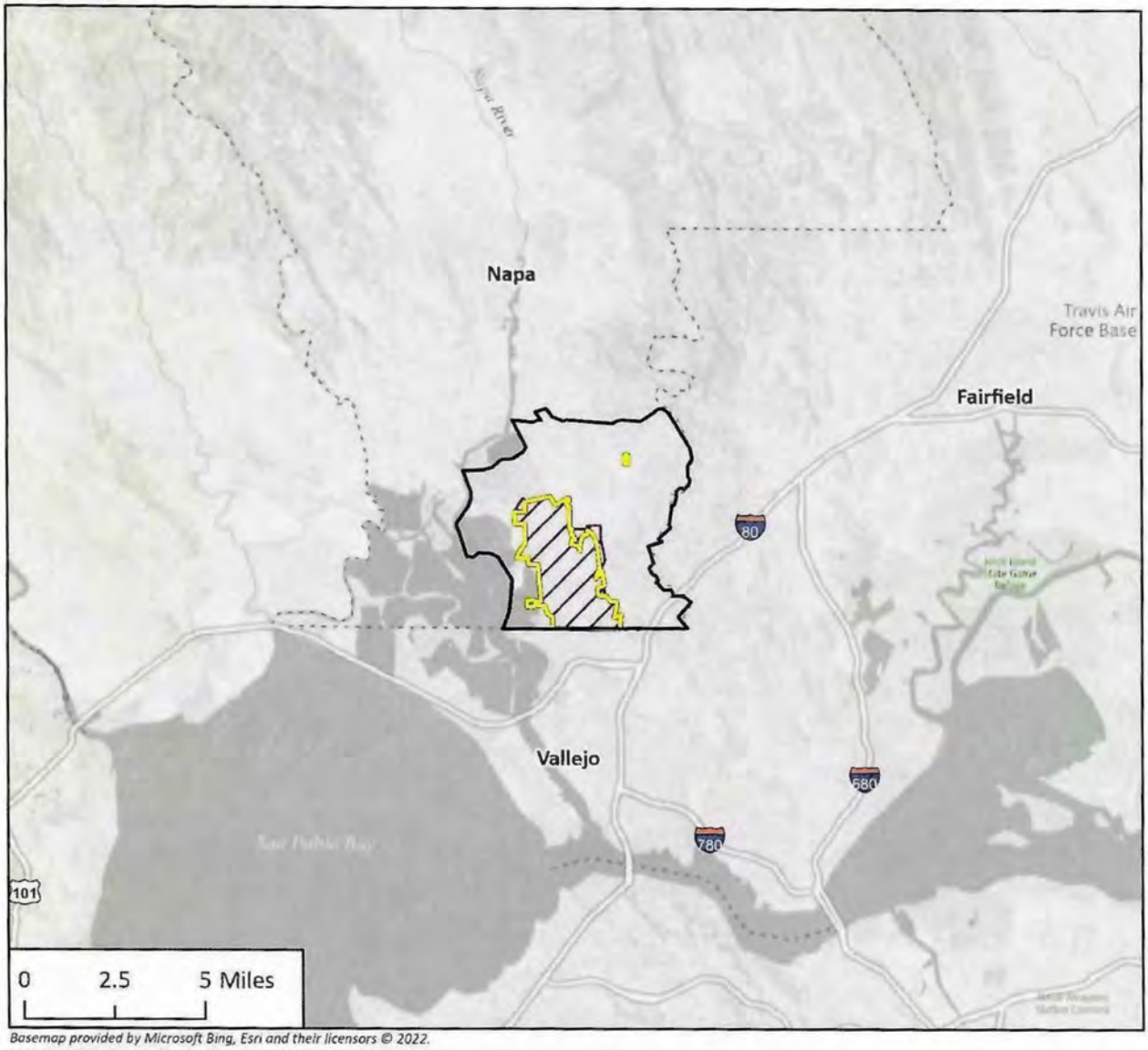
When the Draft EIR is completed, it will be available for review at the City's offices located at 4381 Broadway Street, Suite 201, American Canyon, California 94503 and online at: https://www.cityofamericancanyon.org/government/community-development/planning-zoning/general-plan-update. The City will issue a Notice of Availability of a Draft EIR at that time to inform the public and interested agencies, groups, and individuals of how to access the Draft EIR and provide comments.

If you have questions regarding this NOP or the scoping meeting, please contact Brent Cooper at (707) 647-4335 or via email at bcooper@cityofamericancanyon.org

Brent Cooper, Community Development Director

6/29/22
Date

Figure 1 Regional Location



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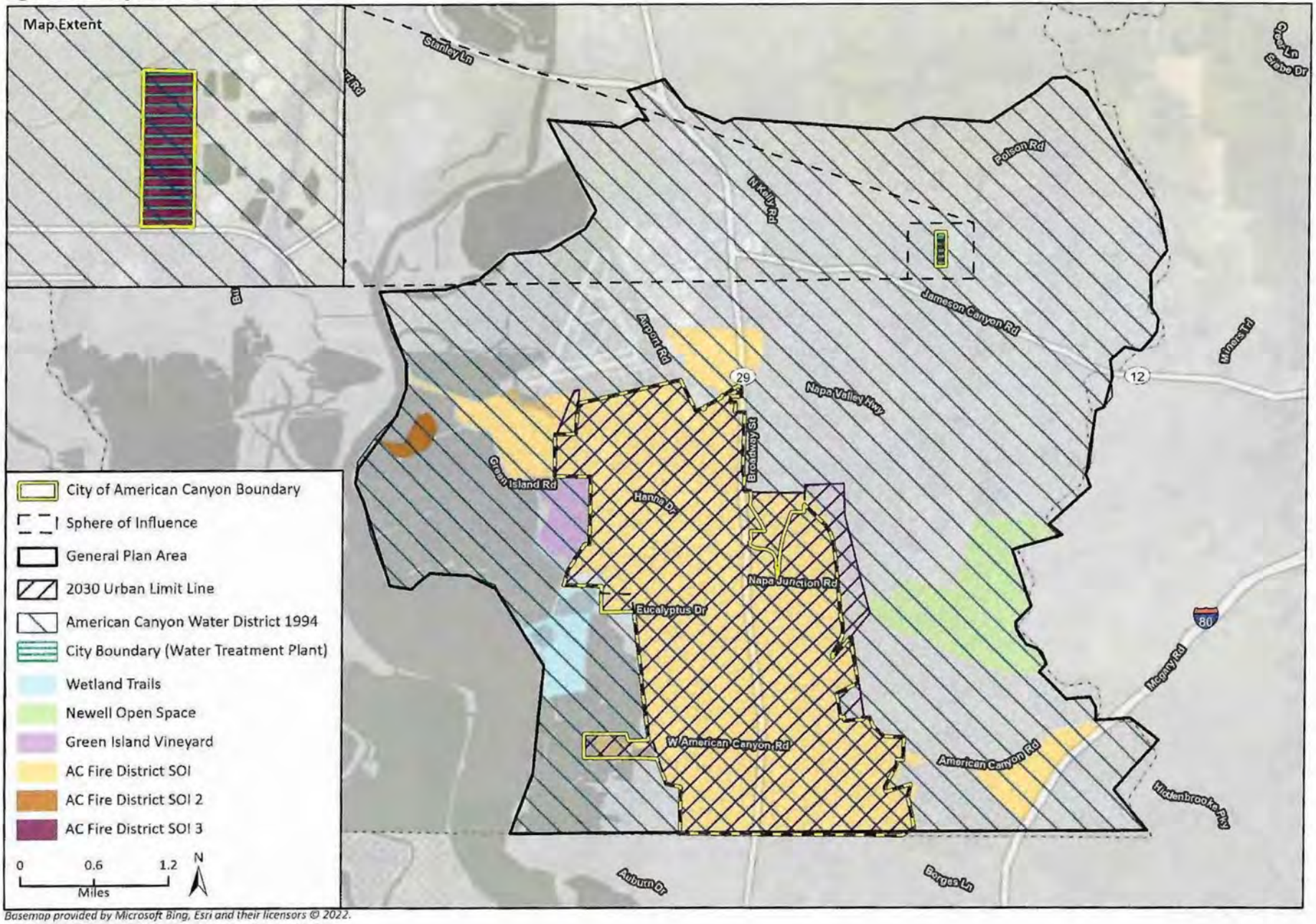
Additional data provided by the City of American Canyon, 2022.

City of American Canyon Boundary
General Plan Area
2030 Urban Limit
Project Location

N



Figure 2 Project Location



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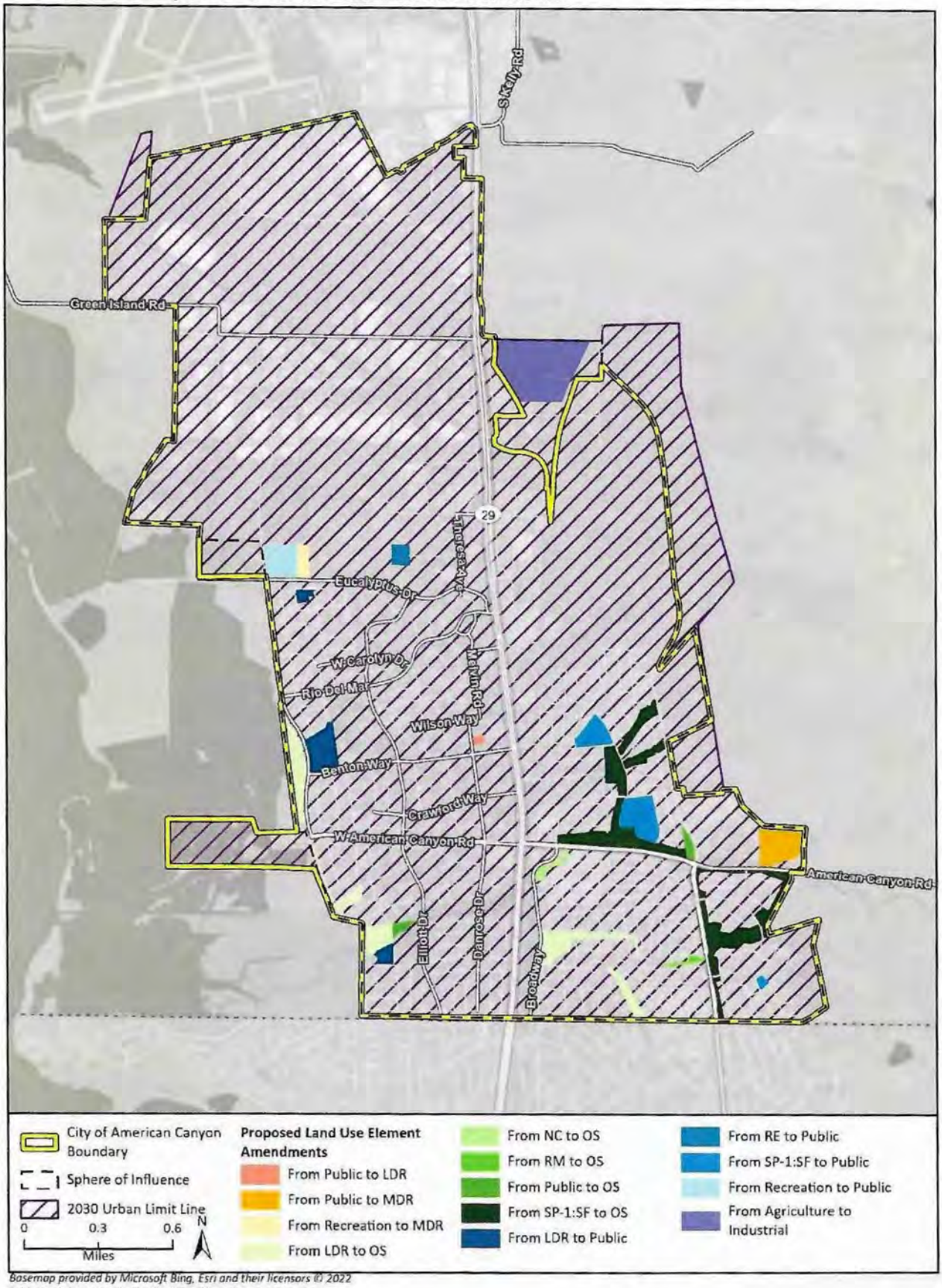
Additional data provided by the City of American Canyon, 2022.

Figure 3 Area of Proposed Land Use Element Amendments



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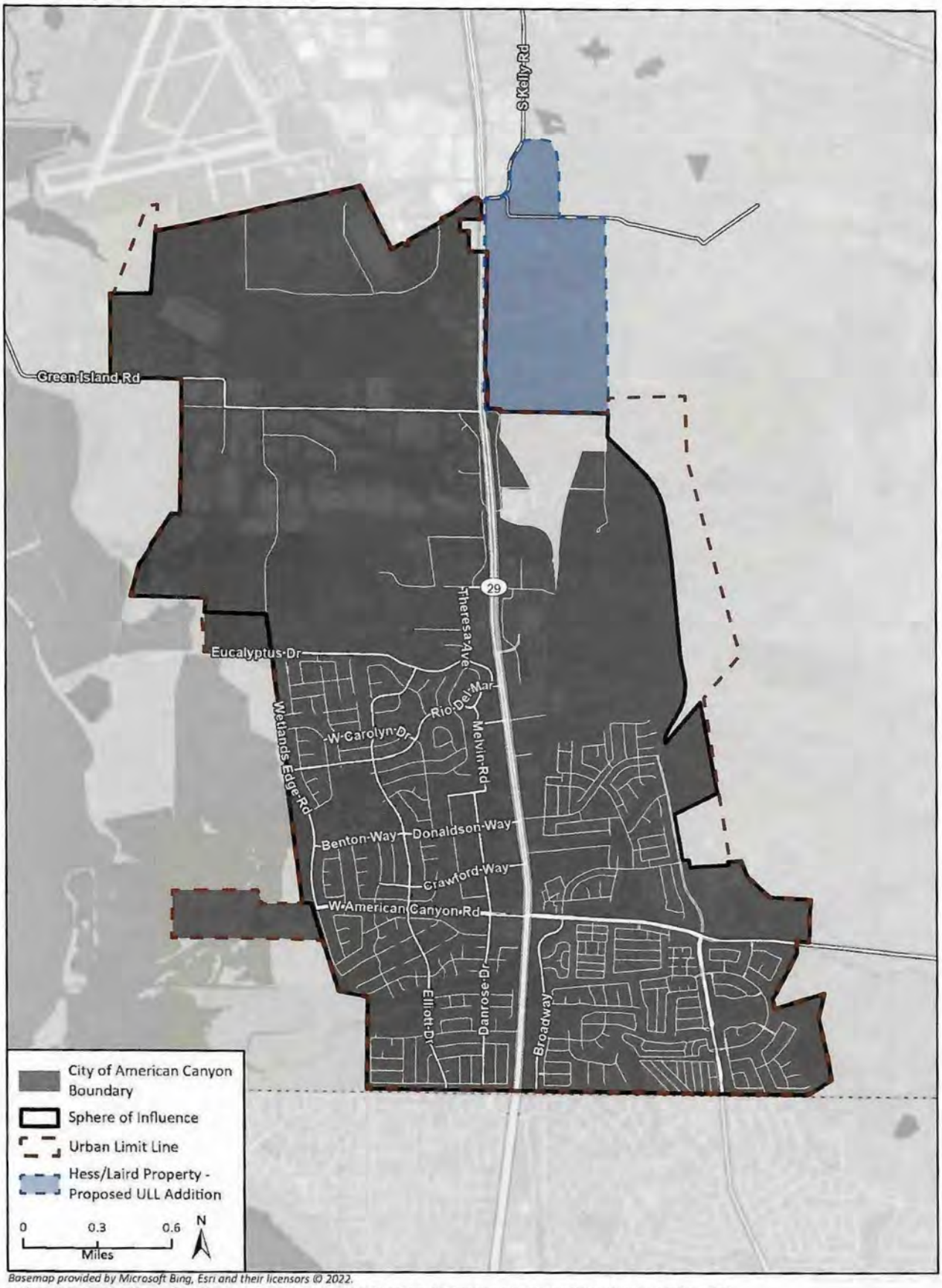
Additional data provided by the City of American Canyon, 2022

Figure 4 Proposed Urban Limit Line



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Additional data provided by the City of American Canyon, 2021; Hess/Laird Property digitized from the Proposed Urban Limit Line Addition, 2022.

Figure 5 Proposed Circulation Element Amendments



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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Governor's Office of Planning & Research

JUL 29 2022

STATE CLEARINGHOUSE

July 28, 2022

Brent Cooper
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
bcooper@cityofamericancanyon.org

Subject: City of American Canyon General Plan Update, Notice of Preparation of a Program Environmental Impact Report, SCH No. 2022070038, Napa County

Dear Mr. Cooper:

The California Department of Fish and Wildlife (CDFW) reviewed the Notice of Preparation (NOP) of a Program Environmental Impact Report (EIR) for the City of American Canyon (City) General Plan Update (Project).

CDFW is providing the City, as the lead agency, with specific detail about the scope and content of the environmental information related to CDFW's area of statutory responsibility that must be included in the EIR (Cal. Code Regs., tit. 14, § 15082, subd. (b)).

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under the California Environmental Quality Act (CEQA) for commenting on projects that could impact fish, plant, and wildlife resources (Pub. Resources Code, § 21000 et seq.; Cal. Code Regs., tit. 14, § 15386). CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as a permit pursuant to the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA), Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources. Pursuant to our authority, CDFW has the following concerns, comments, and recommendations regarding the Project.

PROJECT DESCRIPTION AND LOCATION

The Project will encompass the City of American Canyon city limits, urban limit line, historic water service area and sphere of influence (NOP, Figure 2). The Project will serve as a long-term framework for future growth and development over the next 20 years. The Project will reflect recent development decisions and changes in State law. Major components of the American Canyon General Plan Update will include the following elements: Land Use, Circulation, Community Services, Open Space and Recreation, Conservation, Safety, Noise, and Housing.

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The CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) require that the EIR incorporate a full Project description, including reasonably foreseeable future phases of the Project, that contains sufficient information to evaluate and review the Project's environmental impact (CEQA Guidelines, §§ 15124 & 15378). Please include a complete description of the following Project components in the Project description:

- Land use changes resulting from, for example, rezoning certain areas.
- Footprints of permanent Project features and temporarily impacted areas, such as staging areas and access routes.
- Area and plans for any proposed buildings/structures, ground disturbing activities, fencing, paving, stationary machinery, landscaping, and stormwater systems.
- Operational features of the Project, including level of anticipated human presence (describe seasonal or daily peaks in activity, if relevant), artificial lighting/light reflection, noise, traffic generation, and other features.
- Construction schedule, activities, equipment, and crew sizes.

The NOP identifies that the EIR will be a Program EIR. While Program EIRs have a necessarily broad scope, CDFW recommends providing as much information related to anticipated future activities as possible. CDFW recognizes that, pursuant to CEQA Guidelines section 15152, subdivision (c), if a Lead Agency is using the tiering process in connection with an EIR or large-scale planning approval, the development of detailed, site-specific information may not be feasible and can be deferred, in many instances, until such time as the Lead Agency prepares a future environmental document. This future environmental document would cover a project of a more limited geographical scale and is appropriate if the deferred information does not prevent adequate identification of significant effects of the planning approval at hand. The CEQA Guidelines section 15168, subdivision (c)(4) states, "Where the later activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were within the scope of the program EIR." Based on CEQA Guidelines section 15183.3 and associated *Appendix N Checklist*, and consistent with other program EIRs, CDFW recommends creating a procedure or checklist for evaluating subsequent project impacts on biological resources to determine if they are within the scope of the Program EIR or if an additional environmental document is warranted. This checklist should be included as an attachment to the EIR. Future analysis should include all special-status species and sensitive habitat including but not limited to species considered rare, threatened, or endangered species pursuant to CEQA Guidelines, section 15380.

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When used appropriately, the checklist should be accompanied by enough relevant information and reasonable inferences to support a "within the scope" of the EIR conclusion. For subsequent Project activities that may affect sensitive biological resources, a site-specific analysis should be prepared by a qualified biologist to provide the necessary supporting information. In addition, the checklist should cite the specific portions of the EIR, including page and section references, containing the analysis of the subsequent Project activities' significant effects and indicate whether it incorporates all applicable mitigation measures from the EIR.

REGULATORY AUTHORITY

California Endangered Species Act and Native Plant Protection Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA or NPPA, either during construction or over the life of the Project. Issuance of a CESA ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, such as those identified in **Attachment 1**, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, and 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with CESA.

Lake and Streambed Alteration

CDFW will require an LSA Notification, pursuant to Fish and Game Code sections 1600 et. seq. for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

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Nesting Birds

CDFW also has authority over actions that may disturb or destroy active nest sites or take birds. Fish and Game Code sections 3503, 3503.5, and 3513 protect birds, their eggs, and nests. Migratory birds are also protected under the federal Migratory Bird Treaty Act.

Fully Protected Species

Fully Protected species, including any listed in **Attachment 1,** may not be taken or possessed at any time (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

ENVIRONMENTAL SETTING

The EIR should provide sufficient information regarding the environmental setting ("baseline") to understand the Project's, and its alternative's (if applicable), potentially significant impacts on the environment (CEQA Guidelines, §§ 15125 & 15360).

CDFW recommends that the CEQA document prepared for the Project provide baseline habitat assessments for special-status plant, fish and wildlife species located and potentially located within the Project area and surrounding lands, including but not limited to all rare, threatened, or endangered species (CEQA Guidelines, § 15380). The EIR should describe aquatic habitats, such as wetlands or waters of the U.S. or State, and any sensitive natural communities or riparian habitat occurring on or adjacent to the Project site (for sensitive natural communities see: https://wildlife.ca.gov/Data/VegCAMP/NaturalCommunities#sensitive%20natural%20communities), and any stream or wetland set back distances the City may require. Fully protected, threatened or endangered, candidate, and other special-status species and sensitive natural communities that are known to occur, or have the potential to occur in or near the Project site, include but are not limited to those listed in **Attachment 1**.

Habitat descriptions and the potential for species occurrence should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, U.S. Fish and Wildlife Service's (USFWS) Information, Planning, and Consultation System, and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Based on the data and information from the habitat assessment, the EIR should adequately assess which special-status species are likely to occur on or near the Project site, and whether they could be impacted by the Project.

CDFW recommends that prior to Project implementation, surveys be conducted for special-status species with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocol.

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Botanical surveys for special-status plant species, including those with a California Rare Plant Rank (http://www.cnps.org/cnps/rareplants/inventory/), must be conducted during the blooming period within the Project area and adjacent habitats that may be indirectly impacted by, for example, changes to hydrological conditions, and require the identification of reference populations. More than one year of surveys may be necessary based on environmental conditions. Please refer to CDFW protocols for surveying and evaluating impacts to special status plants available at: https://www.wildlife.ca.gov/Conservation/Plants.

IMPACT ANALYSIS AND MITIGATION MEASURES

The EIR should discuss all direct and indirect impacts (temporary and permanent) that may occur with implementation of the Project (CEQA Guidelines, § 15126.2). This includes evaluating and describing impacts such as:

- Land use changes that would reduce open space or agricultural land uses and increase residential or other land use involving increased development;
- Encroachments into riparian habitats, wetlands or other sensitive areas;
- Potential for impacts to special-status species;
- Loss or modification of breeding, nesting, dispersal and foraging habitat, including vegetation removal, alternation of soils and hydrology, and removal of habitat structural features (e.g., snags, roosts, vegetation overhanging banks);
- Permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic or human presence; and
- Obstruction of movement corridors, fish passage, or access to water sources and other core habitat features.

The CEQA document should also identify reasonably foreseeable future projects in the Project vicinity, disclose any cumulative impacts associated with these projects, determine the significance of each cumulative impact, and assess the significance of the Project's contribution to the impact (CEQA Guidelines, §15355). Although a project's impacts may be insignificant individually, its contributions to a cumulative impact may be considerable; a contribution to a significant cumulative impact – e.g., reduction of available habitat for a special-status species – should be considered cumulatively considerable without mitigation to minimize or avoid the impact.

Based on the comprehensive analysis of the direct, indirect, and cumulative impacts of the Project, the CEQA Guidelines direct the lead agency to consider and describe all

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feasible mitigation measures to avoid potentially significant impacts in the EIR, and/or mitigate significant impacts of the Project on the environment (CEQA Guidelines, §§ 15021, 15063, 15071, 15126.2, 15126.4 & 15370). This includes a discussion of impact avoidance and minimization measures for special-status species, which are recommended to be developed in early consultation with CDFW, USFWS, and the National Marine Fisheries Service. These measures can then be incorporated as enforceable Project conditions to reduce potential impacts to biological resources to less-than-significant levels.

ENVIRONMENTAL DATA

CEQA requires that information developed in EIRs and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNNDB online field survey form and other methods for submitting data can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plantsand-Animals.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

If you have any questions, please contact Alicia Bird, Environmental Scientist, at (707) 980-5154 or Alicia.Bird@wildlife.ca.gov; or Melanie Day, Senior Environmental Scientist (Supervisory), at (707) 210-4415 or Melanie.Day@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

Attachment 1: Special-Status Species & Sensitive Natural Communities

ec: State Clearinghouse No. 2022070038

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Attachment 1: Special-Status Species & Sensitive Natural Communities

Species Name	Common Name	Status
Fish		
Hypomesus transpacificus	Delta smelt	SE, FT
Spirinchus thaleichthys	Longfin smelt	ST
Oncorhynchus mykiss irideus pop. 8	Central California Coast steelhead	FT
Acipenser mediostris	Southern Distinct Population Segment (DPS) green sturgeon	FT
Lampetra ayersi	Western river lamprey	SSC
Pogonichthys macrolepidotus	Sacramento Splittail	SSC
Birds		
Rallus obsoletus obsoletus	California Ridgeway's rail	FP, SE, FE
Laterallus jamaicensis coturniculus	California black rail	FP, ST
Buteo swainsoni	Swainson's hawk	ST
Agelaius tricolor	Tricolored blackbird	ST
Elanus leucurus	White-tailed kite	FP
Falco peregrinus anatum	American peregrine falcon	FP
Aquila chrysaetos	Golden eagle	FP, BGEPA
Athene cunicularia	Burrowing owl	SSC
Geothlypis trichas sinuosa	Saltmarsh common yellowthroat	SSC
Melospiza melodia samuelis	San Pablo song sparrow	SSC
Circus hudsoniusl	Northern harrier	SSC
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	SSC

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Amphibians and Reptiles		
Rana draytonii	California red-legged frog	FT, SSC
Rana boylii (northwest/north coast clade)	Foothill yellow-legged frog	SSC
Emys marmorata	Western pond turtle	SSC
Mammals		
Reithrodontomys raviventris	Salt-marsh harvest mouse	FP, SE, FE
Antrozous pallidus	Pallid bat	SSC
Taxidea taxus	American badger	SSC
Corynorhinus townsendii	Townsend's big-eared bat	SSC
Sorex ornatus sinuosus	Suisun shrew	SSC
Invertebrates		
Bombus occidentalis	Western bumble bee	ICP
Speyeria callippe callippe	Callippe silverspot butterfly	FE
Branchinecta lynchi	Vernal pool fairy shrimp	FT
Plants		
Castilleja affinis var. *neglecta*	Tiburon paintbrush	ST, FE, CRPR 1B.2
Trifolium amoenum	two-fork clover	FE, CRPR 1B.1
Chloropyron molle	soft salty bird's-beak	FE, CRPR 1B.2
Lasthenia conjugens	Contra Costa goldfields	FE, CRPR 1B.1
Lilaeopsis masonii	Mason's lilaeopsis	SR, CRPR 1B.1
Legenere limosa	Legenere	CRPR 1B.1
Extriplex joaquinana	San Joaquin spearscale	CRPR 1B.2
Balsamorhiza macrolepis	big-scale balsamroot	CRPR 1B.2

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Astragalus tener var. *tener*	Alkali milk-vetch	CRPR 1B.2
Lathyrus jepsonii var. *jepsonii*	Delta tule pea	CRPR 1B.2
Eryngium jepsonii	Jepson's coyote-thistle	CRPR 1B.2
Trifolium hydrophilum	Saline clover	CRPR 1B.2
Symphyotrichum lentum	Suisun Marsh aster	CRPR 1B.2
Balsamorhiza macrolepis	big-scale balsamroot	CRPR 1B.2
Downingia pusilla	Dwarf downingia	CRPR 2B.2
Carex lyngbyei	Lyngbye's sedge	CRPR 2B.2
Sensitive Natural Communities		
Coastal Brackish Marsh - S2.1		
Serpentine Bunch Grass - S2.2		

FP = state fully protected under Fish and Game Code; FE = federally listed as endangered under the Endangered Species Act (ESA); FT = federally listed as threatened under ESA; SE = state listed as endangered under CESA; ST = state listed as threatened under CESA; SR = State listed as rate under NPPA; BGEPA = federal Bald and Golden Eagle Protection Act; ICP = California Terrestrial and Vernal Pool Invertebrate of Conservation Priority[1]; SSC = state Species of Special Concern; CRPR = California Rare Plant Rank[2]; S1-S3 = Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA and its equivalents

[1] The list of California Terrestrial and Vernal Pool Invertebrates of Conservation Priority was collated during CDFW's Scientific Collecting Permit rulemaking process: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=157415&inline

[2] CRPR 1B plants are considered rare, threatened, or endangered in California and elsewhere. CRPR 2B plants are considered rare, threatened, or endangered in California but more common elsewhere. Further information on CRPR ranks is available in CDFW's *Special Vascular Plants, Bryophytes, and Lichens List* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline) and on the California Native Plant Society website (https://www.cnps.org/rare-plants/california-rare-plant-ranks).

California Department of Transportation

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

Governor's Office of Planning & Research

AUG 04 2022

STATE CLEARINGHOUSE

August 4, 2022

SCH #: 2022070038
GTS #: 04-NAP-2022-00282
GTS ID: 26948
Co/Rt/Pm: NAP/29/VAR

Brent Cooper, Community Development Director
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: City of American Canyon General Plan Update – Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR)

Dear Brent Cooper:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the City of American Canyon General Plan Update project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the July 2022 NOP.

Project Understanding

The proposed project consists of an update to the City's General Plan which will serve as a long-term framework for future growth and development. State Route (SR)-29 runs through the City of American Canyon.

Travel Demand Analysis

With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide (*link*).

Caltrans looks forward to reviewing the VMT analysis in the DEIR, which should include the following:

- VMT analysis pursuant to the City's guidelines. Projects that result in automobile VMT per capita above the threshold of significance for existing (i.e. baseline) city-wide or regional values for similar land use types may indicate a significant impact. If necessary, mitigation for increasing VMT should be identified. Mitigation should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.

- A schematic illustration of walking, biking and auto conditions at the project site and study area roadways. Potential traffic safety issues to the State Transportation Network (STN) may be assessed by Caltrans via the Interim Safety Guidance (*link*).

- The project's primary and secondary effects on pedestrians, bicycles, travelers with disabilities and transit performance should be evaluated, including countermeasures and trade-offs resulting from mitigating VMT increases. Access to pedestrians, bicycle, and transit facilities must be maintained.

Lead Agency
As the Lead Agency, the Cit of American Canyon is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,

Mark Leong

MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse

NATIVE AMERICAN HERITAGE COMMISSION

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Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 8, 2022

Governor's Office of Planning & Research

July 8 2022

STATE CLEARINGHOUSE

Brent Cooper
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: 2022070038, City of American Canyon General Plan Update Project, Napa County

Dear Mr. Cooper:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

a. A brief description of the project.

b. The lead agency contact information.

c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).

d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

a. Alternatives to the project**.**

b. Recommended mitigation measures**.**

c. Significant effects**.** (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

a. Type of environmental review necessary.

b. Significance of the tribal cultural resources.

c. Significance of the project's impacts on tribal cultural resources.

d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Cameron.Vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

cc: State Clearinghouse

Appendix B

Supporting Biological Resources Information

19-08673: American Canyon

Scientific Name Common Name	Status	Habitat Requirements
Plants and Lichens		
Allium peninsulare var. *franciscanum* Franciscan onion	None/None G5T2/S2 1B.2	Perennial bulbiferous herb. Cismontane woodland, valley and foothill grassland. Clay, Serpentinite (often), volcanic. Elevations: 170-1000ft. (52-305m.) Blooms (Apr)May-Jun.
Amorpha californica var. *napensis* Napa false indigo	None/None G4T2/S2 1B.2	Perennial deciduous shrub. Broadleafed upland forest, chaparral, cismontane woodland. Openings in forest or woodland or in chaparral. 30-735 m. Elevations: 165-6560ft. (50-2000m.) Blooms Apr-Jul.
Astragalus tener var. *tener* alkali milk-vetch	None/None G2T1/S1 1B.2	Annual herb. Playas, valley and foothill grassland, vernal pools. Alkaline. Elevations: 5-195ft. (1-60m.) Blooms Mar-Jun.
Atriplex persistens vernal pool smallscale	None/None G2/S2 1B.2	Annual herb. Vernal pools. Alkaline vernal pools. Elevations: 35-375ft. (10-115m.) Blooms Jun-Oct.
Balsamorhiza macrolepis big-scale balsamroot	None/None G2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, valley and foothill grassland. Serpentinite (sometimes). Elevations: 150-5100ft. (45-1555m.) Blooms Mar-Jun.
Blennosperma bakeri Sonoma sunshine	FE/SCE G1/S1 1B.1	Annual herb. Valley and foothill grassland, vernal pools. Vernal pools and swales. Elevations: 35-360ft. (10-110m.) Blooms Mar-May.
Blepharizonia plumosa big tarplant	None/None G1G2/S1S2 1B.1	Annual herb. Valley and foothill grassland. Clay (usually). Elevations: 100-1655ft. (30-505m.) Blooms Jul-Oct.
Brodiaea leptandra narrow-anthered brodiaea	None/None G3?/S3? 1B.2	Perennial bulbiferous herb. Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Volcanic. Elevations: 360-3000ft. (110-915m.) Blooms May-Jul.

Calochortus pulchellus Mt. Diablo fairy-lantern	None/None G2/S2 1B.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. On wooded and brushy slopes. Elevations: 100-2755ft. (30-840m.) Blooms Apr-Jun.
Carex lyngbyei Lyngbye's sedge	None/None G5/S3 2B.2	Perennial rhizomatous herb. Marshes and swamps. Elevations: 0-35ft. (0-10m.) Blooms Apr-Aug.
Castilleja affinis var. *neglecta* Tiburon paintbrush	FE/SCT G4G5T1T2/S1S2 1B.2	Perennial herb (hemiparasitic). Valley and foothill grassland. Rocky serpentine sites. Elevations: 195-1310ft. (60-400m.) Blooms Apr-Jun.
Ceanothus confusus Rincon Ridge ceanothus	None/None G1/S1 1B.1	Perennial evergreen shrub. Chaparral, cismontane woodland, closed-cone coniferous forest. Serpentinite (sometimes), volcanic (sometimes). Elevations: 245-3495ft. (75-1065m.) Blooms Feb-Jun.
Ceanothus purpureus holly-leaved ceanothus	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, cismontane woodland. Rocky, volcanic. Elevations: 395-2100ft. (120-640m.) Blooms Feb-Jun.
Ceanothus sonomensis Sonoma ceanothus	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral. Sandy, serpentine or volcanic soils. Elevations: 705-2625ft. (215-800m.) Blooms Feb-Apr.
Centromadia parryi ssp. *congdonii* Congdon's tarplant	None/None G3T1T2/S1S2 1B.1	Annual herb. Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. Elevations: 0-755ft. (0-230m.) Blooms May-Oct(Nov).
Centromadia parryi ssp. *parryi* pappose tarplant	None/None G3T2/S2 1B.2	Annual herb. Chaparral, coastal prairie, marshes and swamps, meadows and seeps, valley and foothill grassland. Alkaline (often). Elevations: 0-1380ft. (0-420m.) Blooms May-Nov.
Chloropyron molle ssp. *molle* soft salty bird's-beak	FE/SCR G2T1/S1 1B.2	Annual herb (hemiparasitic). Marshes and swamps. In coastal salt marsh with Distichlis, Salicornia, Frankenia, etc. Elevations: 0-10ft. (0-3m.) Blooms Jun-Nov.

Cicuta maculata var. *bolanderi* Bolander's water-hemlock	None/None G5T4T5/S2? 2B.1	Perennial herb. Marshes and swamps. In fresh or brackish water. Elevations: 0-655ft. (0-200m.) Blooms Jul-Sep.
Cirsium hydrophilum var. *hydrophilum* Suisun thistle	FE/None G2T1/S1 1B.1	Perennial herb. Marshes and swamps. Grows with Scirpus, Distichlis near small watercourses within saltmarsh. Elevations: 0-5ft. (0-1m.) Blooms Jun-Sep.
Dirca occidentalis western leatherwood	None/None G2/S2 1B.2	Perennial deciduous shrub. Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. Elevations: 80-1395ft. (25-425m.) Blooms Jan-Mar(Apr).
Downingia pusilla dwarf downingia	None/None GU/S2 2B.2	Annual herb. Valley and foothill grassland, vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. Elevations: 5-1460ft. (1-445m.) Blooms Mar-May.
Erigeron greenei Greene's narrow-leaved daisy	None/None G3/S3 1B.2	Perennial herb. Chaparral. Serpentine and volcanic substrates, generally in shrubby vegetation. Elevations: 260-3295ft. (80-1005m.) Blooms May-Sep.
Eriogonum truncatum Mt. Diablo buckwheat	None/None G1/S1 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Dry, exposed clay or sandy substrates. Elevations: 10-1150ft. (3-350m.) Blooms Apr-Sep(Nov-Dec).
Eryngium jepsonii Jepson's coyote-thistle	None/None G2/S2 1B.2	Perennial herb. Valley and foothill grassland, vernal pools. Clay. Elevations: 10-985ft. (3-300m.) Blooms Apr-Aug.
Extriplex joaquinana San Joaquin spearscale	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with Distichlis spicata, Frankenia, etc. Elevations: 5-2740ft. (1-835m.) Blooms Apr-Oct.
Fritillaria liliacea fragrant fritillary	None/None G2/S2 1B.2	Perennial bulbiferous herb. Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Often on serpentine; various soils reported though usually on clay, in grassland. Elevations: 10-1345ft. (3-410m.) Blooms Feb-Apr.

Helianthella castanea Diablo helianthella	None/None G2/S2 1B.2	Perennial herb. Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Azonal soils, Partial shade (often), rocky (usually). Elevations: 195-4265ft. (60-1300m.) Blooms Mar-Jun.
Hemizonia congesta ssp. *congesta* congested-headed hayfield tarplant	None/None G5T2/S2 1B.2	Annual herb. Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. Elevations: 65-1835ft. (20-560m.) Blooms Apr-Nov.
Hesperolinon bicarpellatum two-carpellate western flax	None/None G2/S2 1B.2	Annual herb. Chaparral. Serpentine barrens at edge of chaparral. Elevations: 195-3295ft. (60-1005m.) Blooms (Apr)May-Jul.
Hesperolinon breweri Brewer's western flax	None/None G2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Often in rocky serpentine soil in serpentine chaparral and serpentine grassland. Elevations: 100-3100ft. (30-945m.) Blooms May-Jul.
Horkelia tenuiloba thin-lobed horkelia	None/None G2/S2 1B.2	Perennial herb. Broadleafed upland forest, chaparral, valley and foothill grassland. Sandy soils; mesic openings. Elevations: 165-1640ft. (50-500m.) Blooms May-Jul(Aug).
Isocoma arguta Carquinez goldenbush	None/None G1/S1 1B.1	Perennial shrub. Valley and foothill grassland. Alkaline soils, flats, lower hills. On low benches near drainages and on tops and sides of mounds in swale habitat. Elevations: 5-65ft. (1-20m.) Blooms Aug-Dec.
Lasthenia conjugens Contra Costa goldfields	FE/None G1/S1 1B.1	Annual herb. Cismontane woodland, playas, valley and foothill grassland, vernal pools. Vernal pools, swales, low depressions, in open grassy areas. Elevations: 0-1540ft. (0-470m.) Blooms Mar-Jun.
Lathyrus jepsonii var. *jepsonii* Delta tule pea	None/None G5T2/S2 1B.2	Perennial herb. Marshes and swamps. In freshwater and brackish marshes. Often found with Typha, Aster lentus, Rosa californica, Juncus spp., Scirpus, etc. Usually on marsh and slough edges. Elevations: 0-15ft. (0-5m.) Blooms May-Jul(Aug-Sep).
Legenere limosa legenere	None/None G2/S2 1B.1	Annual herb. Vernal pools. In beds of vernal pools. 1-. Elevations: 5-2885ft. (1-880m.) Blooms Apr-Jun.

Leptosiphon jepsonii Jepson's leptosiphon	None/None G2G3/S2S3 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Open to partially shaded grassy slopes. On volcanics or the periphery of serpentine substrates. Elevations: 330-1640ft. (100-500m.) Blooms Mar-May.
Lilaeopsis masonii Mason's lilaeopsis	None/SCR G2/S2 1B.1	Perennial rhizomatous herb. Marshes and swamps, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. In brackish or freshwater. Elevations: 0-35ft. (0-10m.) Blooms Apr-Nov.
Limosella australis Delta mudwort	None/None G4G5/S2 2B.1	Perennial stoloniferous herb. Marshes and swamps, riparian scrub. Usually on mud banks of the Delta in marshy or scrubby riparian associations; often with Lilaeopsis masonii. Elevations: 0-10ft. (0-3m.) Blooms May-Aug.
Lomatium repostum Napa lomatium	None/None G2G3/S2S3 1B.2	Perennial herb. Chaparral, cismontane woodland. Rocky areas in volcanic and serpentine soils with mixed chaparral and black oak woodland communities. Elevations: 295-3380ft. (90-1030m.) Blooms Mar-Jun.
Lupinus sericatus Cobb Mountain lupine	None/None G2?/S2? 1B.2	Perennial herb. Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest. In stands of knobcone pine-oak woodland, on open wooded slopes in gravelly soils; sometimes on serpentine. Elevations: 900-5005ft. (275-1525m.) Blooms Mar-Jun.
Navarretia leucocephala ssp. *bakeri* Baker's navarretia	None/None G4T2/S2 1B.1	Annual herb. Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools. Vernal pools and swales; adobe or alkaline soils. Elevations: 15-5710ft. (5-1740m.) Blooms Apr-Jul.
Puccinellia simplex California alkali grass	None/None G3/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins. Elevations: 5-3050ft. (2-930m.) Blooms Mar-May.
Rhynchospora californica California beaked-rush	None/None G1/S1 1B.1	Perennial rhizomatous herb. Bogs and fens, lower montane coniferous forest, marshes and swamps, meadows and seeps. Freshwater seeps and open marshy areas. Elevations: 150-3315ft. (45-1010m.) Blooms May-Jul.
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625ft. (15-800m.) Blooms Jan-Apr(May).

Sidalcea hickmanii ssp. *napensis* Napa checkerbloom	None/None G3T1/S1 1B.1	Perennial herb. Chaparral. Rhyolitic substrates. Elevations: 1360-2000ft. (415-610m.) Blooms Apr-Jun.
Spergularia macrotheca var. *longistyla* long-styled sand-spurrey	None/None G5T2/S2 1B.2	Perennial herb. Marshes and swamps, meadows and seeps. Alkaline. Elevations: 0-835ft. (0-255m.) Blooms Feb-May.
Stuckenia filiformis ssp. *alpina* northern slender pondweed	None/None G5T5/S2S3 2B.2	Perennial rhizomatous herb (aquatic). Marshes and swamps. Shallow, clear water of lakes and drainage channels. Elevations: 985-7055ft. (300-2150m.) Blooms May-Jul.
Symphyotrichum lentum Suisun Marsh aster	None/None G2/S2 1B.2	Perennial rhizomatous herb. Marshes and swamps. Most often seen along sloughs with Phragmites, Scirpus, blackberry, Typha, etc. Elevations: 0-10ft. (0-3m.) Blooms (Apr)May-Nov.
Trichostema ruygtii Napa bluecurls	None/None G1G2/S1S2 1B.2	Annual herb. Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools. Often in open, sunny areas. Also has been found in vernal pools. Elevations: 100-2230ft. (30-680m.) Blooms Jun-Oct.
Trifolium amoenum two-fork clover	FE/None G1/S1 1B.1	Annual herb. Coastal bluff scrub, valley and foothill grassland. Sometimes on serpentine soil, open sunny sites, swales. Most recently cited on roadside and eroding cliff face. Elevations: 15-1360ft. (5-415m.) Blooms Apr-Jun.
Trifolium hydrophilum saline clover	None/None G2/S2 1B.2	Annual herb. Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. Elevations: 0-985ft. (0-300m.) Blooms Apr-Jun.
Viburnum ellipticum oval-leaved viburnum	None/None G4G5/S3? 2B.3	Perennial deciduous shrub. Chaparral, cismontane woodland, lower montane coniferous forest. Elevations: 705-4595ft. (215-1400m.) Blooms May-Jun.
Invertebrates		
Bombus crotchii Crotch bumble bee	None/None G2/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.

Bombus occidentalis western bumble bee	None/None G2G3/S1	Once common and widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.
Branchinecta lynchi vernal pool fairy shrimp	FT/None G3/S3	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.
Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT/None G3T2T3/S3	Occurs only in the Central Valley of California, in association with blue elderberry (Sambucus mexicana). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.
Speyeria callippe callippe callippe silverspot butterfly	FE/None G5T1/S1	Restricted to the northern coastal scrub of the San Francisco peninsula. Hostplant is Viola pedunculata. Most adults found on E-facing slopes; males congregate on hilltops in search of females.
Syncaris pacifica California freshwater shrimp	FE/SE G2/S2	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main streamflow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.
Fish		
Acipenser medirostris pop. 1 green sturgeon - southern DPS	FT/None G3T1/S1	Spawning site fidelity. Spawns in the Sacramento, Feather and Yuba Rivers. Presence in upper Stanislaus and San Joaquin Rivers may indicate spawning. Non-spawning adults occupy marine/estuarine waters. Delta Estuary is important for rearing juveniles. Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.
Hypomesus transpacificus Delta smelt	FT/SE G1/S1	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.

Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	FT/None G5T2T3Q/S2S3	DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays.
Pogonichthys macrolepidotus Sacramento splittail	None/None GNR/S3 SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.
Spirinchus thaleichthys longfin smelt	FC/ST G5/S1	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.
Amphibians		
Dicamptodon ensatus California giant salamander	None/None G3/S2S3 SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.
Rana boylii pop. 1 foothill yellow-legged frog - north coast DPS	None/None G3TNRQ/S3 SSC	Northern Coast Ranges north of San Francisco Bay Estuary, Klamath Mountains, and Cascade Range including watershed subbasins (HU 8) Lower Pit, Battle Creek, Thomes Creek, and Big Chico Creek in Lassen, Shasta, Tehama, and Butte Counties. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.

Taricha rivularis red-bellied newt	None/None G2/S2 SSC	Coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Isolated population of uncertain origin in Santa Clara County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.
Reptiles		
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.
Masticophis lateralis euryxanthus Alameda whipsnake	FT/ST G4T2/S2	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna and woodland habitats. Mostly south-facing slopes and ravines, with rock outcrops, deep crevices or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses.
Birds		
Accipiter cooperii Cooper's hawk	None/None G5/S4 WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.
Agelaius tricolor tricolored blackbird	None/ST G1G2/S1S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.
Aquila chrysaetos golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.

Asio flammeus short-eared owl	None/None G5/S3 SSC	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.
Athene cunicularia burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
Buteo regalis ferruginous hawk	None/None G4/S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.
Buteo swainsoni Swainson's hawk	None/ST G5/S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.
Charadrius nivosus nivosus western snowy plover	FT/None G3T3/S2 SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.
Circus hudsonius northern harrier	None/None G5/S3 SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.
Coturnicops noveboracensis yellow rail	None/None G4/S1S2 SSC	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.
Cypseloides niger black swift	None/None G4/S2 SSC	Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.

Elanus leucurus white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.
Falco peregrinus anatum American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.
Geothlypis trichas sinuosa saltmarsh common yellowthroat	None/None G5T3/S3 SSC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.
Laterallus jamaicensis coturniculus California black rail	None/ST G3T1/S1 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.
Melospiza melodia maxillaris Suisun song sparrow	None/None G5T3/S3 SSC	Resident of brackish-water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and Salicornia; also known to frequent tangles bordering sloughs.
Melospiza melodia samuelis San Pablo song sparrow	None/None G5T2/S2 SSC	Resident of salt marshes along the north side of San Francisco and San Pablo bays. Inhabits tidal sloughs in the Salicornia marshes; nests in Grindelia bordering slough channels.
Pandion haliaetus osprey	None/None G5/S4 WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.
Rallus obsoletus obsoletus California Ridgway's rail	FE/SE G3T1/S1 FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.
Riparia riparia bank swallow	None/ST G5/S2	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.

Xanthocephalus xanthocephalus yellow-headed blackbird	None/None G5/S3 SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.
Mammals		
Antrozous pallidus pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
Corynorhinus townsendii Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.
Nyctinomops macrotis big free-tailed bat	None/None G5/S3 SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.
Reithrodontomys raviventris salt-marsh harvest mouse	FE/SE G1G2/S1S2 FP	Only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat, but may occur in other marsh vegetation types and in adjacent upland areas. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.
Sorex ornatus sinuosus Suisun shrew	None/None G5T1T2Q/S1S2 SSC	Tidal marshes of the northern shores of San Pablo and Suisun bays. Require dense low-lying cover and driftweed and other litter above the mean hightide line for nesting and foraging.

Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.
Sensitive Natural Communities		
Coastal Brackish Marsh	None/None G2/S2.1	
Northern Claypan Vernal Pool	None/None G1/S1.1	
Northern Coastal Salt Marsh	None/None G3/S3.2	Coastal salt marshes, alkaline flats. The USFWS Wetland Inventory (1996 national list) recognizes Sarcocornia pacifica as an OBL plant.
Northern Vernal Pool	None/None G2/S2.1	
Serpentine Bunchgrass	None/None G2/S2.2	All topographic locations. Soils may be deep with high clay content, loamy, sandy, or silty derived from mudstone, sandstone, or serpentine substrates.

Appendix C

Supporting Noise Information

Existing and Forecast Volumes

Roadway	Location	Existing Network				Build-Out Network			
		Facility Type	Number of Lanes	Speed Limit	Existing 2022 Count	Facility Type	Number of Lanes	Speed Limit	Future 2040 Forecast
Interstate 80	s/o SR 37	Nine-Lane Freeway	9	65	110,006	Nine-Lane Freeway	9	65	117,514
	s/o American Canyon Road	Nine-Lane Freeway	9	65	109,042	Nine-Lane Freeway	9	65	121,991
	s/o Red Top Road	Eight-Lane Freeway	8	65	112,650	Nine-Lane Freeway	8	65	128,806
	s/o SR 12	Eight-Lane Freeway	8	65	97,782	Eight-Lane Freeway	8	65	113,977
	n/o SR 12	Eight-Lane Freeway	8	65	136,706	Eight-Lane Freeway	8	65	155,682
State Route 29	s/o SR 37	Four-Lane Arterial	4	50 to 55	24,051	Four-Lane Arterial	4	50 to 55	26,059
	n/o SR 37	Four-Lane Arterial	4	50 to 55	43,483	Six-Lane Arterial	4	50 to 55	40,444
	s/o Mini Drive	Four-Lane Arterial	4	50 to 55	37,492	Six-Lane Arterial	4	50 to 55	37,666
	n/o Mini Drive	Four-Lane Arterial	4	50 to 55	43,469	Six-Lane Arterial	4	50 to 55	43,575
	n/o American Canyon Road	Four-Lane Arterial	4	50 to 55	49,579	Six-Lane Arterial	4	50 to 55	51,132
	s/o Napa Junction Road	Six-Lane Arterial	6	50 to 55	40,762	Six-Lane Arterial	6	50 to 55	36,053
	n/o Napa Junction Road	Four-Lane Highway	4	50 to 55	59,044	Six-Lane Highway	4	50 to 55	60,310
	n/o Green Island Road	Four-Lane Highway	4	50 to 55	60,263	Four-Lane Highway	4	50 to 55	62,189
	s/o SR 12	Six-Lane Highway	6	50 to 55	*59,200*	Six-Lane Highway	6	50 to 55	62,560
	n/o SR 12	Six-Lane Highway	6	50 to 55	*88,600*	Six-Lane Highway	6	50 to 55	106,300
Airport Blvd.	w/o SR 29	Four-Lane Collector	4	45	10,500	Four-Lane Collector	4	45	10,341
State Route 12	e/o N. Kelly Road	Four-Lane Highway	3	55	35,033	Four-Lane Highway	3	55	36,038
	w/o Red Top Road	Two-Lane Highway	2	55	37,179	Four-Lane Highway	2	55	38,106
State Route 37	w/o SR 29	Four-Lane Freeway	4	50 to 55	39,980	Four-Lane Freeway	4	50 to 55	39,074
	e/o SR 29	Four-Lane Freeway	4	50 to 55	62,495	Four-Lane Freeway	4	50 to 55	63,592
	e/o Fairgrounds Road	Four-Lane Freeway	4	50 to 55	*69,800*	Four-Lane Freeway	0	50 to 55	69,800
	e/o I-80	Six-Lane Freeway	6	50 to 55	42,000	Six-Lane Freeway	6	50 to 55	47,776
American Cyn Rd.	w/o SR 29	Four-Lane Arterial	4	45	15,330	Four-Lane Arterial	4	45	10,935
	e/o Flosden Road	Two-Lane Arterial	2	45	10,771	Two-Lane Arterial	2	45	14,194
	w/o I-80	Two-Lane Arterial	2	45	4,076	Two-Lane Arterial	2	45	7,610
Hiddenbrook Pkwy	e/o I-80	Two-Lane Collector	2	40	6,023	Two-Lane Collector	2	40	6,943
Flosden Road	s/o American Canyon Road	Four-Lane Arterial	4	45	21,510	Four-Lane Arterial	4	45	29,362
Newell Drive	n/o American Canyon Road	Four-Lane Arterial	4	35	9,685	Four-Lane Arterial	4	35	28,072
	s/o Napa Junction Road	-	-	-	-	Four-Lane Arterial	4	*35*	21,790
South Kelly Road	s/o SR 12	Two-Lane Collector	2	50	1,602	Two-Lane Collector	2	50	11,310
Devlin Road	n/o Green Island Road	Two-Lane Collector	-	-	-	Two-Lane Collector	2	40	5,224

Vehicle Mix: Existing and Forecast Volumes

Roadway	Location	Existing 2022				Future 2040			
		Auto	Medium Duty	Heavy Duty	Existing 2022 Count	Auto	Medium Duty	Heavy Duty	Future 2040 Forecast
Interstate 80	s/o SR 37	103,087	3,460	3,460	110,006	110,122	3,696	3,696	117,514
	s/o American Canyon Road	102,881	3,080	3,080	109,042	115,099	3,446	3,446	121,991
	s/o Red Top Road	106,037	3,306	3,306	112,650	121,245	3,780	3,780	128,806
	s/o SR 12	92,042	2,870	2,870	97,782	107,287	3,345	3,345	113,977
	n/o SR 12	125,441	5,632	5,632	136,706	142,854	6,414	6,414	155,682
State Route 29	s/o SR 37	23,544	254	254	24,051	25,509	275	275	26,059
	n/o SR 37	41,357	1,063	1,063	43,483	38,466	989	989	40,444
	s/o Mini Drive	35,689	902	902	37,492	35,854	906	906	37,666
	n/o Mini Drive	41,448	1,011	1,011	43,469	41,549	1,013	1,013	43,575
	n/o American Canyon Road	47,402	1,088	1,088	49,579	48,887	1,122	1,122	51,132
	s/o Napa Junction Road	37,966	1,398	1,398	40,762	33,580	1,237	1,237	36,053
	n/o Napa Junction Road	54,415	2,315	2,315	59,044	55,582	2,364	2,364	60,310
	n/o Green Island Road	54,176	3,043	3,043	60,263	55,908	3,141	3,141	62,189
	s/o SR 12	54,553	2,324	2,324	*59,200*	57,649	2,455	2,455	62,560
	n/o SR 12	82,761	2,919	2,919	*88,600*	99,295	3,503	3,503	106,300
Airport Blvd.	w/o SR 29	9,899	300	300	10,500	9,749	296	296	10,341
State Route 12	e/o N. Kelly Road	31,284	1,874	1,874	35,033	32,182	1,928	1,928	36,038
	w/o Red Top Road	33,312	1,933	1,933	37,179	34,143	1,982	1,982	38,106
State Route 37	w/o SR 29	37,861	1,059	1,059	39,980	37,003	1,035	1,035	39,074
	e/o SR 29	59,370	1,562	1,562	62,495	60,412	1,590	1,590	63,592
	e/o Fairgrounds Road	66,108	1,846	1,846	*69,800*	66,108	1,846	1,846	69,800
	e/o I-80	41,013	494	494	42,000	46,653	561	561	47,776
American Cyn Rd.	w/o SR 29	14,930	200	200	15,330	10,650	143	143	10,935
	e/o Flosden Road	10,684	44	44	10,771	14,079	57	57	14,194
	w/o I-80	3,648	214	214	4,076	6,811	400	400	7,610
Hiddenbrook Pkwy	e/o I-80	5,858	83	83	6,023	6,753	95	95	6,943
Flosden Road	s/o American Canyon Road	20,884	313	313	21,510	28,508	427	427	29,362
Newell Drive	n/o American Canyon Road	9,485	100	100	9,685	27,491	291	291	28,072
	s/o Napa Junction Road	-	-	-	-	*21,339*	*226*	*226*	21,790
South Kelly Road	s/o SR 12	1,586	8	8	1,602	11,197	57	57	11,310
Devlin Road	n/o Green Island Road	-	-	-	-	*261*	*2,481*	*2,481*	5,224

Time of Day Distribution

Roadway	Location	Existing 2022				Future 2040			
		7 a.m.-7 p.m.	7 p.m. - 10 p.m.	10 p.m. - 7 a.m.	Existing 2022 Count	7 a.m.-7 p.m.	7 p.m. - 10 p.m.	10 p.m. - 7 a.m.	Future 2040 Forecast
Interstate 80	s/o SR 37	85,166	14,686	10,154	110,006	90,979	15,688	10,847	117,514
	s/o American Canyon Road	84,420	14,557	10,065	109,042	94,445	16,286	11,261	121,991
	s/o Red Top Road	87,213	15,039	10,398	112,650	99,721	17,196	11,890	128,806
	s/o SR 12	75,702	13,054	9,026	97,782	88,240	15,216	10,521	113,977
	n/o SR 12	105,837	18,250	12,619	136,706	120,528	20,784	14,371	155,682
State Route 29	s/o SR 37	19,692	3,110	1,249	24,051	21,336	3,369	1,353	26,059
	n/o SR 37	34,302	5,783	3,398	43,483	31,904	5,379	3,161	40,444
	s/o Mini Drive	29,794	4,881	2,816	37,492	29,932	4,904	2,829	37,666
	n/o Mini Drive	35,449	5,512	2,508	43,469	35,535	5,525	2,514	43,575
	n/o American Canyon Road	40,432	6,287	2,861	49,579	41,698	6,484	2,950	51,132
	s/o Napa Junction Road	33,241	5,169	2,352	40,762	29,401	4,572	2,080	36,053
	n/o Napa Junction Road	48,150	7,487	3,407	59,044	49,183	7,647	3,480	60,310
	n/o Green Island Road	49,144	7,641	3,477	60,263	50,715	7,886	3,588	62,189
	s/o SR 12	48,278	7,507	3,416	*59,200*	51,018	7,933	3,610	62,560
	n/o SR 12	72,253	11,234	5,112	*88,600*	86,688	13,479	6,134	106,300
Airport Blvd.	w/o SR 29	8,831	462	1,207	10,500	8,697	455	1,189	10,341
State Route 12	e/o N. Kelly Road	25,912	2,831	6,291	35,033	26,655	2,912	6,471	36,038
	w/o Red Top Road	27,499	3,004	6,676	37,179	28,185	3,079	6,842	38,106
State Route 37	w/o SR 29	31,180	5,397	3,402	39,980	30,474	5,275	3,325	39,074
	e/o SR 29	48,740	8,437	5,318	62,495	49,595	8,585	5,412	63,592
	e/o Fairgrounds Road	54,437	9,423	5,940	*69,800*	54,437	9,423	5,940	69,800
	e/o I-80	32,756	5,670	3,574	42,000	37,261	6,450	4,066	47,776
American Cyn Rd.	w/o SR 29	12,528	1,722	1,080	15,330	8,937	1,228	770	10,935
	e/o Flosden Road	8,803	1,210	759	10,771	11,600	1,594	1,000	14,194
	w/o I-80	3,331	458	287	4,076	6,219	855	536	7,610
Hiddenbrook Pkwy	e/o I-80	4,757	771	495	6,023	5,484	888	571	6,943
Flosden Road	s/o American Canyon Road	17,605	2,381	1,524	21,510	24,032	3,250	2,080	29,362
Newell Drive	n/o American Canyon Road	8,220	1,045	420	9,685	23,825	3,029	1,218	28,072
	s/o Napa Junction Road	-	-	-	-	18,494	2,351	945	21,790
South Kelly Road	s/o SR 12	1,417	123	62	1,602	10,004	871	435	11,310
Devlin Road	n/o Green Island Road	-	-	-	-	5,133	0	91	5,224

Traffic Noise Calculator: FHWA 77-108 **Project Title: 19-08673 American Canyon General Plan EIR - Existing 2022**

	Output						Inputs													Auto Inputs	
	dBA at 50 feet			Distance to CNEL Contour																	
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance
1	80.3	83.0	83.6	404	870	1874	Interstate 80	s/o SR 37	110,006	65	0.0%	93.7%	3.1%	3.1%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
2	80.2	82.8	83.4	394	849	1829	Interstate 80	American Canyon	109,042	65	0.0%	94.4%	2.8%	2.8%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
3	80.4	83.0	83.6	405	873	1881	Interstate 80	s/o Red Top Road	112,650	65	0.0%	94.1%	2.9%	2.9%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
4	79.8	82.4	83.0	369	795	1712	Interstate 80	s/o SR 12	97,782	65	0.0%	94.1%	2.9%	2.9%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
5	81.6	84.3	84.9	492	1059	2282	Interstate 80	n/o SR 12	136,706	65	0.0%	91.8%	4.1%	4.1%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
6	70.8	72.4	73.2	82	176	378	State Route 29	s/o SR 37	24,051	55	0.0%	97.9%	1.1%	1.1%	81.9%	12.9%	5.2%	4	Soft	50	0.5	44
7	74.1	76.4	77.1	148	319	688	State Route 29	n/o SR 37	43,483	55	0.0%	95.1%	2.4%	2.4%	78.9%	13.3%	7.8%	4	Soft	50	0.5	44
8	73.4	75.7	76.3	132	285	614	State Route 29	s/o Mini Drive	37,492	55	0.0%	95.2%	2.4%	2.4%	79.5%	13.0%	7.5%	4	Soft	50	0.5	44
9	74.0	75.8	76.6	137	295	636	State Route 29	n/o Mini Drive	43,469	55	0.0%	95.4%	2.3%	2.3%	81.6%	12.7%	5.8%	4	Soft	50	0.5	44
10	74.5	76.3	77.1	148	319	687	State Route 29	American Canyon	49,579	55	0.0%	95.6%	2.2%	2.2%	81.6%	12.7%	5.8%	4	Soft	50	0.5	44
11	74.5	76.3	77.1	148	318	685	State Route 29	Napa Junction Rd	40,762	55	0.0%	93.1%	3.4%	3.4%	81.6%	12.7%	5.8%	6	Soft	50	0.5	68
12	76.1	77.9	78.6	188	405	874	State Route 29	Napa Junction Rd	59,044	55	0.0%	92.2%	3.9%	3.9%	81.6%	12.7%	5.8%	4	Soft	50	0.5	44
13	76.6	78.5	79.2	205	441	950	State Route 29	o Green Island Ro	60,263	55	0.0%	89.9%	5.1%	5.1%	81.6%	12.7%	5.8%	4	Soft	50	0.5	44
14	76.4	78.2	78.9	196	421	908	State Route 29	s/o SR 12	59,200	55	0.0%	92.2%	3.9%	3.9%	81.6%	12.7%	5.8%	6	Soft	50	0.5	68
15	77.8	79.6	80.4	245	528	1139	State Route 29	n/o SR 12	88,600	55	0.0%	93.4%	3.3%	3.3%	81.6%	12.7%	5.8%	6	Soft	50	0.5	68
16	66.2	69.3	69.5	46	100	215	Airport Blvd	w/o SR 29	10,500	45	0.0%	94.3%	2.9%	2.9%	84.1%	4.4%	11.5%	4	Soft	50	0.5	44
17	74.3	78.5	78.8	193	415	894	State Route 12	e/o N. Kelly Road	35,033	55	0.0%	89.3%	5.4%	5.4%	74.0%	8.1%	18.0%	3	Soft	50	0.5	32
18	74.5	78.7	78.9	197	424	914	State Route 12	w/o Red Top Road	37,179	55	0.0%	89.6%	5.2%	5.2%	74.0%	8.1%	18.0%	2	Soft	50	0.5	20
19	73.8	76.3	77.0	146	314	675	State Route 37	w/o SR 29	39,980	55	0.0%	94.7%	2.7%	2.7%	78.0%	13.5%	8.5%	4	Soft	50	0.5	44
20	75.7	78.2	78.8	194	418	900	State Route 37	e/o SR 29	62,495	55	0.0%	95.0%	2.5%	2.5%	78.0%	13.5%	8.5%	4	Soft	50	0.5	44
21	76.2	78.7	79.4	211	454	979	State Route 37	o Fairgrounds Ro	69,800	55	0.0%	94.7%	2.6%	2.6%	78.0%	13.5%	8.5%	4	Soft	50	0.5	44
22	73.5	76.0	76.6	138	298	642	State Route 37	e/o I-80	42,000	55	0.0%	97.7%	1.2%	1.2%	78.0%	13.5%	8.5%	6	Soft	50	0.5	68
23	66.8	68.9	69.5	46	100	216	American Canyon Rd	w/o SR 29	15,330	45	0.0%	97.4%	1.3%	1.3%	81.7%	11.2%	7.0%	4	Soft	50	0.5	44
24	64.4	66.5	67.1	32	69	148	American Canyon Rd	e/o Flosden Road	10,771	45	0.0%	99.2%	0.4%	0.4%	81.7%	11.2%	7.0%	2	Soft	50	0.5	20
25	63.3	65.4	66.0	27	58	125	American Canyon Rd	w/o I-80	4,076	45	0.0%	89.5%	5.3%	5.3%	81.7%	11.2%	7.0%	2	Soft	50	0.5	20
26	61.4	63.9	64.5	21	46	100	Hiddenbrook Pkwy	e/o I-80	6,023	40	0.0%	97.3%	1.4%	1.4%	79.0%	12.8%	8.2%	2	Soft	50	0.5	20
27	68.4	70.5	71.1	59	128	275	Flosden Road	s/o American Car	21,510	45	0.0%	97.1%	1.5%	1.5%	81.8%	11.1%	7.1%	4	Soft	50	0.5	44
28	61.9	63.4	64.0	20	43	93	Newell Drive	n/o American Car	9,685	35	0.0%	97.9%	1.0%	1.0%	84.9%	10.8%	4.3%	4	Soft	50	0.5	44
29	57.4	58.7	59.2	10	21	44	South Kelly Road	s/o SR 12	1,602	50	0.0%	99.0%	0.5%	0.5%	88.5%	7.7%	3.9%	2	Soft	50	0.5	20

Traffic Noise Calculator: FHWA 77-108 **Project Title: 19-08673 American Canyon General Plan - Future 2040**

	Output						Inputs														Auto Inputs	
	dBA at 50 feet			Distance to CNEL Contour																		
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance
1	80.6	83.3	83.9	422	909	1958	Interstate 80	s/o SR 37	117,514	65	0.0%	93.7%	3.1%	3.1%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
2	80.7	83.3	83.9	425	915	1971	Interstate 80	\merican Canyon	121,991	65	0.0%	94.4%	2.8%	2.8%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
3	81.0	83.6	84.2	443	955	2057	Interstate 80	s/o Red Top Road	128,806	65	0.0%	94.1%	2.9%	2.9%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
4	80.4	83.0	83.7	408	880	1896	Interstate 80	s/o SR 12	113,977	65	0.0%	94.1%	2.9%	2.9%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
5	82.2	84.8	85.5	536	1155	2489	Interstate 80	n/o SR 12	155,682	65	0.0%	91.8%	4.1%	4.1%	77.4%	13.4%	9.2%	6	Soft	50	0.5	68
6	71.1	72.8	73.5	86	185	399	State Route 29	s/o SR 37	26,059	55	0.0%	97.9%	1.1%	1.1%	81.9%	12.9%	5.2%	4	Soft	50	0.5	44
7	73.8	76.1	76.8	141	304	656	State Route 29	n/o SR 37	40,444	55	0.0%	95.1%	2.4%	2.4%	78.9%	13.3%	7.8%	4	Soft	50	0.5	44
8	73.4	75.7	76.4	133	286	616	State Route 29	s/o Mini Drive	37,666	55	0.0%	95.2%	2.4%	2.4%	79.5%	13.0%	7.5%	4	Soft	50	0.5	44
9	74.0	75.9	76.6	137	296	637	State Route 29	n/o Mini Drive	43,575	55	0.0%	95.4%	2.3%	2.3%	81.6%	12.7%	5.8%	4	Soft	50	0.5	44
10	74.7	76.5	77.2	151	325	701	State Route 29	\merican Canyon	51,132	55	0.0%	95.6%	2.2%	2.2%	81.6%	12.7%	5.8%	4	Soft	50	0.5	44
11	74.0	75.8	76.5	136	293	631	State Route 29	› Napa Junction Ro	36,053	55	0.0%	93.1%	3.4%	3.4%	81.6%	12.7%	5.8%	6	Soft	50	0.5	68
12	76.2	78.0	78.7	191	411	886	State Route 29	› Napa Junction Ro	60,310	55	0.0%	92.2%	3.9%	3.9%	81.6%	12.7%	5.8%	4	Soft	50	0.5	44
13	76.8	78.6	79.3	209	450	970	State Route 29	o Green Island Ro	62,189	55	0.0%	89.9%	5.1%	5.1%	81.6%	12.7%	5.8%	4	Soft	50	0.5	44
14	76.6	78.4	79.1	203	437	942	State Route 29	s/o SR 12	62,560	55	0.0%	92.2%	3.9%	3.9%	81.6%	12.7%	5.8%	6	Soft	50	0.5	68
15	78.6	80.4	81.2	277	597	1286	State Route 29	n/o SR 12	106,300	55	0.0%	93.4%	3.3%	3.3%	81.6%	12.7%	5.8%	6	Soft	50	0.5	68
16	66.2	69.2	69.4	46	99	213	Airport Blvd	w/o SR 29	10,341	45	0.0%	94.3%	2.9%	2.9%	84.1%	4.4%	11.5%	4	Soft	50	0.5	44
17	74.4	78.6	78.9	196	423	911	State Route 12	e/o N. Kelly Road	36,038	55	0.0%	89.3%	5.4%	5.4%	74.0%	8.1%	18.0%	3	Soft	50	0.5	32
18	74.6	78.8	79.0	200	431	930	State Route 12	w/o Red Top Road	38,106	55	0.0%	89.6%	5.2%	5.2%	74.0%	8.1%	18.0%	2	Soft	50	0.5	20
19	73.7	76.2	76.9	143	309	665	State Route 37	w/o SR 29	39,074	55	0.0%	94.7%	2.7%	2.7%	78.0%	13.5%	8.5%	4	Soft	50	0.5	44
20	75.8	78.2	78.9	196	422	910	State Route 37	e/o SR 29	63,592	55	0.0%	95.0%	2.5%	2.5%	78.0%	13.5%	8.5%	4	Soft	50	0.5	44
21	76.2	78.7	79.4	211	454	979	State Route 37	′o Fairgrounds Ro	69,800	55	0.0%	94.7%	2.6%	2.6%	78.0%	13.5%	8.5%	4	Soft	50	0.5	44
22	74.1	76.5	77.2	151	325	699	State Route 37	e/o I-80	47,776	55	0.0%	97.7%	1.2%	1.2%	78.0%	13.5%	8.5%	6	Soft	50	0.5	68
23	65.3	67.5	68.1	37	80	172	American Canyon Rd	w/o SR 29	10,935	45	0.0%	97.4%	1.3%	1.3%	81.7%	11.2%	7.0%	4	Soft	50	0.5	44
24	65.6	67.7	68.3	38	83	178	American Canyon Rd	e/o Flosden Road	14,194	45	0.0%	99.2%	0.4%	0.4%	81.7%	11.2%	7.0%	2	Soft	50	0.5	20
25	66.0	68.1	68.7	41	88	190	American Canyon Rd	w/o I-80	7,610	45	0.0%	89.5%	5.3%	5.3%	81.7%	11.2%	7.0%	2	Soft	50	0.5	20
26	62.1	64.5	65.1	24	51	110	Hiddenbrook Pkwy	e/o I-80	6,943	40	0.0%	97.3%	1.4%	1.4%	79.0%	12.8%	8.2%	2	Soft	50	0.5	20
27	69.7	71.9	72.5	73	157	339	Flosden Road	s/o American Car	29,362	45	0.0%	97.1%	1.5%	1.5%	81.8%	11.1%	7.1%	4	Soft	50	0.5	44
28	66.6	68.0	68.7	41	88	189	Newell Drive	n/o American Car	28,072	35	0.0%	97.9%	1.0%	1.0%	84.9%	10.8%	4.3%	4	Soft	50	0.5	44
29	65.5	66.9	67.6	34	74	160	Newell Drive	s/o Napa Junctior	21,790	35	0.0%	97.9%	1.0%	1.0%	84.9%	10.8%	4.3%	4	Soft	50	0.5	44
30	65.9	67.2	67.7	35	75	163	South Kelly Road	s/o SR 12	11,310	50	0.0%	99.0%	0.5%	0.5%	88.5%	7.7%	3.9%	2	Soft	50	0.5	20
31	71.2	71.7	71.8	65	141	304	Devlin Road	n/o Green Island	5,224	40	0.0%	5.0%	47.5%	47.5%	98.3%	0.1%	1.6%	2	Soft	50	0.5	20

Roadway	Segment	Existing ADT	2040 Buildout ADT	Existing Traffic Noise Level at 50 feet (dBA CNEL)	2040 Traffic Noise Level at 50 feet (dBA CNEL)	Traffic Noise Increase (dBA CNEL)	Significant? (Y/N)
I-80	South of SR 37	110,006	117,514	83.6	83.9	0.3	N
I-80	South of American Canyon Road	109,042	121,991	83.4	83.9	0.5	N
I-80	South of Red Top Road	112,650	128,806	83.6	84.2	0.6	N
I-80	South of SR 12	97,782	113,977	83.0	83.7	0.7	N
I-80	North of SR 12	136,706	155,682	84.9	85.5	0.6	N
SR 29	South of SR 37	24,051	26,059	73.2	73.5	0.3	N
SR 29	North of SR 37	43,483	40,444	77.1	76.8	-0.3	N
SR 29	South of Mini Drive	37,492	37,666	76.3	76.4	0.0	N
SR 29	North of Mini Drive	43,469	43,575	76.6	76.6	0.0	N
SR 29	North of American Canyon Road	49,579	51,132	77.1	77.2	0.1	N
SR 29	South of Napa Junction Road	40,762	36,053	77.1	76.5	-0.5	N
SR 29	North of Napa Junction Road	59,044	60,310	78.6	78.7	0.1	N
SR 29	North of Green Island Road	60,263	62,189	79.2	79.3	0.1	N
SR 29	South of SR 12	59,200	62,560	78.9	79.1	0.2	N
SR 29	North of SR 12	88,600	106,300	80.4	81.2	0.8	N
Airport Boulevard	West of SR 29	10,500	10,341	69.5	69.4	-0.1	N
SR 12	East of North Kelly Road	35,033	36,038	78.8	78.9	0.1	N
SR 12	West of Red Top Road	37,179	38,106	78.9	79.0	0.1	N
SR 37	West of SR 29	39,980	39,074	77.0	76.9	-0.1	N
SR 37	East of SR 29	62,495	63,592	78.8	78.9	0.1	N
SR 37	East of Fairgrounds Road	69,800	69,800	79.4	79.4	0.0	N
SR 37	East of I-80	42,000	47,776	76.6	77.2	0.6	N
American Canyon Road	West of SR 29	15,330	10,935	69.5	68.1	-1.5	N
American Canyon Road	East of Flosden Road	10,771	14,194	67.1	68.3	1.2	N
American Canyon Road	West of I-80	4,076	7,610	66.0	68.7	2.7	Y
Hiddenbrook Parkway	East of I-80	6,023	6,943	64.5	65.1	0.6	N
Flosden Road	South of American Canyon Road	21,510	29,362	71.1	72.5	1.4	N
Newell Drive	North of American Canyon Road	9,685	28,072	64.0	68.7	4.6	Y
Newell Drive	South of Napa Junction Road	-	21,790	-	67.6	-	N
South Kelly Road	South of SR 12	1,602	11,310	59.2	67.7	8.5	Y
Devlin Road	North of Green Island Road	-	5,224	-	71.8	-	N

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
Copyright 2006, HMMH Inc.
Case: CFNR - Calistoga to Vallejo

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	41	59
Source 1	63	41	57
Source 2	60	24	54
Source 3	0	0	0
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS						
Parameter	**Source 1**		**Source 2**		**Source 3**	
Source Num.	Freight Locomotive	9	Freight Cars	10		
Distance (source to receiver)	distance (ft)	35	distance (ft)	35		
Daytime Hours	speed (mph)		speed (mph)			
(7 AM - 10 PM)	trains/hour		trains/hour			
	locos/train		length of cars (ft) / train			
Nighttime Hours	speed (mph)	10	speed (mph)	10		
(10 PM - 7 AM)	trains/hour	0.45	trains/hour	0.45		
	locos/train	1	length of cars (ft) / train	900		
Wheel Flats?			% of cars w/ wheel flats	0.00%		
Jointed Track?	Y/N	n	Y/N	n		
Embedded Track?	Y/N	n	Y/N	n		
Aerial Structure?	Y/N	n	Y/N	n		
Barrier Present?	Y/N	n	Y/N	n		
Intervening Rows of of Buildings	number of rows		number of rows			

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project
Copyright 2006, HMMH Inc.
Case: CFNR - Ignacio to Fairfield/Suisun

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	65	38	59
Source 1	63	38	57
Source 2	60	21	55
Source 3	0	0	0
Source 4	0	0	0
Source 5	0	0	0
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS						
Parameter	**Source 1**		**Source 2**		**Source 3**	
Source Num.	Freight Locomotive	9	Freight Cars	10		
Distance (source to receiver)	distance (ft)	50	distance (ft)	50		
Daytime Hours	speed (mph)		speed (mph)			
(7 AM - 10 PM)	trains/hour		trains/hour			
	locos/train		length of cars (ft) / train			
Nighttime Hours	speed (mph)	25	speed (mph)	25		
(10 PM - 7 AM)	trains/hour	0.6	trains/hour	0.6		
	locos/train	1	length of cars (ft) / train	900		
Wheel Flats?			% of cars w/ wheel flats	0.00%		
Jointed Track?	Y/N	n	Y/N	n		
Embedded Track?	Y/N	n	Y/N	n		
Aerial Structure?	Y/N	n	Y/N	n		
Barrier Present?	Y/N	n	Y/N	n		
Intervening Rows of of Buildings	number of rows		number of rows			

SOURCE REFERENCE LIST	
Source	**Number**
Commuter Electric Locomotive	1
Commuter Diesel Locomotive	2
Commuter Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Freight Locomotive	9
Freight Cars	10
Hopper Cars (empty)	11
Hopper Cars (full)	12
Crossover	13
Automobiles	14
City Buses	15
Commuter Buses	16
Rail Yard or Shop	17
Layover Tracks	18
Bus Storage Yard	19
Bus Op. Facility	20
Bus Transit Center	21
Parking Garage	22
Park & Ride Lot	23

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	1
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	3
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	10
Future Train Speed (mph)	10
Number of Existing Trains in one Direction	2
Number of Future Trains in one Direction	2
Existing Number of Day Trains (7 am to 10 p.m.)	1.25
Future Number of Day Trains (7 am to 10 p.m.)	1.25
Existing Number of Night Trains (10 p.m. to 7 am)	0.75
Future Number of Night Trains (10 p.m. to 7 am)	0.75
Existing Average Number of Cars	15
Future Average Number of Cars	15
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive			
National Average (50% front, 50% middle)			1
All Front Mounted			2
All Middle Mounted			3
User Defined	80	% front mounted horns	4

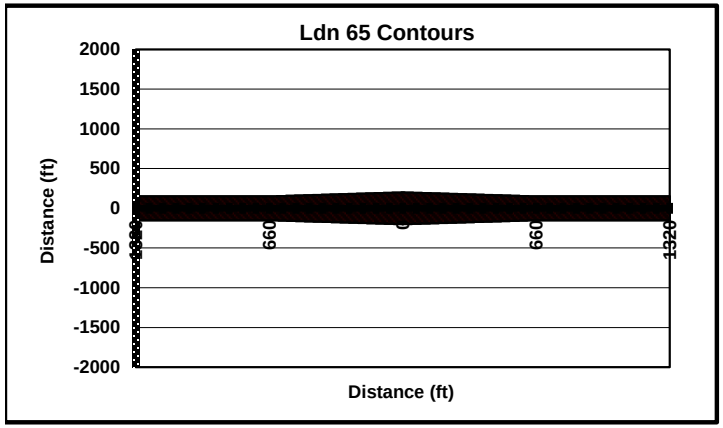
Non Train Noise Environment			
Urban			1
Suburban			2
Rural			3
User Defined Ldn =	50	dBA	4

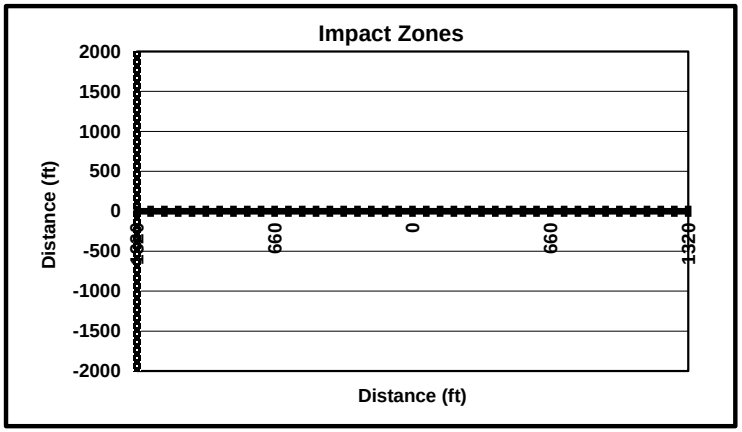
Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	199
Future 65 Ldn Contour at X-ing	199
Existing 65 Ldn Contour at 1/2 zone length	149
Future 65 Ldn Contour at 1/2 zone length	149
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	0
Severe Impact Distance at X-ing	0
Impact Distance at 1/2 zone length	0
Severe Impact Distance at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660





FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	1
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	3
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	25
Future Train Speed (mph)	25
Number of Existing Trains in one Direction	2.5
Number of Future Trains in one Direction	2.5
Existing Number of Day Trains (7 am to 10 p.m.)	1.5625
Future Number of Day Trains (7 am to 10 p.m.)	1.5625
Existing Number of Night Trains (10 p.m. to 7 am)	0.9375
Future Number of Night Trains (10 p.m. to 7 am)	0.9375
Existing Average Number of Cars	15
Future Average Number of Cars	15
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive			
National Average (50% front, 50% middle)			1
All Front Mounted			2
All Middle Mounted			3
User Defined	80	% front mounted horns	4

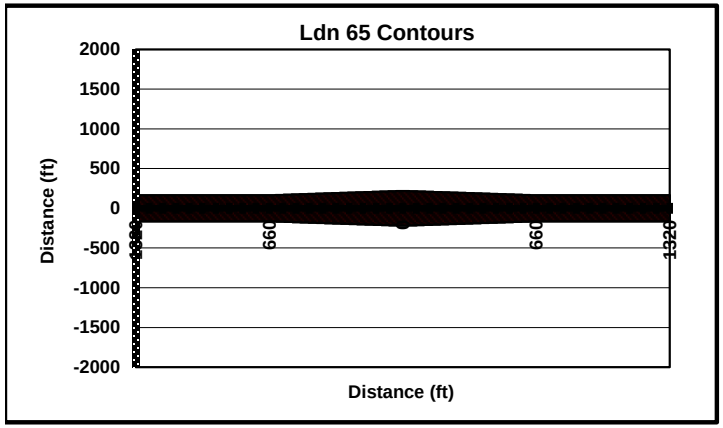
Non Train Noise Environment			
Urban			1
Suburban			2
Rural			3
User Defined Ldn =	50	dBA	4

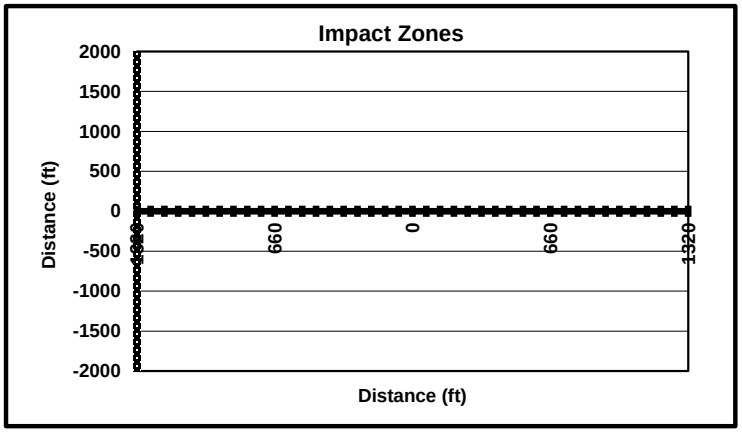
Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	218
Future 65 Ldn Contour at X-ing	218
Existing 65 Ldn Contour at 1/2 zone length	163
Future 65 Ldn Contour at 1/2 zone length	163
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	0
Severe Impact Distance at X-ing	0
Impact Distance at 1/2 zone length	0
Severe Impact Distance at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660















CITY OF AMERICAN CANYON

2040 GENERAL PLAN POLICY DOCUMENT

Public Review Draft
September 2024

LOVE WHERE YOU LIVE.
AMERICAN CANYON GENERAL PLAN WWW.AMCAN2040.ORG

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1 Introduction

The General Plan expresses the shared community vision of a Healthy, Equitable, Resilient, and Economically Vibrant community to the Year 2040 and beyond. A General Plan benefits American Canyon by promoting better projects, streamlined processes, integrated planning, and improved access and use of available resources.

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Introduction

Purpose and Use of the General Plan

What is a General Plan?

Every city and county in California must have a General Plan, which is the local government's long-term framework or "constitution" for future growth and development. The General Plan represents the product of extensive community engagement that expresses the community's vision for its future. This General Plan is designed to address the issues facing the jurisdiction for the next 20 years. The General Plan typically has four defining features:

- **General.** A General Plan provides general policy guidance that will be used to direct future land use and resource decisions.
- **Comprehensive.** A General Plan is comprehensive, covering topics such as land use; housing; economic development; environmental justice; sustainability and resiliency; mobility; public safety; recreation; natural resources; and much more.
- **Long-Range.** A General Plan provides guidance on reaching a future envisioned 20 or more years in the future. To achieve the vision, a General Plan includes goals, policies, and implementation programs that address both immediate and long-term needs.
- **Integrated and Coherent.** The goals, policies, and implementation programs in a General Plan present a comprehensive, unified program for development, resource conservation, and other issues that impact the community. A General Plan uses assumptions and projections to assess future demands for housing, employment, and public facilities (e.g., infrastructure). A General Plan has goals, policies, and implementation programs that enable citizens to understand the vision of the General Plan, and landowners, businesses, and industry to be more certain about how the Plan will be implemented.

A General Plan is made up of "elements" that cover mandatory and optional topics important to the community. Eight elements are required to be included in the General Plan by the State. These are: Land Use, Circulation, Housing, Conservation, Open Space, Noise, Safety, and Environmental Justice. Though the required topics must be addressed in the General Plan, communities can organize their General Plan anyway they choose.

Communities may also include other optional elements that address issues of local interest, such as Economic Development, Health, or Education.

Zoning is an important implementation tool of the General Plan. Although the General Plan and zoning code designate how land may be developed, they do so in different ways. The General Plan identifies allowable land uses, spatial land use relationships, and general pattern of future development.

Land uses shown on the General Plan diagram will be reflected in the local zoning maps, as required per State law. Zoning refines and implements the General Plan land uses by providing specific development standards such as lot size, building setbacks, and allowable uses. Development must not only meet the specific requirements of the zoning code, but also the broader policies set forth in the General Plan.

The American Canyon General Plan meets the requirements of State law by including required elements and one optional element as described in more detail later in this chapter under "Organization of the General Plan." Some of the required elements address additional issues of local interest. Each element contains goals and policies that will guide future decisions within the City. They each also identify implementation programs that will be used to ensure the goals and policies in the General Plan are carried out.

The American Canyon Community

American Canyon is located in Southern Napa County close to the world-famous Napa Valley wine growing region and in close proximity to the San Francisco Bay. Beginning with the McKnight Acres subdivision in the 1940s and the Rancho Del Mar subdivision in the 1950s, American Canyon began a period of initial growth. With McKnight Acres' 150 residential sites and Rancho Del Mar's 600 homes, schools, businesses, and the area's first fire and sewer districts quickly emerged. By 1963 the area supported 27 businesses and was the largest industrial zone in the county. Despite this growth, the area would remain an unincorporated area of Napa County through the 1980s.

In 1991, American Canyon residents overwhelmingly voted to incorporate the City. At the heart of incorporation is the resident's ability to gain local control over land use and other important decisions that affect their everyday life.

The City operates under a council-manager form of government and is a general law city. The City provides a full range of municipal services including police and fire protection services; construction and maintenance of City

streets, storm drains, bridges and similar infrastructure type assets; park maintenance and community recreation activities; short and long-range community planning; operation of water, wastewater, and recycled water utilities; and more.

Since becoming a City on January 1, 1992, the City has grown to more than 21,000 residents., American Canyon is home to three elementary schools, one middle school and one high school and dozens of businesses. In addition to the tourism related economic benefits of proximity to the Napa Valley, American Canyon benefits tremendously as a wine processing hub. Because of our strategic location at the southern end of Napa County and with easy access to state and interstate highways, American Canyon's industrial district is home to millions of square feet of wine processing, bottling, storage, and shipping space. Demand for space in this area is very high, with very little vacancy and there is new development underway.

Regional Setting

Located 35 miles northeast of San Francisco, the City of American Canyon covers an area approximately 6.5 square miles as shown in Figure INT-1. The City is bounded geographically by the Napa River to the west, the Eastern Foothills of the Sulphur Springs Mountain Range to the east, the City of Vallejo to the south, and the Napa Airport to the north.

American Canyon Boundaries

The General Plan uses several terms to describe the City and planning boundaries, as shown on Figure 2.

- **City Limits.** The boundary within the incorporated city limits. American Canyon has land use authority over all land within its city limits.

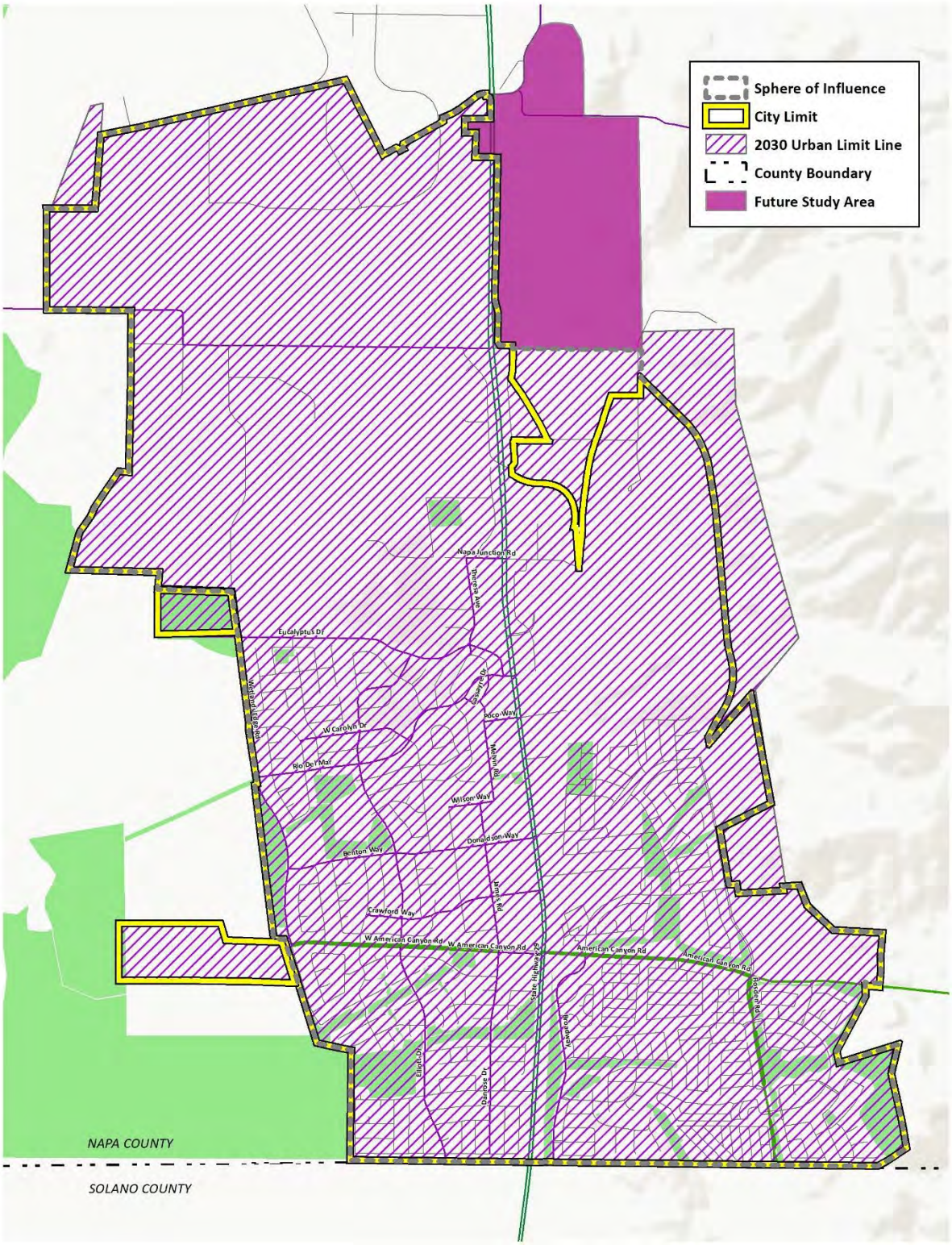
- **Sphere of Influence.** The Napa Local Agency Formation Commission (LAFCo) establishes the Sphere of Influence (SOI), which defines the probable physical boundary and service area of a local agency. The SOI includes incorporated and unincorporated areas where the City has or plans to have responsibility to provide public facilities and services. The City's SOI was approved by the Napa Local Agency Formation Commission (LAFCo) at the time of incorporation in 1992 and updated in 2003.

- **City Urban Limit Line.** The City Council adopted a 2008 voter-initiated Urban Limit Line (ULL) around the city. This ULL was negotiated with Napa County to be consistent with the county's general plan and agricultural protection ordinances. The boundary helps preserve agriculture and open spaces, prevent urban sprawl, and implements the planned development of the city. The ULL also fosters sustainable growth and maintains a balance between housing and jobs. According to the initiative, the ULL will expire in 2030. The General Plan extends the existing ULL indefinitely and includes an addition of the Hess/Laird Property northeast of the city's current ULL.
- **General Plan Planning Area.** A General Plan, pursuant to State law, must address all areas within the jurisdiction's Planning Area that bears a physical relationship to the long-term planning of the city. The General Plan Planning Area encompasses the City of American Canyon Water and Sewer Service area. This area includes the City, SOI, ULL, and Extraterritorial Water and Sewer Service area. Unincorporated Napa County has land use authority within the Extraterritorial Water and Sewer Service area, however, as the Water and Sewer Service provider, the City's Extraterritorial Water and Sewer Service area bears relation to the City's planning consistent with Gov. Code §65300.

INT-Figure 1: Regional Context



INT-Figure 2: General Plan Planning Boundaries



Using the General Plan

The General Plan is an important reference document used by the City Council, Planning Commission, and City staff to make recommendations and decisions with direct or indirect land use implications. It also provides a framework for inter-jurisdictional planning coordination among officials and staff of the City and other Federal, State, and local agencies. City residents, property owners, and businesses use the General Plan for guidance on City policies for geographic areas or to be informed of policies on particular subjects of interest.

As the constitution of development, the General Plan provides the basis for a broad range of development-related regulatory measures and administrative procedures. California planning law requires consistency between the General Plan and implementing programs, such as zoning and subdivision ordinances, capital improvement programs, specific plans, environmental impact procedures, and building and housing codes. The specific roles of the City Council, Planning Commission, and City departments with respect to the approval and use of the General Plan are described below.

City Council

The City Council is the political body which formulates and implements policies in American Canyon. It is the City Council, through its decision-making authority, that affirms the policy direction and priorities contained within this General Plan. The City Council is responsible for adoption of the General Plan, as well as the regulations, capital improvement programs, and financing mechanisms that implement the General Plan.

Planning Commission

The Planning Commission is a 5-member body responsible for offering insights into the General Plan policies, conducting public hearings on the General Plan and Zoning Code modifications, considering public input on development applications and policy changes, and making recommendations to the City Council on these matters. After the General Plan is adopted, the Planning Commission through findings included in the administrative record, verifies that all subsequent land use ordinances, policies, guidelines, and development applications are consistent with the goals, objectives, and policies in the General Plan.

Parks and Community Services Commission

The Parks and Community Services Commission is a 5-member body responsible for advising the City Council on matters pertaining to park development, park and recreation facility use issues, recreation programming and related issues.

Open Space, Active Transportation, and Sustainability Commission

The Open Space, Active Transportation, and Sustainability Commission is a 5-member body responsible for advising the City Council on open space, active transportation, and sustainability efforts in and around American Canyon.

City Departments

The General Plan is a resource for all City services and provides an internally consistent checkpoint for assessing alternatives for the City's future. For this reason, all City departments use the General Plan for policy guidance as it pertains to their operations, service delivery, and planning for future capital projects and potential service level changes. The City's planning staff ensure that the General Plan is implemented on a day-to-day basis so that appropriate land uses are proposed in the proper locations, appropriate levels of service are provided, proposed land uses conform to development regulations, and the environment has been adequately protected.

Preparing the General Plan

In early 2020, the City kicked off the General Plan Update process. This Update ensures the City grows according to current community needs and priorities. New issues, such as community health and climate change, housing, shared mobility, and online shopping, is also included in the updated General Plan. The update process involved multiple opportunities for the public to engage in the development of the Plan (see Community Engagement section below).

Community Engagement

The General Plan was shaped through robust public engagement program that provided an opportunity for all community members to be involved in the General Plan update process. The City gathered community input through the following methods:

1. In-person and virtual community workshops;

2. General Plan Update website – www.cityofamericancanyon.org/government/community-development/planning-zoning/general-plan-update;
3. eBlasts;
4. Circulation Element Advisory Committee meetings;
5. Education and Lifelong Learning Element Advisory Committee meetings;
6. Parks and Recreation Element Working Group meetings; and
7. Planning Commission and City Council meetings, study sessions, and public hearings.

Community Workshops

The update process involved multiple opportunities for the public to engage in the development of the 2040 General Plan. The City gathered community input through the following methods:

- On **February 18, 2020**, the City held their annual State of the City at the Boys and Girls Club Clubhouse. The event led with a presentation and was followed by an open house to discuss the General Plan Update. The purpose of the open house was to provide an overview of the General Plan Update, relay opportunities to get involved in the process, collect input on issues and opportunities that should be addressed through the Plan, and receive initial feedback on a citywide vision for American Canyon.

- On **April 13 and 27, 2022**, the City hosted (via Zoom) two, separate, yet identical workshops. The purpose of this workshop was to introduce the Housing Element and new State requirements, as well as an opportunity for the public to provide comments on housing concerns in the community.

General Plan Update Website

To help expand the outreach efforts of the General Plan, this project included a project website (www.cityofamericancanyon.org/government/community-development/planning-zoning/general-plan-update) to provide information on the process including information on the General Plan, meeting dates and locations, and related documents. The City used regular updates to the project website throughout the update process to keep community members informed and involved.

eBlasts

Throughout the update process, the City sent timely eBlasts to the General Plan contact list, which included elected and appointed officials, City Staff, stakeholders, and engaged community members. People could join the contact list through a link on the project website, by signing-in at a General Plan community workshop or public meeting, or by directly contacting the City of American Canyon.

Circulation Element Advisory Committee Meetings

The Circulation Element Advisory Committee recommended a road alignment for the "West Side Connector," along with programs and policies for multi-modal transportation solutions throughout the City.

Education and Lifelong Learning Element Advisory Committee Meetings

The Education and Lifelong Learning Element Advisory Committee provided recommendations for educational needs for all residents, including children younger than public school age and adults of post-secondary education age and seniors.

Parks and Recreation Element Working Group meetings

The Parks and Recreation Element Working Group will provide recommendations to meet the parks and recreation needs of all residents and it is anticipated that this effort will effectively result in a new Parks and Community Services Master Plan.

Planning Commission and City Council Meetings, Study Sessions, and Public Hearings

The City held various Planning Commission and City Council meetings, study sessions, and public hearings throughout the update process to inform decision-makers and the public, discuss key milestones, and provide direction for the next steps.

Analyses Informing the General Plan

Existing Conditions StoryMap. The Existing Conditions StoryMap tells the story of American Canyon – where it has been, where it is today, and the trends that will shape its future and focuses on providing the foundational

information about the physical, natural, cultural, and economic conditions and trends that set the stage for updating the General Plan.

Organization of the General Plan

Table INT-1 shows how the elements of the American Canyon General Plan are organized to meet the requirements of State law.

INT-Table 1: Elements of the American Canyon General Plan

American Canyon Elements	State Mandated								Optional Elements
	Land Use	Circulation	Housing	Conservation	Noise	Open Space	Safety	Environmental Justice	
Land Use	■							■	
Housing	■		■					■	
Economic Development									■
Mobility		■							
Utilities	■						■		
Public Services and Facilities	■	■		■					
Parks and Recreation	■								
Environment				■		■			
Safety					■		■	■	
Environmental Justice	■							■	

The General Plan is organized into 12 chapters (an introductory chapter, 10 elements, and a glossary), allowing users to find topics or sections that interest them. The policies throughout all elements work together and users must

consider them comprehensively when making planning decisions. The chapters of the General Plan are as follows.

1. **Introduction**

   The Introduction chapter provides an overview of the General Plan, its use and maintenance, the process used to develop the 2040 General Plan, and the Vision and Guiding Principles. This chapter also includes a Reader's Guide that provides useful information on how to read and use the goals, policies, and implementation programs presented in each element.

2. **Land Use Element**

   The Land Use Element establishes the pattern and intensity of land use in the city and sets forth policies and standards to guide future development.

3. **Housing Element**

   The Housing Element ensures that there is adequate land in place to accommodate American Canyon's fair share of new residents. Housing Elements are updated on separate cycles per State law. The current Housing Element will cover the time span from 2023-2031 and will address housing needs in the city in compliance with State housing law.

4. **Economic Development Element**

   The Economic Development Element focuses on supporting traditional employment sectors, including retail and office commercial, industrial, and commercial recreation, while ensuring the city is responsive to cost pressures, and shifting consumer demands.

5. **Mobility Element**

   The Mobility Element focuses on providing a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel.

6. **Utilities Element**

   The Utilities Element guides decision-making concerning public and private infrastructure and utilities.

7. Public Services and Facilities Element

The Public Services and Facilities Element provides policies focused on improving the City's services and facilities focused on education, recreation, libraries and emergency and medical services.

8. Parks and Recreation Element

The Parks and Recreation Element focuses on conserving the city's park and open space environments for present and future residents, as well as enhancing important attributes to American Canyon that provide recreation for residents and visitors.

9. Environment Element

The Environment Element aims to preserve, protect, and enhance the natural and historical resources that make American Canyon a unique place.

10. Safety Element

The Safety Element establishes a policy framework for protecting people and property from unreasonable risks from natural disasters, noise, and other events. It also focuses on disaster and emergency response.

11. Environmental Justice Element

The Environmental Justice Element establishes a policy framework for encouraging and supporting local efforts to increase participation in the local political process and to improve local conditions relative to environmental justice issues. The themes covered in this element lay the foundation for creating a more equitable and inclusive City for all residents of American Canyon.

12. Glossary

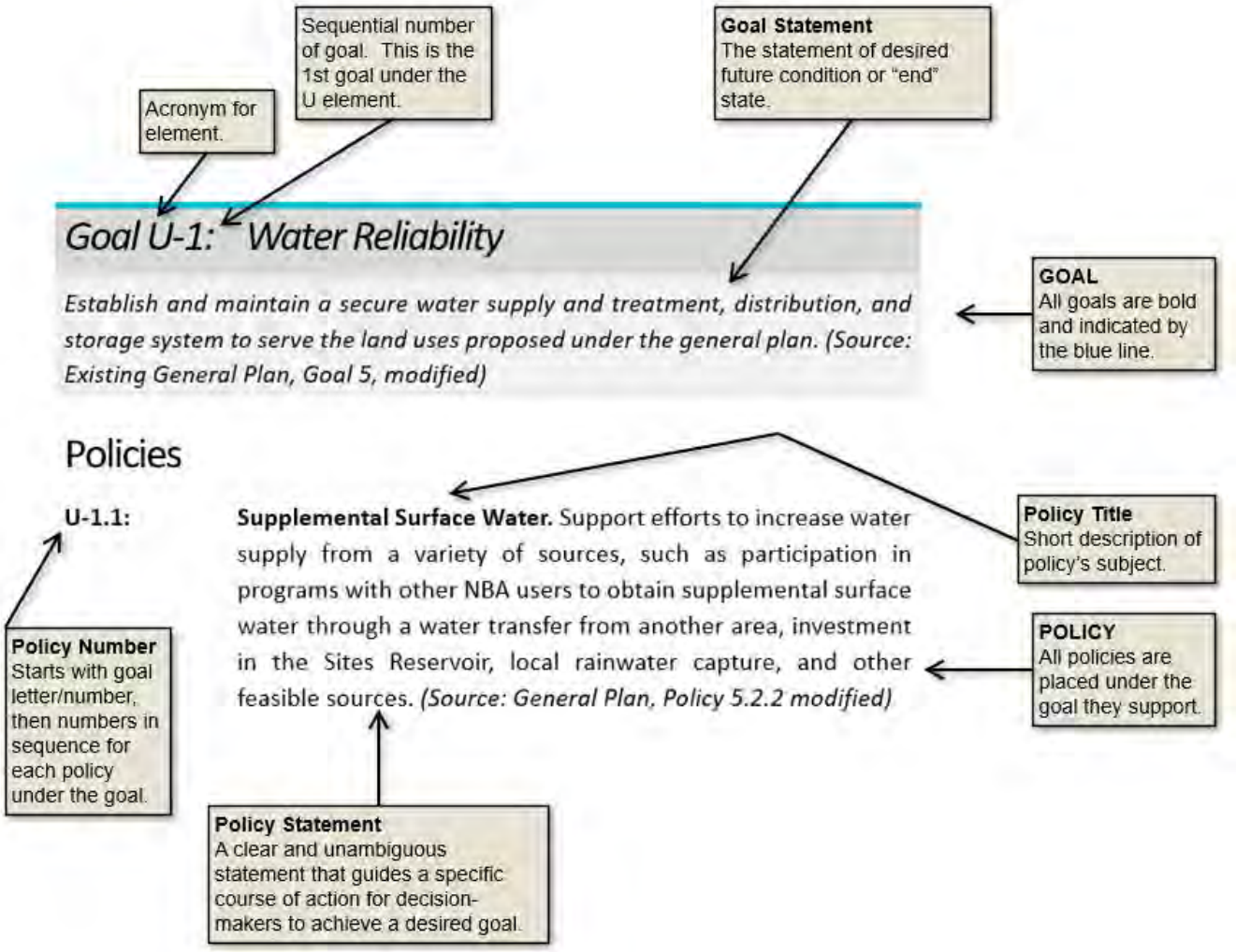
This chapter provides a definition of the key terms used in the General Plan.

Readers' Guide

Goals and Policies

Each element contains the goals and policies that the City will use to guide future land use, development, resource management, and environmental protection decisions. Figure I-3 explains the standard format for goals and policies, using a sample goal and policy.

INT-Figure 3: How to Read Goals and Policies



Goal

A goal is a statement that describes in general terms a desired future condition or "end" state. Goals describe ideal future conditions for a topic and tend to be very general and broad.

Policy

A policy is a clear and unambiguous statement that guides a specific course of action for decision-makers to achieve a desired goal.

"Shall" vs. "Should"

Policies and implementation measures throughout the General Plan use terms such as "shall" and "should" to define the intentions of the City relative to these components. These modifiers are used as follows in the General Plan:

"Must" or "shall" or "required" are used to signify a mandatory requirement that the City will follow. For example, Policy U-4.4 says: "Continue to participate in the National Flood Insurance Program. To this end, the City **shall** ensure that local regulations are in full compliance with standards adopted by the Federal Emergency Management Agency (FEMA)."

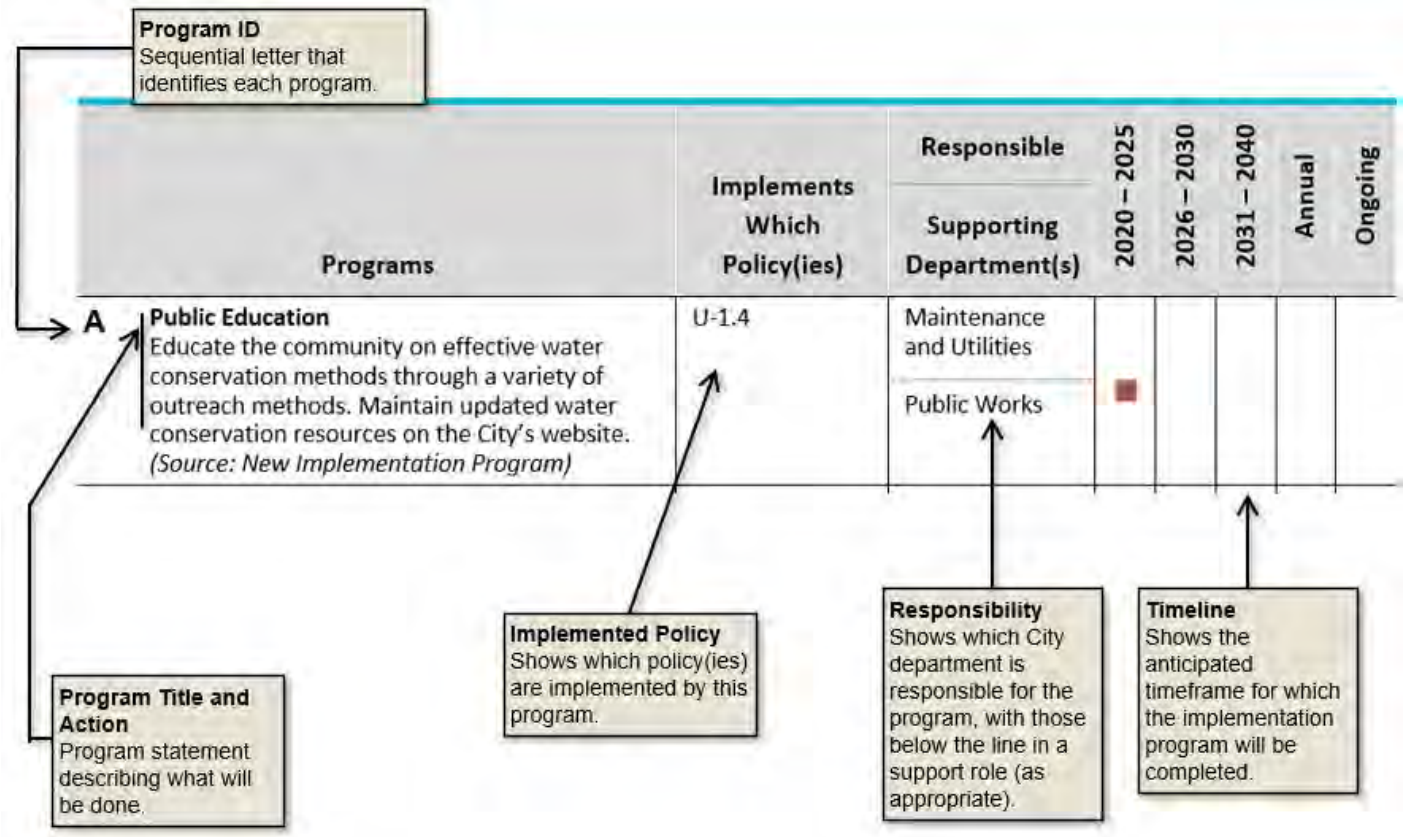
Words such as "should" or "may" are used to signify a less rigid directive, that will be honored in the absence of compelling or contravening considerations.

For example, Policy U-2.5 says: "Subject to State regulations and organizational capacity, **consider** new ways that recycled water can replace potable water. " This provides flexibility in addressing the policy in the context of the project or proposal.

Implementation Programs

Many policies will be implemented as part of routine City operations, and some policies require specific actions. The final section of each Element includes a table of implementation programs in a format illustrated on Figure I-4. Each implementation program will be evaluated in light of City resources, such as financial, staffing, and technology over the 20-year planning period.

INT-Figure 4: How to Read Implementation Programs



Maintaining the General Plan

Over time, the City's population will likely increase, its goals will evolve, and the physical environment will change. In order for the General Plan to remain relevant to current needs, it must be monitored and periodically revised to respond to changing conditions and needs over time.

The General Plan should be reviewed annually, with a more comprehensive and thorough review and revision done every ten years to reflect changes in local conditions, new local priorities, or State law. Though not required, many cities and counties will undertake a technical review of their general plan five years after adoption. State law permits the General Plan to be amended up to four times in any calendar year unless special conditions apply as defined by

Government Code Sections 65358(c) and (d). Each amendment may contain more than one change to the General Plan.

General Plan Amendments can be initiated by the City or at the request of a property owner. Each General Plan Amendment is subject to review under the California Environmental Quality Act (CEQA) and goes through a public review process, including hearings with the Planning Commission and City Council. While specific findings may be applied on a project-by-project basis, at a minimum the following standard findings shall be made for each proposed General Plan amendment:

1. The amendment is deemed to be in the public interest;
2. The amendment is consistent and/or compatible with the rest of the General Plan and any implementation programs that may be affected;
3. The potential impacts of the amendment have been assessed and have been determined not to be detrimental to the public health, safety, or welfare; and
4. The amendment has been processed in accordance with the applicable provisions of the California Government Code, the California Environmental Quality Act (CEQA), and the City's Municipal Code.

City-initiated amendments, as well as amendments requested by other public agencies, are subject to the same basic process described above to ensure consistency and compatibility with the General Plan. This includes appropriate environmental review, public notice, and public hearings, leading to an official action by the City Council.

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2 Land Use

The Land Use Element goals, policies, and programs strategically accommodate future growth and community vision while preserving and enhancing the qualities that make American Canyon a great place to live and work. The Element contains the Land Use Diagram, a map of land uses within the planning area, and a description of the land use designations.

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Land Use Diagram and Designations

Important Note

It is common for the Land Use Diagram to be updated over time. Please check with the American Canyon Community Development Department, Planning Division, to ensure you have the current version.

The Land Use Element designates land uses that achieve the development vision for the city through the 2040 planning horizon year.

The core of the Land Use Element is the land use diagram and land use designations that distinguish the various land uses in the City. Corresponding levels of intensity, density, and allowable uses are defined in this section, as required by Government Code Section 65302(a).

The General Plan development projections were determined by analyzing vacant and underutilized parcels within the city and the realistic level of development potential based on what is allowed under the applicable land use designation factoring for known physical constraints and/or regulatory requirements.

Planning Boundaries

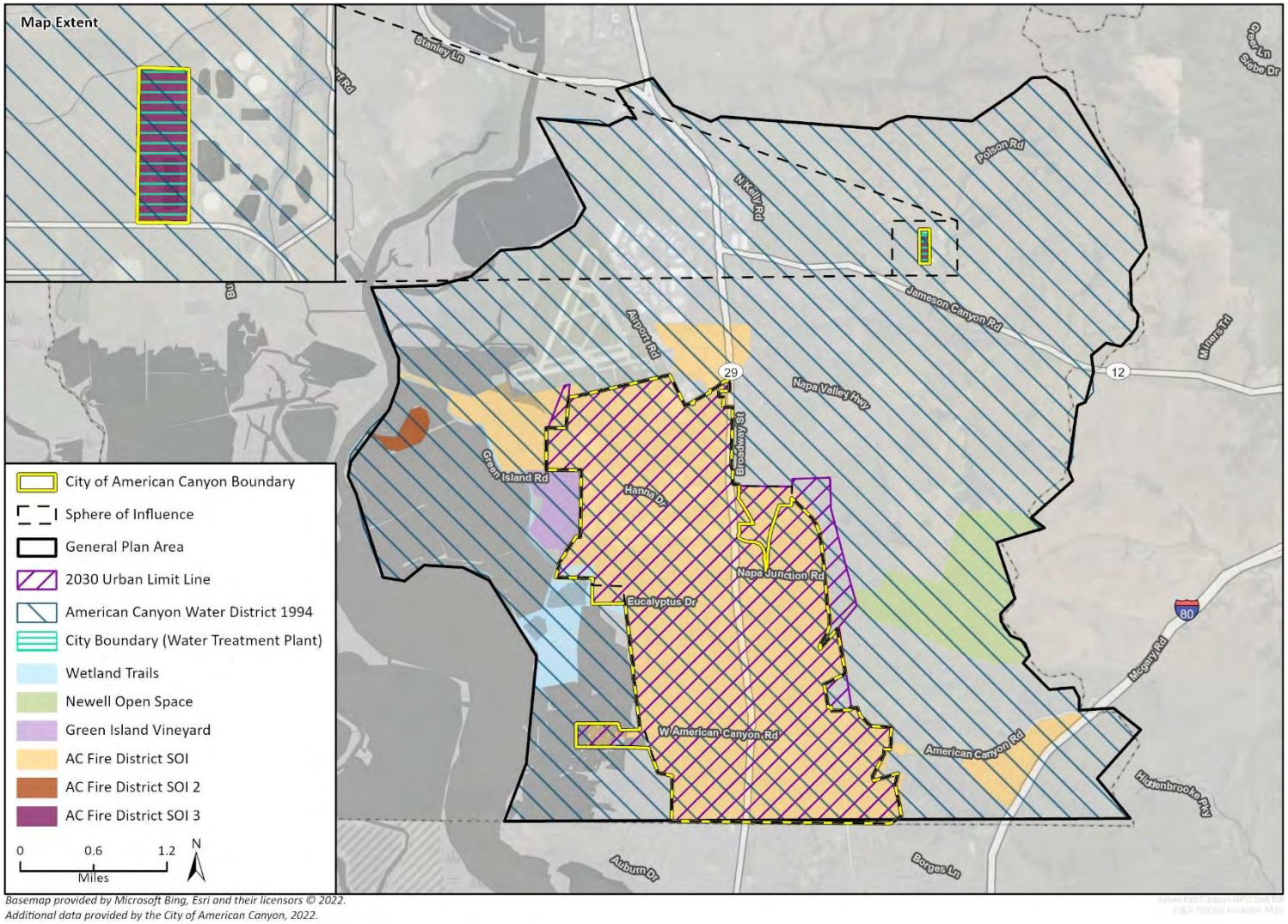
The following planning boundaries are recognized as part of the American Canyon General Plan:

- **City Limit.** The political boundary within the incorporated city limits. American Canyon has land use authority over all land within its city limits.
- **Sphere of Influence.** The Local Agency Formation Commission (LAFCo) establishes the Sphere of Influence (SOI), which defines the probable future incorporated City boundary. An SOI typically includes areas where the City already has or plans to have responsibility to provide municipal facilities and services.
- **Urban Limit Line.** The City's Urban Limit Line was adopted by the City Council in response to a 2008 voter initiative (Resolution 2008-106). This Urban Limit Line was coordinated with Napa County to be consistent with the County's General Plan and City-centered urban growth policies. The 2040 General Plan extends the existing ULL indefinitely from a 2030 expiration date and includes an addition of the Hess/Laird Property northeast of the city's current ULL.

- **General Plan Planning Area.** A General Plan, pursuant to State law, must address all areas within the jurisdiction's Planning Area that bears a physical relationship to the long-term planning of the city. Consistent with this principle, the General Plan Planning Area includes the City of American Canyon Water and Sewer Service area, City, SOI, and ULL. Unincorporated Napa County has land use authority within the Extraterritorial Water and Sewer Service area, however, as the Water and Sewer Service provider, the City's Extraterritorial Water and Sewer Service area bears relation to the City's planning consistent with Gov. Code §65300.

Figure LU-1, the General Plan Planning Area Diagram, shows the planning boundaries that make up the General Plan Planning Area.

Figure LU-1 Planning Area Boundary



Basemap provided by Microsoft Bing, Esri and their licensors © 2022.
Additional data provided by the City of American Canyon, 2022.

Land Use Diagram

Figure LU-1, the General Plan Land Use Diagram, shows the distribution of the land use designations within the City's Planning Area. There are 14 residential, commercial, mixed-use, and public/quasi-public uses land use designations within the City's Planning Area.

The Land Use Diagram is intended to be more general than the Zoning Map. While the Land Use Diagram guides zoning, it is not the same as the City's Zoning Map. Each land use designation has one or more corresponding compatible zoning districts. Whereas the land use designations are intentionally broad, the zoning designations are more detailed and provide specific development standards, including permitted and conditional uses, building heights, setbacks, lot coverage, and parking requirements.

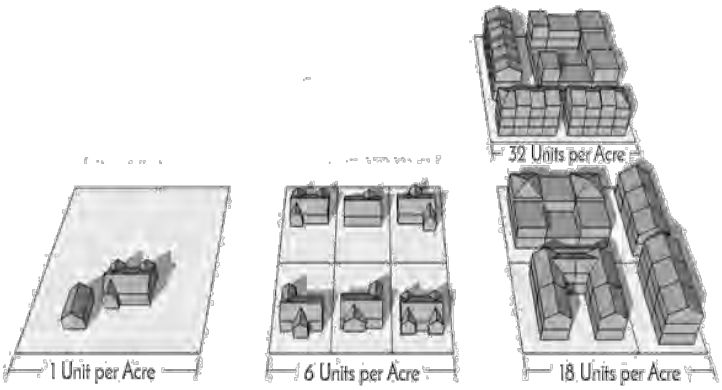
Land Use Designations

Table LU-1 describes the land use designations along with their corresponding density/intensity standards:

- **Designation.** This provides the name of each land use designation and the acronym used when referring to the designation.
- **Color.** Each land use designation has an assigned color used in the Land Use Diagram (Figure LU-2).
- **Description.** This describes the purpose and application of each land use designation. The City's Zoning regulations provide further detail about uses allowed and permitted in zoning districts that implement the land use designations.
- **Density/Intensity Standards.** This describes development density or intensity. Designations allowing residential uses include a minimum and maximum density, expressed as dwelling units per acre (du/ac). Non-residential uses include maximum building intensity standards, expressed as Floor Area Ratio (FAR), which is defined below. Most non-residential land use designations also allow residential uses and include density standards as well.

Residential Density

Development is defined by allowed density (minimum and maximum) measured in dwelling units per acre (du/ac). Residential density is calculated by dividing the number of dwelling units on a site (excluding accessory dwelling units) by the gross acreage of the site. The image to the right shows prototypical examples of different residential densities for one-acre properties.

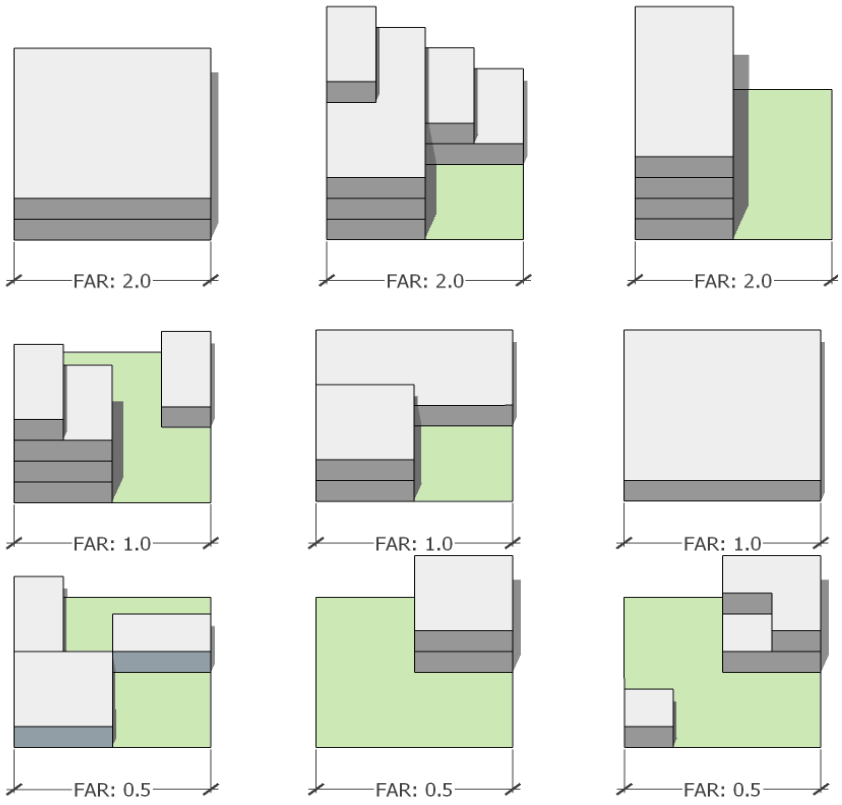


State planning law requires general plans to include standards for measuring population density. Population density is determined by multiplying the maximum number of dwelling units allowed in a given land use designation by the average number of persons per household (as determined by the California Department of Finance). Standards of density for residential uses are stated as the allowable range (i.e., minimum and maximum) of dwelling units per gross acre (du/ac).

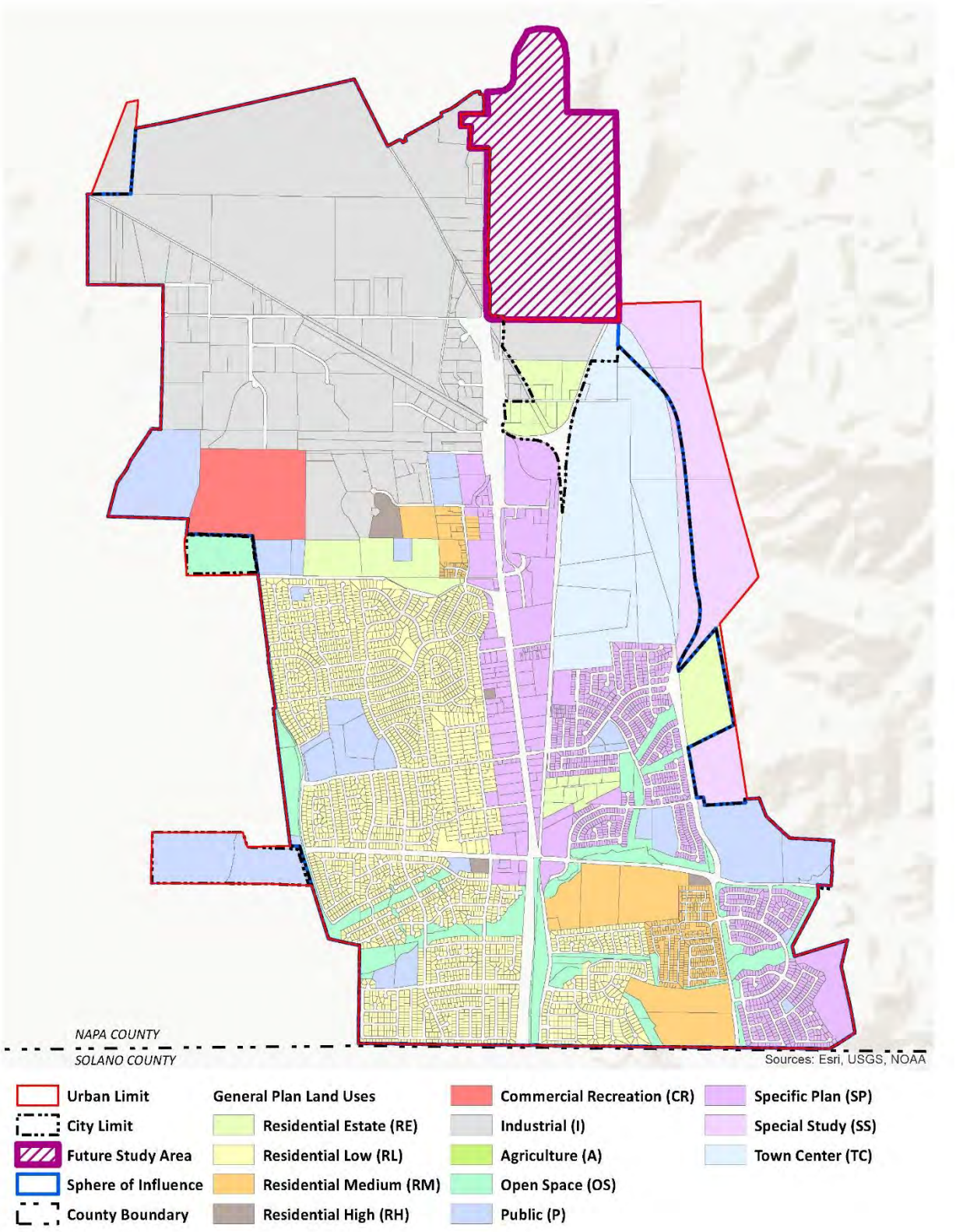
Floor Area Ratio (FAR)

Standards of building intensity for nonresidential uses such as office, commercial, industrial, and institutional development are defined in terms of floor area ratio (FAR). FAR is an indicator of how much building space is permitted on a given site. In the case of mixed-use developments that include residential uses, density standards are applied to the residential component while FAR standards are applied to the nonresidential component. A site includes all contiguous parcels that will share parking or access.

While FAR provides overall development intensity, it does not specify the form or character of the building. Different configurations of the same FAR can result in buildings of different character. To encourage building configurations of allowed FARs consistent with community vision, zoning regulations identify height limits, building setbacks, lot coverage, or open space requirements to guide the form of buildings with a given FAR.



LU-Figure 2: Land Use Diagram



LU-Table 1: Land Use Designations

Residential Estate (RE)

This designation allows for single-family residential development. This designation is characterized by detached single-family residences on large parcels. *(Source: Existing General Plan, Objective 1.7 and Policy 1.7.1 modified)*

Density/Intensity Range

- Density: 1.0 to 2.0 du/ac
- Intensity: N/A

Residential Low (RL)

This designation allows for single-family residential development in both an attached and detached format. *(Source: Existing General Plan, Objective 1.7 and Policy 1.7.2 modified)*

Density/Intensity Range

- Density: 2.0 to 5.0 du/ac
- Intensity: N/A

Residential Medium (RM)

This designation allows for the development of multi-family dwellings and mobile home parks. *(Source: Existing General Plan, Objective 1.8, modified)*

Density/Intensity Range

- Density: 5.0 to 12.0 du/ac
- Intensity: N/A

Residential High (RH)

This designation allows for the development of multi-family dwellings at a variety of densities. This designation also includes two sub-designation of RH-1 and RH-2. The only difference between the two sub-designations is the allowable density. *(Source: Existing General Plan, Objective 1.8 and Policy 1.8.2, modified)*

Density/Intensity Range

- Density:
    - RH-1: 16.0 to 20.0 du/ac
    - RH-2: 0.0 to 20.0 du/ac
- Intensity: N/A

Commercial Recreation (CR)

This designation allows for allows for development of recreation and winery-oriented.

Density/Intensity Range

- Density:
    - CR: None.
- Intensity: None.

Industrial (I)

This designation allows for the continuation of existing and development of new industries that capitalize upon the geographic advantages of the City (including adjacency to Napa County Airport and the railroad), the agricultural production of the region, and emerging types of businesses (such as "thematic" and "environmental" based industries), offer opportunities for the clustering of key economic sectors, and maintain the environmental quality of the City. *(Source: Existing General Plan, Objective 1.22, modified)*

Density/Intensity Range

- Density: N/A
- Intensity: 0.5 to 0.7 FAR

Public (P)

This designation allows for the continuation of existing and expansion of governmental administrative, recreation, public safety, human service, cultural and educational, infrastructure, utility infrastructure, and other public land uses and facilities to support the existing and future population and development of the City. *(Source: Existing General Plan, Objective 1.23, modified)*

Density/Intensity Range

- Density: N/A
- Intensity: N/A

Open Space (OS)

This designation preserves the important environmental resources of the City including significant wildlife habitats and vegetation, hillsides and canyons, creeks, rivers, and wetlands. *(Source: Existing General Plan, Objective 1.24)*

Density/Intensity Range

- Density: N/A
- Intensity: N/A

Specific Plan (SP)

This designation reserves land for designated specific plans within the City. *(Source: New Text)*

Density/Intensity Range

- Density: Dependent on the approval of individual Specific Plans.
- Intensity: Dependent on the approval of individual Specific Plans.

Specific Study (SS)

This designation allows certain parcels as "special study" areas that may be needed for future urban growth, but for which appropriate land use designations have yet to be determined. *(Source: Existing General Plan, Objective 1.25, modified)*

Density/Intensity Range

- Density: N/A
- Intensity: N/A

Town Center (TC)

This designation allows for the development of a Town Center that physically and functionally serves as the symbolic and identifiable focus of community activities and events for the City and which is a regional destination within Napa Valley. The Town Center shall have two principal land use areas: (s) Town Center Core Area, and (b) Town Center Residential Neighborhoods. The Town Center Core Area shall mean the area around the basalt industrial ruins which will be developed with the land uses to create a true "downtown" for American Canyon. The Town Center Residential Neighborhoods shall mean the residential areas portion of Town Center that surrounds the Town Center Core Area. *(Source: Existing General Plan, Objective 1.19, modified)*

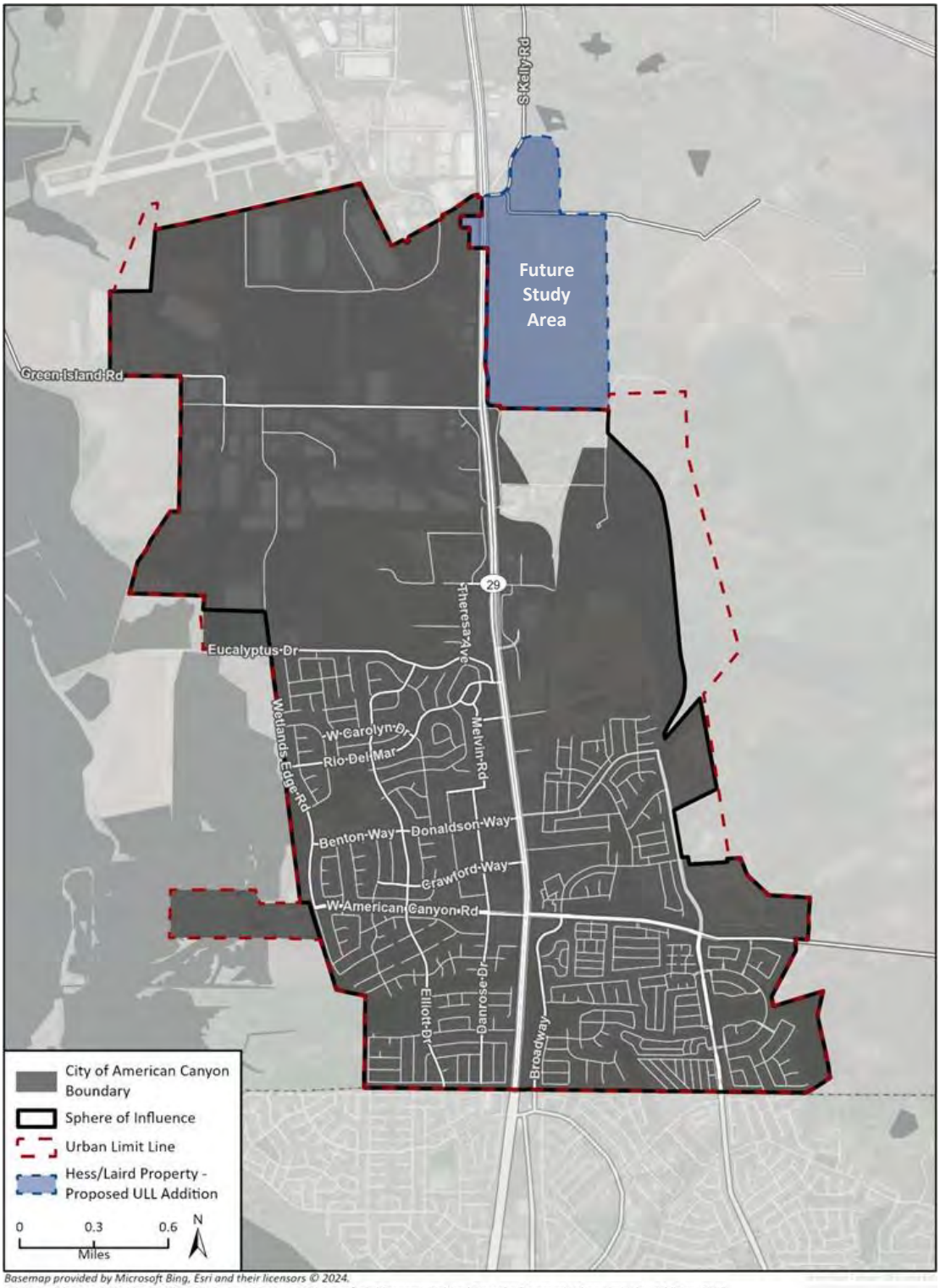
Density/Intensity Range

- Density: Dependent on the approval of individual Specific Plans.
- Intensity: Dependent on the approval of individual Specific Plans.

Future Study Area

As part of the General Plan Update the City identified a future study area (Figure LU-3) that has the potential for additional growth. This future study area encompasses the Hess/Laird property which is currently located within the jurisdiction of Napa County and is not within the Urban Limit Line (ULL) for American Canyon. At this time the General Plan does not anticipate growth for this future study area within the horizon year of this Plan but is highlighting it for future potential if and when the City decides to expand.

LU-Figure 3: Future Study Area



Basemap provided by Microsoft Bing, Esri and their licensors © 2024.
Additional data provided by the City of American Canyon, 2021; Hess/Laird Property digitized from the Proposed Urban Limit Line Addition, 2022.

Goals and Policies

Growth Management and Phasing

The City of American Canyon was incorporated on January 1, 1992. Since then, the City has grown to a population of more than 21,000. American Canyon is home to three elementary schools, one middle school and one high school and dozens of businesses. Positioned along Highway 29 in Southern Napa County, the City is the SF Bay Area's entry point to the Napa and Sonoma Valley wineries.

The City's focus is on strengthening the local economy and increasing job opportunities in American Canyon to enable more residents to work closer to home and sustain and enhance the long-term economic viability of the City. The City is also focused on capitalizing on tourism and preserving the unique environmental resources and character of the area. Revitalization of vacant and underutilized properties and quality new development are key to the city's future. Policies in this section give American Canyon the tools to grow and change through 2040. They provide structure and guidance, while allowing flexibility to adapt to economic, environmental, and social change.

Goal LU-1:

Establish American Canyon as a "complete city" with a diversity of distinct land uses that serve the needs of residents, businesses, and visitors. *(Source: Existing Goals 1.1A and 1.1C, modified)*

Policies

LU-1.1: **Balance of Land Uses.** Establish a diversity of land use designations that provide for housing, commercial, employment, educational, cultural, entertainment, and recreation needs of residents; capture visitor and tourist activity; provide employment opportunities for residents of the greater subregion; and provide open space and aesthetic relief from developed urban/suburban areas. *(Source: Existing Policy 1.1.1.1 and Objective 1.1.1, modified)*

LU-1.2: **Pattern of Development.** Support a pattern of development that establishes distinct neighborhoods, districts, places of community activity and culture and open spaces that are

interlinked and promote a cohesive image; locates jobs, commerce, recreation, and other places of community activity within close proximity to housing, minimizing the need for vehicular use; achieves a balance of uses to serve both sides of Highway 29; and establishes an overall compact urban form surrounded by open space. *(Source: Existing Objective 1.1.4, modified)*

LU-1.3: **Open Space.** Provide adequate open space and recreational facilities to ensure a high-quality environment for American Canyon's residents. *(Source: Existing Policy 1.1.1.5)*

LU-1.4: **Compact Development Pattern**. Maintain a compact development pattern that fosters a walkable and bikeable urban form. *(Source: New Policy)*

LU-1.5: **Infrastructure Coordination.** Ensure new development consistent with the Land Use Plan is coordinated with adequate public infrastructure (e.g., transportation facilities, capital improvements, wastewater collection and treatment, water supply, electrical, natural gas, telecommunications, solid waste disposal, and storm drainage) and public services (e.g., governmental administrative, police, fire, recreation). *(Source: Existing Objective 1.1.3 and Policy 1.1.3.1, modified)*

Residential

Residential neighborhoods provide the heart of daily life and social interactions with friends, family, and neighbors. The General Plan encourages residential neighborhoods with connectivity, pedestrian safety, neighborhood character, and housing choice.

Goal LU-2:

New and expanded residential neighborhoods include a range of housing opportunities to meet the physical, economic, and social needs of the population, are designed to exhibit a high quality and character, contain appropriate supporting services, and reflect their environmental setting. (Source: Existing Goal1.1E, modified)

LU-2.1: **Housing Inclusiveness**. Within each neighborhood support development of diverse housing types and lot sizes to

accommodate a range of affordability levels and socio-economic diversity. *(Source: New Policy)*

LU-2.2: **Provide Public Facilities and Parks**. Establish and maintain public facility and park standards for new residential and commercial development. *(Source: New Policy)*

LU-2.3: **Objective Design Standards.** Establish objective design standards that convey a high level of quality and character in new residential development. *(Source: Existing Policies 1.1.7.4 and 1.1.8.4, modified)*

LU-2.4: **Nonresidential Structures in Residential Neighborhoods.** Require nonresidential structures in new development (e.g., recreation facilities, community meeting rooms and auditoriums, neighborhood commercial, services, and religious facilities) be designed to be compatible with and convey the visual and physical scale and character of residential structures.

LU-2.5: **Active Transportation**. Increase walking and bicycling opportunities by implementing pedestrian and bicycle plans and link recreation and commercial services to residential areas with safe and protected pedestrian walkways and bicycle paths *(Source: Existing Policy 1.1.1.1.6, modified)*

Commercial

Commercial uses provide needed retail goods and services for residents, employees, and visitors. They are places for commerce, employment, entertainment, culture, and, in some case, living in proximity to these uses. Pedestrian-oriented activities are encouraged that welcome customers with plazas and informal gathering places. Commercial uses accommodate development of property exclusively for commercial and employment uses (without housing) and/or mixed-use projects that integrate housing with retail, office, community facilities, and other uses within the same structure or on the same site. They can also integrate community-serving uses, such as public meeting rooms and daycare facilities in key activity areas. Commercial uses should be designed to operate in harmony with adjacent neighborhoods and uses through the siting of buildings, transitions in scale, and land use mix

Goal LU-3:

Attractive and vibrant neighborhoods, community, and regional commercial centers with convenient shopping, services, entertainment, and social interaction. (Source: New Goal)

LU-3.1: **Diversity of Commercial Uses.** Provide for a diversity of retail and service commercial uses that support multiple neighborhoods and the greater community, reduce the need for trips to adjacent jurisdictions for goods and services, and provide shopping and service opportunities for commuters, visitors, and tourists. *(Source: Existing Objectives 1.1.1.4 and 1.1.1.5 modified)*

LU-3.2: **Unique Viewsheds.** Accommodate commercial uses on Oat Hill that capitalize on the unique views of the Napa River, San Francisco Bay, and Napa Valley, site topography, and other natural characteristics. *(Source: Existing Objective 1.1.1.7.1, modified)*

LU-3.3: **Unwanted Glare.** Prevent glare with commercial lighting designed to illuminate within the property line in accordance with safety standards. *(Source: Existing Policy 1.1.1.8.3, modified)*

LU-3.4: **High Activity Areas.** Require entertainment, drinking establishments, and other uses provide adequate physical, safety, and operational measures. *(Source: Existing Policy 1.1.1.8.4 modified)*

LU-3.5: **Napa River Public Access.** Encourage development of a kayak launching facility on the Napa River. *(Source: Existing Policy 1.1.2.1.2, modified)*

Goal LU-4:

Improve the appearance and functionality of the Highway 29 corridor and establish a Town Center to provide for economically sound local- serving commercial development. (Source: Existing Goal 3.3.B, modified)

LU-4.1: **Retail and Office Development.** Designate enough land to attract new retail and office development to meet the needs

of the current and projected residents, as well as to retain potential sales tax revenue in the City. *(Source: Existing Objective 3.3.6 and Policy 3.3.6.1, modified)*

LU-4.2: **Tourism.** Provide and promote opportunities for uses which capitalize on the City's proximity to the wine country and the airport, as well as take advantage of the City' s natural resources, including tourist- supported commercial activities, such as a wine train depot, winery outlets, hotel, and golf course. *(Source: Existing Policy 3.3.6.2)*

LU-4.3: **Diversification.** Diversify by attracting, promoting, and retaining small businesses, establishing the City's niche as a provider of specialty stores and a broad range of services. *(Source: Existing Policy 3.3.6.4)*

LU-4.4: **Business Retention.** Establish an outreach program to encourage existing businesses that are in conformance with the General Plan to remain in or at their current locations. *(Source: Existing Policy 3.3.6.5, modified)*

LU-4.5: **High Sales Tax Generating Uses.** Modify existing zoning regulations as necessary to encourage long-term retention of high sales tax generating uses, such as lumber yards. *(Source: Existing Policy 3.3.6.6)*

LU-4.6: **Commercial Uses in Industrial Zones.** Increase the flexibility of industrial zoning regulations to allow for certain types of specialty retail uses that are compatible with industrial uses. *(Source: Existing Policy 3.3.6.7)*

LU-4.7: **Highway 29 Improvements.** Enhance the City' s existing tax base through the improvement and maintenance of the Highway 29 commercial corridor, *(Source: Existing Objective 3.3.7)*

LU-4.8: **Small Scale Commercial Development.** Provide for small scale commercial development that would serve residents as well as take advantage of tourism or commuter traffic. *(Source: Existing Policy 3.3.7.2)*

LU-4.9: **Commercial Clustering.** Encourage the clustering of commercial activities along Highway 29 to provide more

attractive and cohesive facilities while minimizing potential circulation conflicts. *(Source: Existing Policy 3.3.7.3)*

LU-4.10: **Create Town Center. I**mprove and strengthen the City' s identity though the creation of a Town Center as the principal government and commercial center and designate enough land to accommodate future demand for neighborhood and community- serving retail and commercial development. *(Source: Existing Objective 3.3.8 and Policy 3.3.8.1, modified)*

LU-4.11: **Small Community Atmosphere.** Encourage the development of small specialty stores in the Town Center to promote a small community atmosphere. *(Source: Existing Policy 3.3.8.3, modified)*

LU-4.12: **Marketing Program.** Periodically assess market conditions, including population growth in the City and neighboring Vallejo and when appropriate, establish an aggressive marketing program to effectively compete with neighboring cities to attract desired commercial uses. *(Source: Existing Policy 3.3.8.4)*

Industrial

Industrial centers provide manufacturing, research and development, flex space, industry incubators, and similar uses that range from business parks, warehouses, and distribution facilities to manufacturing. This designation supports “clean” industries and agricultural and wine-related industries that take advantage of the education and skills of the local and regional population. Industrial designations promote improvements in site planning to create places with attractive architecture and landscaping, and make employment areas accessible to pedestrians, bicyclists, and transit. They also support the integration of limited additional employment support uses such as retail and services.

Goal LU-5:

Industrial uses that provide employment for residents of American Canyon and the surrounding region and contribute significant revenue for the City. (Source: Existing Goal 1.1.I)

LU-5.1: **Industrial Development Compatibility with Existing Uses.** Require new industrial development be designed to achieve a high level of quality and compatibility with existing uses including architectural treatment of all building elevations; use of extensive landscape along the primary street frontages and parking lots; and enclosure of storage areas visible from principal highways (including Highway 29) and peripheral residential and commercial districts with decorative screening or other elements. *(Source: Existing Policy 1.1.2.2.4, modified)*

LU-5.2: **Industrial Development Unified Character.** Require new industrial development be designed to convey a unified character by inclusion of pedestrian walkways, arcades, an/or other visual elements to interconnect individual buildings; differentiation of building facades by materials, color, architectural details, and modulation of building volumes; use of consistent and well-designed public and informational signage; and installation of elements that define the key entries to the industrial district. *(Source: Existing Policy 1.1.2.2.5, modified)*

LU-5.3: **Truck Access.** Require truck access be controlled so it is safe and efficient and minimizes exposure to adjacent residential neighborhoods. *(Source: Existing Policy 1.1.2.2.7)*

LU-5.4: **Industrial Operations.** Require, where industrial uses are located adjacent to residential neighborhoods, that their operations be controlled to prevent adverse impacts on adjacent property (e.g., noise, light and glare, and odors) and appropriate measures implemented to buffer these uses (e.g., setbacks, landscaping, and earthen berms). *(Source: Existing Policy 1.1.2.2.8, modified)*

LU-5.5: **Prevent Adverse Impacts.** Control, through the permit process, the development of industrial uses that use, store, produce, or transport hazardous materials in threshold planning quantities, generate unacceptable levels of noise or air emissions, or result in other impacts that adversely impact American Canyon. *(Source: Existing Policy 1.1.2.2.9, modified)*

Goal LU-6:

a diversified industrial base that provides employment opportunities for residents and generates fiscal revenues for the City. (Source: Existing Goal 3.3.A modified)

LU-6.1: **New Compatible Industries.** Increase the number of firms within the industries now represented in the City and capture new, clean, nonpolluting industries that are stable and compatible with City needs in terms of traffic, air quality, and employment. *(Source: Existing Objective 3.3.4.1)*

LU-6.2: **Industrial Development Standards.** Establish design and FAR standards for industrial buildings which will create and maintain an attractive image for American Canyon's industrial areas without imposing overly restrictive regulations. (*Source: Existing Policy 3.3.4.2)*

LU-6.3: **State grants.** Pursue available state grants that would assist the City and private property owners in enhancing infrastructure in the industrial areas. *(Source: Existing Policy 3.3.4.4)*

LU-6.4: **Accommodate Projected Industrial Growth.** Designate enough land to accommodate projected demand for industrial space by 2040. *(Source: Existing Policy 3.3.5.1, modified)*

LU-6.5: **ULL Amendment.** Expand the Urban Limit Line to include the "Hess and Laird" Properties north side of the Paoli Property and maintain the existing Urban Limit Line when the Urban Limit Line Initiative expires in 2030. *(Source: New Policy)*

LU-6.6: **SOI Amendment.** Work with Napa County and LAFCO to amend the City's Sphere of Influence to include the "Hess and Laird" Properties. *(Source: Existing Policy 3.3.5.2 modified)*

Public and Institutional

American Canyon has many public and private institutional uses, that provide government services, education, recreation, and medical services. This goal and its supporting policies are designed to ensure that public and institutional land uses enhance the quality of life of residents and meet the service needs of the community. Policies encourage public and quasi-public uses to be

designed and operated in a manner that is compatible with surrounding properties.

Goal LU-7:

Sufficient public and institutional uses that meet the needs of the residents of American Canyon. Source: Existing Goal 1.1.J modified)

LU-7.1: **Adequate Public Facilities.** Provide governmental administrative, recreation, public safety, human service, cultural and educational, infrastructure, utility infrastructure, and other public land uses and facilities to support the existing and future population and development of the City. *(Source: Existing Objective 1.1.2.3, modified)*

LU-7.2: **Electric Transmission Corridors.** Limit the development of uses within electrical transmission corridors to ensure adequate public health and safety. *(Source: Existing Policy 1.1.2.3.2, modified)*

LU-7.3: **Utility Modernization**. Coordinate new development with policies in the Utility Element to improve American Canyon's resilience to increasing utility demands and system hardening to climate change and natural disasters. *(New Policy)*

LU-7.4: **Public Facility design.** Establish standards for the City and coordinate with other public agencies to ensure that public buildings and sites are designed to be compatible in scale, mass, character, and architecture with the existing buildings and pertinent design characteristics prescribed by this General Plan for the district or neighborhood in which they are located. *(Source: Existing Policy 1.1.2.3.7)*

LU-7.5: **PG&E Facility Landscaping.** Work with Pacific Gas and Electric Company to facilitate landscaping of their site and facilities at the intersection of Highway 29 and American Canyon Road. *(Source: Existing Policy 1.1.2.3.9)*

Neighborhoods, Boulevards, and Districts

American Canyon features safe and friendly residential neighborhoods, a few notable rural residential areas, an increasing balance of needed multi-family

communities; a commercial core centered along Broadway, a vibrant, growing industrial park to the north, and open space that envelopes the City to the east and west.

The goal and policies in this section are intended to support the continued development of unique neighborhoods, boulevards, and districts.

Goal LU-8:

Harmonize new neighborhoods and districts into the existing community fabric. (Source: Existing Goal 1.1.M Modified)

LU-8.1: **Distinct Neighborhoods, Boulevards, and Districts.** Assure that new development supports the differentiation of the neighborhoods, boulevards, and districts of the City by their functional role, uses, form, scale, and character of development. *(Source: Existing Objective 1.1.2.6, modified)*

LU-8.2: **Objective design and Development Standards.** Require new development to comply with the City's objective design and development standards to maintain long- term, high-quality development. *(Source: Existing Objective 1.1.3.3, modified)*

LU-8.3: **Placemaking.** Encourage development of an "American Canyon Vernacular" architectural style by encouraging new development to reflect the architectural styles of newer development located nearby. *(Source: New Policy)*

LU-8.4: **Public Gathering Spaces**. *Encourage new retail development to include formal and informal public gathering spaces through a variety of means, such as pedestrian-oriented street design; sidewalk furniture and pedestrian-oriented development; well-designed, multi-use public spaces of different sizes including pocket parks, plazas, and monuments; and community events. (Source: New Policy)*

LU-8.5: **Public Art**. *Encourage new development to include public artwork and accommodate public art at key gateways, parks, open spaces, trails, and public gathering places. (Source: New Policy)*

Airport Compatibility

Napa County Airport abuts the City Urban Limit Line. This represents both an opportunity and a constraint. The airport provides an economic stimulus for the development of industries and commercial businesses in American Canyon. Airport operations result in noise and the potential risk of accidents that impact nearby land uses. The goals and policies in this section are intended to mitigate any potential hazards and assure compatibility of new development with the airport.

Goal LU-9:

Ensure the compatibility of development within American Canyon with the Napa County Airport. (Source: Existing Goal 1.N)

LU-9.1: **Airport Constraints.** Ensure new development does not adversely constrain the Napa County Airport. *(Source: Existing Objective 1.1.2.7, modified)*

LU-9.2: **Land Use Compatibility.** Require new development or expansion of existing uses evaluate the Napa County Airport Land Use Compatibility Plan and Airport Compatibility Zones "A" through "E". *(Source: Existing Policies 1.1.2.7.1 and 1.1.2.7.2, modified)*

LU-9.3: **Airport Authority Coordination.** Work with the Napa County Airport Authority to ensure that ground activities and operations, operation expansion, and vehicle access at the Airport do not adversely impact (e.g., noise, vibration, air emissions, or other pollution) the city of American Canyon. *(Source: Existing Policies 1.1.2.7.3, 1.1.2.7.4, and 1.1.2.7.5, modified)*

LU-9.4: **Emergency Preparedness.** Work with the Napa County Airport Authority and other appropriate agencies to ensure that emergency preparedness plans are maintained and regularly updated to protect American Canyon residents and property. *(Source: Existing Policy 1.1.2.7.6, modified)*

LU-9.5: **Airport Benefits.** Recognize the importance of the Napa County Airport to city residents, including the economic, transportation and recreational benefits, and ensure that land

use decisions do not negatively impact Airport operations. *(Source: Existing Policy 1.1.2.7.7, modified)*

Quality of the Built Environment

American Canyon has a unique identity that the General Plan seeks to enhance by providing a policy framework for the preservation of resource lands and the design of new development. Tasteful development projects, beautiful landscaping, and a lack of visual clutter create an appealing community for residents and visitors. American Canyon has many areas with excellent community design characteristics, and others that need attention. The policies in this section seek to ensure neighborhoods are developed and maintained as high-quality living environments that support American Canyon's community character.

Goal LU-10:

Foster a community image that promotes and enhances American Canyon as a desirable place to live and do business. (Sources: New Goal)

LU-10.1: **City Gateway.** Seek to improve the scenic character of SR 29 as an important gateway into the City, through undergrounding utilities, increased landscaping, street tree planting, and appropriate architectural character. *(Source: New Policy)*

LU-10.2: **City Identity.** Promote public art, historical structures, and landmarks to reinforce American Canyon's identity. *(Source: New Policy)*

LU-10.3: **City Livability.** Promote a diversity of compatible land uses throughout the City to enable people to live close to job locations, have adequate and convenient commercial services, and enjoy public amenities and services such as transit, parks, trails, and schools. *(Source: New Policy)*

LU-10.4: **City Livability.** Support an active and comfortable public realm by incorporating street trees, shade opportunities, benches, trash receptacles, public restrooms, and other features that contribute to an attractive and enjoyable space in city parks, trails, and streetscapes. *(Source: New Policy)*

LU-10.5: **Economic Adaptation.** Support flexibility in land uses designations to respond to changing and evolving economic needs. *(Source: New Policy)*

LU-10.6: **Landscaping Plans.** Require that new development subject to discretionary review submit and implement a landscaping plan consistent with City standards and requirements. *(Source: Existing Policy 1.1.3.2.2, modified)*

LU-10.7: **Property Maintenance.** Require properties be properly maintained consistent with the neighborhood preservation ordinance (Municipal Code Chapter 9.04) and discretionary development conditions of approval. *(Source: Existing Policy 1.1.3.2.3, modified)*

LU-10.8: **Preserve Existing Trees and Vegetation.** Require new development to preserve and incorporate existing mature and specimen trees and other significant vegetation into project design. *(Source: Existing Policy 1.1.3.2.4, modified)*

LU-10.9: **Zero Water Footprint.** Require new development offset the amount of increased potable water that will be consumed by their project on a one-to-one basis, including using water efficient fixtures, consuming recycled water for non-potable uses when available, dual plumbing buildings, installing water wise landscaping and irrigation, and other appropriate measures. *(Source: Zero Water Footprint Policy)*

LU-10.10: **Code Enforcement.** Actively enforce City codes to eliminate abandoned, wrecked, or inoperative vehicles in the front yards; overgrown weeds or unsafe or unsanitary living conditions; accumulated trash and debris; and address other property maintenance issues to assure high-quality neighborhoods, commercial districts, and industrial areas. *(Source: Existing Policy 1.1.3.3.5, modified)*

LU-10.11: **Property Maintenance Programs.** Promote programs and work with local service organizations and educational institutions to inform residential, commercial, and industrial property owners and tenants regarding methods for the maintenance and upkeep of their property. *(Source: Existing Policy 1.1.3.3.6)*

LU-10.12: **Community-based Maintenance Efforts.** Require community- and neighborhood-based efforts for the maintenance, upkeep, and renovation of structures and sites. *(Source: Existing Policy 1.1.3.3.7)*

LU-10.13: **Climate Change Adaptation.** Support efforts to construct needed infrastructure that helps the City adapt to Climate Change. *(Source: New Policy)*

LU-10.14: **Safe Pedestrian and Bicycle Mobility.** Improve bicycle and pedestrian safety throughout the City, consistent with the Mobility Element and implementing programs, such as Local Roadway Safety Plan. *(Source: New Policy)*

LU-10.15: **Housing Inclusion.** Incorporate a variety of housing types into future development that is available to a range of incomes. *(Source: New Policy)*

Urban Limit Line

Goal LU-11:

Maintain an Urban Limit Line for the City of American Canyon which describes its future geographic boundary until January 1, 2040. (Source: Existing Goal 1.1.T)

LU-11.1: **Lands Outside the Urban Limit Line.** Ensure that lands outside of the City Urban Limit Line shall not be developed until January 1, 2040, or later, except as provided by Policy LU-11.2 below. *(Source: Existing Policy 1.1.3.5.3)*

LU-11.2: **Public Uses Outside the Urban Limit Line.** Acquire lands for public uses and construct and operate public facilities outside of the City Urban Limit Line, if necessary and appropriate, provided that those facilities are designed to serve development within the City Urban Limit Line. *(Source: Existing Policy 1.1.3.5.4)*

LU-11.3: **Preserve Agriculture and Open Space.** Define the limits of urban development of the City, preserving agricultural and

open space outside of the City Urban Limit Line on a long-term basis. *(Source: Existing Objective 1.1.3.6)*

LU-11.4: **Orderly, Sequential Annexation.** Annex urbanized and vacant areas in the City's Sphere of Influence and Urban Limit Line in an orderly progressive sequence. *(Source: Existing Program 3.13.2 modified)*

Economic Development

The City recognizes that it can facilitate private-sector investment and the creation of jobs by creating a business-friendly climate. The type and supply of the employment land uses in the city also provide important indicators of the ability of the City to meet the needs of the changing economy. Policies in this section seek to protect the industrial and commercial lands that provide jobs to many American Canyon. The policies also stress the importance of fair and predictable permit procedures, the removal of unnecessary regulatory barriers, and economic development programs as ways to attract private-sector investment to American Canyon.

Goal LU-12:

Improve economic conditions in American Canyon by capitalizing on the City's industrial land and promoting a mix of land uses which create quality jobs and foster fiscal stability. (Source: Existing Goal 3.3, modified)

LU-12.1: **Maximize Economic Development.** Support new industrial and business park and community-serving commercial development to maximize the City's market and economic development potential. *(Source: Existing Objective 3.3.1, modified)*

LU-12.2: **Expand the Economic Base.** Seek to expand the City's economic base and development opportunities through planned annexation program that is linked to the General Plan. (I 3.2) *(Source: Existing Policy 3.3.1.3, modified)*

LU-12.3: **Home-Based Businesses.** Continue to facilitate home occupation uses to enable residents to work from home while maintaining the quality and character of existing residential neighborhoods. *(Source: New Policy)*

LU-12.4: **Workforce Innovation.** Consider specific needs for innovative businesses, including small businesses, incubator uses, live-work spaces, artist studios, and small home-based businesses to foster entrepreneurship, workforce development, and increased workforce participation. *(Source: New Policy)*

LU-12.5: **Best Practice Codes.** Update zoning, building and property codes to conform with recent best practices. *(Source: New Policy)*

LU-12.6: **Climate Adapted Utility Grid.** Support efforts to develop a more resilient power grid by encouraging backup generators, home microgrids, and solar energy systems with battery backups. (*Source: New Policy)*

LU-12.7: **Internet of Things.** Facilitate implementation of innovative electronic capabilities (IOT) with improved wireless infrastructure technology throughout the city. (*Source: New Policy)*

LU-12.8: **Positive Fiscal Impacts.** Promote growth that generates net positive fiscal impacts to the City to ensure that municipal services keep up with growing demand. *(Source: Existing Objective 3.3.2)*

LU-12.9: **Fiscal Impact Analysis.** Require a fiscal impact analysis of new development to determine what costs of the new development to the City, if any, may be subject to mitigation. *(Source: Existing Policy 3.3.2.1, modified)*

LU-12.10: **Fiscal Impact Monitoring.** Monitor the fiscal impact of new development activity to determine the optimal development phasing of new development to ensure that the costs of City services are balanced with revenues generated on a recurring basis. *(Source: Existing Policy 3.3.2.2, modified)*

LU-12.11: **Rates, Taxes, and Fees Assessment.** Periodically assess the structure of utility rates, business license taxes, and user fees to ensure that such rates and fees cover the true cost to the City. *(Source: Existing Policy 3.3.2.3)*

LU-12.12: **Streamlined One-stop Application Process.** Expedite the growth of job-generating, quality businesses, and other high priority development by developing a streamlined, one-stop

City application procedures. *(Source: Existing Objective 3.3.3 and Policy 3.3.3.4, modified)*

LU-12.13: **New Use Performance Standards.** Establish a standard performance base for new uses. If a proposed use conforms to established standards, eliminate, or reduce the level of discretionary review process. *(Source: Existing Policy 3.3.3.1)*

LU-12.14: **Industrial Performance Standards.** Continue implementation of zoning standards that ensure industrial development is designed and operated to minimize—to the extent feasible—noise, heat, glare, dust, unscreened storage yards, air emissions, hazardous materials generation, and other negative effects. *(Source: New Policy).*

LU-12.15: **Employment Retention.** Support retention of industrial uses that provide high-paying local jobs within the City when possible. *(Source: New Policy).*

LU-12.16: **Employee Services.** Encourage development of supporting commercial services such as dining, recreation, and childcare in the City's industrial areas to provide convenient access to services for industrial workers. *(Source: New Policy).*

LU-12.17: **Occupancy Permit Requirements.** Maintain occupancy permit requirements for new and existing buildings to monitor zoning compliance and business activity within the City. *(Source: Existing Policy 3.3.3.3)*

LU-12.18: **Development Review Process information.** Prepare informational brochures that clearly describe the development review process to the public. *(Source: Existing Policy 3.3.3.5, modified)*

Goal LU-13:

Capitalize on the City's physical resources to generate private commercial recreational opportunities. (Source: Existing Goal 3.3.C, modified)

LU-13.1: **Commercial Recreation Opportunities.** Explore opportunities to encourage private development related to commercial recreation. *(Source: Existing Objective 3.3.9 modified)*

LU-13.2: **Private Partnerships.** Seek opportunities to partner with private for-profit and nonprofit organizations to facilitate new recreational opportunities. *(Source: New Policy)*

LU-13.3: **Land Use Strategies.** Evaluate potential locations for commercial recreation opportunities that capitalize on the City's physical resources and foster a healthier community. *(Source: Existing Policy 3.3.9.1 modified)*

General Plan Use and Maintenance

The American Canyon 2040 General Plan is designed to be a living document that reflects the City's needs and desires, which will evolve over time. The effectiveness of the General Plan ultimately depends on how the City implements and maintains the General Plan over its lifetime. This section is designed to ensure that the City reviews and updates this General Plan to respond to current community needs and aspirations, and changes in State law.

Goal LU-14:

An effective and implemented General Plan Land Use Map. (Source: Existing Goal 1.1.O, modified)

LU-14.1: **Land Use Map.** Maintain and implement a Land Use Map describing the types of allowed land uses by geographic location and the density of allowed uses within each designation. *(Source: Existing Program 3.13.1, modified)*

LU-14.2: **Zoning Designations.** Amend zoning designations and maps to ensure they remain consistent with the General Plan Land Use Map (Figure LU-1). *(Source: New Policy)*

LU-14.3: **Land Use Element Compliance.** Implement the Nonconforming Uses, Structures, and Lots zoning standards to existing structures and uses which do not conform with the Land Use Element requirements and standards. *(Source: Existing Objective 1.1.2.8, modified)*

Goal LU-15:

A General Plan consistent with State law that provides a clear framework for ongoing administration, maintenance, with rigorous and efficient implementation. (Source: New Goal)

LU-15.1: **Five-year General Plan Review.** Conduct a technical review of the General Plan every five years and revise and update as necessary to assure compliance with State law and responsiveness to current City needs, including a jobs/housing balance and adequate municipal revenues to maintain adequate level of public services. *(Source: New Policy)*

LU-15.2: **Implementation Program Monitoring.** Maintain and annually review the General Plan Implementation Programs. As part of this process, the City shall update the prioritization of programs based on applicability, relevance, timing of initiation, and availability of funding. *(Source: New Policy)*

LU-15.3: **Housing Element Update.** Update and implement a Housing Element every eight years that provides policy and programs to encourage the provision of safe, well-designed, accessible, sanitary, and affordable residential areas where people of all ages can live, work, and play. This includes an equitable distribution of parks and public facilities to all residential areas consistent with legal requirements. *(Source: New Policy)*

LU-15.4: **General Plan/Zoning Consistency.** Review the Zoning Ordinance standards and amend as necessary to ensure consistency with the General Plan. *(Source: New Policy)*

LU-15.5: **Zoning Standards Update.** Periodically review the Zoning Ordinance to ensure that the appropriate zoning districts have appropriate allowed uses and development standards to accommodate the building and site needs associated with new and emerging industries. *(Source: New Policy)*

LU-15.6: **Programmatic Environmental Review.** Take advantage of streamline development review by conducting Programmatic Environmental Review of General Plan Policies and Development Review. *(Source: New Policy)*

LU-15.7: **Community Outreach.** Continually focus on improving methods to inform the public about land use policy development and ongoing development decision making. *(Source: New Policy)*

LU-15.8: **Development Review Processes.** Continually review development review processes to make them more informative and easier to access through technological capacity. *(Source: New Policy)*

LU-15.9: **Implementation Partnerships.** Maintain and expand upon General Plan implementation of highly technical service delivery through partnerships with other governmental agencies and nonprofit organizations, such as the City of Napa's implementation of affordable housing policy, Fair Housing Napa Valley, Napa Sonoma ADU center and others. *(Source: New Policy)*

Implementation Programs

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
A	**Objecitve Design Standards** Prepare objecitve residential design standards that reflect existing community character and design as well as recent development projects that are widely accepted as successful, well-design projects. The objective design standards will enable to City to approved more residential projects "by-right." *(Source: New Program)*	LU-2.4 LU-10.5	Community Development	■				
B	**Industrial Marketing Program.** Support the Chamber of Commerce with its efforts to market the City to new businesses. *(Source: : Existing Program 1.11.19, modified)*	LU-6.2	City Manager Chamber of Commerce		■			
C	**Permit Processing and Streamlining.** Continually seek methods to streamline permit processing that assures proactive review of priority development applications in desired areas. Assign a specific staff member to coordinate the permit process for high priority development applications. Prepare brochures that clearly define the development review process to the public. *(Source: Existing Program 3.13.8, modified)*	LU-11.7	Community Development	■				
D	**Implement the Broadway District Specific Plan** Prepare a fee program or other funding program to pay for needed amenities, such as parks, landscaping, stormwater improvements, bicyle trails, and overhead utility undergrounding. *(Source: New Program)*	LU-4.7 LU-4.8 LU-4.9	Finance Department Public Works Parks and Recreation		■			

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
E	**Fiscal Impact Analysis** Determine a threshold project size for new development, above which a fiscal impact analysis is required. Each fiscal impact analysis shall analyze the potential project-specific fiscal impacts and determine what costs to the City, if any, that may be subject to mitigation. *(Source: Existing Program 3.13.5, modified)*	LU-11.4	City Manager Community Development		■			
F	**Fiscal Impact Monitoring.** Annually monitor the fiscal impact of new development activity to determine the optimal development phasing of new development, according to its net positive or negative fiscal impact. In addition to monitoring the fiscal impact by type of development, the fiscal impact of development in different locations should be monitored. The purpose of such monitoring efforts is to ensure that the costs of services are balanced with revenues generated on a recurring basis. *(Source: Existing Program 3.13.5, modified)*	LU-11.5	City Manager Community Development				■	
G	**Five Year General Plan Review**. Conduct a technical review of the General Plan every five years and revise and update as necessary to assure compliance with State law and responsiveness to current City needs, including a jobs/housing balance and adequate municipal revenues to maintain adequate level of public services. *(Source: New Program)*	LU-15.1	Community Development		■	■		

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4 Mobility

The Mobility Element provides a framework for decisions concerning the City's multimodal transportation network. Correlated with the Land Use Element, the Mobility Element guides a safe and efficient transportation system that includes roadway, transit, bicycle, pedestrian, rail transport, and aviation. Recognizing the contribution of transportation to greenhouse gas emissions, the Mobility Element integrates with Climate Change and Sustainability policies.

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Mobility Vision

The City of American Canyon is a community that embraces mobility through all transportation modes. The core value of the Mobility Element is to provide safe and easy travel for pedestrians, bicyclists, transit riders and motor vehicles correlated with the Land Use Element.

This community mobility value is based on enhancing the City's " sense of place" with a strong emphasis on all forms of mobility safety and environmental protection. An efficient multi-modal plan will improve our sense of place, provide greater mobility choice for all residents, and help the environment.



Introduction

The Mobility Element provides a vision and guiding principles for the transportation system, and detailed goals and policies which implement a compete streets approach to mobility in the future.

Local transportation planning is a coordinated effort involving local and regional agencies. The goals and policies set forth in this document are intended to promote local planning, but also foster cooperation between jurisdictional partners such as the Napa Valley Transportation Authority (NVTA), the Metropolitan Transportation Commission (MTC) and the California Department of Transportation (Caltrans).



The transportation planning and policy in the Mobility Element includes a critical component of the City's responsibility towards supporting regional efforts to meet greenhouse gas reduction targets, through coordinating planning for land use, transportation, and housing. The Regional Transportation Plan and Sustainable Community Strategy (RTP/SCS) for the San Francisco Bay Area, Plan Bay Area 2050, was jointly produced and adopted by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) on October 21, 2021. Plan Bay Area 2050 is the strategic update to Plan

Bay Area 2040, and it connects the elements of housing, the economy, transportation, and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. It is a roadmap to help Bay Area cities and counties preserve the character of our diverse communities while adapting to the challenges of future population growth.

A portion of the Planning Area - the Broadway District (SR 29) corridor - has been designated by MTC and ABAG as a Priority Development Area (PDA), meaning that it is recognized as an area with substantial opportunity for infill development near transit. PDAs play a critical role in accommodating future growth in the regional agencies' SCS plans.

California Planning Requirements

Required General Plan Element. California law mandates a "Mobility Element" or "Circulation Element" that contains the "general location and extent of existing and proposed major thoroughfares, transportation routes, and other local public utilities and facilities, all correlated with the land use element" of the General Plan per Government Code Section 65302 (b).

Complete Streets Act. The term "complete streets" refers to a balanced, multimodal transportation network that meets the needs of all users of streets -- including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, public transportation, and seniors. A complete street is one that provides safe and convenient travel in a manner that is suitable to the local context. In 2012, the City adopted a Complete Streets Policy (Resolution 2012-72).

The Mobility Element is consistent with the California Complete Streets Act (AB 1358), which requires cities and counties incorporate "Complete Street" policies when updating their General Plan Mobility Element. Complete streets make travel safe for all users, including bicyclists, pedestrians, motorists, transit vehicles, and people of all ages and abilities. While every street does not need to provide dedicated space to all users, the street network must accommodate the needs of all users.

Economically, complete streets help lower transportation costs by enabling people to use transit, walking, or bicycling rather than driving to reach their destinations. Caltrans is actively engaged in implementing its complete streets policy in all planning, programming, design, construction, operations, and maintenance activities for the State Highway System.

Provision of safe mobility for all users contributes to the Caltrans's vision: "improving mobility across California." The successful long-term implementation of this vision will provide more options for people to travel from one place to another, less traffic congestion, fewer greenhouse gas emissions, more walkable communities (with healthier, more active people), and fewer barriers for older adults, children, and people with disabilities.

Local Roadway Safety Plan. American Canyon is currently preparing a Local Roadway Safety Plan (LRSP). Required for an agency to apply for federal Highway Safety Improvement Program (HSIP) funding, the LRSP will proactively correct high collision or problem locations and prevent local road fatalities and injuries. The final plan will recommend proven countermeasures, provide a structure and realistic set of responses that implement changes over time, will integrate the "4 E's" approach (Education, Enforcement, Emergency Service, and Engineering) in its proposed solution strategies, and identify road safety partners that could sustain a long-term effort.



Traffic Calming Program. The American Canyon "We ♥ Safe Streets" Traffic Calming Program provides a framework for the community to submit concerns of problem areas to our Traffic Calming Team for evaluation. The Program includes criteria to assess the magnitude of the need to modify a street or roadway, and probable effectiveness of a potential traffic calming measure installation.

Capital Improvement Programs. California Government Code Section 65401 specifies public works projects must conform to the General Plan. In practice, this requires the Five-Year Capital Improvement Program (CIP) adoption include findings that the proposed City of American Canyon Five-Year CIP conforms with the General Plan, which includes the Mobility Element.

Vehicle Miles Traveled. The Mobility Element is consistent with Senate Bill (SB) 743 directing changes to the California Environmental Quality Act (CEQA) guidelines that established Vehicle Miles Traveled (VMT) as the transportation metric analyzed under CEQA, effective July 1, 2020. Using VMT as the transpor-

tation CEQA metric is intended to emphasize statewide goals related to infill development, transit investments, promotion of public health through active transportation, and reduction of GHG emissions over local needs to manage traffic congestion on local road networks.

Transportation impact analysis under CEQA is no longer based on level of service (LOS), which focused on motor vehicle delay. The new CEQA standards require transportation impacts associated with development be assessed primarily on the effects of VMT.

While LOS is no longer related to CEQA, LOS-based performance goals remain relevant for non-CEQA planning purposes and as a tool for the City to ensure its roadway system meets the expectations of the community on critically-important roadways.



Transportation Setting

The city of American Canyon is located in southern Napa County, about 35 miles northeast of San Francisco. Adjacent and south of the city limits is the city of Vallejo in Solano County. North of the city limits, the cities of Napa, , St. Helena, Calistoga, and the Town of Yountville are located along State Route 29 (SR 29) which is a main route to wine country destinations. As with American Canyon, these jurisdictions are bisected by SR 29.

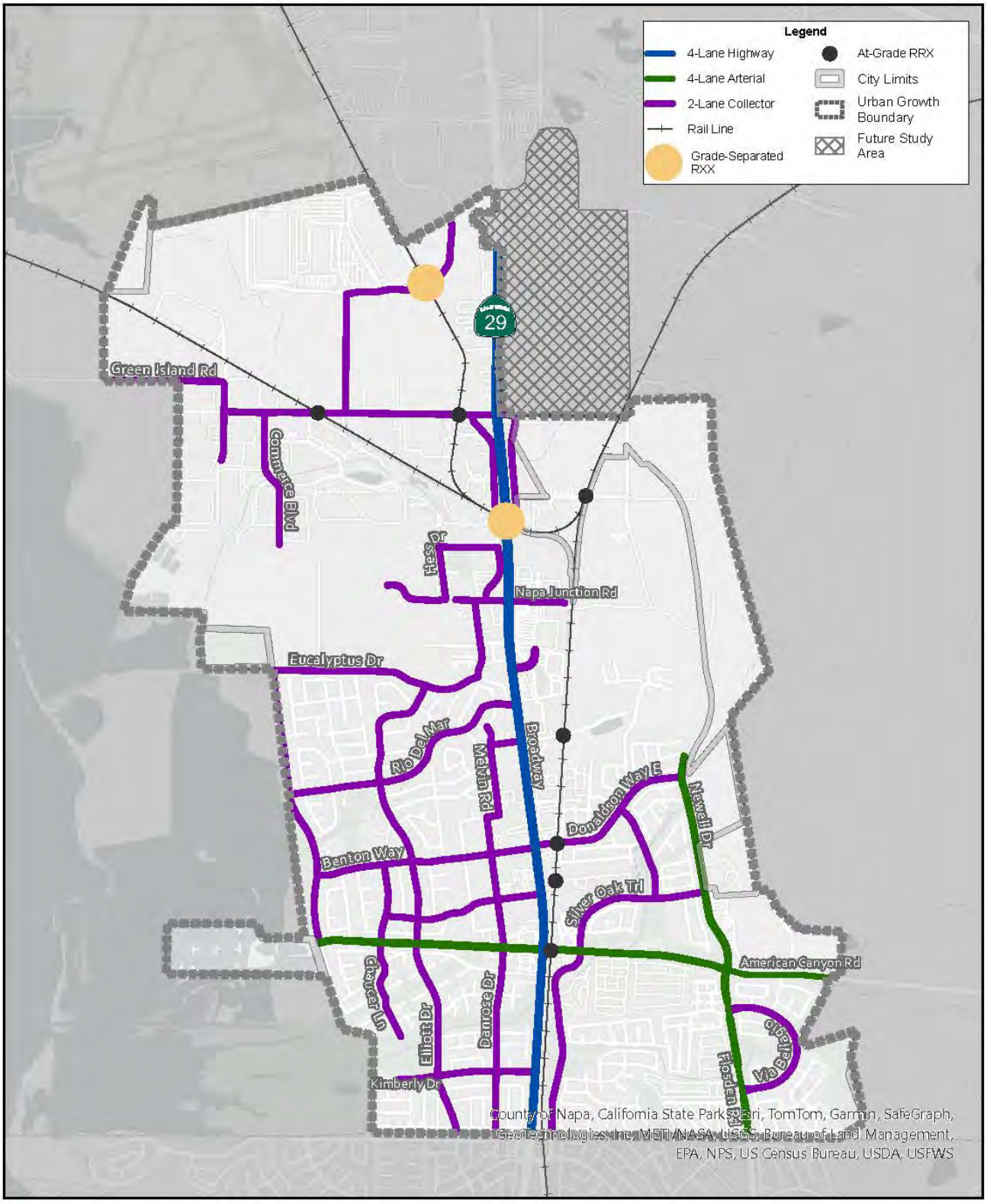
American Canyon had an estimated population of 21,800 in 2020, an increase from 19,454 in 2010 and 9,774 in 2000. It is the second most populated city in the County after the city of Napa. With its recreational options, local wineries, and proximity to Napa Valley, Sonoma County, the East Bay, San Francisco, and easy access to Sacramento, American Canyon sees many different types of roadway users each day.

State Route 29 runs through the city mostly at-grade and serves as a main thoroughfare for local and pass-through traffic. In addition, American Canyon roadways serve a variety of users including pedestrians, bicyclists, transit riders, passenger cars, and heavy trucks for freight, with a mix of local, recreational, and regional trips.

MOB-Figure 1 shows the existing mobility system map. Traffic to and from the I-80 corridor is served by American Canyon Road and Jameson Canyon Road (SR 12). Access to and from Vallejo and the East Bay, including the Counties of Contra Costa and Alameda, is provided via Flosden Road and SR 29. To and from the north, access is provided via SR 29 and SR 12, which also collects traffic from the rest of Napa County. Marin and Sonoma counties to the west and northwest may also access the city using SR 29 via SR 37.

Rail transportation in the City is currently limited to freight service only. No commuter rail service exists in the city or county. The main rail line in the city is owned by Union Pacific Railroad Company and enters the city parallel to and on the east side of SR 29 at the Solano County line.

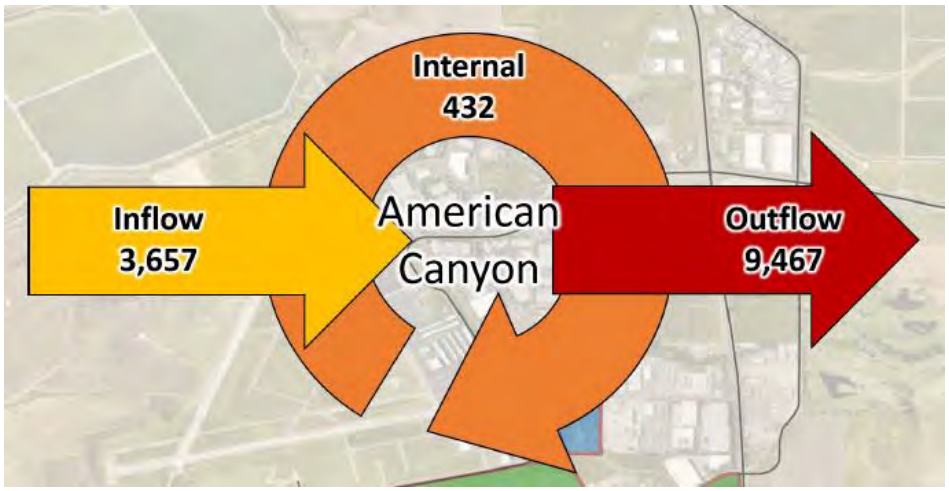
MOB-Figure 1: Existing Mobility System Map



Local Travel Trends

The U.S. Census Bureau provides data on the "journey to work" in its decennial census and American Community Survey databases. MOB-Figure 2 shows commuting patterns in and out of American Canyon. Of the 4,089 people employed in the American Canyon, 432 live in the city and 3,657 commute in from other areas. More than 9,000 American Canyon residents commute out of the city for work.

MOB-Figure 2: Employment Inflow-Outflow Travel Patterns (2017)



American Canyon residents overwhelmingly commute to and from work by automobile, with nearly 79 percent driving to work alone and 14 percent carpooling in recent years as shown on CIR-Table 1. Only approximately 3 percent of residents commute to work by multimodal means, with 2.4 percent commuting by public transit, and less than 1 percent walking or bicycling to work.

MOB-Table 1: Means of Transportation to Work (Residents)

	1990	2000	2010	2018
Single-Occupancy Vehicle	73.9%	73.3%	78.2%	78.5%
Carpool	21.4%	20.6%	13.7%	14.1%
Work from Home/Other	1.5%	3.3%	3.8%	2.9%
Public Transit	0.8%	1.5%	2.0%	2.4%
Motorcycle or Other	73.9%	0.2%	0.7%	1.3%

Source: US Census Bureau, 1990 and 2000 Summary files, and American Community Survey (ACS) 5-Year Estimates for 2006- 2010 and 2014-2018.

As shown on CIR-Table 2: while the majority of American Canyon residents commute less than 25 miles to work, nearly 1,500 residents (15-percent) must travel more than 50 miles for work each day. American Canyon employed residents have heavy commute patterns south and north of the city, and the majority of these residents travel north to the city of Napa.

MOB-Table 2: Travel Time to Work (Residents)

Travel	Number	Percent
Less than 10 miles	2,977	30.1%
10 to 24 miles	3,514	35.5%
25 to 50 miles	1,920	19.4%
Greater than 50 miles	1,488	15.0%
Total	**9,899**	**100.00%**

Source: US Census Bureau, Center for Economic Studies, LEHD On the Map.

During the five-year period between 2017 and 2021, there were two fatal and five severe injury collisions recorded for the roadways under the City of American Canyon's jurisdiction. There were two fatal and 10 severe injury collisions on SR 29. MOB Figure -3 shows the locations of fatal and severe injuries.

Active Transportation

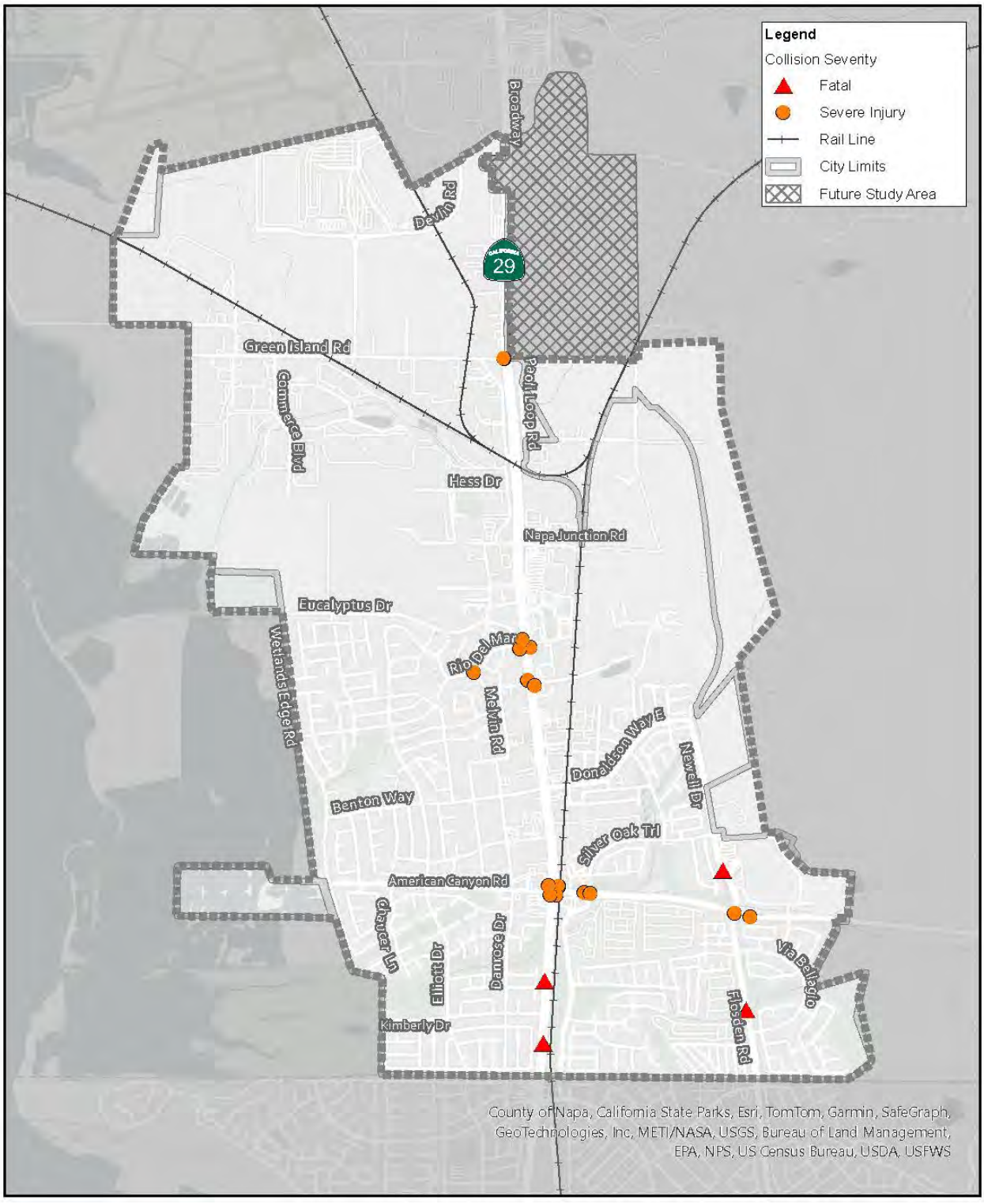
There are currently over 13 miles of bicycle network within American Canyon, including over 8 miles of Class I multiuse paths, 2.8 miles of Class II bike lanes, and over 2 miles of Class III designated bicycle routes on public roadways. While most of the city has sidewalks, given the rural character of many older neighborhoods and the lack of a centralized downtown area, several areas of the city have limited or lacking pedestrian infrastructure. There is minimal sidewalk coverage along SR 29, which serves as the main commercial corridor through the center of American Canyon. MOB-Figure 4 shows the locations of collisions involving bicyclists from 2017-21, which are concentrated on American Canyon Boulevard. MOB-Figure 5 shows the locations of collisions involving pedestrians from 2017-21 which primarily occurred on SR 29 and American Canyon Boulevard.

Public Transit Service

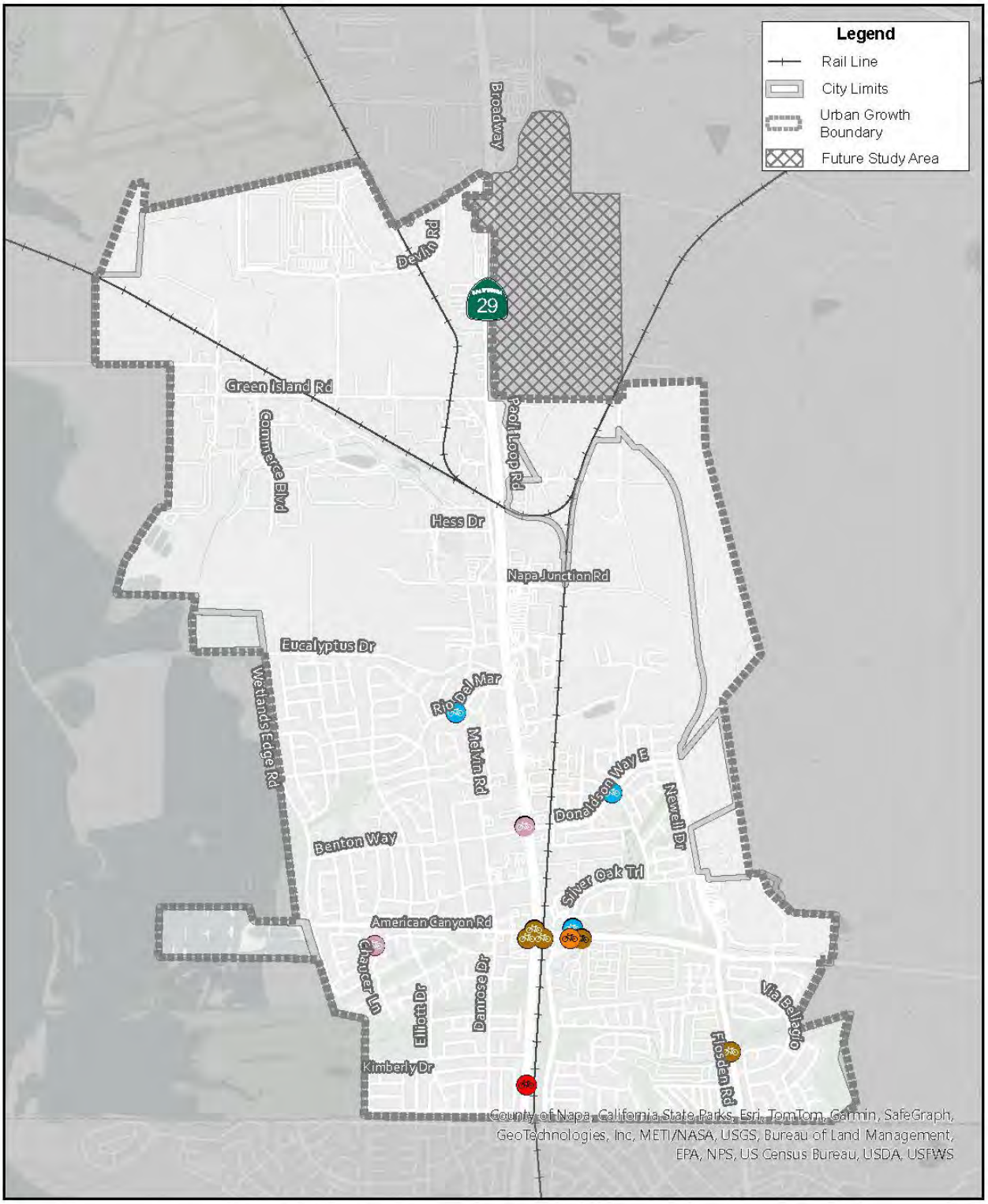
Public transportation within the city is provided by American Canyon Transit, which is a part of the Napa Valley Transportation Authority (NVTA) Vine Transit system. American Canyon Transit is a fixed route and on-demand, door-to-door, transit service within specific areas of the city. Vine's Route 29 (Napa-BART) Express connects the BART Station in El Cerrito to the Redwood Park-n-Ride in

the city of Napa and stops in American Canyon at the Post Office on Crawford Way.

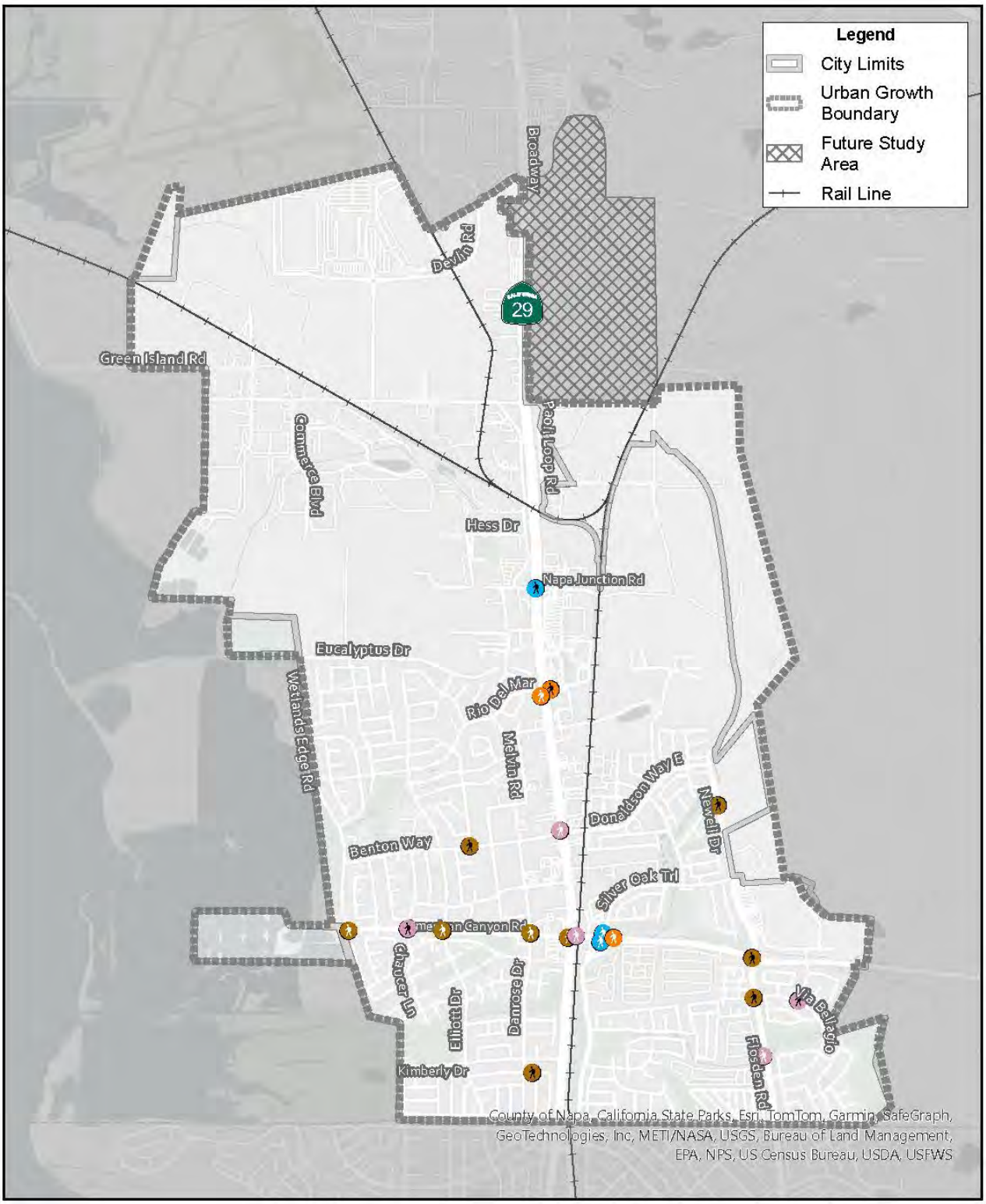
MOB-Figure 3: Fatal and Severe Injury Collision Locations 2017-21



MOB-Figure 4: Bicycle Collision Locations 2017-21



MOB-Figure 5: Pedestrian Collision Locations 2017-21



Airport

The Napa County Airport is just northwest of the city limits in unincorporated territory. It is a General Aviation airport with charter flights available, but no scheduled commercial flights. The airport can accommodate most private aircraft including jets, up to 120,000 pounds. The airport was built by the United States Army Air Force in 1942 and was deeded to Napa County after World War II for civilian use. The nearest general passenger airports are in Oakland, San Francisco, and Sacramento.

Land use planning in the airport area is subject to the Napa Airport Land Use Compatibility Plan. In 2010, the Napa County Airport Land Use Commission deemed the American Canyon General Plan in conformance with the Napa Airport Land Use Compatibility Plan (#P109-0002-ALUC).

Street System Plan

The planned street network will provide an efficient transportation system that includes a citywide network of complete streets. A commitment to providing complete streets is a key to effective transportation planning and will maximize the effectiveness of the existing street network.

Street Classifications

American Canyon consists of a network of complete streets. These streets play an integral role in connecting the city to other destinations in Napa County, the adjacent city of Vallejo, Solano County, and the San Francisco Bay Area. MOB-Figure 6 shows the planned buildout street network based on the following classifications:

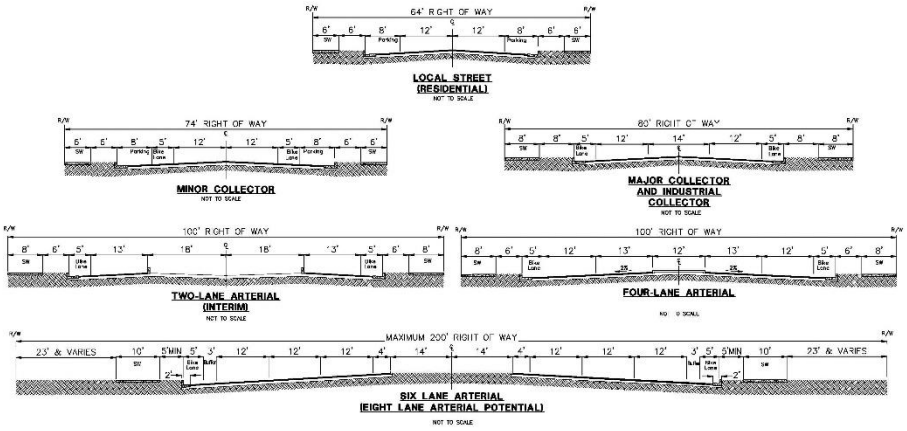
- **Arterial Streets.** Arterial facilities serve all travel modes and connect areas of major activity within the urban area. Arterials also distribute motor vehicle traffic from freeways/highways to collector streets. Within the city, arterial streets provide four motor vehicle lanes with bicycle lanes and sidewalks, and maximum operating speeds currently ranging from 30 to 45 mph, including American Canyon Road, Flosden Road, and Newell Drive. State Route (SR) 29 is a Regional Arterial that bisects the city and provides interregional access to the city of Vallejo in the south, and the rest of Napa County to the north. SR 29 serves a dual purpose of providing local cross-town circulation for all travel

modes, as well as serving significant regional travel primarily by motor vehicle, including public transportation. The regional travel contains two components - regional "through" traffic that does not originate or terminate in the city, and regional-local "commute" traffic that originates in the city but terminates outside, or vice-versa.

- **Collectors.** Collector streets serve all travel modes and function as connector routes between local and arterial streets and provide access to residential, commercial, and industrial property. Collector streets within the city typically provide two motor vehicle lanes (one per direction) with current maximum operating speeds of 30 mph and include Broadway Street, Eucalyptus Drive, Green Island Road, Rio Del Mar, and Donaldson Way, Commerce Boulevard, among others.

- **Local Streets.** Local streets provide direct access for all travel modes to abutting properties and allow for localized movement of traffic. Local streets are characterized by low daily traffic volumes and current operating speeds of 25 to 30 mph.

MOB-Figure 6: Standard Roadway Cross Sections



SR 29 Corridor Planning

Broadway (SR 29) is a four-lane highway through American Canyon. Between Napa Junction Road and American Canyon Road, Broadway defines the City's character to our residents, business community, and thousands of drivers that pass through our City each day. Local planning efforts have resulted in the

development of preliminary concepts for SR 29 that have been presented to the public through workshops for input and comment.

Planning for the State Route 29 (SR 29) corridor is an issue of significant importance not only for the city, but for the entire region. Both Solano County to the south and Napa County to the north rely on SR 29 for mobility-for work, school, shopping, and recreation.

As a State facility, Caltrans plays an important part in approving and funding improvements to SR 29. State funding for improvements is provided through Caltrans, and planning efforts require approval from Caltrans prior to implementation.

Currently, the Napa Valley Transportation Authority (NVTA) in partnership with the City, is preparing the American Canyon Multimodal Improvement Project. This effort is considering two Options for improving Broadway between Napa Junction Road and American Canyon Road. Both Options contemplate landscape and pedestrian improvements, and multimodal features. Option 2 would maintain the existing 4-lane roadway configuration with roundabouts at major intersections.



MOB-Figure 7: American Canyon Multimodal Improvement Project Option 2



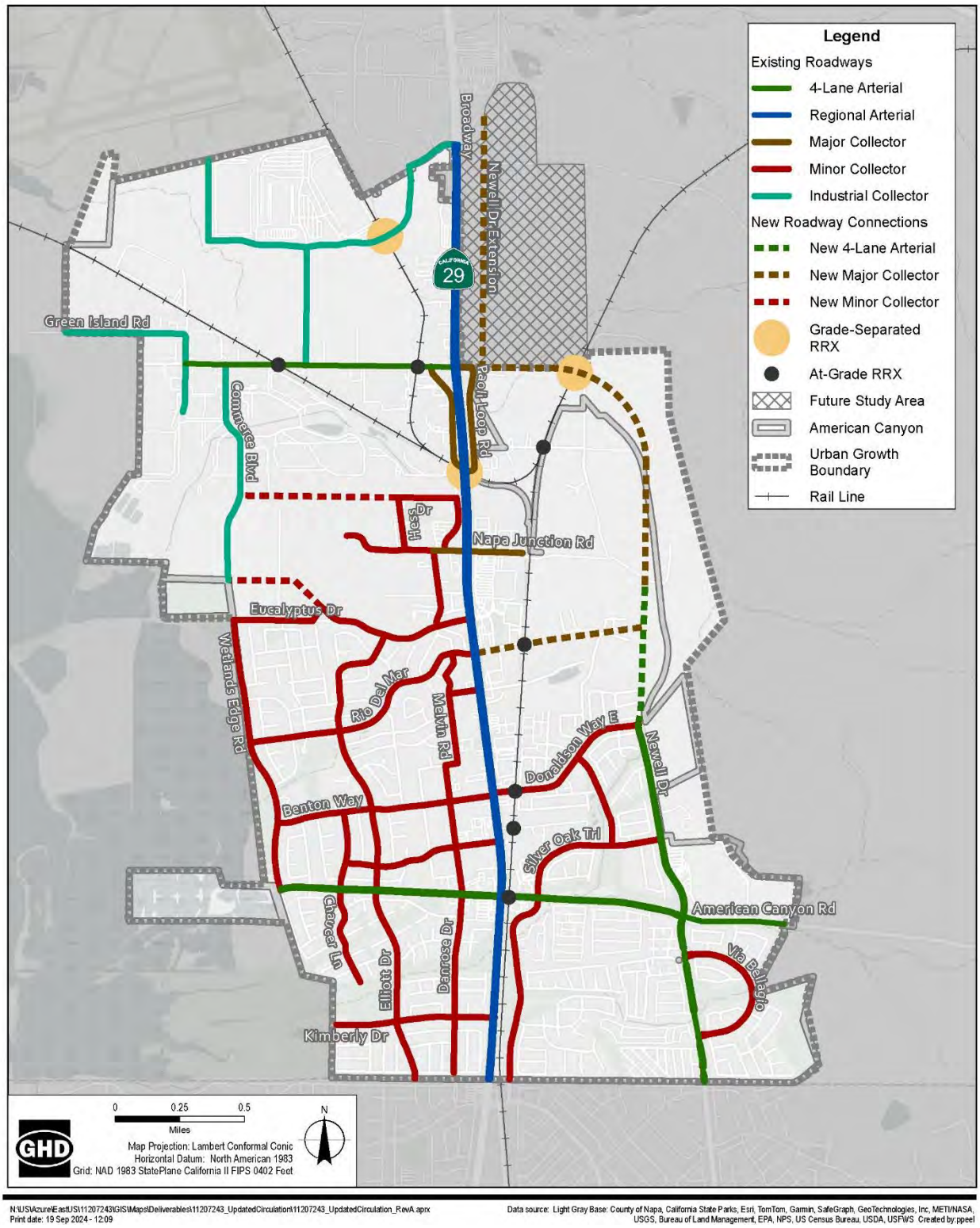
Newell Drive Extension

The Mobility Element street network includes extension of Newell Drive north from its current terminus concurrent with future development. MOB-Figure 8 shows the planned future alignment of Newell Drive. As envisioned, Newell Drive would eventually connect American Canyon Boulevard in the south with SR 29 at Green Island Road and would also connect with North Kelly Road to the north of American Canyon. The future extension would be a 2-lane collector with one motor vehicle lane in each direction, bicycle lanes and sidewalks.

Vision Zero

The Mobility Element includes Vision Zero goals and policies. Vision Zero aims to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility for all. Traffic deaths and injuries can be reduced over time by prioritizing traffic safety as a public health issue. The City of American Canyon Local Roadway Safety Plan (LRSP) identifies safety countermeasures to improve safety.

MOB-Figure 8: General Plan Mobility System Map



Bikeway Network Plan





American Canyon is ideally situated for bicycle and pedestrian mobility, with a generally flat topography, scenic landscapes in the Newell Open Space and Napa River Wetlands a short distance to the east, west, and north. Combined with the Napa Valley Vine Trail, the goal is to interconnect American Canyon as well as the surrounding communities in the County with a seamless bicycle network for recreational and commuter use. The plan includes proposed bicycle and pedestrian trails, as well as on-street bicycle facilities to complete the partial network already in place in the city and county.

Types of Bikeways

Four classes of bikeways are defined by Caltrans:

- **Class I Multi Use Path.** Typically known as bike paths, Class I facilities are multi-use facilities that provide a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane.** Known as bike lanes, Class II facilities provide a striped and signed lane for one-way bicycle travel on each side of a street or highway. The minimum width for bike lanes ranges between four and five feet depending upon the edge of roadway conditions (curbs). Bike lanes are demarcated by a six-inch white stripe, signage and pavement legends.



- **Class Ill Bike Route.** Known as bike routes, Class Ill facilities provide signs for shared use with motor vehicles within the same travel lane on a street or highway. Bike routes may be enhanced with warning or guide signs and shared lane marking pavement stencils. While Class Ill routes do not provide measures of separation, they have an important function in providing continuity to the bikeway network.

- **Class IV Separated Bikeway.** A Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and adjacent vehicle traffic. The physical separation may include flexible posts, grade separation, inflexible physical barriers or on-street parking. Separated bikeways generally operate in the same direction as vehicle traffic on the same side of the roadway. However, two-way separation bikeways can also be used, usually in lower speed environments (35 miles per hour or less).



Example of a Class IV Separated Bikeway

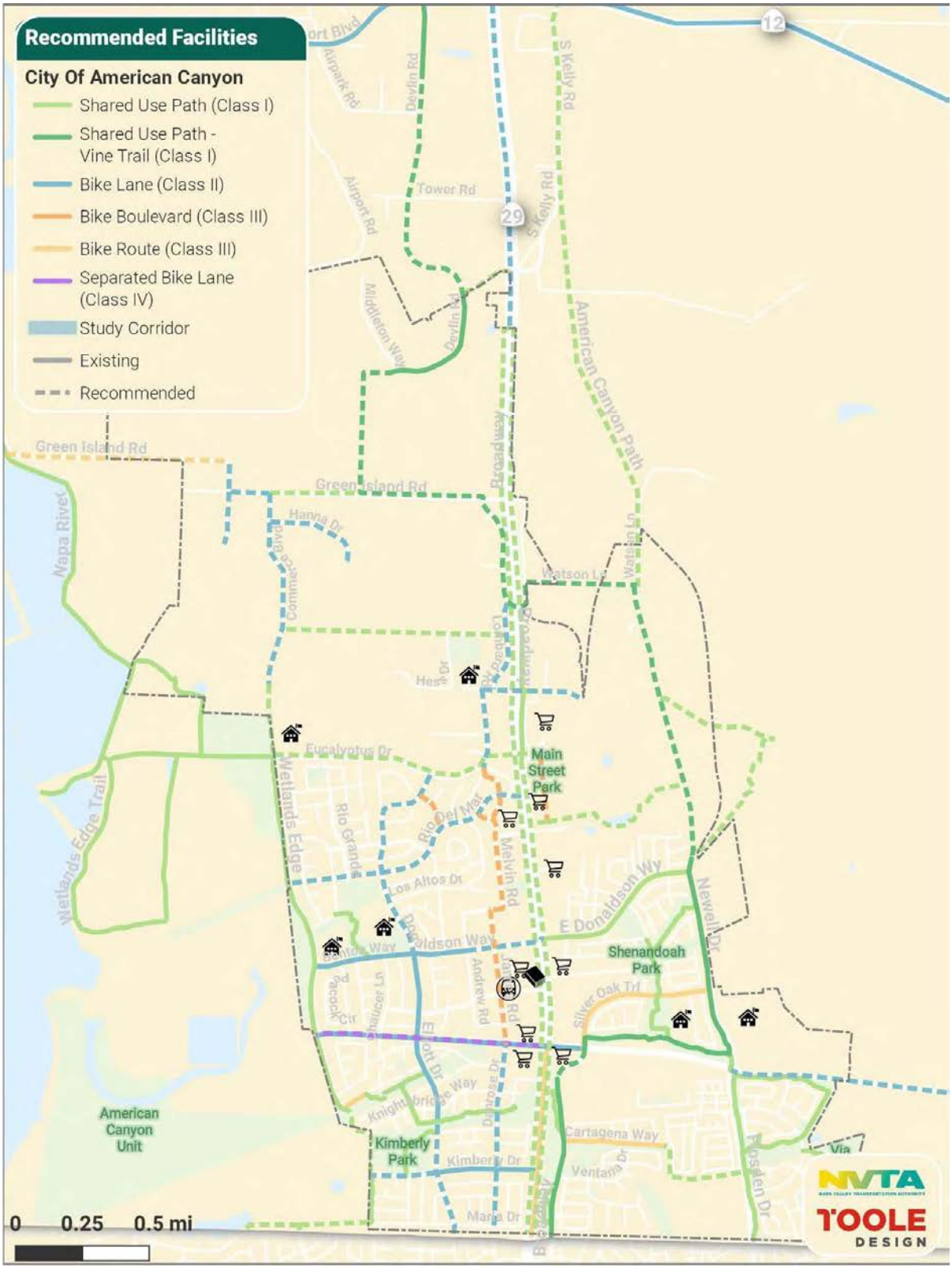
Currently, bikeway facilities separated from vehicular traffic in American Canyon include a network of recreational pathways located throughout the community in City parks and on the American Canyon Creek corridor, a north-south Class I Multi-use Path along Flosden Road and Newell Drive, and a Bay Trail pathway on Wetlands Edge Road. Class II bike lanes are provided on Elliot Drive, Broadway Street, Benton Way, Donaldson Way, American Canyon Road, and Kimberly Drive. Connecting gaps in the planned trail network is a high priority for the City.

Bicycle Plan

The City adopted a Bicycle Plan in 2020 (Resolution 2020-11). The Bicycle Plan was prepared by the NVTA in accordance with the California Bicycle Transportation Act as part of the Napa Countywide Bicycle Plan. The plan was coordinated with extensive public outreach and existing City and Regional Plans

at the time of its adoption. The Bicycle Plan adoption was one of several City actions implementing SB 375, the Sustainable Communities Strategy Act. MOB-Figure 9 shows the Bikeway Plan map.

MOB-Figure 9: Bikeway Plan Map



Pedestrian Plan

The City adopted a Pedestrian Plan into the General Plan in 2017 and incorporated into this General Plan by refernce (Resolution 2017-42). The Pedestiran Plan was prepared by the NVTA in accordance with the Caltrans Active Transportation Program (ATP) Guidelines, which outline statewide requirements for what should be included in active transportation plans. Together with the Bicycle Plan, the Pedestrian Plan creates an Active Transportation Plan that will position American Canyon to effectively compete for project funding. MOB-Figure 10 shows the Pedestrian Plan Priority Improvements map.

MOB-Figure 10:Pedestrian Plan Priority Improvements Map



Planned Street Network Improvements

To provide complete streets and correlate existing and planned land uses within the city, mobility improvements will be needed. Major street improvement locations are summarized on CIRC-Table 3.

MOB-Table 3: Major Circulation Improvements

Street	From (South or East)	To (North or West)	Classification
State Route 29	Southern City Limits	Northern City Limits	See NVTA PID Report
Newell Drive	Rio Del Mar	SR 29/Green Island Road	2-Lane Major Collector
Newell Drive	Paoli Loop	S. Kelly Road	2-Lane Major Collector
Newell Drive	Donaldson Way	Rio Del Mar	4-Lane Arterial
Green Island Road	Western Terminus	Easter Terminus	3-Lane Arterial
West Side Connector	Commerce Boulevard	Hess Drive	2-Lane Major Collector
Eucalyptus Drive	Theresa Avenue	SR 29	2-Lane Major Collector
Rio Del Mar or South Napa Junction Road (includes new at-grade railroad crossing)	SR 29	Newell Drive	2-Lane Major Collector
Napa Junction Road	Western Terminus	Theresa Avenue	2-Lane Minor Collector
Newell Drive Railroad Overcrossing	South of Railroad	North of Railroad	2-Lane Arterial Bridge Structure
American Canyon Road Pedestrian Crossing	East of SR 29	West of SR 29	Pedestrian Grade Separated Crossing
Donaldson Way Pedestrian Crossing	East of SR 29	West of SR 29	Pedestrian Grade

			Separated Crossing
Napa Junction Road Pedestrian Crossing	East of SR 29	West of SR 29	Pedestrian Grade Separated Crossing

Source: City of American Canyon

Goals and Policies

Goal MOB-1:

Provide safe and convenient access throughout the community with a citywide network of complete streets that meet the needs of all users and reduce vehicle miles traveled (VMT). (Source: New Goal)

Policies

MOB-1.1: **Complete Streets.** Maintain and update street standards that that serves not just automobile operations, but also multi-modal movement and adjacent land uses, including pedestrians, motorists, bicyclists, and transit riders of all ages and abilities, in a form that is compatible with and complementary to adjacent land uses, and promotes connectivity between uses and areas. *(Source: Existing Policies 1.7 and 1.19, modified)*

MOB-1.2: **Complete Street Standards**. Review current arterial, collector, and local street standards and update as necessary to conform to best practice classification standards and NACTO complete streets guidelines. *(Source: New Policy)*

MOB-1.3: **Street Design Standard Exceptions**. Consider exceptions to adopted street standards by the City Engineer subject to substantial evidence included in an Engineering Design Standard Exception application. *(Source: Existing Policies 1.19 and 1.21, modified)*

MOB-1.4: **Development Review**. Evaluate new development to ensure that the safety, comfort, and convenience of pedestrians, bicyclists and transit users are given equal level of consideration

to motor vehicle operators. *(Source: Existing Policy 1.19, modified)*

MOB-1.5: **Sidewalks.** Require sidewalks on all arterial and collector streets. Where feasible, separate sidewalks from streets on arterials and collectors with landscaping including a tree canopy to create shade. *(Source: Existing Policy 1.19, modified)*

MOB-1.6: **Transportation Facility Construction and Modification.** When constructing or modifying transportation facilities, strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists, and pedestrians appropriate for the road classification and adjacent land use. *(Source: Existing Policy 1.19, modified)*

MOB-1.7: **Promote Walking and Bicycling.** Promote walking and bicycling for transportation, recreation, and improvement of public health. *(Source: Existing Policy 2.1, modified)*

MOB-1.8: **Discourage SR 29 Traffic on City Streets.** Design the city circulation system to discourage regional traffic from bypassing SR 29 and impacting City streets. *(Source: Existing Policy 1.3, modified)*

MOB-1.9: **SR 29 Mobility.** Work with regional partners, including Caltrans, NVTA, and other agencies to explore a complete streets approach that will expand the travel capacity of SR 29. *(Source: Existing Policy 1.3, modified)*

MOB-1.10: **Circulation System Design.** Provide and maintain a City circulation system that is correlated with planned land uses in the city and surrounding areas in the. *(Source: Existing Policy 1.4)*

MOB-1.11: **Reduce the Need to Drive.** Implement land use policies designed to create a pattern of activity that makes it easy to shop, play, visit friends, and conduct personal business without driving. *(Source: Existing Policy 2.4)*

MOB-1.12: **Neighborhood Context.** Support safe, complete, and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context. *(Source: Existing Policy 1.5)*

MOB-1.13: **Multimodal Level of Service.** Strive to achieve and maintain a Multimodal LOS D or better during peak hours recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond the control of the City. The following locations that may not achieve or maintain LOS D are as follows and therefore will be exempt from the LOS D policy: (1) Green Island Road; (2) Devlin Road; (3) American Canyon Road (4) Newell Drive; and (5) Flosden Road south of American Canyon Road. *(Source: Existing Policy 1.6, modified)*

MOB-1.14: **Street Improvement Design.** The street facility classifications indicated on the General Plan Circulation Map shall be the standard to which roads needing improvements are built to support the traffic generated by General Plan Land Use Element buildout, and therefore represent the buildout standards to which a street segment or intersection shall be improved. *(Source: Existing Policy 1.8, modified)*

MOB-1.15: **Existing Facility Use.** Make efficient use of existing transportation facilities and improve these facilities as necessary in accordance with the Circulation Map. *(Source: Existing Policy 1.9)*

MOB-1.16: **Agency Coordination.** Coordinate with State, Regional, County, and neighboring agencies to ensure highway improvements (i.e.: SR-12, SR-29, and SR-37) appropriately consider impacts to American Canyon. *(Source: Existing Policy 1.10, modified)*

MOB-1.17: **Reduce Vehicle Miles Traveled.** Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop. *(Source: Existing Policy 1.11, modified)*

MOB-1.18: **Circulation System Enhancements.** Achieve, maintain, and improve mobility in the city in accordance with the Circulation Map, support multimodal travel of all users and goods, explore creative circulation system enhancements that increase system capacity, and consider, where feasible, improvements in addition to those identified on the Circulation Map, where feasible and appropriate. *(Source: Existing Policy 1.12, modified)*

MOB-1.19: **Financing Program.** Maintain a transportation financing program that will fund to the greatest extent feasible planned transportation network consistent with the General Plan, including Transportation Impact Fee (TIF) program funding consistent with AB 1600. *(Source: Modified Existing Policy 1.13)*

MOB-1.20: **Bicycle Plan Funding.** Include funding for the City's Bicycle Plan updates and bikeway improvements consistent with the Bicycle Plan in the City's transportation financing program and TIF, recognizing the multi-modal travel needs of the City. *(Source: Existing Policy 2.11)*

MOB-1.21: **Address Mobility Needs.** Recognize and meet the mobility needs of persons using wheelchairs and those with other mobility limitations. *(Source: Existing Policy 2.2)*

MOB-1.22: **Non-motorized Circulation System.** Provide safe and direct pedestrian routes and bikeways between places. *(Source: Existing Policy 2.3)*

MOB-1.23: **Pedestrian Connections to Employment Destinations**. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29. *(Source: Existing Policy 2.18)*

MOB-1.24: **Bicycle Facilities.** Bicycle facilities shall be provided to complete a continuous bikeway system, consistent with state standards, as shown on the Bikeway Plan Map. In cases where existing right of way constraints limit development of Class II or Class IV facilities, Class Ill signage and demarcation may be permitted at the discretion of the City Engineer. Deviations from these standards and from the routing shown on the diagram shall be permitted with the approval of the City Engineer. *(Source: Existing Policy 2.5, modified)*

MOB-1.25: **Street Trees.** Ensure that street tree plans consider shade and comfort for pedestrians and bicyclists and traffic calming benefits. *(Source: Existing Policy 2.6, modified)*

MOB-1.26: **Universal Design.** Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts such as bus pullouts and shelters, street lighting, and curbside management features such as pickup/drop-off locations for shared ride/ transit network companies and spaces for delivery vehicles to park safely for short durations. *(Source: Modified Existing Policy 2.7)*

MOB-1.27: **Sustainable Roadway Expansion.** Monitor the effects of roadway expansion on air, noise, seismic and archeological resources, and nesting habitat. *(Source: New Policy).*

MOB-1.28: **Coordination with Adjacent Jurisdictions**. Coordinate with adjacent jurisdictions to ensure connected and consistent non-vehicular facilities, including bridges, grade-separate crossings, as appropriate. *(Source: New Policy).*

Goal MOB-2:

A safe transportation system that eliminates traffic-related fatalities and reduces non-fatal injury collisions. (Source: New Goal)

Policies

MOB-2.1: **Vision Zero.** Strive for the elimination of all traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. *(Source: New Policy)*

MOB-2.2: **Context Sensitive Design.** Improve multimodal transportation safety by expanding the City's non-motorized transportation infrastructure using context sensitive design. *(Source: New Policy)*

MOB-2.3: **Bicycle Safety.** Increase the safety of those traveling by bicycle by sweeping debris from and repairing bicycle paths and lanes. *(Source: Existing Policy 2.14)*

MOB-2.4: **Improved Bikeway Visibility.** Use visual cues, such as brightly colored paint on bike lanes or a one-foot painted buffer strip, along bicycle routes to provide a visual signal to drivers to watch out for bicyclists and nurture a "share the lane" ethic, prioritizing bikeways with recent automobile-bicycle collisions. *(Source: Existing Policy 2.16, modified)*

MOB-2.5: **Speeds on Residential and Arterial Streets**. Explore innovative ways to reduce vehicular speeds through residential neighborhoods to posted speed limits, such as implementing traffic calming strategies such as: enhanced cross walks, lighted crosswalks, reducing lane widths, and others). *(Source: New Policy)*

MOB-2.6: **Site Designs and Safety**. Ensure, through the development review process, that development projects follow best design practices to reduce conflicts between multiple travel modes. *(Source: New Policy)*

Goal MOB-3:

Support safe evacuation routes in the event of an emergency. (Source: New Goal)

Policies

MOB-3.1: **Parallel North-South Roadway**. Prioritize construction of roadways that provide alternate vehicle access parallel to Highway 29 through American Canyon and coordinate continuation of parallel routes outside the City with Regional Agencies. *(Source: New Policy)*

MOB-3.2: **Evacuation Routes.** Identify important roadways that would serve as evacuation routes in the event of an emergency. *(Source: New Policy)*

MOB-3.3: **Natural Hazard Awareness Week.** Coordinate with the American Canyon Fire Protection District to conduct outreach to the community on emergency evacuation routes in our community. *(Source: New Policy)*

MOB-3.4: **Evacuation Route Obstacles.** Evaluate potential physical conditions that could impede an evaluation route. Examples include overhead utility poles, dead/ dying trees, aging infrastructure. *(Source: New Policy)*

Goal MOB-4:

Support mobility programs that reduce reliance on fossil fuel. (Source: New Goal)

Policies

MOB-4.1: **Transit Electrification.** Support NVTA in its efforts to electrify the transit fleet. *(Source: New Policy)*

MOB-4.2: **Municipal Fleet**. Prepare a plan to systematically replace the City's vehicle fleet to electric. *(Source: New Policy)*

MOB-4.3: **Effects of New Technologies**. Monitor and evaluate the development of convenient new electric mobility technologies (e.g., scootershare and bikeshare). *(Source: New Policy).*

MOB-4.4: **Expand Electric Charging Stations**. Evaluate regulatory and incentivized processes and funding mechanisms to streamline new electric vehicle charging stations at the lowest possible cost. *(Source: New Policy).*

Public Transportation

American Canyon has a variety of public transportation options including fixed route systems and demand-responsive systems as well as local systems and regional systems.

American Canyon Transit

American Canyon Transit (ACT) is a part of the Napa County Transit (VINE) family of services operated by the NVTA. ACT is a bus service that provides a 90-minute round trip route through the city on weekdays between 7:30 AM and 6:00 PM. ACT provides one main route served by two buses, ACT-1 and ACT-2, as well as a Peak Service route during the morning. The ACT buses will deviate from routes and provide on-demand service as time permits for disabled and senior citizens.

Route ACT-1 Southbound starts at 6 am weekdays from the ACT bus stop on Main Street next to Wal-Mart. ACT-1 travels southbound via Rio Del Mar to Donaldson Way and continues (blue route on Figure 5) Route ACT-2 Northbound starts at 10 am weekdays from the ACT bus stop on James Street at Crawford Way. ACT-2 travels easterly via Donaldson Way to southbound Shenandoah and continues (blue route on Figure 6).

The AM Peak Service makes two loops in the AM. The first loop is from the Wal-Mart bus stop at 7:25 am, and the second loop is from the Rio Del Mar/Eucalyptus intersection (7-Eleven) bus stop (green route on Figure 6). This route is designated as the "American Canyon High School" route, as depicted on the bus front signs.

VINE

VINE provides services outside the ACT routes between several cities in Napa County. Within the City, Route 10, and VINE 29 offer bus stops within the city limits. Route 10 (purple route on Figure 6) runs from Napa Valley College in the city of Napa to the city of Vallejo and stops at SR 29/Rio Del Mar and at the American Canyon Senior Center on Elliot Drive between Knightsbridge Way and Kimberly Drive.

VINE 29 (yellow route on Figure 6) is a commuter express route from Calistoga to El Cerrito Del Norte BART and the Ferry Terminal in Vallejo. Vine 29 stops at the American Canyon Post Office at SR 29/Crawford Way. Both of these routes are available throughout the week. VINE Go is also an available door-to-door dedicated service for qualifying disabled and senior citizens.

Goals and Policies

Goal MOB-5:

Support increased public transit to improve mobility, improve air quality, and support efforts to reduce vehicle miles traveled (VMT. (Source: New Goal)

Policies

MOB-5.1: **VMT Thresholds**. Maintain and periodically reevaluate established vehicle miles traveled (VMT) thresholds and Transportation Demand Management (TDM) mitigation requirements for the purposes of environmental review under the California Environmental Quality Act (CEQA). Continue to maintain LOS standards for the purposes of planning and designing street improvements on Green Island Road, Devlin Road, and American Canyon Road. *(Source: New Policy)*

MOB-5.2: **Existing Transportation Demand Management Efforts**. Continue to support the implementation of existing local and regional efforts to manage traffic demand, such as the Napa Logistics Park trip monitoring program, and employer TDM provisions of the Bay Area Air Quality Management District (BAAAQMD). *(Source: New Policy)*

MOB-5.3: **Support Transit Operation Improvements.** Work with NVTA to expand both ACT and VINE fixed route services, improve operations, and support dedicated bus lanes and/or queue-jump lanes on SR 29 to enhance bus operations by reducing travel time for transit vehicles. *(Source: Existing Policies 3.2 and 3.3, modified)*

MOB-5.4: **Demand-Responsive Transit.** Support NVTA's demand responsive transit system. *(Source: Existing Policy 3.4)*

MOB-5.5: **Transit Stops.** Work with NVTA to situate transit stops at locations that are convenient for transit users and promote increased transit ridership through the provision of shelters, benches, bike racks on buses, and other amenities. *(Source: Existing Policy 3.8)*

MOB-5.6: **Transit Service Funding.** Encourage NVTA to continue to pursue Federal and State funds to subsidize capital and operating costs associated with transit operation in the city. *(Source: Existing Policy 3.6, modified)*

MOB-5.7: **Future Transit Links.** Consider orienting transit system expansion to link with other potential future commuter bus and/or rail services. *(Source: Existing Policy 3.13, modified)*

MOB-5.8: **Transit Services Marketing**. Support NVTA efforts to encourage ridership on public transit systems through marketing and promotional efforts. Provide information to residents and employees on transit services available for local and regional trips. *(Source: Existing Policy 3.9)*

MOB-5.9: **Support VINE Services.** Continue to support the VINE service provided by NVTA. *(Source: Existing Policy 3.14)*

MOB-5.10: **Transit Supportive Development**. Ensure that new development is designed to make transit a viable transportation choice for residents, including neighborhood centers or focal points with sheltered bus stops; locating medium and high-density development on or near streets served by transit wherever feasible; and link neighborhoods to bus stops by continuous sidewalks or pedestrian paths. *(Source: Existing Policy 3.11)*

MOB-5.11: **Transit for Seniors**. Require new community care facilities and senior housing projects with over 25 beds to provide accessible transportation services for the convenience of residents. *(Source: Existing Policy 3.10)*

MOB-5.12: **SB 375 Implementation**. Coordinate with other agencies to implement regional transit solutions as part of the SB 375 Sustainable Communities Strategy. *(Source: Existing Policy 3.12)*

MOB-5.13: **Park and Ride Facilities**. Continue to encourage additional regional public transportation services and support facilities, such as park and ride lots near Broadway (SR-29). *(Source: New Policy)*

MOB-5.14: **Effects of New Technologies on Transit Use**. Monitor and evaluate the development of new mobility technologies (such as rideshare, microtransit, and potentially commuter rail

transit) and the potential effects on transit demand and the way users access public transit. *(Source: New Policy)*

Goods Movement

Truck Routes

Truck routes are intended to carry heavyweight commercial, industrial, and agricultural vehicles through and around the community with minimum disruption to local auto traffic and minimum annoyance to residential areas. Due to the high level of existing and expected future light industrial activity in the northwest quadrant of the City, truck routes should be clearly designated so that intrusion of heavy vehicle traffic into residential areas can be avoided.

Green Island Road, and SR 29 are the City's designated truck routes. Currently, SR 29 carries significant truck traffic and is designated as a Surface Transportation Assistance Act (STAA) terminal access route. The 1982 Surface Transportation Assistance Act set standards for large trucks, known as STAA trucks, and set minimum truck sizes that states allow on the National Network including the Interstate System and other defined routes, such as SR 29.

Rail Transport

Rail transportation in the American Canyon is limited to freight service only. The main rail line is owned by Union Pacific Railroad Company and enters the city from the City of Vallejo parallel to and on the east side of SR 29.

The rail line continues on this trajectory diverting from the SR 29 alignment north of American Canyon Road. North of Napa Junction Road, the railroad line splits into three segments:

- One segment heads northeast parallel to Jameson Canyon Road towards the city of Fairfield.
- Another segment heads northwest under SR 29 and across Green Island Road toward the city of Sonoma.
- The third leg heads north past Napa County Airport, terminating just north of Kennedy Park in the city of Napa. This leg connects to the Napa Valley Wine Train.

The Napa Valley Railroad operates a tourist-oriented passenger train service between the City of Napa and St. Helena. The Wine Train makes multiple round trips per day between the two cities.

In 2003, the NVTA studied potential passenger rail service from the Vallejo Ferry Terminal north to St. Helena or Calistoga. The Napa/Solano Passenger/Freight Rail Study concluded that passenger rail service could be feasible. However, the service would require a significant subsidy with no current funding source.

In 2019, Sonoma-Marin Area Rail Transit (SMART) completed a Passenger Rail Service Feasibility Study for a 41-mile Novato to Suisun City corridor. This study determined that this corridor is feasible for passenger rail including a potential rail station in American Canyon.

Goals and Policies

Goal MOB-6:

Efficient and safe transport of goods by truck and rail. (Source: New Goal)

Policies

MOB-6.1: **Promote Safe and Efficient Goods Movement.** Promote the safe and efficient movement of goods via truck and rail with minimum disruptions to residential areas. *(Source: Existing Policy 4.1)*

MOB-6.2: **Promote Railroad Safety.** Maintain safe railroad crossings by coordinating road improvements at rail crossings with the California Public Utilities Commission. *(Source: Modified Existing Policy 4.2)*

MOB-6.3: **Passenger Rail Service**. Encourage regional transit agencies to evaluate passenger rail service with a station in American Canyon. *(Source: New Policy)*

MOB-6.4: **Location of Industrial Development.** Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements. *(Source: Existing Policy 4.6)*

MOB-6.5: **Secure Truck Parking.** Encourage high-security off-street parking for tractor-trailer rigs in industrial designated areas. *(Source: Existing Policy 4.7)*

MOB-6.6: **Goods Movement Along City Arterials**. Continue to restrict truck traffic through the City to its arterial roadways in order to facilitate goods movement to regional facilities; continue to prohibit truck traffic on residential streets. *(Source: Modified Policy 4.4)*

MOB-6.7: **Truck Route Signage**. Ensure that clear signage is provided from regional gateways to truck routes in the City. *(Source: Existing Policy 4.3, modified)*

MOB-6.8: **Truck Route Design**. Incorporate provisions for trucks in the design of Industrial Collector streets and other designated truck routes. Ensure that truck routes are designed according to California and where appropriate STAA standards for intersections and turning movements. *(Source: Existing Policy 4.5)*

MOB-6.9: **Effects of New Technologies on Goods Movement**. Monitor and evaluate the development of new technologies and trends (such as e-commerce) and the potential effects on the goods movement network (including increased curbside loading demand). *(Source: New Policy)*

Goal MOB-7:

Improve the mobility system with fiscally-sound financing methods. (Source: New Goal)

Policies

MOB-7.1: **Funding Sources.** Leverage existing available funding methods and sources to fund the transportation system in American Canyon while also researching innovative funding sources at the federal, state, regional, and county levels. *(Source: New Policy)*

MOB-7.2: **New Development.** Ensure new development projects contribute their fair share to transportation network

improvements and that existing funding commitments are met. *(Source: New Policy)*

MOB-7.3: **Monitor Funding.** Monitor fee programs and regular funding mechanisms to ensure adequate funding for programmed transportation improvements**.** *(Source: New Policy)*

MOB-7.4: **Regional Funding.** Maintain standards to qualify for regional transportation revenues and engage regional agencies to provide adequate transportation funding to local jurisdictions. *(Source: New Policy)*

Implementation Programs

	Programs	Implements Which Policy(ies)	Responsible / Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
A	**Capital Improvement Program** Update the Capital Improvement Program annually to incorporate necessary circulation system improvements. *(Source: Existing Policy 1.19)*	MOB-1.1 MOB -1.2 MOB -1.7 MOB -1.8 MOB -1.9 MOB -1.13 MOB -1.18 MOB -1.19	Public Works City Manager				■	
B	**Update Street Standards**. Update the City's street standards based on the complete streets guidelines published by the National Association of City Transportation Officials (NACTO). *(Source: New Program)*	MOB -1.1 MOB -1.2	Public Works	■				
C	**Active Transportation Plan.** Prepare and update every five years an Active Transportation Plan to replace the Bicyle Master Plan and include pedestrian faclities. The Plan should include a full range of facilities for bicycle travel, including Class I bike/multiuse paths, Class II bike lanes, Class Ill bike routes, and Class IV separated bikeway to provide a continuous system of bikeways trhoughout the city. *(Source: New Program that includes Existing Policy 2.5, modified)*	MOB -1.6 MOB -1.19 MOB -1.22 MOB -1.23	Public Works	■	■	■		
D	**Update Transportation Impact Analysis (TIA) Guidelines.** Update and adopt Transportation Impact Analysis (TIA) guidelines to include VMT and a Multimodal LOS assessment methodology for the evaluation of potential transportation impacts resulting from new development. *(Source: Existing Policy 1.26)*	MOB -1.2 MOB -1.3	Pbulic Works	■				
E	**Transportation Impact Fee.** Maintain and update the transportation impact fee (TIF) program consistent with AB 1600. *(Source: Existing Policy 1.13, modified)*	MOB -1.18	Public Works					■
F	**Active Transportation Funding.** Annually allocate TIF funds for the Active Transportation Plan updates and bikeway design and improvements consistent with the Active Transportation Plan implementation program. *(Source: Existing Policies 2.8 and 2.11, modified)*	MOB -1.18 MOB -1.19	Public Works					■

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
G	**Bicycle use by City employees.** Establish a program to encourage bicycle use among City employees. *(Source: Existing Policy 2.11)*	MOB -1.6	Public Works		■			
H	**Bicyle Facility Development and Maintenance.** Prepare and update every five years a bike facility development and maintenance program that includes the following provisions: • signage consistent with according to Caltrans or City standards • lighting where needed; • bicycle paths and lanes on bridges and overpasses; • bicycle-safe drainage grates; • bikeways free of hazards such as uneven pavement or gravel; • merging or crossing signage where bike routes and paths make transitions into or across roadways; • promoting classes on bicycle safety in the schools in coordination with the Napa Valley Unified School District; and • sweeping debris from and repairing bicycle paths and lanes. *(Source: Existing Policy 2.14, modified)*	MOB -1.12 MOB -1.17 MOB -1.19 MOB -2.3 MOB -2.4	Public Works					■
I	**Parking and Congestion Pricing.** Prepare a study to evaluate the feasibility of implementing parking and/or congestion pricing, working with Caltrans as appropriate when considering congestion pricing strategies for SR 29. *(Source: Existing Policy 5.1, modified)*	N/A	Public Works		■			
J	**Pedestrian Crosswalk Installation.** Install clearly marked crosswalks at intersections near all commercial uses, as well as clearly marked pedestrian paths within parking areas. While mid-block crossings are discouraged, if conditions warrant and are approved by City Engineer, crosswalks and signage indicating pedestrian activity should be installed at mid-block entrances where existing commercial uses are adjacent to other high-intensity uses, such as parks and schools where necessary for safety. Where possible, pedestrians should be roiuted to grade separated crossings over State Route 29. *(Source: Existing Policy 2.17, modified)*	MOB -1.6 MOB -1.22	Public Works					■

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
K	**Pedestrian Connections to Schools.** Continue developing the existing network of walkways between schools and residential uses, and encourage the development of new continuous walkways between schools and residential uses. Where possible, route pedestrians to grade separated crossings over State Route 29. *(Source: Existing Policy 2.19)*	MOB -1.6 MOB -1.21	Public Works					■
L	**Vision Zero.** Prepare and update every five years a Vision Zero program and install safety countermeasures consistent with the results and recommendations of the Local Roadway Safeway Plan (LRSP). *(Source: New Program)*	MOB -2.1 MOB -2.2 MOB -2.2 MOB -2.4	Public Works		■			
M	**Truck Facilities Financing.** Prepare an analysis of possible funding sources, including user fees, to help finance truck routes and truck parking areas. *(Source: Existing Policy 4.8, modified)*	MOB -4-1 MOB -4.2 MOB -4-3 MOB -4.4	Public Works		■			
N	**Railroad Crossing Safety Program.** Continue the ongoing comprehensive program to improve the condition and safety of existing railroad crossings by upgrading surface conditions and installing signs and signals where warranted. Participate in railroad safety education, such as Operation Lifesaver activities when offered. *(Source: Existing Policy 4.9)*	MOB -4-1 MOB -4.2	Public Works					■
O	**New Railroad Crossings.** Provide new crossings across the railroad (UPRR) in conjunction with the planned roadway improvements shown on the Circulation System map to ensure at least one cross-town route is maintained in case rail activity interrupts local and regional traffic flow and/or emergency access. New crossings will be at Newell Drive (grade separated); and Rio Del Mar or South Napa Junction Road (initially at-grade, may be grade separated in the future). *(Source: Existing Policy 4.10, modified)*	MOB -4-1 MOB -4.2	Public Works		■			



5 Utilities

The quality, capacities, and capabilities of the public facilities, utilities, and infrastructure enhances community livability and economic potential. This Element focuses on policies to improve and maintain public facilities, utilities, and infrastructure that sustain households, businesses, and future population and employment growth.

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Water Infrastructure and Supply

A reliable source of water sustains our population, economy, and ensures long term growth. This section focuses on American Canyon's existing potable water system, including water sources, treatment capabilities, and conservation practices.

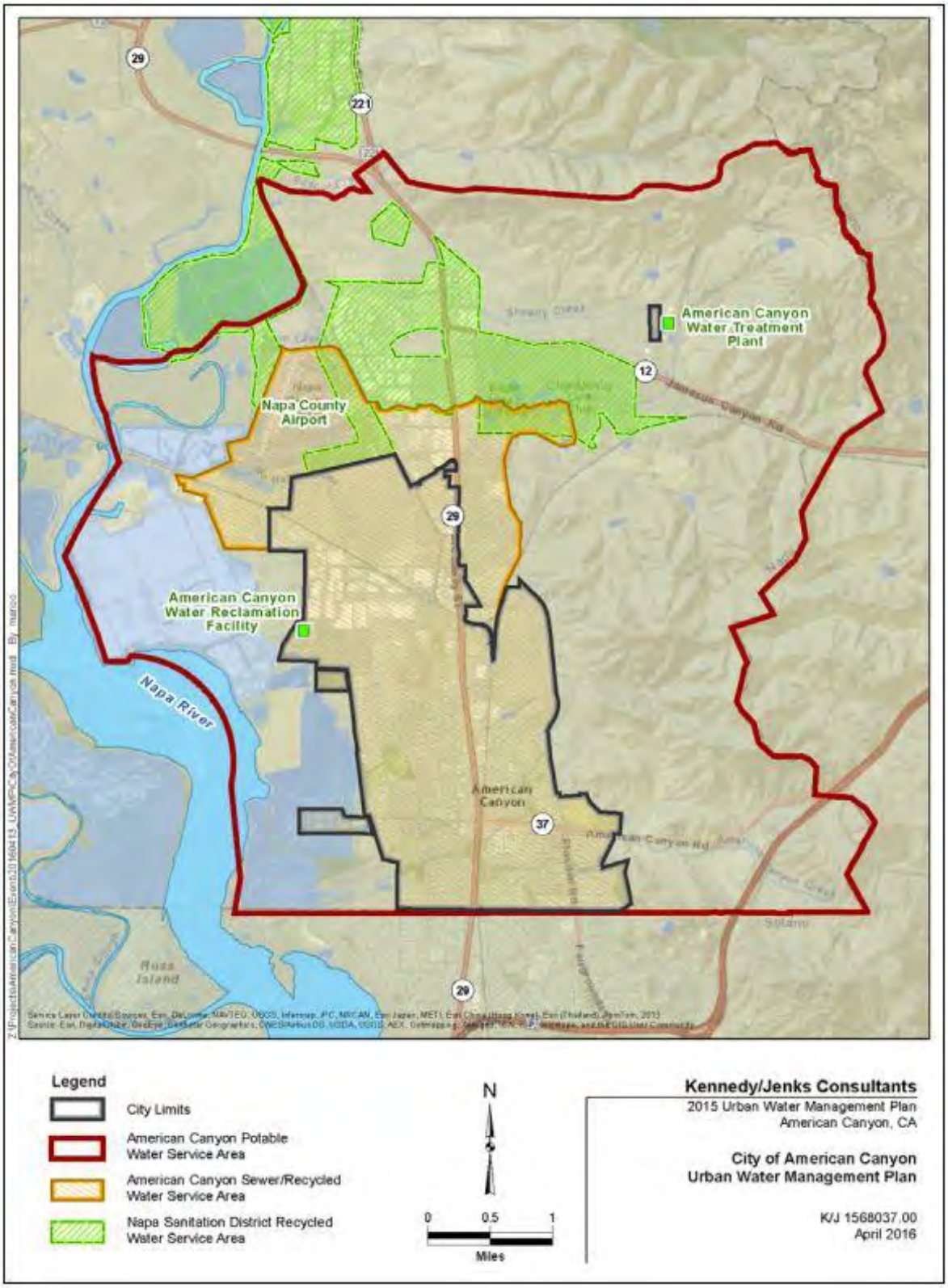
Water/Wastewater Service Area

At the time of City incorporation in 1992, the City acquired the water and wastewater services provided by the American Canyon County Water District. As a subsidiary agency, the water system is owned and operated by the City and governed by a five-member City Council.

- The City's water service area is approximately 30 square miles (see Figure 3-1) and comprises of the following areas:
- The City itself, which is approximately 6 square miles and includes residential, commercial, industrial and agricultural users;
- The commercial/industrial areas in and around the Napa County Airport located north of the City (unincorporated Napa County), which covers approximately 5 square miles; and
- The largely open space/agricultural areas to the west, east and north of the City limits (unincorporated Napa County), which include agricultural users and a small number of single-family residential customers who represent "legacy" accounts that were originally connected and served by the American Canyon County Water District.

A graphic depicting the historical water service area is shown on the figure below.

U-Figure 1: American Canyon Water Service Area



Water Supply

The City's water supply primarily comes from the State Water Project. The State Water Project is designed, constructed, operated, and maintained by the California department of Water Resources and supplies water for 25 million Californians.

Lake Oroville is the largest State Water Project reservoir, one of 21 reservoirs that collects water for distribution. The water travels to American Canyon through several miles of the North Bay Aqueduct (NBA) and is delivered to tanks near the Jameson Canyon Road water treatment plant.

The City also receives supplemental water purchased from the Cities of Napa and Vallejo.

In 2017, the City became a partner in the Sites Reservoir Project, an environmentally beneficial, off-river reservoir that will capture excess water from major storms and save it for drier periods. This Project will help California's farms, businesses, and cities continue to supply reliable water when other sources are low.

The City also produces and delivers recycled water to meet demand to private customers for agriculture, industrial, toilet flushing in apartment and commercial uses, and landscape irrigation.

According to the draft 2020 Urban Water Management Plan, the City anticipates it can meet water demands through the planning horizon year of 2045.

Potable Water Treatment

Raw water received through the North Bay Aqueduct system must be treated before potable use. American Canyon owns and operates a water treatment plant located at 250 Kirkland Ranch Road. The plant uses two processes to treat water, a conventional sedimentation and filtration process and a membrane filtration process. In total, the plant produces up to 5.5 million gallons of potable water each day within the water service area across 5,621 connections. The plant consistently meets the highest quality standards set forth by State and Federal regulations.

Water Conservation

Climate change is causing higher average temperatures, a decrease in precipitation, and longer and more frequent heat waves and droughts. These climatic conditions overall increase water demand. A key component to water reliability and adaptation to climate change is conservation. The City's Zero Water Footprint directs that conservation offset new potable water demand. These and other measures will be implemented to ensure adequate water supply and responsible water usage. The following are some of the water conservation programs the City is implementing to further conservation efforts.

Water Conservation Ordinances

American Canyon has adopted three ordinances to help further its conservation efforts. The first aims to reduce the amount of wasted water and the second and third require new developments to use water efficient landscaping techniques.

Water Metering

All potable and recycled water customers are metered and billed on a monthly basis. City staff reads meters on a monthly basis, utilizing meter reading to both document demand reductions from conservation and high-water use.

Conservation Pricing

American Canyon uses a tiered rate structure method to encourage water conservation. The tiered rate structure incentivizes conservation by reducing rates for low water users, while progressively increasing the cost per gallon for high water users. Since 2007, American Canyon has applied tiered water rates to all single-family residential users.

Public Education and Outreach

American Canyon is actively involved in water conservation through public outreach and education. City programs include distributing free water saving devices (i.e., shower heads, faucet aerators, shower timers), rebates for high efficiency toilets and clothes washing machines, public outreach through the City website, and the "Cash for Grass" program, which pays homeowners to replace turf with water efficient landscaping.

Goals and Policies

Goal U-1: Water Reliability

Establish and maintain a secure water supply and treatment, distribution, and storage system to serve the land uses proposed under the general plan. (Source: Existing General Plan, Goal 5, modified)

Policies

U-1.1: **Supplemental Surface Water.** Support efforts to increase water supply from a variety of sources, such as participation in the Sites Reservoir programs with other NBA users to obtain supplemental surface water through a water transfer from another area, investment in the Sites Reservoir, local rainwater capture, and other feasible sources. *(Source: General Plan, Policy 5.2.2 modified)*

U-1.2: **Facility Upgrades.** Require construction of upgraded and expanded, distribution, storage, and treatment facilities to support existing and new development. *(Source: Existing General Plan, Policy 5.7.1, modified)*

U-1.3: **Upgrade Responsibilities.** Ensure that improvements to the existing water supply, distribution, storage, and treatment facilities are borne by project proponent in proportion to benefit; either through the payment of fees, or by the actual construction of the improvements. *(Source: Existing General Plan, Objective 5.8, Policy 5.8.1, modified)*

U-1.4: **Urban Water Management Plan.** Prepare a framework for long-term water planning consistent with the State Urban Water Management Planning Act (UWMP Act), by preparing and adopting an Urban Water Management Plan (UWMP) once every five years. *(Source: New Policy)*

U-1.5: **Adequate Supply Prior to Occupancy.** Implement a Will Serve Process to ensure adequate water supply, distribution, storage, and treatment facilities is available to serve a project prior to the issuance of certificates of occupancy. *(Source: Existing General Plan, Policy 5.7.1 modified)*

U-1.6: **Water Service Priority**. Consistent with State Law, in times of constrained water service expansion capacity, prioritize affordable housing developments as defined in California Government Code 65589.7 or any successor statute. The second priority is provided to water connections and services to residences and businesses located within the city corporate boundaries. *(Source: New Policy, ACMC Section 13.10.020)*

U-1.7: **Extraterritorial Water Service Customers.** Ensure existing water service customers located outside the City limits pay appropriate water rates consistent with Hansen v. City of San Buenaventura (1986) 42 Cal.3d 1172 or latest legal precedent. *(Source: New Policy)*

Goal U-2: Water Conservation

Establish policies that make the most efficient use of our water resources for a variety of public benefits, such as: improve water reliability, reduce greenhouse gas emissions, and minimize environmental impacts from drawing water from the environment. (Source New Goal)

Policies

U-2.1: **Zero Water Footprint.** Ensure new development offsets potable water demand by funding or constructing potable water conservation efforts elsewhere in the water delivery system. *(Source: New Policy)*

U-2.2: **City Facilities Retrofits.** Improve water use efficiency at City facilities through retrofits, recycled water usage, and employee education. *(Source: New Policy)*

U-2.3: **Retrofits Existing Buildings.** Promote existing buildings upgrades to support water conservation by encouraging owners of residential, commercial, and industrial properties to replace inefficient plumbing fixtures, install drought-tolerant and water-wise landscaping, and harvest rainwater for landscaping and other household uses. *(Source: New Policy)*

U-2.4: **Conservation Applications.** Promote the use of water-saving plumbing fixtures and water-saving landscaping in existing

development throughout the water service district. *(Source: Existing General Plan, Policy 5.4.1)*

U-2.5: **Recycled Water Use.** Subject to State regulations and organizational capacity, consider new ways that recycled water can replace potable water. *(Source: New Policy)*

U-2.6: **Recycled Water Distribution System.** Conserve potable water by expanding the availability of recycled water (i.e., purple pipes) throughout the city. *(Source: New Policy)*

Wastewater

Wastewater collection and treatment is essential. American Canyon ensures wastewater is properly handled and reused for beneficial purposes. This section provides an overview of the City's wastewater collection and treatment systems.

Infrastructure and Collection

Wastewater collection and treatment services are provided by the City's Maintenance and Utilities Department. The Sewer Collection responds to reports of sewer spills and back-ups and monitors environmental compliance and water quality regulations. The City's sewer infrastructure consists of 53 miles of gravity pipelines, five pump stations, five miles of sewer force mains, and the American Canyon Water Reclamation Facility (WRF). This infrastructure collects and treats wastewater from both domestic and industrial customers. The City has plans to further develop this infrastructure to address population growth.

Treatment

The American Canyon Water Reclamation Facility (WRF) treats domestic and industrial wastewater flows from the city. The treatment plant discharges treated wastewater it to the Napa River, via wetlands ponds, or to the City's recycled water distribution system. The WRF was designed to treat an average flow of 2.5 million gallon per day (mgd) and has a wet weather capacity of 5.0 mgd. Average treatments flows in 2018 ranged from 1.54 to 1.62 mgd, which is well below the facility treatment capacity.

Recycled Water

American Canyon supplements its water supply with recycled water. *(Source: American Canyon StoryMaps)* The City adopted a Recycled Water Implementation Plan in 2005, and has been working to expand its recycled water system in order to further reduce the City's reliance on imported water supply.

The City's Water Reclamation Facility (WRF) has the ability to produce recycled water that meets the Title 22 standards for disinfected tertiary water, which is suitable for a wide range of uses such as landscape irrigation in residential and commercial areas, school yards, parks and playgrounds. Title 22 (California Code of Regulations, Division 4, Chapter 3, §60301 et seq.) is the regulation that establishes the level of treatment, water quality standards and the types of uses for recycled water for the purpose of protecting public health.

Napa Sanitation District (NSD) also provides wastewater collection/treatment and recycled water services for northern portions of the City's potable water service area. In addition, some users in the northern part of the City's water service area receive recycled water from Napa Sanitation District (NSD).



This is an example of recycled water and purple piper infrastructure.

NSD provides wastewater collection/treatment and recycled water services for the City of Napa and portions of unincorporated Napa County. In 2015, NSD provided approximately 210 acre-feet of recycled water for landscape and agricultural irrigation to customers located within the City of American Canyon's potable water service area. NSD is also planning to expand its recycled water distribution, including to agricultural and commercial landscape irrigation users within the City's potable water service area.

American Canyon operates a Residential Recycled Water Fill Station open to residents on a drop-in basis. The station is located at the City's Corporation Yard, 205 Wetlands Edge Road. After a brief training on the applicable uses for the water, residents are provided up to 300 gallons free of charge. Recycled water taps are purple to easily distinguish them from standard potable water pipes.

Goals and Policies

Goal U-3: Wastewater Treatment Capacity

Establish and maintain adequate planning, construction, maintenance, and funding for wastewater collection and treatment facilities to support land uses; upgrading existing deficient systems, and expanding, where necessary, in the City's service area. (Source: Existing General Plan, Goal 5E, modified)

Policies

U-3.1: **Demand Requirements for Facilities.** Through the Capital Improvement Plan process, ensure wastewater collection and treatment facilities are installed, maintained, and upgraded in a timely manner to meet usage requirements and maximize cost efficiency. *(Source: Existing General Plan, Objective 5.15, Policy 5.14.2, and Policy 5.14.3 modified)*

U-3.2: **Capacity Demand.** Require all new development to evaluate sewer capacity demand during the discretionary review process. *(Source: Existing General Plan, Policy 5.14.5 modified)*

U-3.3: **Fiscal Obligations.** Ensure wastewater infrastructure impact fees reflect the proportional increase in demand from new development. *(Source: Existing General Plan, Objective 5.16, Policy 5.16.1, modified)*

U-3.4: **Alternatives Sustainable Approaches.** Consistent with best practices, evaluate environmentally and economically efficient wastewater treatment systems, such as the artificial marshland wastewater treatment system. *(Source: Existing General Plan, Policy 5.14.8, modified)*

U-3.5: **Wastewater Service Priority**. Consistent with State Law, in times of constrained wastewater service expansion capacity, prioritize affordable housing developments as defined in California Government Code 65589.7 or any successor statute. The second priority is provided to sewer connections and services to residences and businesses located within the city corporate boundaries. *(Source: New Policy ACMC Section 13.10.020)*

Flood Control and Storm Drainage

Stormwater is rainwater that does not quickly soak into the ground. Stormwater flows from rooftops, over impervious paved areas, and through lawns and fields. As it flows, runoff collects into streams and rivers that transport soil, pesticides, fertilizer, oil and grease, leaves, litter, and other potential pollutants into local waterbodies. Due to its geographical location near sensitive watersheds, American Canyon plays a vital role in collecting stormwater runoff and preventing pollution that could be distributed in the surrounding sensitive environments.

Stormwater Infrastructure

The City of American Canyon Maintenance and Utilities Department oversees municipal storm drainage facilities within the city limits. The City's storm drainage system collects stormwater runoff and discharges the water to the Napa River through a system of on-street storm drain inlets, ditches, detention basins, ponds, and bio-swales designed to increase groundwater infiltration and reduce sediment and pollutants.

Flooding and Flood Control

Seasonal flooding along the Napa River Watershed is a regular occurrence. In fact, there have been at least 22 serious floods on the river since 1865. During heavy rain, low-lying areas of American Canyon are subject to flooding along natural creeks and low-lying areas around the city.

According to the San Francisco Bay Conservation & Development Commission (BCDC), sea level rise from global warming has risen water levels in San Francisco Bay nearly eight inches over the past century, and the rate of sea level rise is accelerating. Since 2008, the BCDC has served as the State agency responsible for leading the Bay Area's preparedness for, and resilience to, rising sea level, tides, and storm surge due to climate change.

Rising sea levels (SLR) will have widespread impacts on the Bay Area. Adapting to this hazard will cost billions of dollars over the next several decades.

Goals and Policies

Goal U-4: Flood Control

Establish and maintain adequate planning, construction, maintenance, and funding for storm drain and flood control facilities to support permitted land uses and preserve public safety. (Source: Existing General Plan, Goal 5C, modified)

Policies

U-4.1: **Storm Drainage Maintenance.** Maintain existing public storm drains and flood control facilities and construct upgraded and expanded storm drain and flood control facilities, where necessary, to protect existing and accommodate new permitted development. *(Source: Existing General Plan, Policy 5.10.1 modified)*

U-4.2: **Maximize Pervious Surfaces.** Consistent with engineering standards, minimize storm water runoff from new development with pervious surface materials (grass, ground cover, and other). *(Source: Existing General Plan, Policy 5.10.18 modified)*

U-4.3: **Financial Obligations.** Ensure new storm drain and flood control facility costs are borne by the project proponent in proportion to benefit; either through the payment of fees, or by constructing new improvements. *(Source: Existing General Plan, Objective 5.11, Policy 5.11.1, modified)*

U-4.4: **National Flood Insurance Program.** Continue to participate in the National Flood Insurance Program. To this end, the City shall ensure that local regulations are in full compliance with standards adopted by the Federal Emergency Management Agency (FEMA). *(Source: Existing General Plan, Policy 5.10.8)*

U-4.5: **Agency Coordination.** Coordinate with the Napa County Flood Control and Water Conservation District and other regional agencies and non-profit groups to maintain and improve levees and drainage channels. *(Source: Existing General Plan, Policy 5.10.14, modified)*

U-4.6: **Flood Control Channel Maintenance.** Ensure clearance of flood control channels routinely of vegetation and debris which could impede stormwater flows, while protecting significant riparian vegetation. *(Source: Existing General Plan, Policy 5.10.13)*

U-4.7: **Integrity of Levees.** Discourage uses that promote the erosion or structural deterioration of levees. *(Source: Existing General Plan, Policy 5.10.16)*

U-4.8: **Low Impact Development.** Require new developments to install green infrastructure consistent with the best management practices of the State and the San Francisco Bay Regional Water Quality Control Board, including but not limited to pervious pavement, infiltration basins, raingardens, green roofs, rainwater harvesting systems, and other types of low impact development (LID). *(Source: New Policy)*

U-4.9: **Floodwater Diversions.** Implement engineering standards that prevent new development from increasing historical stormwater flows onto neighboring properties. *(Source: Existing General Plan, Policy 5.10.12 modified)*

U-4.10: **Development in Floodplains.** Ensure the City's Floodplain Ordinance is maintained with current standards and new development is designed consistent the Floodplain Ordinance. *(Source: Existing General Plan, Policy 5.10.9 and 5.10.10 modified)*



This is an example passive treatment system.

Goal U-5: Stormwater Quality

Maintain the quality of surface and subsurface water resources within the City of American Canyon and its Planning Area. (Source: Existing General Plan, Goal 5D, modified)

U-5.1: **Passive Treatment Systems.** Consistent with engineering standards and water quality regulations, reduce pollutant loading through passive treatment systems such as vegetated filter strips, grass swales, and infiltration/sedimentation areas in suitable open space areas and incorporated into landscaping adjacent to parking lots and streets. *(Source: Existing General Plan, Policy 5.12.1, modified)*

U-5.2: **Water Detention Facilities.** Consistent with engineering standards and water quality regulations, require new and existing development to include drainage detention facilities that enhance the quality of water discharges from the facility. *(Source: Existing General Plan, Policy 5.13.2 modified)*

U-5.3: **Impervious Area Water Treatment.** Implement engineering standards in new development that require stormwater treatment from impervious areas. *(Source: Existing General Plan, Objective 5.13, modified)*

U-5.4: **Storm Water Permitting.** Require industrial operations to obtain coverage under the State Storm Water Permit For Industrial Activities, and comply with provisions of the Permit, through notification and educational activities. *(Source: Existing General Plan, Policy 5.13.2 modified)*

Goal U-6: Climate Change Adaptation

Anticipate existing and future stormwater impacts of sea level rise and climate-change induced storm events. (Source: New Goal)

U-6.1: **Climate Change Vulnerability Assessment.** Use the best available science to forecast areas in the City that are vulnerable to climate change-induced flooding. *(Source: New Policy)* **Critical Infrastructure Adaptation.** Plan for and construct sea level rise protection for American Canyon Critical Infrastructure such as Public Works Yard, Wastewater Treatment Plant, and Pump Station. *(Source: New Policy – NCHMP Mitigation AC-04.2020)*

U-6.2: **Floodplain Management.** Evaluate the cumulative increase in offsite flooding potential impacts caused by new development projects that remove property from the 100-year floodplain. *(Source: New Policy)*

Solid Waste Disposal and Recycling

Waste collection and management is important to protect the environment and health of the population. Proper collection and disposal of waste is a large task that involves logistical planning and scientific understanding to balance environmental impacts and cost effectiveness. This section describes American Canyons current sold waste collection and disposal efforts.

Collection

Solid Waste collection is provided by Recology American Canyon under the Napa-Vallejo Waste Management Authority (NVWMA). NVWMA contracts collection, hauling, and disposal of solid waste from the cities of Napa, Vallejo, and unincorporated areas in southern Napa County. Recology provides residents with regular garbage, recycling, and green waste/compost pickup. Waste collected from American Canyon is sorted at the Devlin Road Recycling and Transfer Facility, located at 889 Devlin Road in American Canyon before it is sent to nearby landfills.



The Potrero Hills Landfill located in Solano County.

Disposal

Solid waste from American Canyon is directed to the Solano County Potrero Hills Landfill, located at 3675 Potrero Hills Lane, Suisun City. The Potrero Hills Landfill is a Class III landfill that accepts a variety of waste types, including mixed municipal, construction/demolition waste, agricultural, sludge (biosolids), industrial, and other designated wastes.

As of 2014, Potrero Hills Landfill accepted 97 percent of the City's total solid waste (i.e.: 12,896 tons). The Potrero Hills Landfill is expected to be in operation until 2048 with a remaining capacity of approximately 13 million cubic yards with up to 4,330 tons of waste per day.

On November 16, 2021, City Council adopted Ordinance No. 2021-08 modifying Title 8 (Health and Safety) of the American Canyon Municipal Code to add "Chapter 8.20 Mandatory Municipal Solid Waste, Recycling and Compost Material Disposal Reduction." A requirement of State Senate Bill 1383 (SB 1383), the Ordinance will:

- Divert 50 percent of organic waste from landfills below 2014 levels by 2020 and 75 percent by 2025;

- Set a goal to recover a minimum of 20 percent of currently disposed edible food for human consumption by 2025; and
- Require organics recycling education and outreach to all residents, businesses, haulers, and food recovery organizations

Goals and Policies

Goal U-7: Solid Waste Collection

Maximize source reduction, recycling, and composting in the solid waste disposal programs. (Source: Existing General Plan, Goal 5F)

Policies

U-7.1: **Waste Management Services.** Continue waste management service contracts to provide quality and cost-effective solid waste removal throughout the city and require all residents and businesses to comply with solid waste collection and recycling service requirements. *(Source: New Policy)*

U-7.2: **Levels of Service.** Conduct monitoring solid waste collection contractor operations to ensure franchise agreement service levels are maintained. *(Source: Existing General Plan, Policy 5.19.2)*

U-7.3: **Landfill Coordination.** Coordinate with the Napa-Vallejo Waste Management Authority (NVWMA) concerning the City's continuing use of the Potrero Hills Landfill. *(Source: Existing General Plan, Policy 5.19.3, modified)*

Goal U-8: Solid Waste Source Reduction

Achieve maximum public participation in source reduction, recycling, and composting activities through outreach programs. (Source: Existing General Plan, Goal 5G, modified)

U-8.1: **Recycling Education and Information.** Coordinate with Napa-Vallejo Waste Management Authority (NVWMA) and Recology to expand public information and education programs to

complement source reduction, recycling, and composting efforts. *(Source: Existing General Plan, Policy 5.20.1, modified)*

U-8.2: **Expansion of Recycling Programs.** Expand recycling programs through the local waste hauler. *(Source: New Policy)*

U-8.3: **Promotion of Recycling.** Promote the recycling of solid waste including but not limited to paper, metals, aluminum cans, green waste, cardboard, plastic and glass. *(Source: Existing General Plan, Implementation Program 15.61, modified)*

U-8.4: **Outreach to Schools.** Coordinate efforts at the local elementary and intermediate school level to provide youth education programs. *(Source: Existing General Plan, Implementation Program 15.62, modified)*

U-8.5: **Recycling Receptacles and Biodegradable/Recycled-Materials Products.** Require the availability of recycling and composting receptacles and use biodegradable or recycled-material products instead of single-use plastic products at all City facilities and City-sponsored events. *(Source: New Policy)*

U-8.6: **Zero Waste Community.** Support American Canyon in implementing policies and programs to become a Zero Waste Community. *(Source: New Policy)*

U-8.7: **Food Waste Collection.** Ensure food waste collection is available and convenient to residents and businesses. *(Source: New Policy)*

U-8.8: **Green Business Program.** Encourage local businesses to participate in the Napa County Green Business Program to minimize waste generation and create recycling and composting programs to reduce waste. *(Source: New Policy)*

U-8.9: **Demolition and Construction Waste.** Require all new development to comply with the current CALGreen requirements for construction and demolition waste diversion. *(Source: New Policy)*

Energy Utilities

Energy in many forms is an essential public service. As energy demand increases it may strain existing energy systems and resources. A shift toward alternative energy resources can supplement future demands sustainably.

Shift to Renewable Energy

Since 2016, the City has been enrolled in the Light Green program, Marin Clean Energy (MCE)'s default energy plan that offers 60% renewable energy. In 2021, American Canyon City Council voted to supply the City's facilities with MCE Deep Green 100% renewable energy. The change to Deep Green will remove approximately 247,000 pounds of carbon dioxide from American Canyon's carbon footprint per year. *(Source: Media Release - American Canyon Opts Into 100% Renewable Energy for Its City Facilities, 2021)*

The City's switch to Deep Green adds to a growing list of American Canyon's clean energy initiatives, including the Citywide Energy Efficiency and Resiliency Project (CEERP). The City joined MCE in 2016 and has since been enrolled in the electricity provider's 60% renewable energy option. Before switching to MCE, the City was enrolled in Pacific Gas and Electric's (PG&E) 29% renewable option. MCE is an alternative to PG&E for energy generation; all residents and local businesses were automatically enrolled in Light Green also have the option to opt up to Deep Green. Customers pay higher rates for Deep Green but do not have to pay any upfront fees to upgrade. *(Source: Media Release - American Canyon Opts Into 100% Renewable Energy for Its City Facilities, 2021)*

In addition to the City's association with a greener electric source from MCE, residents have installed solar energy at their homes with rooftop photovoltaic panels (PVEs). The Residential PVE permit activity trends show increasing on-site, carbon free energy generation. Changes in building codes that call for greater energy efficiency in all new construction will increase this trend for the foreseeable future.

Goals and Policies

Goal U-9: Energy Resilience and Conservation

Improve energy system resilience with energy conservation and access to renewable energy sources. (Source: New Goal)

Policies

U-9.1: **Reach Building Code.** Reduce energy use in new development by considering a local amendment that requires a 15% energy efficient standard improvement over the California Building Code. *(New Policy)*

U-9.2: **Electric Energy Systems.** Coordinate with Pacific Gas and Electric Company (PG&E) to ensure that electrical energy systems do not adversely impact land uses and population in the City of American Canyon. *(Source: Existing General Plan, Policy 1.1.2.3.8)*

U-9.3: **Resilient Grid.** Cooperate with PG&E to obtain applicable City permit approvals that improve electric grid resilience to natural hazards (seismic events, flooding, wildfires, extreme wind events). *(Source: New Policy)*

U-9.4: **Overhead Utility Undergrounding**. Develop a comprehensive strategy to underground existing overhead utilities. *(Source: New Policy)*

U-9.5: **Passive Solar Heating and Cooling.** Consistent with the California Subdivision Map Act, require new subdivisions to examine the feasibility of incorporating site layouts that allow passive solar heating and cooling. *(Source: New Policy)*

U-9.6: **Residential Energy Efficiency.** Seek grant funds that help low and moderate-income residents obtain low or no-cost loans to increase energy efficiency of their homes through weatherization, insulation, solar energy generation and energy battery backup storage; and assist utility providers with outreach on home energy efficiency rebates and programs for all residents, regardless of income. *(Source: New Policy)*

Implementation Programs

	Programs	Implements Which Policy(ies)	Responsible / Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
A	**Public Education** Educate the community on effective water conservation methods through a variety of outreach methods. Maintain updated water conservation resources on the City's website. *(Source: New Implementation Program)*	U-1.4	Maintenance and Utilities Public Works	■				
B	**Rate Structure** Develop a rate schedule structured to promote water conservation. *(Source: Existing General Plan, Policy 5.4.2)*	U-1.4	Maintenance and Utilities Public Works		■			
C	**Demand Monitoring** Annually monitor the demands on the water system and, as necessary, manage development to mitigate impacts and/or facilitate improvements. *(Source: Existing General Plan, Policy 5.7.5)*	U-1.7	Maintenance and Utilities				■	
D	**Operational Criteria** Develop a set of operational criteria and compare with performance of current water distribution, storage, and treatment facilities. *(Source: Existing General Plan, Policy 5.7.10, modified)*	U-1.7	Public Works		■			
E	**Water Audits** Collaborate with efforts by local water providers to promote water audit programs that offer free water audits to single-family, multi-family, large landscape accounts, and commercial customers. *(Source: New Implementation Program)*	U-1.9 U-1.10	Public Works	■				
F	**Capital Improvement Program Update** Review and update every five years a new five-year Capital Improvement program for adoption and prioritization by the City Council. *(Source: Existing General Plan, Implementation Program 15.26)*	U-3.1	Public Works City Manager Maintenance and Utilities		■	■		■

	Programs	Implements Which Policy(ies)	Responsible / Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
G	**Impact Fees** Review and amend as necessary and appropriate, drainage impact fees and service charges collected from new development for the construction of new facilities necessitated by the new development. *(Source: Existing General Plan, Implementation Programs 15.30 and 15.31)*	U-3.1 U-3.3	Public Works					■
H	**Storm Drainage and Flood Control Standards** Review and update every five years the storm drainage and flood control improvement standards to set forth minimum requirements for the planning, design, construction and maintenance of storm drainage and flood control improvements. *(Source: Existing General Plan, Implementation Program 15.25)*	U-3.1 U-3.3 U-3.4 U-3.7 U-3.8 U-3.10 U-3.11 U-3.12	Public Works		■	■		■
I	**Low Impact Guidelines** Establish Low-Impact Development (LID) guidelines to limit the amount of impervious surface in new development and to increase the retention, treatment, and infiltration of urban stormwater runoff. LID measures should also apply to major remodeling projects and to public and recreation projects where possible. *(Source: New Implementation Program)*	U-3.8	Maintenance and Utilities Public Works		■			
J	**Sewer Improvement Standards** Prepare sewer system improvement standards and review every five years to minimum requirements are in place for the planning, design, construction, and maintenance of wastewater improvements. *(Source: Existing General Plan, Implementation Program 15.46)*	U-4.1	Maintenance and Utilities		■	■		■
K	**Review of Sewer Rates** Review and update sewer rates annually for operation and maintenance of the wastewater system. *(Source: Existing General Plan, Implementation Program 15.49)*	U-4.1	Maintenance and Utilities City Manager					■

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
L	**Wastewater Master Plan** Update the City's Wastewater Master Plan as necessary to accurately determine which collection and treatment facilities will be needed to serve present and future growth in the city. *(Source: Existing General Plan, Policy 5.15.3)*	U-4.1	Maintenance and Utilities					■
M	**Capital Improvement Program on Wastewater** Implement a five-year capital improvement program to upgrade and maintain the City's wastewater collection system. *(Source: Existing General Plan, Policy 5.15.4)*	U-4.1	Maintenance and Utilities City Manager		■	■		■
N	**Water Master Plan** Update the Wastewater Master Plan every five years to define existing conditions and reflect significant changes in the planned land use within the City. Capital improvement plans and prioritization schedules shall also be prepared. The utility systems shall be updated accordingly. City maintenance and replacement actions shall be identified. *(Source: Existing General Plan, Implementation Program 15.45)*	U-4.1 U-4.2 U-4.5	Maintenance and Utilities		■	■		■
O	**Capacity Recording** Establish and maintain a record of the capacity and utilization of wastewater collection and treatment facilities serving the City of American Canyon, monitoring impacts and demands of new development, and, as necessary, managing development to mitigate impacts and/or facilitate improvements. *(Source: Existing General Plan, Policy 5.14.6)*	U-4.4	Maintenance and Utilities			■		
P	**Fee Review** Review sewer connection fees, capacity fees, and monthly service charges, as necessary, to ensure that adequate amounts of fees and charges are collected to fund the operation/maintenance of existing facilities and to construct new facilities. *(Source: Existing General Plan, Policy 5.16.2)*	U-4.5	Maintenance and Utilities City Manager					■

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
Q	**Updating Standards and Guidelines** Regularly update design standards and/or guidelines to reflect best practices for: • open space /landscaping, filter strips, grass swales, • infiltration/sedimentation areas to be used in minimizing impervious area which is directly connected to piped or channelized drainage systems, and • detention facilities which will provide a dual purpose (water quality enhancement and detention) function. (Source: Existing General Plan, Implementation Programs 15.39 and 15.40, modified)	U-4.7	Maintenance and Utilities Community Development Public Works	■				■
R	**Municipal Facilities Recycled Water** Implement recycled water for new municipal facilities and landscaping by connecting new facilities to the recycled water pipeline network. (Source: New Implementation Program)	U-4.9	Public Works		■			
S	**Residential Recycled Water Program** Promote the Residential Recycled Water Program on social media and posting information on the City's online utility billing portal for residents. (Source: New Implementation Program)	U-4.9	Public Works		■			
T	**Levels of Service** Develop and implement a plan that provides a level of service that will comply with all applicable solid waste regulations and rules while remaining cost efficient, while seeking federal fund to offset any associated fiscal impacts. (Source: Existing General Plan, Objective 5.19 and Implementation Program, 15.63, modified)	U-5.1	Maintenance and Utilities			■		
U	**Annual Reduction Report** Prepare an annual progress report in collaboration with Napa County to report the progress and documentation of solid waste and recycling reduction. (Source: Existing General Plan, Implementation Program 15.64, modified)	U-5.1 U-5.3 U-6.1 U-6.2	Maintenance and Utilities City Manager				■	

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
V	**Funding for Receptacles** Identify appropriate funding sources for placing and maintaining trash and/or recycling receptacles in the City. (Source: Existing General Plan, Implementation Program 15.60)	U-6.5	Maintenance and Utilities Public Works	■				
W	**Zero Waste Action Plan** Create and adopt a zero-waste action plan to maximize waste diversion. (Source: New Implementation Program)	U-6.6	Maintenance and Utilities Public Works		■			
X	**Food Waste and Recycling Standards.** Update the municipal code to establish standards for food waste and recycling collection for residential, commercial, and industrial development. (Source: New Implementation Program)	U-6.7	Community Development	■				
Y	**Improve Efficiency in Existing Buildings** Study possible measures to improve energy and water efficiency in existing buildings. (Source: New Implementation Program)	U-7.3 U-7.4	Community Development		■			

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7 Environment, Parks & Recreation

American Canyon and its surrounding areas contain natural habitats and cultural and historical resources that significantly benefit the environment, history, and quality of life for the community. Together with Parks and Recreation, the Environmental Element provides a strategy for preserving and enhancing our human and natural environment.

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Introduction

American Canyon's environmental resources are critical features that define our character and quality of life. In our community, environmental resources include:

- Biological Resources
- Water Resources
- Soil Resources
- Cultural and Historic Resources
- Regional and Local Open Space
- Parks and Recreation
- Scenic Resources
- Air Quality and Climate Change

Why Is Protecting the Environment and enhancing Recreation and Open Space Important?

Our natural environment, combined with recreation and open space are central features of our community's quality of life. Preserving the environment retains important ecosystems that life itself depends. For American Canyon residents, our environment defines American Canyon as our home – a place with familiar physical features that endure for generations.

The City's open space system provides places for recreation, activity, and engagement, for peace and enjoyment, and for freedom and relief from the built world. Physical recreation reduces obesity and risk of cardiovascular disease, diabetes, and other health ailments. Public open spaces, whether playgrounds, picnic fields or even just engaging streets, can help build community by giving neighbors a realm in which to get to know each other, and giving children a safe place to play.

Biological Resources

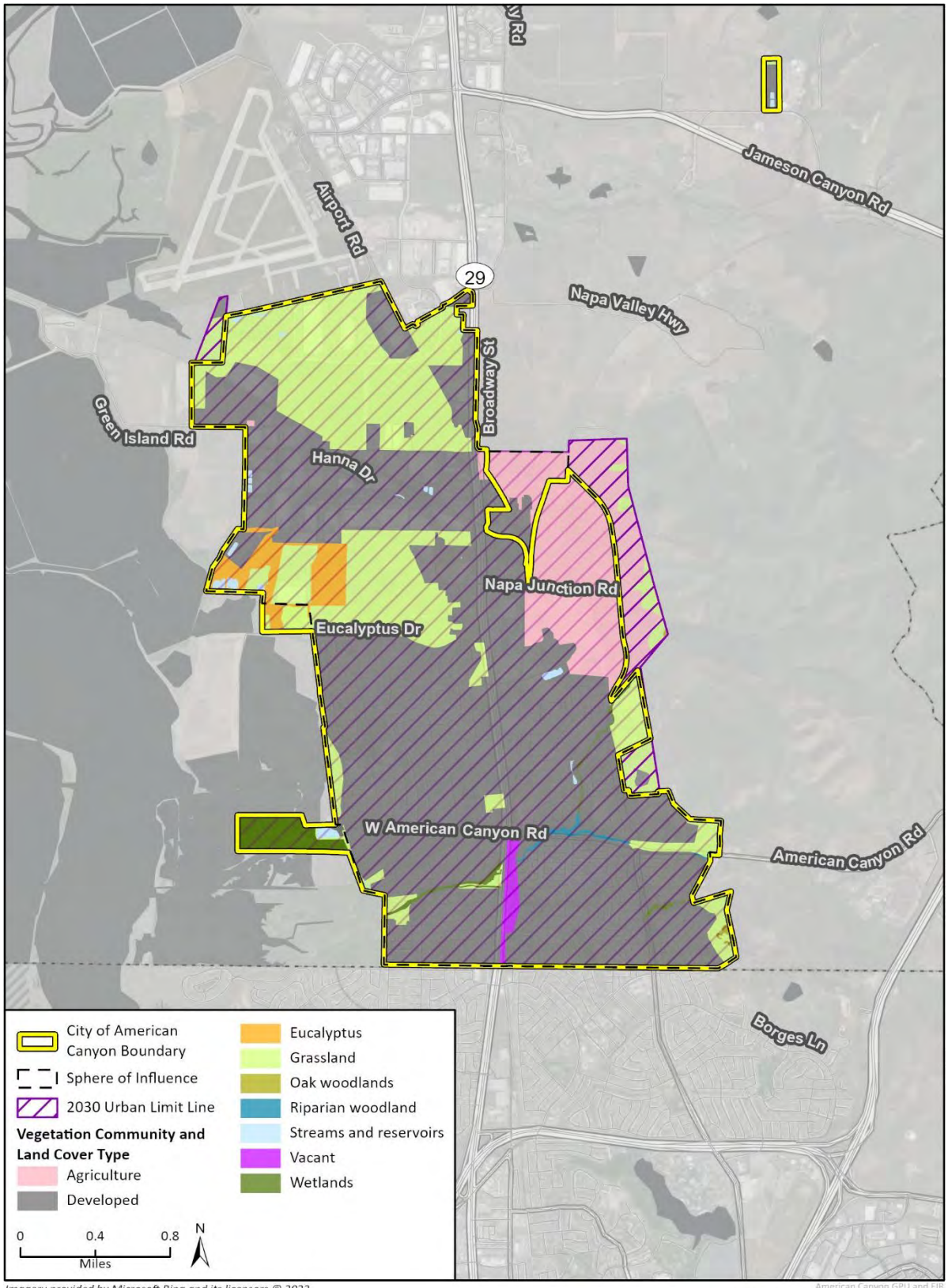
American Canyon has rich habitat areas in and around the community. The Napa River tidal wetland area lies at the western city boundary. Smaller wetlands are located within the city boundaries, including rivers and streams that traverse the city from east to west. These important ecosystems provide habitat for special-status species that rely on wetland or riparian habitats. American Canyon is also located alongside critical habitat for a variety of natural species, including the California red-legged frog (Rana draytonii) to the east of the city, and vernal pool fairy shrimp. (Branchinecta lynchi) to the northwest. (Source: New Text)



What is critical habitat?

Critical habitat, as defined by the Endangered Species Act, are specific geographic areas that are important for the protection and/or recovery of an endangered or threatened species.

ENV-Figure 1: Vegetation Communities in American Canyon



Imagery provided by Microsoft Bing and its licensors © 2023.
Additional data provided by Napa County, 2019.

American Canyon GPU and EIR
Fig X Vegetation Communities in American Canyon

Special-Status Species

A special status species is listed on the federal and/or State Endangered Species Acts as endangered, threatened, a candidate for listing, or of special concern. American Canyon and the surrounding areas are potentially home to numerous special-status species, including 30 plants, 26 birds, 10 fish, five invertebrates, five mammals, two amphibians, and one reptile.

Goals and Policies

Goal ENV-1:

Protect and preserve significant habitats, plants and wildlife within the city and areas of its jurisdiction. (Source: Existing General Plan, Goal 8)

Policies

ENV-1.1: **Areas of Significant Biological Value.** Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development. *(Source: Existing General Plan, Objective 8.1)*

ENV-1.2: **Sensitive Habitat Assessment and Impact Mitigation.** Require new development and redevelopment located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, vernal pools, and riparian habitats to provide a detailed assessment of the potential for impacts on these resources, and include measures to reduce any identifiable impacts. *(Source: Existing General Plan, Policy 8.2.1, modified)*

ENV-1.3: **Habitat Conservation**. Support habitat conservation efforts to set aside and preserve suitable habitats, with priority given to habitats for rare and endangered species in American Canyon in accordance with state and federal resource agency requirements. *(Source: New Policy)*

ENV-1.4: **Native Species**. Encourage the use of native vegetation where possible. *(Source: New Policy)*

ENV-1.5: **Open Space Network.** Establish a network of open spaces along the city's natural drainages and riparian corridors and link significant biological habitats by restricting alteration to these resources and limiting land uses. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas. *(Source: Existing General Plan, Policy 8.3.5, modified)*

ENV-1.6: **Urban Forest.** Build upon existing streetscapes and develop an urban forest within the City's streets, parks, and open space to provide avian habitat, sequester carbon monoxide emissions, foster pedestrian activity, and provide shade. *(Source: New Policy)*

ENV-1.7: **Trees for Pollinators.** Support sustainable pollinator species (i.e.: bees, birds, butterflies) in American Canyon by planting low-water use pollinator-supportive trees in streets, parks, open spaces, and private development. *(Source: New Policy)*

ENV-1.8: **Education and Appreciation.** With community partners, support a range of educational programs that cultivate an appreciation of American Canyon's natural environment and biological resources. *(Source: New Policy)*

ENV-1.9: **Natural Drainage Preservation.** Through the development review process, evaluate opportunities to preserve natural on-site drainages and consider opportunities to incorporate pedestrian paths and greenbelts along their lengths. *(Source: Existing General Plan, Policy 8.3.6, modified)*

ENV-1.10: **Natural Resource Integrity.** Consistent with Federal and State Resource Permitting agencies, encourage activities that improve the biological value and integrity of the city's natural resources through vegetation restoration, control of invasive plants and animals, and landscape buffering. *(Source: Existing General Plan, Policy 8.4.3)*

ENV-1.11: **Napa River Studies.** Support state and federal studies of the Napa River wetlands and riverine systems. *(Source: Existing General Plan, Policy 8.1.2)*

Water Resources

There are six primary watercourses within the Planning Area: American Canyon Creek, North Slough Creek, Rio Del Mar Creek, Rio Del Mar Creek, No Name Creek, and Fagan Creek. These watercourses have well-defined channels upstream with sparse vegetation due to the streams being dry most of the year. The downstream reaches of the creeks have significant vegetation along banks because of year-round flows mostly generated from development runoff.

Most of the city's precipitation falls as rain during the months of November through April with the most rainfall in December and January. The mean annual precipitation is between 22 and 23 inches.

Goals and Policies

Goal ENV-2:

Maintain the quality of surface and subsurface water resources within the City of American Canyon and the Urban Limit Line. (Source: Modified Existing General Plan, Goal 8.8A)

Policies

ENV-2.1: **Creek Preservation.** Maintain American Canyon Creek within its natural waterway. *(Source: Existing General Plan, Policy 8.7.1)*

ENV-2.2: **Existing Streams and Creeks.** As required by wetland resource permitting agencies, require new development to incorporate existing streams and creeks into proposed development plans in their natural state to prevent degradation, erosion, or sedimentation and help impart a unique character to the city. *(Source: Existing General Plan, Policy 8.7.2, modified)*

ENV-2.3: **Minimize Soil Erosion.** Implement best management practices from the National Pollution Discharge Elimination System (NPDES) to prevent soil erosion impacts on water resources. *(Source: Existing General Plan, Policy 8.8.1, modified)*

ENV-2.4: **Stormwater Drainage on Development Sites.** Through the development review process, evaluate methods to ensure required stormwater drainage systems are environmentally sensitive safe, and attractive. *(Source: New Policy)*

ENV-2.5: **Public Education.** Protect existing water resources by continuing public education on safe disposal of household hazardous waste and storm drain pollution prevention (i.e.: "only rain down the drain"). *(Source: New Policy)*

Cultural and Historic Resources

The American Canyon area has a rich Native American history and is the traditional territory of the Patwin. Tribes in the area include the Cortina Rancheria – Kletsel Dehe Band of Wintun Indians, the Confederated Villages of Lisjan, and Yocha Dehe Wintun Nation.

Goals and Policies

Goal ENV-3:

Preserve and restore sites, and structures that have architectural, historical, archaeological and/or cultural significance to the City of American Canyon. (Source: Existing General Plan, Goal 8.8.E Modified)

ENV-3.1: **Resource Protection.** Ensure the City's culturally, historically, and archaeologically significant resources are protected in a manner that preserves and/or enhances the inherent resource value. *(Source: Existing General Plan, Objective 8.19, modified)*

ENV-3.2: **Historic Structure Compatibility.** Encourage compatibility between new development and existing adjacent historic structures in terms of scale, massing, building materials and general architectural treatment. *(Source: Existing General Plan, Policy 8.19.4, modified)*

ENV-3.3: **Historic Resource Reuse.** Encourage appropriate adaptive reuse of historic resources where possible to prevent misuse, disrepair, and demolition. *(Source: Existing General Plan, Policy 8.20.5, modified)*

ENV-3.4: **Historical Building Code.** When historical structures are rehabilitated in accordance with established historic preservation guidelines, consider implementing the State Historical Building Code Part 8, Title 24. *(Source: Existing General Plan, Policy 8.20.3, modified)*

ENV-3.5: **Historic Resource Preservation.** Prohibit demolition of an historic resource as a first-choice alternative for resources that qualify for Federal, State Historic Registration, or Locally Significant Resources. *(Source: Existing General Plan, Policy 8.20.4, modified)*

ENV-3.6: **Flexible Development Standards.** Consider flexibility in development standards, such as a variance of setbacks, heights and parking requirements to help feasibility of new development that contains preserved historic resources. *(Source: Existing General Plan, Policy 8.20.4, modified)*

Goal ENV-4:

Protect cultural and tribal resources. (Source: New Goal)

Policies

ENV-4.1: **Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. *(Source: New Policy)*

ENV-4.2: **Development.** Ensure that human remains are treated with sensitivity and dignity and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98. *(Source: New Policy)*

ENV-4.3: **Yocha Dehe Wintun Nation Treatment Protocol**. In the event any Native American human remains, grave goods, ceremonial items, and items of cultural patrimony are found in

conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity, the "Yocha Dehe Wintun Nation Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation" shall be implemented as included as Appendix A to the Housing Element. (Source: New Policy)

Open Space

American Canyon maintains approximately 1,168 acres of open space, including the 642-acre Newell Open Space Preserve, the 24-acre Clarke Ranch open space area, and 513 acres of protected wetlands on the western side of the city (Figure 1). Figure 2 shows land designated as open space in and surrounding the city.

Open Space is managed by several agencies and private individuals within the city and Planning Area. Some of these are listed below:

The City of American Canyon

The City of American Canyon owns and manages several open space resources within the city and Planning Area.

Newell Open Space Preserve

The Newell Open Space Reserve (Newell Open Space) is located east of the city limits. Consisting of 642 acres of steep hills, Newell Open Space is also a working ranch with free-range cattle. The preserve was donated to the City in 1999 by Jack and Bernice Newell. The Land Trust of Napa County holds a conservation easement over the property. The preserve consists primarily of non-native grassland with pockets of oak-bay woodlands and eucalyptus trees and provides habitat for federally listed threatened and endangered plant and animal species including golden eagles, red-legged tree frogs and Tiburon paintbrush. In addition to providing natural habitat and grazing lands, Newell Open Space is used for recreation by the public and has a system of trails that the City intends to improve and expand.

Clarke Ranch

Acquired by the City in 1999 from the Port of Oakland through CalFed grant funds, Clarke Ranch is a 24-acre parcel of open space adjacent to the Wetlands Viewing Area and Napa River Bay Trail. Today, the property is home to the

American Canyon branch of the 4-H Club and a Spirit Horse Riding Center facility. Spirit Horse is an all-inclusive riding program open to riders of all abilities who are facing developmental, emotional, social, and physical challenges. In 2017, the City Council adopted a Master Plan for future improvements at Clarke Ranch.

Napa River Wetlands



The Napa River Wetlands are located on lands outside the city limits, but owned by the City of American Canyon and the State of California. The Wetlands features ten miles of trails jointly managed by the City of American Canyon, the California State Fish and Wildlife Department, and the Napa County Parks and Open Space District, including segments of the San Francisco Bay Trail. The Napa River Bay Trail, which opened the first segment in 2010 provides great views of the wetlands and constructed ponds, as well as public access to the Napa River. You can view a video that describes the wetlands HERE.

Watercourses in American Canyon

Major watercourses in American Canyon have been set aside as open space as part of development approvals. These watercourses and uplands are shown on Figure 1.

Golden State Land Conservancy

Canyon Estates Homes is a residential subdivision situated east of Newell Drive north of the American Canyon High School. The Canyon Estates project set aside 67 acres to Golden State Land Conservancy for wildlife and habitat conservation.

Napa Logistics Park is an industrial park located south of Napa Airport, east of Devlin Road. In 2013, the Napa Logistics Park set aside a 34-acre wetland easement to Golden State Land Conservancy for wildlife and habitat conservation.

Trail Networks

Napa County and American Canyon enjoys a network of regional trail systems that showcase many of the unique environments and spectacular scenery throughout the valley. From paved riverwalk trails to hikes along the ridge, the combined trail systems listed below provide views, exercise and adventures for everyone.

The City of American Canyon supports trail networks with several regional partners. These include the Napa County Regional Park and Open Space District, the Napa Valley Vine Trail Coalition, the San Francisco Bay Trail, and the Bay Area Ridge Trail Council.

Napa Valley Vine Trail

The Napa Valley Vine Trail is spearheaded by the nonprofit Napa Valley Vine Trail Coalition to construct a 47-mile walking and biking trail system connecting the entire Napa Valley from the Vallejo Ferry terminal to Calistoga. The City of American Canyon adopted the Vine Trail into the General Plan as part of the Bicycle Master Plan in 2012 with minor updates since that time. A total of 47 miles are envisioned when the trail network is complete. As of 2022, 20 miles have been completed within American Canyon.

The Bay Trail

The Bay Trail is spearheaded by the nonprofit San Francisco Bay Trail Coalition to construct over a 500-mile walking and biking trail system to circle the San Francisco Bay. In American Canyon, a Bay Trail segment is located adjacent to Meadow Bay Drive and Wetlands Edge Road. From there, the Bay Trail continues north along the Napa River to the eastern side of the Brazos Railroad Bridge.

Ridge Trail

The Bay Area Ridge Trail Council, a nonprofit organization encompassing representatives from public and private organizations, has sponsored planning for a 550-mile Ridge Trail that would traverse the ridgelines surrounding the San Francisco Bay. The closest Ridge Trail to American Canyon traverses Hiddenbrooke in Vallejo, north to Lynch Canyon, then to Skyline Wilderness Park in the City of Napa.

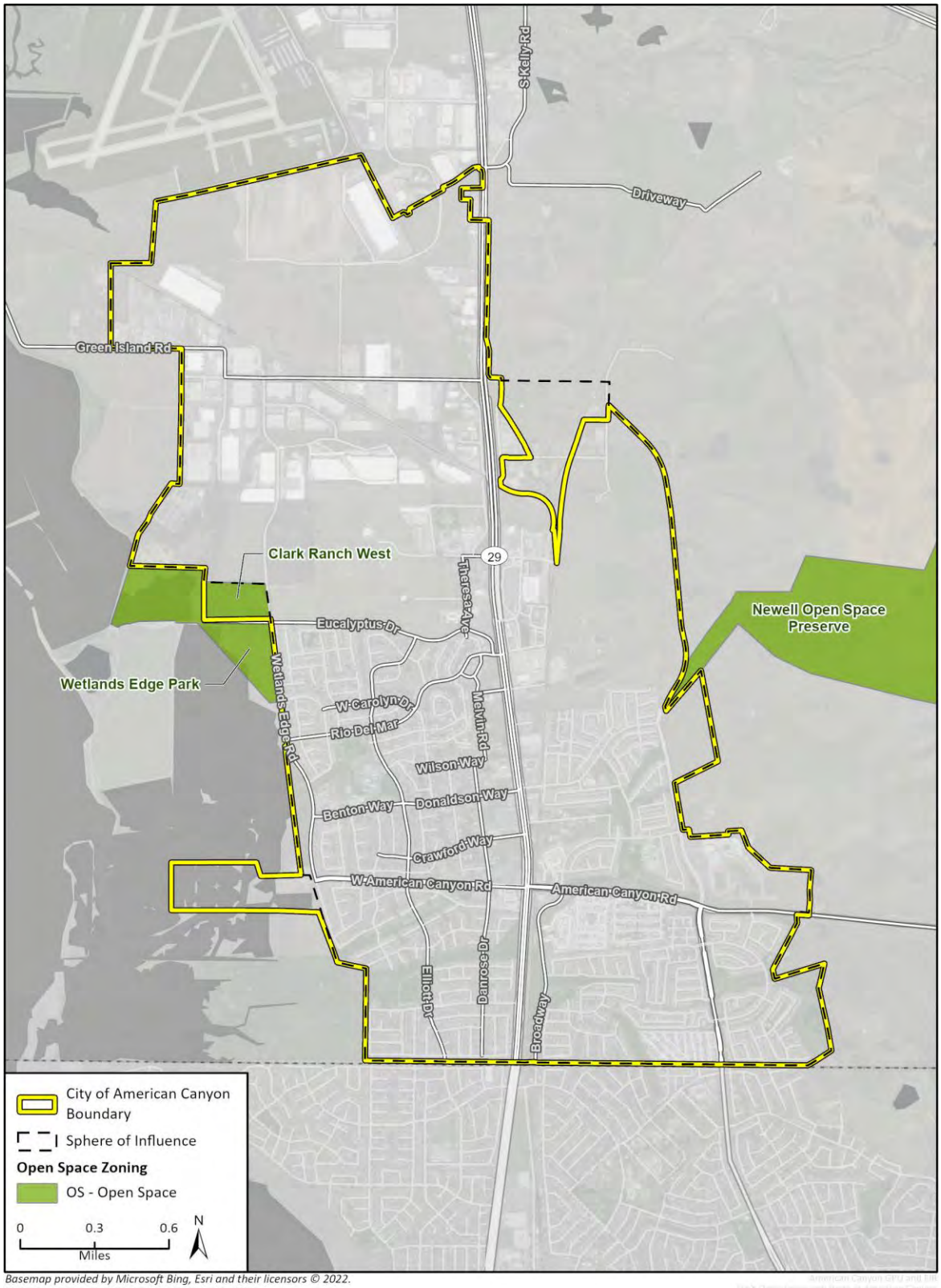
Within American Canyon a planned River to Ridge Trail would connect the Bay Trail next to the Napa River to the Ridge Trail in Lynch Canyon through the Newell Open Space Reserve.

American Canyon Wetlands Trail

The American Canyon Wetlands trails were opened to the public in 2010. This five-mile Class I paved trail network showcases the Napa River, associated marshes, and beautiful views across town east to the Newell Open Space.



ENV-Figure 2: Open Space in American Canyon



Basemap provided by Microsoft Bing, Esri and their licensors © 2022.
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Goals and Policies

Goal ENV-5:

Preserve and expand trails and public and private open space areas for conservation and recreational use. (Source: New Goal)

Policies

ENV-5.1: **Open Space Designation.** Maintain the following types of land as designated open space:

a. Sensitive habitats or unique resources such as oak woodlands, riparian/creek corridors, significant wetlands and corridors which connect habitats;

b. Those areas which are best suited to non-urban uses due to:

i. Infeasibility of providing proper access or utilities;
ii. Excessive slope or slope instability;
iii. Wildland fire hazard;
iv. Noise exposure; and
v. Flood hazard; *(Source: New Policy)*

ENV-5.2: **Open Space Funding.** Encourage partnering with community groups and neighboring jurisdictions to identify grant opportunities to maintain, enhance, and expand open space, and recreational opportunities. *(Source: New Policy)*

ENV-5.3: **Interjurisdictional Open Space Coordination.** Coordinate open space planning, acquisition, and development efforts with those of Napa County and regional and State agencies. *(Source: Policy 7.4.5 modified)*

ENV-5.4: **Open Space Access.** Provide public access to open space resources, with interpretive information, when doing so is consistent with protection of the resources, and with the security and privacy of affected landowners and occupants. *(Source: New Policy)*

ENV-5.5: **American Canyon Bicycle and Pedestrian Trail Plans.** Continue to refer to the American Canyon Bicycle and Pedestrian Trail plans for guidance on trail locations, construction design, priority development and other relevant policies. See Mobility Element Appendix A and B. *(Source: New Policy)*

ENV-5.6: **Trail System.** Work with property owners, resource conservation agencies, neighboring cities, Napa County, and the State to establish an interconnected system of trails connecting open space resources with surrounding neighborhoods. *(Source: Policy 7.2.1 and 7.2.2 modified)*

ENV-5.7: **River to Ridge Trail.** Implement the planned River to Ridge Trail alignment (West to East). The trail would travel from Eucalyptus Drive to Broadway, south on Broadway to South Napa Junction Road, east across the railroad tracks to Watson Ranch and the Newell Open Space Preserve beyond. *(Source: BDSP Policy 5-9)*

ENV-5.8: **Urban Open Space.** Plan, design and build open spaces of varying size (e.g. public plazas, large and small open spaces, and spaces for social gathering that serve as local focal points) to diversify the open space experience and provide opportunities for a larger range experiences for park users. *(Source: BDSP Policy 5-1)*

ENV-5.9: **Surplus Caltrans Right-of-Way.** Work with Caltrans to use vacant, surplus properties for park and open space purposes. *(Source: BDSP Policy 5-2)*

ENV-5.10: **Urban Trails.** Improve convenience of nonmotorized in-town trips and recreation by linking residential and commercial land uses with pedestrian trails**.** *(Source: Policy 7.2.6 modified)*

ENV-5.11: **Trail Construction.** Require new development to dedicate and improve trails and walkways at least ten feet wide across long blocks or to provide access to schools, parks, open spaces or other public areas, and where such trails or walkways are within the project boundary or frontage and shown on any map or diagram in the general plan and any of its elements or on any specific plan of the city of American Canyon. *(Source: New Policy based on ACMC 18.40.090)*

ENV-5.12: **Climate Adaptation**. Mitigate the effects of heat reflecting from paved trail surfaces by incorporating shade trees along the south and west sides of trails wherever possible. *(Source: New Policy)*

ENV-5.13: **Trail Connectivity.** Enhance trail functionality by identifying gaps that connect missing links along a trail or between trail networks. *(Source: New Policy)*



Parks and Recreation

The City of American Canyon's natural beauty makes outdoor recreation that much more special. The park system in the Planning Area is comprised of a diverse range of outdoor parks and recreation facilities that serve every segment of our community. The General Plan will guide the City's future parks and recreation decisions, so they improve over the next 20 years for the benefit of everyone.

Policy Framework

American Canyon Subdivision Ordinance

The Subdivision Ordinance is included in the American Canyon Municipal Code under Title 18. The subdivision ordinance requires parkland to be dedicated or in-lieu fees paid in conjunction with approval of residential subdivisions.

Parks and Community Services Master Plan

This plan is intended to guide the vision and direction and natural amenities and services provided by the Parks and Recreation Department in American Canyon.

Parks and Recreation Needs Assessment

The Parks and Recreation needs Assessment was completed in 2015. The assessment used a statistically valid survey to predict trends and patterns of use and how to address unmet needs in American Canyon and recommended Level of Service Standards to develop appropriate actions regarding recreation programs, parks, trails, open space, building and other amenities.

Quimby Act

The Quimby Act (Government Code Section 66477) allows local governments to require developers to dedicate land, donate conservation easements, or pay fees to fund parkland development. The Quimby Act has a standard of 3.5 acres of parkland per 1,000 residents. The American Canyon General Plan and Parks and Community Services Master Plan identify a local standard for American Canyon at 5.0 acres per 1,000 residents.

American Canyon Bicycle Master Plan

This plan was developed as a component of the Napa Valley Transportation Authority's Countywide Bicycle Plan Update. The Bicycle Plan is intended to help make American Canyon more safe, convenient and accessible for bicycles within and traveling through American Canyon. American Canyon adopted the Bicycle Plan into the General Plan in 2012.

American Canyon Pedestrian Master Plan

This plan was developed as a component of the Napa Valley Transportation Authority's Countywide Pedestrian Plan Update. The pedestrian plan is intended to make walking in Napa County more safe, comfortable, convenient and enjoyable for all pedestrians. It strives to improve accessibility for the disabled but does not intend to replace an existing Americans with Disabilities Act (ADA) Transition Plan. American Canyon adopted the Pedestrian Plan into the General Plan in 2017.

Park Classifications:

Mini-Parks are less than one acre in size and not designed for active recreational uses. They do, however, provide passive open space and buffering from adjacent urban development and typically include elements such as walking paths and benches. The City has three Mini-Parks listed below:

ENV-Table 1: Mini Parks

Name	Address/Location	Acreage
Bedford & Kensington	323 Bedford Lane	0.14
Nottingham & Bently	270 Nottingham Lane	0.10
Danrose Sports Court	785 Danrose Drive	1.24

a. Neighborhood Parks are usually two and a half to five acres in size and primarily planned for children five to fourteen years of age.

To maximize the use of the parcel, these parks are ideally located within the center of a neighborhood and sited adjacent to a school whenever possible.

Recreation facilities typically provided in neighborhood parks include children's play areas (ideally equipped with a variety of play equipment for a range of users), picnic tables, and basketball courts. The service area for a neighborhood park is generally one-quarter to a one-half mile radius. The City has 15 Neighborhood Parks listed below:

ENV-Table 2: Neighborhood Parks

Name	Address/Location	Acreage
Banbury Park	100 Banbury Way	8.83
Elliott Park	2234 Elliott Drive	2.83
Gadwall Park	161 Gadwall Street	2.0
Linwood Park	285 Linwood Lane	1.32
Main Street Park	5050 Main Street	3.0
Melvin Park	19 Melvin Road	1.3
Montecarlo Park	54 Montecarlo Way	2.75
Northampton Park	243 Northampton Drive	4.0
Pelleria Park	54 Pelleria Drive	1.0
Quarry Park	N/A	7.1
Shenandoah Park	100 Sonoma Creek Way	6.0
Silver Oak Park	485 Silver Oak Drive	5.0
Via Bellagio Park	100 Via Bellagio	1.0
Watson Ranch Center Park	Marcus Road	3.8
Watson Ranch Newell Park	Newell Drive	7.4

b. Community Parks are designed to serve several neighborhoods. Community parks are planned for youths and adults and provide for a wider range of activities than the neighborhood park or playground. Community parks generally range in size from 10 to 40 acres and provide facilities for both indoor and outdoor recreational activities such as softball diamonds, basketball courts, tennis courts and community centers. The service area for a community park is typically one-to-one-and-a-half-mile radius. *(Source: Existing Policy 7.3.1)* The City has 5 Community Parks listed below:

ENV-Table 3: Community Parks

Name	Address/Location	Acreage
Community Park I	1400 Rio Grande Drive	8.0
Community Park II	20 Benton Way	6.3
Kimberly Park	600 Kimberly Way	10.0
Little League Complex	280 Napa Junction Road	10.0
Veterans Memorial Park	2801 Broadway	9.0

c. Regional Parks are usually 50 acres or larger and designed to serve the local community in which the park is located and surrounding communities. Community Parks often retain significant natural features and provide outdoor recreational facilities, such as picnicking, camping, hiking, and unique programs that appeal to a broad range of interests and recreational needs. Within the Planning Area, the Napa County Regional Parks and Open Space District is in the process of acquiring the Suscol Ridge Regional Park. The Planning Area has three Regional Parks listed below:

ENV-Table 4: Regional Parks

Name	Address/Location	Acreage
Newell Open Space Preserve	7000 Newell Drive	642
Suscol Ridge Regional Park	Jameson Canyon Road	711
Wetlands Edge	Wetlands Edge	TBA

Goals and Policies

Goal ENV-6:

Enrich the quality of life in American Canyon by providing parks, trails, and recreational services for all of the City's residents. (Source: Existing Goal 7)

Policies

ENV-6.1: **Park Standards.** Provide a variety of mini, neighborhood, community, and regional park facilities to achieve a minimum standard of 5 acres of parkland per 1,000 residents. *(Source: Existing Policy 7.1.1, modified*)

ENV-6.2: **Parks Master Plan.** Create a comprehensive, citywide Parks and Recreation Master Plan that provides specific criteria and guidelines for the siting, design, and programming of parks and recreational facilities. *(Source: Existing Policy 7.1.2, modified*)

ENV-6.3: **Parks System.** Work toward the establishment of a of public parks system interconnected by off-street trails or bicycle lanes. *(Source: Existing Policy 7.1.3, modified*)

ENV-6.4: **Park Balance between Active and Passive.** Ensure that American Canyon provides both active and passive recreational activities in a variety of park and trail settings. *(Source: Existing Policy 7.1.4, modified*)

ENV-6.5: **Corp Yard Re-Use**. Consider re-use of the Wetlands Edge Corp Yard to an Eco Center through a partnership agreement with a nonprofit foundation. *(Source: New Policy)*

ENV-6.6: **Public Input.** Promote a high level of public outreach regarding park and recreation opportunities and facility design in American Canyon. *(Source: New Policy)*

ENV-6.7: **Landfill Re-Use**. Evaluate the potential for further recreational use at the closed landfill. *(Source: New Policy)*

ENV-6.8: **Kayak Launch.** Evaluate feasible locations to accommodate a kayak launch at the Napa River wetlands. *(Source: New Policy)*

ENV-6.9: **Broadway District Specific Plan Parks.** Evaluate feasible locations for public parks to serve residents in the Broadway District Specific Plan area. *(Source: New Policy)*

ENV-6.10: **Watson Ranch Specific Plan.** Incorporate the Watson Ranch Specific Plan recreation program into the General Plan by reference which includes private recreation facilities, public parks, trails, and community center and plaza. *(Source: New Policy)*

ENV-6.11: **Climate Change Adaptation.** Consider impacts and feasible adaptation measures to address potential long-term impacts of sea level rise, extreme weather, and heat on the city's park system. *(Source: New Policy)*

ENV-6.12: **Park Dedications.** Review the Subdivision Ordinance as necessary to ensure park dedication requirements remain consistent with the Subdivision Map Act. *(Source: Existing Policy 7.6.1 modified)*

ENV-6.13: **Park Accessibility.** Require any park construction and any new development on existing park facilities meet accessibility standards defined by the Americans with Disabilities Act (ADA) and playground safety requirements (Senate Bill 2733). *(Source: Existing Policy 7.10.3 modified)*

ENV-6.14: **Park Fee Revenue.** Periodically review the parks and recreation fee structure to ensure it is meeting established cost-recovery objectives without placing an excessive financial burden on residents. *(Source: Existing Policy 7.8.5 modified)*

ENV-6.15: **Park Impact Fee**. The City shall update, as needed and appropriate, the park in-lieu fee assessed to all new development. *(Source: Existing Policy 7.6.4)*

ENV-6.16: **Park Donations**. Provide mechanisms by which the City may accept gifts and dedications of parks, open space and facilities. *(Source: Existing Policy 7.6.5)*

ENV-6.17: **Park Funding.** Consider the use of special taxes, bonds, or assessment districts for park development and maintenance. *(Source: Existing Policy 7.6.6)*

ENV-6.18: **Park Funding**. Seek out and aggressively pursue all forms of federal, state, county, private foundation, and endowment support to assist in the acquisition, development and programming of park and recreation resources in the City of American Canyon. *(Source: Existing Policy 7.6.7)*

ENV-6.19: **Park Service Variety.** Provide a variety of desirable amenities within recreation areas to accommodate persons of varying ages and leisure time interests. *(Source: Existing Policy 7.11.2)*

ENV-6.20: **Private Recreation Services.** Ensure the zoning code accommodates sufficient land within the city to allow establishment of private commercial recreation facilities and services that serve all age groups that could not otherwise be provided by the City. *(Source: Existing Policy 7.6.9 modified)*

ENV-6.21: **Park Operation and Maintenance.** Operate and maintain American Canyon's park and recreation facilities by utilizing programs that are designed for the most effective use and enhancement of park sites at the minimum possible cost. *(Source: Existing Objective 7.8)*

ENV-6.22: **Partnerships.** Encourage partnerships with the American Canyon Community & Parks Foundation, the Napa County Parks and Open Space District, the 4-H Club and many other neighborhood groups, organizations, clubs and businesses to take a greater interest and financial responsibility in the improvement of the park and recreation system in American Canyon through the donation of goods, services and financial support. *(Source: Existing Policy 7.8.3 modified)*

ENV-6.23: **Volunteer Services.** Promote establishment of volunteer services program to assist City Park and recreation staff, thereby stimulating more direct community involvement and reducing future staffing costs. *(Source: Existing Policy 7.8.4)*

ENV-6.24: **Volunteer Recognition**. Recognize, support, and celebrate the efforts of local groups and organizations that provide recreational opportunities for youth and members of all age groups. *(Source: Existing Policy 7.10.6 modified)*

ENV-6.25: **Nighttime Park Use**. Limit nighttime hours in parks located adjacent to residences to ensure noise does not adversely

impact resident quality of life. *(Source: Existing Policy 7.8.7 modified)*

ENV-6.26: **Park Maintenance**. Rehabilitate existing American Canyon parks based on such measures as increased public access, lower maintenance costs and increased service delivery. *(Source: Existing Policy 7.8.8*)

ENV-6.27: **Highlight Natural Features.** Combine Park sites that contain significant natural features with recreational learning opportunities wherever possible. For example, the City could establish a natural resource learning center near the Napa River Wetlands. *(Source: Existing Policy 7.10.4)*

Public Art

A community's sense of place is not static. As a narrative that evolves over time, Public Art provides voice to the many values and historical periods within the community. A further beauty of Public Art is its expressive diversity – there is no limit to art form and subject matter. What can Public Art do?

- Create a sense of place
- Improve pedestrian connections and walkability
- Instill civic pride
- Provide jobs for neighborhood artists
- Celebrate the City's history and culture
- Reduce vandalism and graffiti

Encouraging and celebrating the community's artistic expression will enrich our lives and nurture our community to flourish intellectually, culturally, and economically.

Goals and Policies

Goal ENV-7:

Enhance the community with visual arts that acknowledge our local artistic community, inspire pride, identity, and a sense of place within the community. (Source: New Goal, Public Art Program Protocol)

Policies

ENV-7.1: **Public Art Program.** Establish a program to facilitate artwork on public property. *(Source: New Policy)*

ENV-7.2: **Public Art Generally.** Ensure administrative policies foster an artwork-rich environment by exempting formal artwork selection procedures for minor-age residents and artwork on private property. *(Source: New Policy)*

ENV-7.3: **Public Art Committee.** On a regular basis, ensure a 2-Councilmember Ad-Hoc Subcommittee of the City Council is appointed to review and implement the Public Art Program. *(Source: New Policy)*

ENV-7.4: **Public Art Qualifications.** Ensure artists that develop public art are well qualified and recognized by critics and peers as a professional practitioner of the visual art. *(Source: New Policy)*

ENV-7.5: **Public Art Selection Criteria.** Ensure Public Art is diverse and inclusive by considering artworks of all schools, styles, and tastes. *(Source: New Policy)*

ENV-7.6: **Public Art Location Criteria.** Ensure Public Art selected is visible and accessible to the public and constructed safely and placed outside traffic or other potential hazards. *(Source: New Policy)*

ENV-7.7: **Public Art Maintenance.** Ensure ongoing artwork maintenance is considered when selecting Public Art. *(Source: New Policy)*

ENV-7.8: **Public Art Funding.** Consider establishing a Public Art fund as the depository for all funds collected with the Public Art Program. *(Source: New Policy)*

Scenic Resources

American Canyon is located adjacent to the Coast Mountain Ranges with rich scenery and iconic landscapes. Wetlands Edge Road provides unimpeded views of the marsh and the nearby Napa River to the distant hills beyond. The eastern hills are visible from many areas of the community, bordering the city

with foothills along Newell Drive and American Canyon Road. *(Source: New Text)*

Several streams and creeks are located throughout the city and surrounding area, including American Canyon Creek, which runs through the southern portion of the city from the Sulphur Spring Mountains down to the Napa River. These waterways and natural areas provide habitat for local animal and plant species and are an important community resource for recreation and attractive landscapes. *(Source: New Text)*

These scenic resources, and the general bucolic environment in which the city resides, is a key characteristic for American Canyon that will be preserved and protected through policy and future development decisions. *(Source: New Text)*

There are no designated scenic highways or roads in American Canyon. However, the County has designated the portion of Highway 29 north of the American Canyon and South of the City of Napa as a designated scenic road. In addition, the portion of American Canyon Road located east of the city limits is also designated as a scenic road. *(Source: New Text)*

Goals and Policies

Goal ENV-8:

Preserve viewsheds and scenic resources, including ridgelines, canyons, and significant public views. (Source: New Goal)

Policies

ENV-8.1: **Implement the Urban Limit Special Study Zone.** The Special Study Zone in the Urban Limit Line on the eastern side of American Canyon requires proposed development to provide view corridors and public access from Newell Drive to the agricultural and Open Space lands in Unincorporated Napa County to the east (2008 Urban Limit Line Initiative)

ENV-8.2: **Oat Hill View Corridor**. In conjunction with new development on Oat Hill, accommodate a public view trail around the top of Oat Hill. *(Source: New Policy)*

ENV-8.3: **Identify Scenic Vistas.** Identify notable viewsheds and public views from which scenic vistas can be observed. *(Source: New Policy)*

ENV-8.4: **Visual Design.** Require massing, height, and orientation of new development where allowable by the zoning standards adjacent to viewsheds and public views be evaluated and be sited and designed to minimize additional obstructions of public views to and along scenic areas. *(Source: New Policy)*

ENV-8.5: **Public Access to Vistas.** Identify important vista locations within the City, Sphere of Influence, and Urban Limit line and evaluate modification to the American Canyon Bicycle Plan and the Napa Countywide Bicycle and Pedestrian Master Plans to include trails that lead up to and around important vista locations. *(Source: New Policy)*

Climate Change and Air Quality

Greenhouse Gas Emissions

Greenhouse gases (GHG) are gases that trap heat in the Earth's atmosphere and cause changes to the Earth's climate, including changes to weather and precipitation patterns and increasing global temperatures. The main sources of GHG emissions are the combustion of fossil fuels for transportation and energy. California is a leader in GHG emissions reductions efforts and has adopted aggressive targets for GHG reduction. Primary GHG reduction legislation driving State and city climate action plans include Assembly Bill (AB) 32, Senate Bill (SB) 32, and Executive Order (EO) B-55-18. California has also passed legislation to increase energy efficiency in buildings (Title 24), improve fuel efficiency in vehicles (Advanced Clean Cars Program), and establish the goal of 100 percent carbon neutral electricity by 2045 (SB 100).

Major California Climate Change Legislation

- **Assembly Bill (AB) 32** – AB 32 was adopted in 2014 and sets a statewide goal of reducing GHG emissions to 1990 levels by 2020 and

requires for the California Air Resources Board (CARB) to prepare a Scoping Plan that outlines the main strategies the State will employ to meet the 2020 target.

- **Senate Bill (SB) 32** – SB 32 was adopted in 2017 and is the successor to AB 32. SB 32 requires the State of California to achieve a statewide reduction in GHG emissions of 40% below 1990 levels by 2030.

- **Executive Order (EO) B-55-18** – EO B-55-18 establishes a new statewide goal of achieving and maintaining carbon neutrality as soon as possible and no later than 2045. Executive orders have not been codified by the State but are binding for State agencies and therefore, must be addressed by qualified GHG reduction plans.

- **Executive Order N-79-20 -** (EO N-79-20) issued in September 2020 established a statewide goal that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035, that 100 percent of medium and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible, and that 100 percent of all drayage trucks will be zero-emission by 2035 where feasible. EO N-79-20 also establishes a goal to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible. EO N-79-20 directs CARB to develop regulations that will help achieve these goals.
- **Senate Bill 100** – SB 100 requires 100 percent of retail sales of electricity to California end-use customer by sourced from eligible renewable energy resources and zero-carbon resources by 2045. SB 100 targets the reduction of GHG emissions associated with electrical generation.

- **Bay Area Air Quality Management District (BAAQMD) CEQA GHG Emissions Thresholds** – thresholds adopted in April 2022 by BAAQMD require a change to the way CEQA GHG thresholds are analyzed in CEQA documents. In summary, a proposed plan or project within BAAQMD jurisdiction should either 1) be consistent with GHG reduction measures of a local qualified Climate Action Plan (CAP), or 2) include and show proof of all the following: all electric buildings, 15 percent vehicle miles traveled (VMT) reduction, and electric vehicle parking compliant with CalGreen Tier 2 requirements. *(Source: New Text)*

The City of American Canyon has begun a path towards electrification and decarbonization by adopting the Energy Efficiency Climate Action Plan (EECAP)

to outline the City's approach to reduce energy use and energy-related GHG emissions and through joining Marin Clean Energy (MCE).

In 2019, the City Council issued a Proclamation to join with Napa County Jurisdictions dedicated to working together to address climate change through comprehensive, immediate, and sustained action with community organizations, businesses, schools, and regional partners and jurisdictions to educate, mobilize, expand, and accelerate local, regional, and statewide support.

In 2022, the City Council approved a Climate Emergency Resolution (Resolution 2022-07) recognizing that a Climate Emergency exists, and that it threatens our city, state, country, and the planet. The Resolution recognizes the need to provide leadership and services in working with community organizations, businesses, schools, and regional partners and jurisdictions to educate, mobilize, expand, and accelerate local, regional and statewide support for comprehensive, immediate, and sustained action to achieve its goal of net zero climate pollution by or before 2030.

Gaining a nearly carbon-free power mix through MCE makes the transition to a fully carbon-free economy feasible through a shift to electric vehicles and buses, adopting electric appliances, and shifting buildings away from natural gas usage. The goals and policies listed below are intended to move the City further along the path to decarbonization, allowing it to meet the 2045 carbon neutrality goal set by the State. For additional policies relating to energy see the Utilities Element (Element 5).

Goals and Policies

Goal ENV-9:

Conduct decisive near-term action to reduce greenhouse gas emissions in American Canyon. (Source: Goal 1U)

Policies

ENV-9.1: **Greenhouse Gas Emission Reductions.** Consider initiatives to reduce direct and indirect greenhouse gas (GHG) emissions from transportation sources, and from new, renovated, and existing development in the city. *(Source: Objective 1.37)*

ENV-9.2: **Intergovernmental Cooperation.** Work with Napa County Jurisdictions together with community organizations, businesses, schools, and regional partners and jurisdictions to educate, mobilize, expand, and accelerate local, regional, and statewide support for comprehensive, immediate, and sustained action. *(Source: Policy 1.37.1)*

ENV-9.3: **Gas Station Limits.** Recognizing that the transportation sector is the largest source of GHG emissions in American Canyon and in California more broadly, prohibit construction of new fossil-fuel stations in American Canyon. *(Source: Policy 1.37.2)*

ENV-9.4: **Expand Zero Emission Vehicles.** Consider feasible methods to foster widespread use of Zero Emission Vehicles (ZEVs) to improve air quality and help meet California's GHG reductions targets by expanding availability of non-fossil vehicle fuel infrastructure, such as public and private electric vehicle charging stations, and hydrogen facilities for fuel cell electric vehicles throughout American Canyon. *(Source: Policy 1.37.3)*

ENV-9.5: **Vehicle Miles Travelled Reduction**. Reduce vehicle miles travelled by encouraging future land uses that feature a compact mixed-use urban form connected with pedestrian and bicycle trails. *(Source: Policy 1.37.4)*

ENV-9.6: **Reach Building Code.** Consider feasibility of adopting a "reach" local amendment to the California building code to require a 15% or greater energy efficiency than the State standard. *(Source: Policy 1.37.5)*

ENV-9.7: **Vehicle Idling.** Reduce vehicle engine idling in American Canyon by educating the broader community (i.e.: businesses, commuters, residents) on the greenhouse gas impacts caused by engine idling and implementing feasible commercial vehicle regulations. *(Source: Policy 1.37.6)*

ENV-9.8: **Building Electrification.** Consider a Reach Building Code that would prohibit installation of natural gas in all new construction. *(Source: New Policy)*

ENV-9.9: **CEQA Qualified Climate Action Plan.** Investigate alternatives to develop a CEQA Compliant Climate Action Plan for the City of American Canyon. *(Source: New Policy)*

ENV-9.10: **GHG Emissions Education.** Support educational programs to educate the public on climate change and GHG emissions reduction measures. *(Source: New Policy)*

Goal ENV-10:

Reduce energy consumption and increase renewable energy resources. (Source: New Goal)

Policies

ENV-10.1: **Energy Efficiency.** Require developers employ energy-efficient site planning methods and building design, including building orientation, shading, landscaping, building reflectance, and passive solar heating and hot water systems. *(Source: Existing General Plan, Policy 8.23.1, modified)*

ENV-10.2: **Renewable Energy Sources.** Work with other agencies and utility companies to develop safe, economical, and renewable energy resources. *(Source: Existing General Plan, Policy 8.25.2, modified)*

ENV-10.3: **Renewable Energy Program.** Support installation of renewable energy and battery storage for homes and businesses. *(Source: New Policy)*

ENV-10.4: **Energy Retrofit Program.** Develop an energy retrofit program and incentives for homeowners and building owners to encourage energy efficiency improvements such as fixture and appliance upgrades. *(Source: New Policy)*

ENV-10.5: **Energy Efficiency City Operations.** Increase energy efficiency of City operations and evaluate the feasibility of installing renewable energy at city facilities. *(Source: New Policy)*

ENV-10.6: **Energy Conservation Education.** Provide educational programs to the community on energy conservation and renewable energy options. *(Source: New Policy)*

ENV-10.7: **LEED Certification of Municipal Facilities.** Design new municipal facilities to, at minimum, meet the baseline Leadership in Energy and Environmental Design (LEED) certification criteria. *(Source: New Policy)*

ENV-10.8: **Land Use Planning**. Utilize land-use planning techniques to reduce traffic congestion and promote alternative modes of transportation for the community. *(Source: New Policy)*

ENV-10.9: **Development**. Encourage and incentivize the development of mixed-use residential opportunities and live-work environments within the city to lessen the impacts of traffic congestion on local air quality. *(Source: New Policy)*

ENV-10.10: **Active Transportation**. Improve active transportation options within the city by connecting local bikeways and trails to City bus stops and public transportation centers. *(Source: New Policy)*

ENV-10.11: **Public Transit**. Coordinate with NVTA and actively pursue the improvement and expansion of public transit for American Canyon residents. *(Source: New Policy)*

Air Quality

American Canyon is located in the San Francisco Bay Area Air Basin (SFBAAB) which includes the nine counties surrounding San Francisco Bay. The Bay Area Air Quality Management District (BAAQMD) monitors regional air quality, oversees policies, and adopts regulations to maintain air quality standards for criteria air pollutants and reduce air pollution and GHG emissions for the SFBAAB.

Air quality in American Canyon is generally good. Monitoring in Napa County from 2016 to March 2020 shows particulate matter of less than 2.5 microns exceeds national standard for a few days in the fall some years but is generally within the national and State standards. The area is within State and national standards for concentrations of other criteria air pollutants, such as, nitrogen dioxide, and particulate matter of 10 microns or less.

Goals and Policies

Goal ENV-11:

Improve air quality and minimize human exposure to toxic air pollutants. (Source: New Goal)

Policies

ENV-11.1: **Regional Air Quality Efforts.** Support and coordinate with BAAQMD and State and Federal planning efforts aimed at reducing air pollution and management of major pollutants affecting American Canyon and the region, including the Clean Air Plan. *(Source: New Policy)*

ENV-11.2: **Construction Management Plans.** Require new development and redevelopment projects to prepare and implement a construction management plan that incorporates Best Available Control Measures and all best management practices in accordance with the Air District standards to reduce criteria pollutants. *(Source: New Policy)*

ENV-11.3: **Separate Sensitive Land Uses.** Separate sources of air pollution from sensitive land uses, such as residences, schools, day care centers, hospitals, and nursing homes. *(Source: New Policy)*

ENV-11.4: **EV Charging Station Requirements.** Consider adopting voluntary measures from CalGreen Tier 1 and/or Tier 2 to implement stricter electric vehicle charging requirements for new development. *(Source: New Policy)*

ENV-11.5: **Alternative Modes of Transportation.** Encourage residents to use alternative modes of transportation, including walking, biking, and transit to minimize air pollutant emissions. *(Source: New Policy)*

ENV-11.6: **City Vehicle Fleet.** Transition the municipal fleet to electric or alternative-fuel vehicles. *(Source: New Policy)*

ENV-11.7: **Air Pollution Education.** Support public education programs that promote the reduction of air pollutant emissions, such as reducing vehicle emissions through reducing VMT and using alternative modes of transportation. *(Source: New Policy)*

ENV-11.8: **Commute Reduction.** Support programs that reduce commuter vehicle trips. *(Source: New Policy)*

ENV-11.9: **Countywide Bicycle and Pedestrian Plans.** Work with the County to implement the best practices provided within the

American Canyon edition of the Napa Countywide Bicycle Plan and Napa Countywide Pedestrian Plan. *(Source: New Policy)*

ENV-11.10: **Transit Services.** Work with Vine Transit, SolTrans, and other transit providers to regularly evaluate and update transit servicing American Canyon *(Source: New Policy)*

Implementation Programs

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
A	**Biological Resources Inventory** Create and maintain an inventory of areas within the City's Sphere of Influence and Urban Limit Line with significant biological habitats as defined in Section 19.24.010 of the municipal code. Utilize the inventory during site plan review to ensure protection of resources in those habitat areas. *(Source: New Implementation Program)*	ENV-1.1	Community Development Public Works					■
B	**Site Design Standards.** Expand and enforce the site design standards and land use restrictions within the municipal code for water courses and riparian habitats to preserve the natural state of drainages and riparian cooridors to the extent feasible. *(Source: New Implementation Program)*	ENV-1.3 ENV-2.1 ENV-2.2	Community Development		■			
C	**Natural Drainage Protection.** Update the municipal code to establish objective standards for protection of natural drainage and pedestrian paths and greenbelts for new development and redevelopment. *(Source: New Implementation Program)*	ENV-1.4	Community Development Public Works		■			
D	**Invasive Plant Species Management.** Create an invasive species management plan to identify and and remove invasive species in designated natural habitats and open spaces. Work with property owners to coordinate removal and prevention efforts. *(Source: New Implementation Program)*	ENV-1.5	Community Development Public Works		■			
E	**City Vegetative Maintenance Plan.** Prepare and implement a vegetative maintenance plan for City-owned properties to maintain views into and through vegetated areas, and to remove invasive species. *(Source: New Implementation Program)*	ENV-1.5	Community Development Public Works		■			
F	**Local Historic Resources.** Develop critieria for establishing local historic resources and maintain a database of designated local historic resources. *(Source: New Implementation Program)*	ENV-4.1	Community Development		■			

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
G	**Funding for a Historic Resources Inventory.** Seek funding to conduct a citywide survey to inventory sites of historical significance. *(Source: New Implementation Program)*	ENV-4.1	Community Development		■			
H	**Historic Compatibility.** Develop guidelines, such as a review checklist, for determining historic and architectural compatibility for new development and redevelopment projects that include or are in proximity to historic structures.	ENV-4.2	Community Development		■			
I	**Adaptive Reuse.** Develop guidelines for adaptive reuse of historic buildings in new development and redevelopment projects. *(Source: New Implementation Program)*	ENV-4.4	Community Development		■			
J	**Historic Preservation Incentives.** Develop a historic preservation incentive program to encourage preservation of historic resources with measures such as waiving building permit fees for property owners with historic resources for the rehabilitation, alteration, or reuse of their structure in accordance with established historic preservation guidelines. *(Source: Existing General Plan, Policy 8.20.1 and 8.20.2, modified)*	ENV-4.4	Community Development		■			
K	**Building Code Flexibility for Historic Structures.** Consider allowing flexibility in building code requirements for the rehabilitation of historic structures as specified in State Historical Building Code Part 8, Title 24 if these structures are rehabilitated in accordance with established historic preservation guidelines. *(Source: Existing General Plan, Policy 8.20.3)*	ENV-4.4	Community Development					■
L	**Architectural and Cultural Resource Survey.** Conduct a comprehensive survey of archaeological and cultural resources and historic vegetation that is based on established criteria and encompasses the entire City and its Sphere of Influence. *(Source: Existing General Plan, Policy 8.19.1)*	ENV-4.1 ENV-5.1	Community Development		■			
M	**Project Review Guidelines.** Develop guidelines for project review to ensure potential impacts to archaeological and/or cultural resources are minimized. *(Source: New Implementation Program)*	ENV-4.1 ENV-5.1	Community Development		■			

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
N	**Archaeological Surveys.** Update site plan review requirements to ensure discretionary projects located in areas where archeological resources are suspected conduct an archaeological investigation in accordance with CEQA to determine if the site contains cultural resources.	ENV-5.1	Community Development	■				
O	**Grant Opportunities.** Pursue available funding sources and/or partnerships for open space acquisition, management, and enhancement. *(Source: New Implementation Program)*	ENV-6.2	Recreation Community Development					■
P	**Level of Service and Access.** Establish open space level of service and level of access standards to prioritize acquisition, maintenance, and access for open space areas. *(Source: New Implementation Program)*	ENV-6.4	Community Development Recreation		■			
Q	**Open Space ADA Accessability.** Evaluate and identify ADA compliance of open spaces. Seek funding to implement improvement projects that could increase accessibility such as providing ADA accessible parking and pathways and establishing easy access trails. *(Source: New Implementation Program)*	ENV-6.4	Recreation Community Development					■
R	**Trail Network Plan.** Develop a trail network plan to and connect open spaces, parks, and residential neighborhoods. *(Source: New Implementation Program)*	ENV-6.5	Recreation Community Development		■			
S	**Scenic Resources Inventory.** Create and periodically update an inventory of scenic resources important to the City. *(Source: New Implementation Program)*	ENV-7.1	Community Development					■
T	**Scenic Resource Protection.** Identify and map valuable scenic viewscapes and update the City's development and design standards to protect scenic resources and important viewsheds. *(Source: New Implementation Program)*	ENV-7.1 ENV-7.2	Community Development					■
U	**BAAQMD Non-Attainment Standards.** Comply with BAAQMD's non-attainment standards and implement required pollution control measures by State and Federal statutes. *(Source: New Implementation Program)*	ENV-8.1	Community Development					■

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
V	**Construction Management Plan Guidelines.** Develop construction management plan guidelines for incorporating best management practices for air quality in new development and redevelopment projects. *(Source: New Implementation Program)*	ENV-8.2	Community Development		■			
W	**Sensitive Land Uses.** Update the municipal code to prohibit the siting of sensitive land uses in proximity to air pollutant emission sources unless adequate mitigation measures are adopted and implemented. *(Source: New Implementation Program)*	ENV-8.3	Community Development	■				
X	**EV Charging Standards.** Update the municipal code to incorporate development standards for electric vehicle charging facilities as new State and federal legislation is adopted. Consider adopting the voluntary CalGreen Tier 1 and/or Tier 2 electric vehicle measures. *(Source: New Implementation Program)*	ENV-8.4	Community Development		■			
Y	**Bicycle and Pedestrian Infrastructure Funding.** Pursue grant funding to implement bicycle and pedestrian infrastructure, such as new bike lanes and sidewalks. *(Source: New Implementation Program)*	ENV-8.5 ENV-8.9	Community Development		■			
Z	**Municipal Fleet Electrification.** Phase out the use of gasoline vehicles in the City's vehicle fleet for electric powered or alternative fuel vehicles. *(Source: New Implementation Program)*	ENV-8.6	Public Works					■
AA	**Air Pollution Reduction Education.** Provide and support educational programs that educate the public on air pollution and strategies to reduce air pollution emissions, especially vehicle emissions. *(Source: New Implementation Program)*	ENV-8.7	Community Development Public Works				■	
BB	**Commute Trip Reduction Program.** Create a commute trip reduction program to support employer implementation of commute reduction measures. Create guidelines for employers that include best practices and resources for commute reduction. *(Source: New Implementation Program)*	ENV-8.8	Community Development	■				

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
CC	**GHG Thresholds.** Establish GHG thresholds to evaluate non-exempt discretionary projects consistent with CEQA. Require projects above those thresholds to mitigate their GHG emissions and locally offset the remaining GHG emissions if necessary.	ENV-9 ENV-9.2	Community Development	■				
DD	**Building Electrification Ordinance.** Adopt a new building ordinance which bans the installation of natural gas in new residential construction by 2024 and in new commercial construction by 2025. The ordinance will only apply for building types where electrification is shown to be cost-effective. *(Source: New Implementation Program)*	ENV-9.1	Community Development	■				
EE	**Electric Appliances Building Retrofit Program.** Coordinate with SCP and other local programs to create incentives for retrofitting for electric appliances in existing buildings by 2030. *(Source: New Implementation Program)*	ENV-9.1	Community Development		■			
FF	**Climate Action Plan.** Update the Energy Efficiency Climate Action Plan and GHG emissions reduction targets to be consistent with State and federal regulations. *(Source: New Implementation Program)*	ENV-9.1 ENV-9.2	Community Development	■				
GG	**GHG Inventory Update.** Update and report the citywide GHG emissions inventory every five years. *(Source: New Implementation Program)*	ENV-9.2 ENV-9.3	Community Development	■				
HH	**GHG Emissions Reduction Education.** Work with the school district to provide educational programs that educate the public on climate change and GHG emissions reduction strategies. *(Source: New Implementation Program)*	ENV-9.3	Community Development					■
II	**Energy Efficient Building Code.** Update the Zoning Ordinance to require energy efficient site and building design in all new development consistent with and, where feasible, beyond the requirements of Title 24 of the California Administrative Code. *(Source: Existing General Plan, Implementation Program I 8.7, modified)*	ENV-10.1	Community Development		■			

	Programs	~~Implements~~ Which Policy(ies)	Responsible / Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
JJ	**Energy Performance Requirements.** Enforce existing energy conservation provisions and establish additional energy performance requirements in the building code as new information becomes available. Measures to be considered include building orientation and shading, active and passive solar heating and hot water systems, insulation of water heater and pipes, roof, wall and floor insulation, solar swimming pool heater, setback thermostats, double-pane windows, etc. *(Source: Existing General Plan, Implementation Program I 8.9)*	ENV-10.1	Community Development		■			
KK	**Renewable Energy Incentives.** Partner with energy providers to develope a program to offer incentives to installation of renewable energy generating systems, such as rebates, fee waivers, and permit streamlining. *(Source: New Implementation Program)*	ENV-10.3	Community Development		■			
LL	**Energy Retrofit Program.** Provide incentives to support adoption of building retrofits for fixtures and appliances to conserve energy in partnership with energy providers, the County, or local programs such as BayREN. Incentives can include rebates, permit fee waivers, or connecting interested parties with agencies that provide technical assistance (BayREN). *(Source: New Implementation Program)*	ENV-10.4	Community Development Public Works		 ■			
MM	**Energy Education.** Prepare educational and promotional materials for distribution at the Planning and Building Department and post information on the City's website outlinining permitting procedures and a submittal checklist for solar, wind, and other alternative energy permits. *(Source: New Implementation Program)*	ENV-10.6	Community Development Public Works					 ■
NN	**Energy Audits.** Initiate and facilitate programs that allow for energy audits of existing structures and public education programs aimed at promoting energy conservation. The programs should define the current levels of use, compare these to current standards for similar types of structures, and prescribe corrective methods to improve conservation. *(Source: Existing General Plan, Implementation Program I 8.35, modified)*	ENV-10.6	Public Works					■

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8 Safety

The Safety Element provides the City of American Canyon's goals, policies, and actions to minimize safety hazards to in and around the city. The Safety Element evaluates natural and human-caused hazards that affect existing and future development and provides guidelines for protecting the community from harm. The Safety Element describes existing and potential future conditions and sets policies to reduce risk of injury, death, property loss, and other hardships to acceptable levels.

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Introduction

Public Safety in American Canyon includes both natural and manmade hazards and the emergency response to them. The goals and policies of this element are organized around the following topics:

- Emergency Operations
- Fire Safety
- Flooding
- Geologic Hazards and Seismic
- Hazardous Waste and Materials
- Airport and Military Operations
- Climate Change
- Noise

Emergency Response and Preparedness

There are several guiding documents that help the City of American Canyon prepare for and respond to natural and manmade disasters. The Emergency Operations Plan (EOP) and community emergency preparedness program helps minimize the risk of loss of life or property in the event of a disaster.

In 2020, the American Canyon Fire Protection District and County adopted The Napa County Multijurisdictional Hazard Mitigation Plan (MJHMP), developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and following FEMA's Local Hazard Mitigation Plan guidance. The MJHMP uses a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short and long-term strategies, involve planning, policy changes, programs, projects, and other activities. The MJHMP evaluates hazards such as drought,

earthquakes and geologic hazards, wildfire, and flood for the City of American Canyon, and assesses how those hazards may change in the future due to climate change.

Emergency Operations Plan

The City of American Canyon Emergency Operations Plan was adopted in 2009 and covers the government responsibilities, initial and long-term response and operations, mutual aid agreements, and funding options for emergency response in American Canyon.

Community Emergency Preparedness

The City manages a comprehensive website containing information, guidance, and instruction on preparing and responding to each type of emergency the residents of American Canyon may anticipate in the future. General preparedness tips and checklists are included on the main page of the website, with links to more specific guidance, in English and Spanish, for earthquakes, flooding, wildfires, power outages, evacuation procedures, and COVID-19 safety practices.

Emergency Communications

Napa County Jurisdictions' emergency management is organized within the Standardized Emergency Management System (SEMS) and National Incident Management System (NIMS). (*Source: Napa County Office of Emergency Services*) The Napa County EOP complies with SEMS and NIMS to coordinate with the State Emergency Plan and National Response Framework. Additionally, the City has an established system for warning and alerting the public of an emergency, and for needed coordination with other departments, agencies, organizations, and levels of government. To notify residents of emergencies, the Police and Fire Departments use the Emergency Alert System (NIXLE), integrated public alert & warning system (IPAWS), special broadcasts, the public address system, City website, City Manager's updates, Nextdoor, Facebook, non-electronic communications, and sirens. To alert and activate emergency response personnel, American Canyon uses an Emergency Operations Center (EOC) Notification List, which can only be activated by the City Manager, Police Chief, Fire Chief, or Incident Manager when a disaster occurs or threatens to occur in the city.

Emergency Operations Center (EOC)

The Napa County EOC, located at 1535 Airport Blvd, Napa, CA 94558, within the Napa County Sheriff's Office, is the central coordination point for multi-agency emergency management coordination. The purpose of a multi-agency coordination point is to provide a location to collect and disseminate information, provide a common operating picture of operational area response activities, and facilitate actions necessary to protect residents and property of Napa County during an event. Napa County has developed an EOC Plan as an annex to the County's EOP, which includes more specific operational guidance and position description for EOC roles. The American Canyon EOC is located at 911 Donaldson Way East.

The EOC exchanges information with governmental and nongovernmental agencies to maintain a comprehensive situational analysis. The EOC provides space and facilities for the centralized coordination of emergency functions (e.g., emergency operations, communications, damage assessment, public information). It is staffed with specially trained personnel and is equipped with a variety of systems and tools that aid in data collection and sharing, resource allocation, and other critical functions. (*Source: Napa County Office of Emergency Services*)

Evacuation Procedures

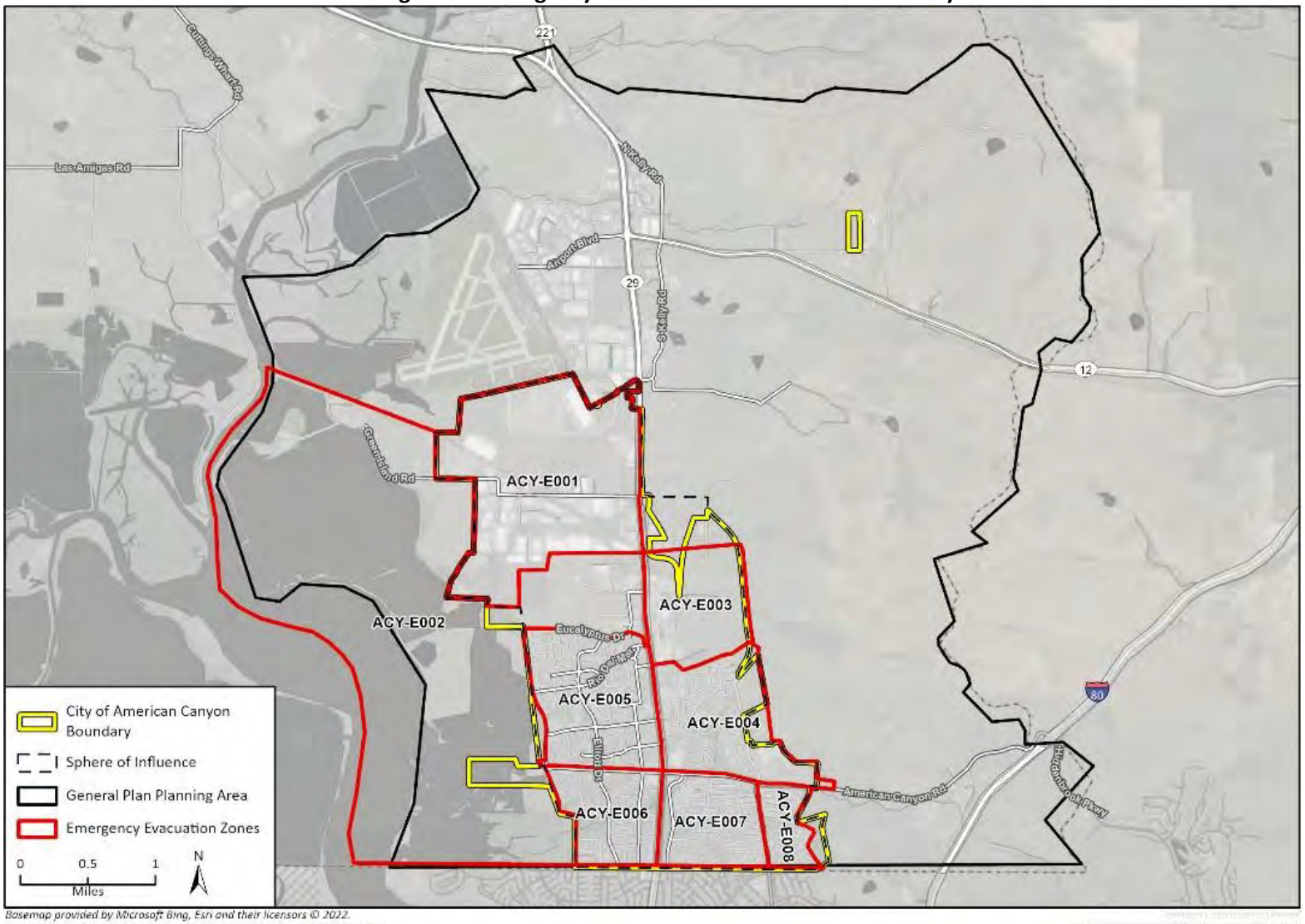
Evacuation may be required if a wildfire or earthquake takes place in the vicinity of homes, businesses, or gathering places. American Canyon generally operates using three levels of evacuation alerts: *(Source: New Text)*

- **Evacuation Advisory**: This is a precautionary notice designed to give residents time to prepare for a possible evacuation.
- **Voluntary Evacuation**: Those in the evacuation area are strongly urged to leave the area. If they choose to remain, they should be prepared to take action immediately if danger approaches.
- **Mandatory Evacuation**: Danger is imminent. Those in the evacuation area should find their Emergency Supply Kit and leave the area immediately. Should they choose to remain, they may be on their own as emergency personnel will not likely be able to help them.

Napa County and its incorporated municipalities have partnered with Zonehaven to establish standardized evacuation zones for the entire county. In the past, evacuation zones were different for each incident; zones now remain

consistent. American Canyon consists of eight evacuation zones, as shown in Figure 1.

S-Figure 1: Emergency Evacuation Zones in American Canyon



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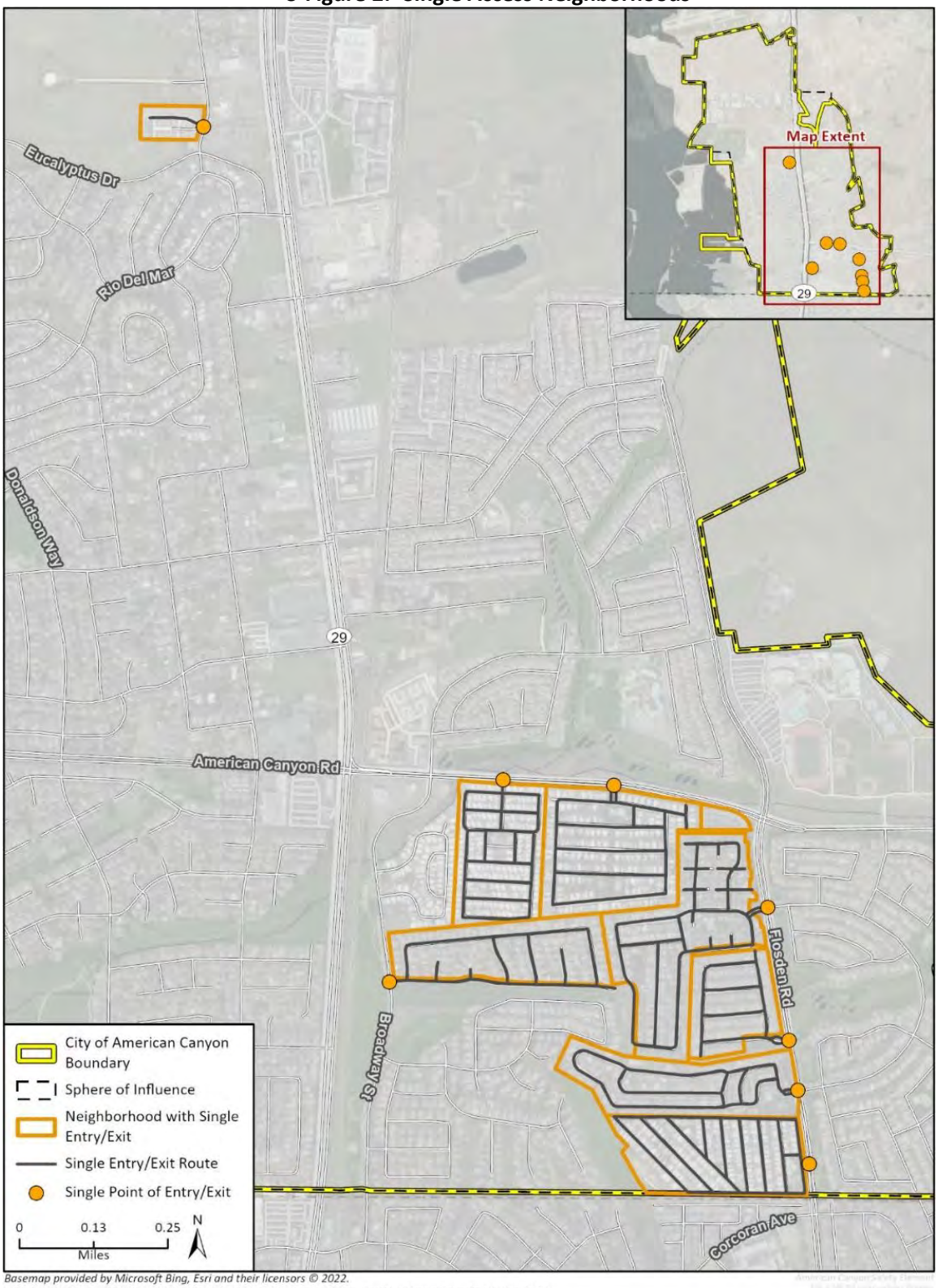
Additional data Georeferenced and Digitized from Zonehaven AWARE, 2022.

SB 99 Evacuation Analysis

Evacuation zones have been designated using Zonehaven to facilitate the movement of residents away from impacted areas before or during a disaster or hazard event. In 2019, the State adopted Senate Bill (SB) 99 which requires cities to identify residential developments in any hazard area identified in the Safety Element that do not have at least two emergency evacuation access roads. This allows the City to identify opportunities to improve evacuation capacity and connectivity for vulnerable neighborhoods. Figure 2 identifies residential neighborhoods that have a single access road for entry and exit (i.e., roads that connect to a collector or arterial road by only a single route).

There are currently eight neighborhoods in the city that have been identified as having only a single access road. Residents of these neighborhoods may be at risk during evacuation scenarios and these neighborhoods may pose significant logistical challenges. As a result, policy and implementing actions have been developed to minimize evacuation challenges for these specific neighborhoods.

S-Figure 2: Single Access Neighborhoods



Basemap provided by Microsoft Bing, Esri and their licensors © 2022.
Additional data provided by Mintier Harnish, 2022; SB 99 Routes determined by Rincon Consultants, Inc, 2022.

Goals and Policies

Goal S-1:

Prepare and equip American Canyon to minimize loss of life, injury, property damage, and disruption of vital services from disasters and emergencies. (Source: New Goal)

Policies

S-1.1: **Emergency Shelters.** Periodically coordinate with emergency shelter providers to ensure that necessary equipment supplies are available in case of emergency. *(Source: New Policy)*

S-1.2: **Critical Facilities.** Coordinate with service providers to ensure the resilience of critical emergency facilities to serve the entire city and other jurisdictions within the region. *(Source: New Policy)*

S-1.3: **Law Enforcement.** Coordinate with the American Canyon Fire Protection District, Napa County, the State, and neighboring jurisdictions to ensure readiness and availability of emergency services and back up services. *(Source: New Policy)*

S-1.4: **Water and Sewer.** Ensure any interruption of utility services in the case of a disaster is minimal and short-term, including water and sewer services. *(Source: New Policy)*

S-1.5: **Business Disaster Preparedness.** Coordinate with the American Canyon Chamber of Commerce to assist local and small businesses in preparing and responding to disasters and in planning for the subsequent continuity of operations. *(Source: New Policy)*

S-1.6: **Public Training.** Encourage residents to attend periodic training programs on wildfire mitigation and disaster planning, and to develop disaster preparedness and evacuation plans for their families. *(Source: New Policy)*

S-1.7: **Public Awareness.** Increase public awareness of City and Fire District emergency response plans, evacuation routes and shelters, and ways to reduce risks at the home and office,

focusing on the most vulnerable populations such as older adults and individuals with chronic health conditions. Offer informational materials in multiple languages. *(Source: New Policy)*

S-1.8: **Emergency Access.** Work with the American Canyon Fire Protection District (ACFPD) and the Napa County Sheriff's Department to identify and regularly evaluate emergency access routes to improve accessibility throughout the city in the event of a disaster. *(Source: New Policy)*

S-1.9: **Essential Facilities.** Work with service providers to maintain the reliability of essential facilities, such as communications towers, electrical substations, water services, and first-response buildings in the event of an emergency through promoting grid resilience and energy independence. Work to implement on-site power generation through solar photovoltaic systems and battery storage. *(Source: New Policy)*

S-1.10: **Communication.** Evaluate the potential to utilize a comprehensive emergency communication system to ensure effective communication between City departments, outside organizations and agencies, and with the community before, during, and to accelerate recovery following a disaster. *(Source: New Policy)*

S-1.11: **City Employee Emergency Preparedness.** Increase City employee capacity to respond to emergencies through the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) compliant training drills to identify hazards and assist in emergency preparedness, response and recover. *(Source: New Policy)*

S-1.12: **Local Partnerships.** Coordinate with citizen groups and organizations, such as the American Canyon Community Response team (CERT) to identify, prepare for, and respond to emergency assistance in the event of a natural disaster. *(Source: New Policy)*

S-1.13: **Emergency Evacuation Protocols for Single Access Neighborhoods.** Update emergency evacuation protocols and relevant evacuation plans to address and support

neighborhoods with fewer than two ingress/egress routes. *(Source: New Policy)*

S-1.14: **Communication and Outreach for Single Access Neighborhoods.** Establish and maintain communication and outreach protocols with the public that include tailored evacuation messaging to residents that live in identified neighborhoods with fewer than two ingress/egress routes. Outreach should include support for preventative home hardening and defensible space standards and conduct emergency preparedness and response trainings. *(Source: New Policy)*

S-1.15: **Expand Access for Single Access Neighborhoods**. Assess options for expanding ingress/egress options for residents in the identified access-limited areas in coordination, as necessary, with Napa Valley Transportation Authority, Caltrans, California Highway Patrol, adjacent cities, and Napa County. *(Source: New Policy)*

S-1.16: **Zone-Based Evacuation Plans.** Establish specific "zone-based" evacuation plans and protocols that address the specific needs of residents in identified areas with fewer than two ingress/egress routes. *(Source: New Policy)*

S-1.17: **Critical Infrastructure Siting.** Whenever feasible, locate the following critical facilities outside of flood, seismic, and high fire hazard zones: health care facilities, schools, emergency shelters, fire stations, emergency command centers, and emergency communications facilities. *(Source: New Policy)*

S-1.18: **Emergency Operations Plan.** Update the City's Emergency Operations Plan every five years and maintain consistency with the County's Emergency Operations Plan. *(Source: New Policy)*

S-1.19: **Multi-Jurisdictional Hazard Mitigation Plan Updates.** Continue to fully participate in, support, and implement the five-year updates of the Napa County Multi-Jurisdictional Hazard Mitigation Plan. *(Source: New Policy)*

S-1.20: **Funding for Critical Facilities.** Direct the dedication of funds to upgrade and maintain City owned critical facilities, including the Emergency Operations Center, fire and police departments, and

City Hall, to make them more resilient to the potential impacts of natural disasters.

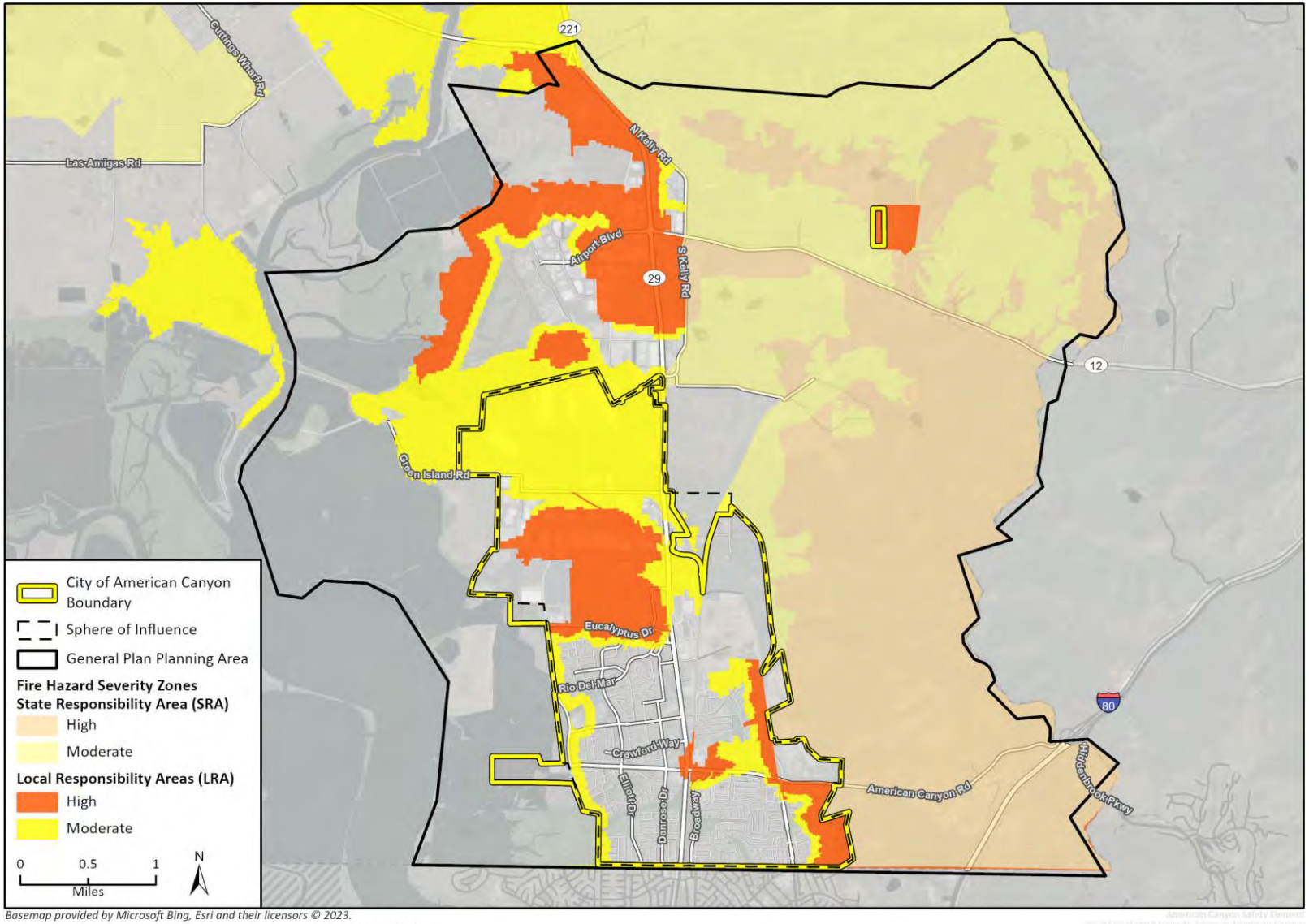
Wildfire Hazards

Wildfires are a common risk for Californians, and Napa County and American Canyon have had several nearby fires in recent history. The combination of highly flammable fuel, long dry summers and steep slopes creates a significant natural hazard for large wildland fires in many areas of Napa County. Wildland fire behavior is based on three primary factors: weather, topography, and fuel. Similarly, fires that start in urbanized areas can grow into wildland fires. Wildland/urban interface (WUI) fire hazards are especially pronounced in areas of high structure densities adjacent to undeveloped open space areas or narrow roads with dense vegetation. A WUI fire may result in death, injury, economic loss, and a large public investment in firefighting activities.

From 2000 to 2020, there were 12 wildfires that burned over 1,000 acres in Napa County. In October 2019, the American Fire caused 526 acres of open space in the eastern hills to burn, threatening the city and prompting evacuation advisories. The Atlas Fire and Nuns Fire, both in 2017, burned approximately ten miles north of American Canyon and were part of a series of destructive wildfires that occurred in the same season. Numerous other fires have caused health issues in the community from smoke, and such fire hazards are expected to continue and worsen in the future due to climate change.

The American Canyon Wildfire District provides fire protection services for the City of American Canyon. Direct wildfire risks for American Canyon are mostly on the eastern side of the city, as shown in Figure 3. As of 2020, American Canyon High School and the American Canyon Water Treatment Plant are located in high wildfire intensity zones, and approximately 1,460 people live in moderate to high wildfire intensity zones. While the urbanized areas of the city are not directly susceptible to wildland fires, development on hillsides has increased the number of homes in the wildland-urban interface (WUI) and fire could spread from the hillside area to urbanized areas.

S-Figure 3: Fire Severity Zones Surrounding American Canyon



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Additional data provided by CalFire, 2007; Napa County and Mintier Harnish, 2022.

Goals and Policies

Goal S-2:

A City safe and adequately prepared for urban and wildfire emergencies. (Source: New Goal)

Policies

S-2.1: **Fire Safe Site Design.** Develop site design and ongoing maintenance standards for new development in the moderate and high fire hazard zones to mitigate wildfire risk, including implementing minimum road widths and clearances to ensure adequate space for emergency vehicles. *(Source: New Policy)*

S-2.2: **Utility Undergrounding.** Develop a comprehensive plan to underground overhead utilities in new development projects and throughout the city. *(Source: New Policy)*

S-2.3: **Residential Evacuation Routes.** Require that all new residential development have at least two emergency evacuation routes. *(Source: New Policy)*

S-2.4: **Public Education.** Coordinate with the American Canyon Fire Protection District to target fire safety education efforts and fire hazard reduction strategies towards the most vulnerable populations such as older adults and individuals with chronic health conditions. *(Source: New Policy)*

S-2.5: **Fire Equipment.** Coordinate with the American Canyon Fire Protection District to ensure that all fire equipment remains operable and adequate to respond to a major disaster. *(Source: New Policy)*

S-2.6: **Building and Fire Code Compliance.** Require new development to meet or exceed structural hardening requirements in the most current version of the California Building Codes and California Fire Code. *(Source: New Policy)*

S-2.7: **Development Standards Update.** Incorporate relevant new legislative requirements and best practices into the City's development standards. *(Source: New Policy)*

S-2.8: **Property and Building Improvements.** Encourage property and building owners to implement site improvements and building retrofits to bring existing non-conforming developments into conformance with contemporary fire safe standards. *(Source: New Policy)*

S-2.9: **Fire Protection Plans.** Coordinate with the American Canyon Fire Protection District to consider developing fire protection plan guidelines and standards for new construction projects. *(Source: New Policy)*

S-2.10: **Fire Suppression.** Coordinate with the Fire District to ensure adequate, water supply to suppress wildfire, as part of the next Napa County Multi-jurisdictional Hazard Mitigation Plan update. *(Source: New Policy)*

S-2.11: **Peakload Water Supply.** Support measures to provide adequate water availability throughout the city to meet future peak fire demand during times of peak domestic demands. *(Source: New Policy)*

S-2.12: **Emergency Roadways.** Maintain roadways used for emergency access by emergency response vehicles as necessary and appropriate to ensure ongoing serviceability. (Source: New Policy)

S-2.13: **Community Fire Breaks.** Coordinate with the American Canyon Fire Protection District to encourage property owners to maintain fire breaks and fuel modification/reduction zones on their property. *(Source: New Policy)*

Flood Hazards

The Napa River is prone to seasonal flooding from November through April each year, which most severely impacts low-lying properties near the Napa River and its feeder streams. Recorded history indicates there has been recurrent flooding on the Napa River, with the most serious recent floods occurring in 2005, 1997, 1995, and 1986.

Most areas in the 100- and 500-year FEMA flood zones are located on the west side of the city and along the canal that runs east to west across the city, as shown in Figure 4. Flooding may also occur throughout the city during extreme storms, when the stormwater system is overwhelmed and cannot convey water away quickly enough. Most flooding in the city, whether from the flood zones or stormwater system, occurs during extreme storm events and is limited to localized flooding of a few inches to a few feet at most.

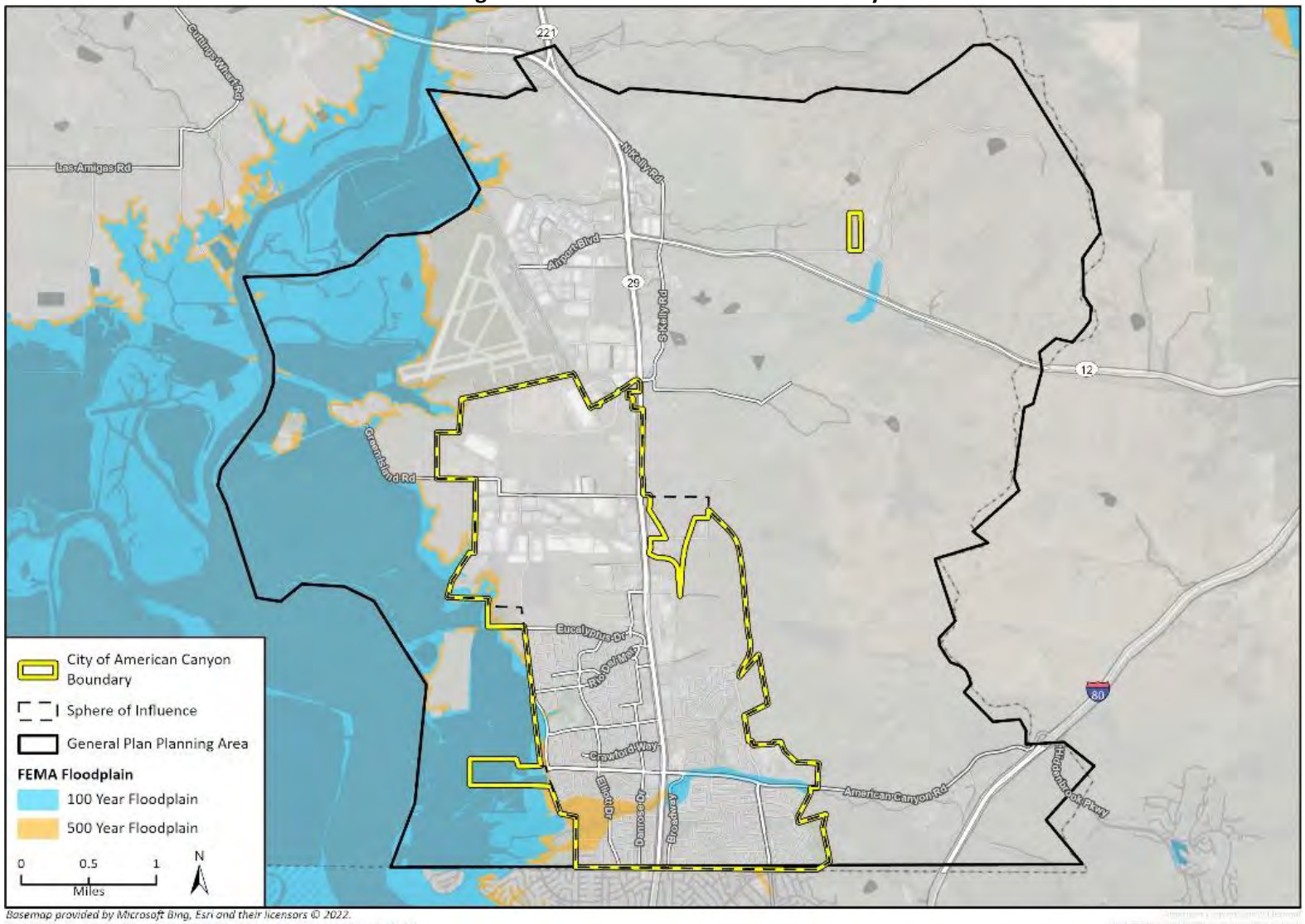
Sea Level Rise

Sea level rise is the increase in ocean levels caused by climate change. Rising global temperatures are melting glaciers and ice caps and causing an expansion of sea water. This phenomenon will lead to more extensive coastal flooding during storms and increased coastal erosion. A small area adjacent to the city's western border is projected to be affected by future sea level rise due to increased flooding from the Napa River. This area includes the American Canyon Wastewater Treatment Plant, Public Works Yard, and pump stations located along Wetlands Edge Road. This flooding would be minimal, mostly exacerbating any issues already present, with expected flooding depths of less than two feet in most storm events.

Dam Inundation

The Napa County MJHMP includes Figure 1-5: Dam Failure Exposure Summary showing the extent of potential inundation risk for American Canyon in the event of dam failure. While the City does have areas within potential inundation areas should a dam fail, the MJHMP has mitigation measures in place to cooperate with other participating jurisdictions in the assessment of local dams and coordination of warning systems if and when necessary.

S-Figure 4: Flood Hazards in American Canyon



Basemap provided by Microsoft Bing, Esri and their licensors © 2022.
Additional data provided by FEMA, 2021; Napa County and Mintier Harnish, 2022.

Goals and Policies

Goal S-3:

Protect the community from potential flood hazards. (Source: New Goal)

Policies

S-3.1: **Regulatory Compliance**. Coordinate with local, state, and federal agencies to ensure the City's flood control regulations comply with federal, State, and local standards. (Source: New Policy)

S-3.2: **FEMA Coordination**. Coordinate with the Federal Emergency Management Agency (FEMA) to ensure that Federal Insurance Rate Maps correctly depict flood hazards in the City. (Source: New Policy)

S-3.3: **Changing Conditions**. Coordinate with the Bay Development and Conservation District (BCDC) to consider the need to expand flood control facility capacity caused by flood conditions associated with climate change and extreme weather. (Source: New Policy)

S-3.4: **City Preventative Maintenance.** Maintain City storm drains to prevent local flooding and debris flows. *(Source: New Policy)*

S-3.5: **Private Preventive Maintenance.** Require property owners keep natural drainage courses on their sites free of obstructions such as structures, dams, and debris, which may adversely affect flooding on the site or downstream properties. *(Source: Existing Policy 10.1.3 modified)*

S-3.6: **Development in Flood Zones**. Implement the standards and requirements defined in the Municipal Code to reduce hazards within the 100-year flood zone and require projects in the 100- and 500-year flood zones to incorporate adequate stormwater management and flood-prevention design measures. *(Source: New Policy)*

S-3.7: **Reduce Flood Vulnerability**. Seek funding and assistance to protect existing structures and infrastructure that are

vulnerable to flood hazards and sea level rise impacts. *(Source: New Policy)*

S-3.8: **Protect Public Facilities.** Protect existing public infrastructure at risk from sea level rise through building retrofits and other mitigation methods. *(Source: New Policy)*

S-3.9: **Zero Net Fill**. Establish an ordinance that requires any permit that adds fill within a floodway to demonstrate that an equal amount of fill is removed from the floodway. *(Source: New Policy)*

S-3.10: **Sea Level Rise Mitigation**. Require new development and redevelopment within areas at risk of sea level rise to incorporate mitigation measures to address flood and erosion hazards into the project's design. *(Source: New Policy)*

S-3.11: **Flood Protection by Wetlands**. Coordinate with resource agencies to preserve and restore wetlands in the western areas of the city to mitigate the effects of sea level rise and flood impacts. *(Source: New Policy)*

S-3.12: **Public Facilities.** Locate, when feasible, new essential public facilities outside of flood hazard zones, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities, or identify mitigation measures to ensure such facilities are protected from flood hazards.

Geologic and Seismic Hazards

American Canyon is located near several active or potentially active earthquake faults, including the Northern Hayward/Rodgers Creek, Maacama, Hunting Creek-Berryessa, West Napa, and Green Valley faults. Numerous earthquakes have occurred in and near Napa County over the last twenty years. Two large-scale earthquakes in Napa County caused damage, death, and injuries over the last twenty years. In September 2000, Napa County residents experienced a 5.2 earthquake on the West Napa Fault. Damages were estimated at $30-50 million.

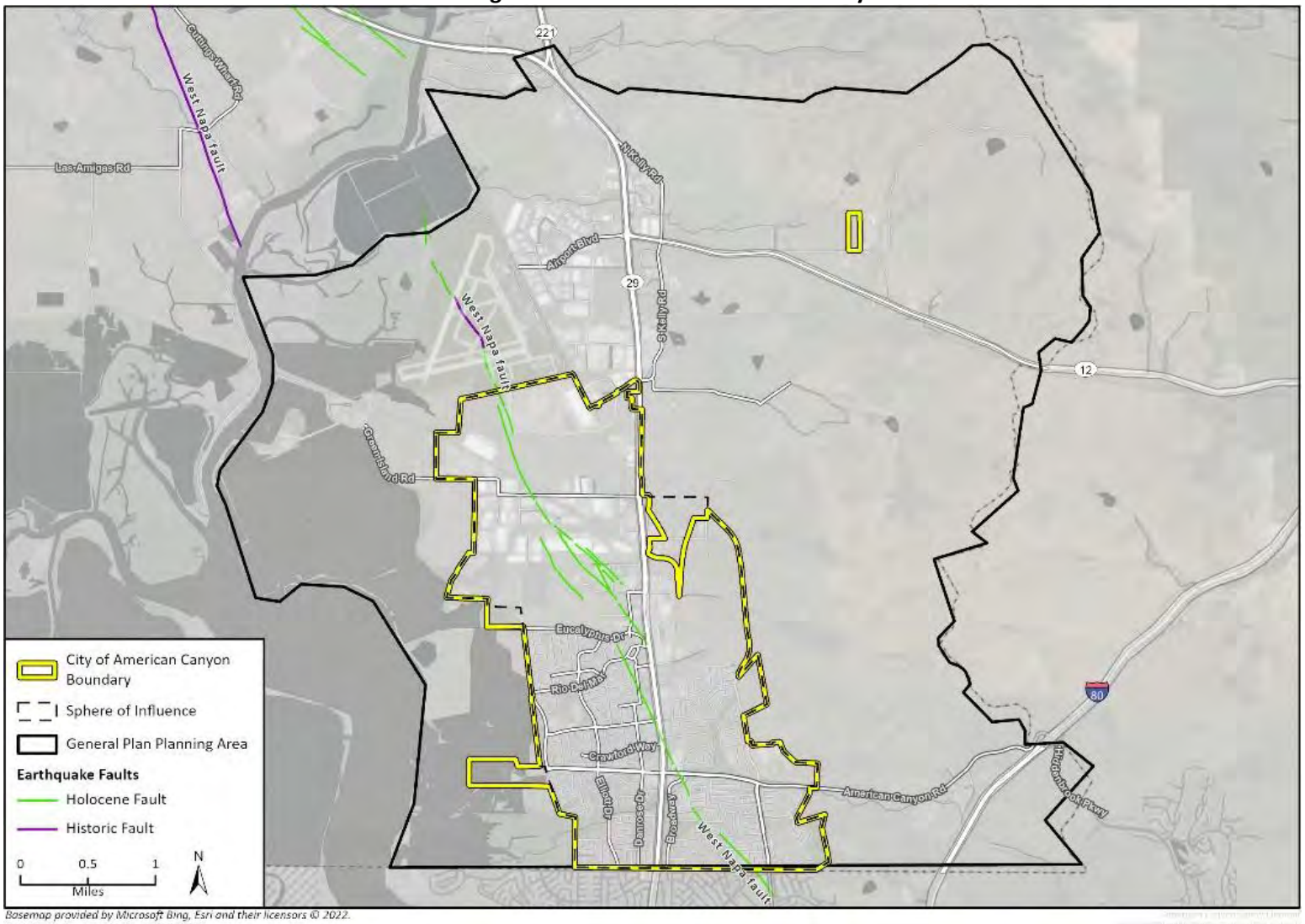
American Canyon is in a severe earthquake probability zone. Figure 5 shows fault lines in American Canyon. Seventy-nine critical facilities are located in earthquake hazard areas, and the water and utility distribution systems are vulnerable in the event of a severe earthquake.

Risk of landslides in American Canyon is primarily located in the eastern hills just outside of the city limits. A moderate earthquake could trigger landslides that impact development on the eastern side of the city, especially in the area south of American Canyon Road and east of Flosden Road and along Newell Drive. Figure 6 shows areas susceptible to landslide in American Canyon.

The 2014 South Napa Earthquake

The South Napa earthquake hit at approximately 3:30 a.m. on August 24, 2014, at a 6.0 on the moment magnitude scale and a maximum Mercalli intensity of VIII (severe), making it the largest bay area earthquake since the 1989 Loma Prieta earthquake. The earthquake was centered four miles northwest of American Canyon and resulted in over 200 people being injured and significant damages to buildings and infrastructure.

S-Figure 5: Fault Lines in American Canyon



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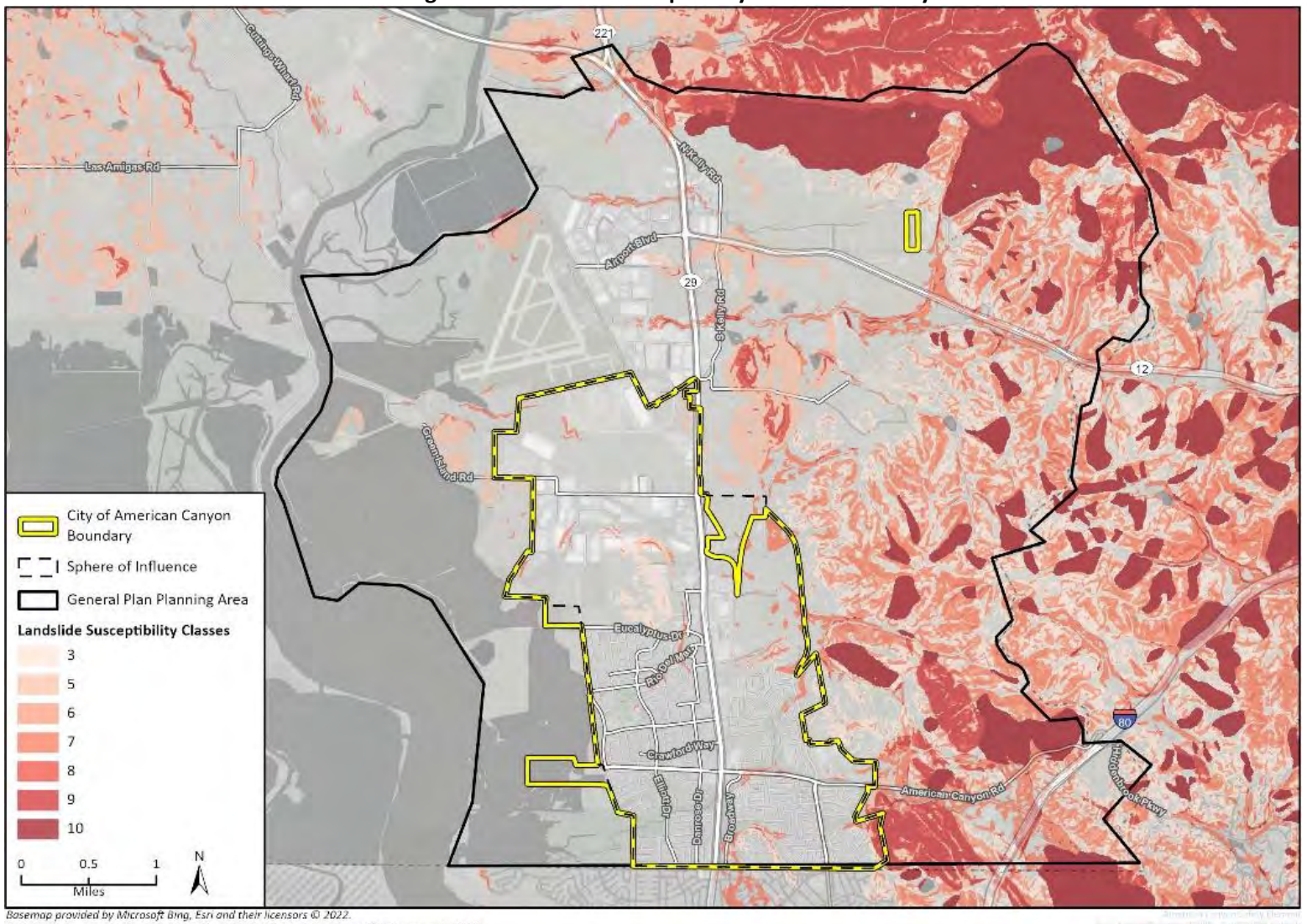
Additional data provided by USGS, 2017.

S-Figure 6: Landslide Susceptibility in American Canyon



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Additional data provided by CGS, Map Sheet 58, 2015; Napa County and Mintier Harnish, 2022.

Goals and Policies

Goal S-4:

A community adequately prepared for natural hazards related to landslides, geologic instability, and seismic activity. (Source: New Goal)

Policies

S-4.1: **Geologic Hazard Identification**. Reference current local and California Geologic Survey seismic and geologic hazards map surveys when assessing development review applications. *(Source: New Policy)*

S-4.2: **Liquefaction**. Require special site-specific studies in areas potentially subject to liquefaction to determine engineering mitigations and development siting measures for new development. *(Source: Existing Policy 9.3.2 modified)*

S-4.3: **Structure Protection.** Develop inventories of at-risk public buildings and infrastructure and seek funding to bring existing City-owned structures into compliance with updated seismic safety standards. *(Source: New Policy)*

S-4.4: **Infrastructure Protection.** Support earthquake strengthening and provision of alternative or backup services, for at-risk infrastructure such as water, sewer, electricity, and natural gas pipelines and connections, for critical facilities especially in areas of high seismic or geologic high hazard or where weak segments are identified by existing or future studies. *(Source: New Policy)*

S-4.5: **Earthquake Protection.** Enforce seismic design provisions from all relevant building codes to reduce the risk of damage associated with seismic activity in all new and expanded development and ensure adequate review and inspection. *(Source: New Policy)*

S-4.6: **Alquist-Priolo Act**. Implement mandatory development restrictions and investigation requirements (by the state, under the Alquist-Priolo Act, or by the City) on the West Napa fault

zone located within American Canyon and its Planning Area. *(Source: Existing Policy 9.1.2)*

S-4.7: **Geotechnical Review.** Continue to require preliminary investigations of tract sites by State-registered geotechnical engineers and certified engineering geologists (Chapter 70 County Building Code) and ensure regular inspection of grading operations. *(Source: Existing Policy 9.4.5 modified)*

S-4.8: **Landslide Activity.** Restrict new development in areas of known landslide activity unless adequate mitigation is incorporated. *(Source: Existing Policy 9.4.7 modified)*

Hazardous Materials

A hazardous material is any substance that may be explosive, flammable, poisonous, corrosive, reactive, radioactive, or any combination thereof because of its quantity, concentration, or characteristics. These substances have a variety of uses and are frequently stored and transported but require special care in handling and disposal because of their hazardous nature.

Hazardous material concerns are most likely to occur as part of certain land uses, such as oil and gas, agriculture, or industrial businesses, or through the transport or storage of hazardous materials. Hazardous materials are most often transported along Highways 29, 12, and 37, and on the California Northern railway. The city's rail yard also has bulk hazardous material storage, and several permitted underground storage tanks are located throughout the city that could potentially cause concern if leaks occur. There are no State or Federally listed hazardous material cleanup sites in American Canyon, but there are five locations that are considered hazardous waste sites due to the materials or uses on the site.

Goals and Policies

Goal S-5:

A community protected from use, storage, and transport of hazardous materials. (Source: New Goal)

Policies

S-5.1: **Regulations**. Ensure that American Canyon Fire Protection District continues to enforce the Fire Code relating to the use of hazardous material and ensure that appropriate regulations are followed and precautions are taken for the type and amount of hazard being created. *(Source: New Policy)*

S-5.2: **Cleanup Sites**. Require developers coordinate with the Napa County Health Care Agency to confirm that hazardous waste cleanup sites located within the city are remediated by the property owner in a manner that keeps the public safe. *(Source: New Policy)*

S-5.3: **Travel Restriction.** Restrict the travel of vehicles carrying hazardous material through the city by establishing designated travel routes. *(Source: New Policy)*

S-5.4: **Storage and Disposal.** Coordinate with the American Canyon Fire Protection District to enforce proper storage and disposal of hazardous materials, including medical waste, by commercial and industrial operations. *(Source: New Policy)*

S-5.5: **Safe Use and Disposal**. Coordinate with the City's waste service provider(s) to increase public awareness about safe use and disposal of household hazardous wastes. *(Source: New Policy)*

S-5.6: **Hazardous Material Review.** Review new development sites for potential presence of hazardous materials.

Airport Hazards and Military Compatibility

The northern city boundary is just south of the Napa County Airport, with industrial buildings closest to the airport and residences located approximately four miles south. The airport was first constructed in 1942 by the Army Corps of Engineers on County-owned land. The airport does not support commercial flights and mostly serves single-engine aircraft, with a 2021 projection of between 210,000 and 260,000 total aircraft operations for the airport.

Potential dangers from the airport are mostly limited to the obstruction of airspace near the airport and the risk of aircraft accidents. The airport and surrounding communities adhere to several practices that minimize these risks.

Open Land Requirements

Maintaining open land to be used in the event of an emergency landing is important to maintain the safety of communities surrounding the airport. The Airport Land Use Plan (ALUP) and land use plans of surrounding communities ensure adequate open space is maintained for emergency landings if necessary.

Limiting Surrounding Development

Residential uses are not allowed in areas that may be impacted by significant noise or safety issues from the airport. Maintaining a buffer around the airport where homes are not allowed to be built mitigates potential hazards.

Goals and Policies

Goal S-6:

A community protected from loss of life, injury, and property damage from aircraft operations. (Source: New Goal)

Policies

S-6.1: **Airport Land Use Consistency.** Review all applications for new development, expansion of existing uses, and re-use within Napa County Airport Compatibility Zones "A" through "E" for compliance with the appropriate use and development conditions. *(Source: Existing Policy 1.27.2)*

S-6.2: **Adverse Airport Impact Mitigation.** Work with the Napa County Airport Authority to ensure that onsite ground activities of the Airport do not adversely impact (e.g., noise, vibration, air emissions, or other pollution) the City of American Canyon. (*Source: Existing Policy 1.27.3*)

S-6.3: **Airport Traffic Impacts.** Work with the Napa County Airport Authority to ensure that airport vehicular access does not adversely impact the City of American Canyon. (*Source: Existing Policy 1.27.4*)

S-6.4: **Airport Operation Expansion.** Work with the Napa County Airport Authority to ensure that any expanded operations of the Airport do not adversely impact existing land uses and development in the City of American Canyon. (*Source: Existing Policy 1.27.5*)

S-6.5: **Emergency Preparedness**. Work with the Napa County Airport Authority and other appropriate agencies to ensure that emergency preparedness plans are maintained to protect American Canyon residents and development. (*Source: Existing Policy 1.27.6*)

S-6.6: **Economic Development.** Recognize the importance of the Napa County Airport to City residents, including the economic, transportation and recreational benefits, and ensure that land

use decisions rendered for this area do not negatively impact Airport operations (*Source: Existing Policy 1.27.7*).

S-6.7: **Airport Plan Updates.** Participate in Napa County efforts to update with the Napa Airport Land Use Compatibility Plan. *(Source: New Policy)*

S-6.8: **ALUC Plan Review**. Submit applicable General Plan Amendments and legislative proposals for Napa Airport Land Use Compatibility Plan consistency review by the ALUC . *(Source: New Policy)*

Climate Change and Adaptation

Climate change is affecting the bay area in many ways, some obvious and some more subtle. While climate change occurs on a global scale, the effects are felt locally, and local communities do their part to reduce emissions of the greenhouse gases that cause climate change. Rising average temperatures, more days of extreme heat, more occurrences of drought, more risk of severe wildfires, and rising sea levels are already affecting California cities as a result of climate change.

According to models developed by the State of California and the University of Berkeley, increases in temperature will be the most intense effect of climate change. By 2040, the average maximum temperature is expected rise by 2.5°F to 77.7°F, and by 2050, the average maximum temperature will rise by 3.4°F to 74.8°F, and by 2100 it will rise 4.5°F to 75.9°F. Days where temperatures reach 99.0°F or more are likely to occur twice as often each year by 2040, and more than triple to 12 days a year by 2060.

Regional risks such as wildfire and drought will also increase in American Canyon and in the surrounding Napa and Solano Counties. Changes in weather patterns throughout California could occur, leading to times of extreme drought when rainfall and snowfall is reduced, or instances of extreme storms and flooding. The California Department of Water Resources projects that the Sierra snowpack will decrease by 25 to 40 percent by 2050, reducing available water supplies throughout California and the surrounding states. The increased temperatures and potential for extreme drought will also increase the risk and intensity of wildfires because of dry vegetation and an increased chance of ignition.

Goals and Policies

Goal S-7:

A community prepared for the effects of climate change. (Source: New Goal)

Policies

S-7.1: **Water Conservation.** Continue and expand water conservation programs and water efficiency upgrades for existing and new development. *(Source: New Policy)*.

S-7.2: **Planning Decisions.** Prepare for and adapt to the effects of climate change by considering climate change vulnerability in planning decisions, including those involving new public facilities and private development. *(Source: New Policy)*

S-7.3: **Climate Planning Partnerships.** Engage surrounding jurisdictions and Napa County to coordinate climate adaptation planning efforts. *(Source: New Policy)*

S-7.4: **Green Infrastructure.** Utilize drought-tolerant green infrastructure projects including street trees and landscaped areas and encourage installation of green roof systems as part of cooling strategies to help reduce the heat island effect and energy demand during extreme heat events. *(Source: New Policy)*

S-7.5: **Extreme Heat Response Measures.** Update emergency/disaster response measures to provide support during extreme heat emergencies. *(Source: New Policy)*

S-7.6: **Extreme Heat Education.** Provide educational programs on preparing for extreme heat days and the effects heat related illness and target educational efforts to vulnerable populations. *(Source: New Policy)*

S-7.7: **Air Conditioning Alternatives.** Encourage residents to adopt air conditioning supplements such as installing fans or planting shade trees. *(Source: New Policy)*

S-7.8: **Public Facility Retrofits.** Seek funding to retrofit existing public facilities, including public buildings and transit stops, to protect the community from extreme heat events and poor air quality. *(Source: New Policy)*

S-7.9: **Resilient Hubs.** Establish community serving facilities that support vulnerable population resilience during climate related emergencies such as poor air quality and extreme heat. *(Source: New Policy)*

S-7.10: **Open Space Protection.** Protect city open space areas and parks from the effects of drought and heat by incorporating drought tolerant landscaping and native trees for shade. *(Source: New Policy)*

S-7.11: **City Tree Maintenance.** Reduce risk of falling tree limbs caused by drought and heat by properly maintaining city trees. *(Source: New Policy)*

S-7.12: **Emergency Power for Critical Facilities.** Work with local providers and facility owners to establish emergency power systems for critical facilities such as hospitals, police and fire departments, City Hall, and community centers. (Source: New Policy)

S-7.13: **Climate Change Impact Outreach.** Create an outreach plan with specific outreach programs for vulnerable populations identified in the Climate Change Vulnerability Assessment to educate and help prepare residents for climate change hazards such as extreme heat, sea level rise, flooding, drought, wildfires, and poor air quality. (Source: New Policy)

S-7.14: **Monitoring.** Coordinate with the Napa County Public Health Department to establish extreme heat and air quality warning systems and develop accessible and language appropriate community education resources to prepare community members for increase extreme heat events and air pollution. *(Source: New Policy)*

S-7.15: **Backup Power Sources.** Require new City-owned critical facilities to have adequate backup power sources and battery storage to minimize service disruptions during climate hazard events. *(Source: New Policy)*

Noise

Noise is recurring or ongoing unwanted or intrusive sound, usually generated by vehicular, railroad, or airplane traffic, construction or industrial activity, or disturbances, such as barking dogs, construction, home maintenance activities, or special events and parties. *(Source: Story Maps)* To manage unwanted noise, the American Canyon Municipal Code Title 8, Chapter 8.12, Community Noise establishes a noise control program that designates the community development director as the City's noise control officer (NCO) who, along with the police chief, can enforce noise restrictions within the city. Chapter 8.12 prohibits the making of noise that disturbs the peace and quiet of the community or that causes discomfort or annoyance and outlines procedures for measuring problematic noises. The ordinance also sets limits for interior and exterior noise levels near residential uses and for construction activity and lists specific noises that are prohibited in the city. In addition, the Noise Ordinance specifies procedures for obtaining a variance for noise sources restricted by the ordinance. *(Source: New Text)*

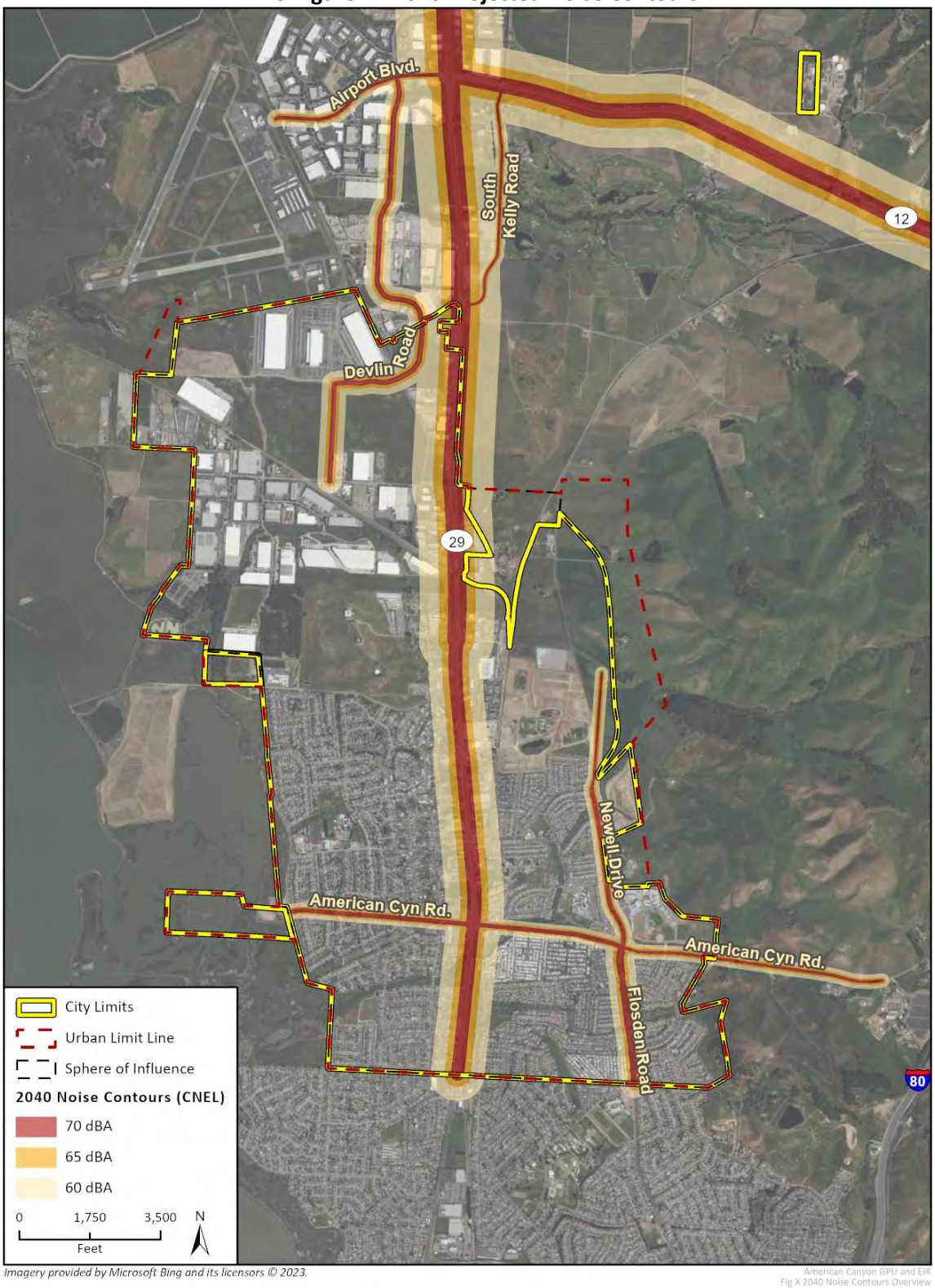
Noise Sources

Many noise issues are managed by careful planning of land use and circulation patterns, ensuring that noise-generators are located away from noise sensitive areas such as homes, schools, and hospitals. The biggest source of noise in American Canyon is vehicular traffic. Other noise sources include aircraft and railroad operations. *(Source: New Text)*

Most noise issues in American Canyon are from vehicle traffic, especially along Highway 29 and American Canyon Road. The railroad is another source of noise, running north to south parallel to Highway 29. Much of Highway 29 within the city is developed with commercial uses, and many areas with residential or other noise sensitive uses on both roads have fences to buffer roadway noise. *(Source: New Text)*

Construction activity also typically generates substantial short-term increases in ambient noise levels in the immediate vicinity of construction sites, which can be disruptive to nearby noise-sensitive uses. Figure 7 shows the projected future noise contour map for American Canyon. *(Source: Story Maps)*

S-Figure 7: 2040 Projected Noise Contours



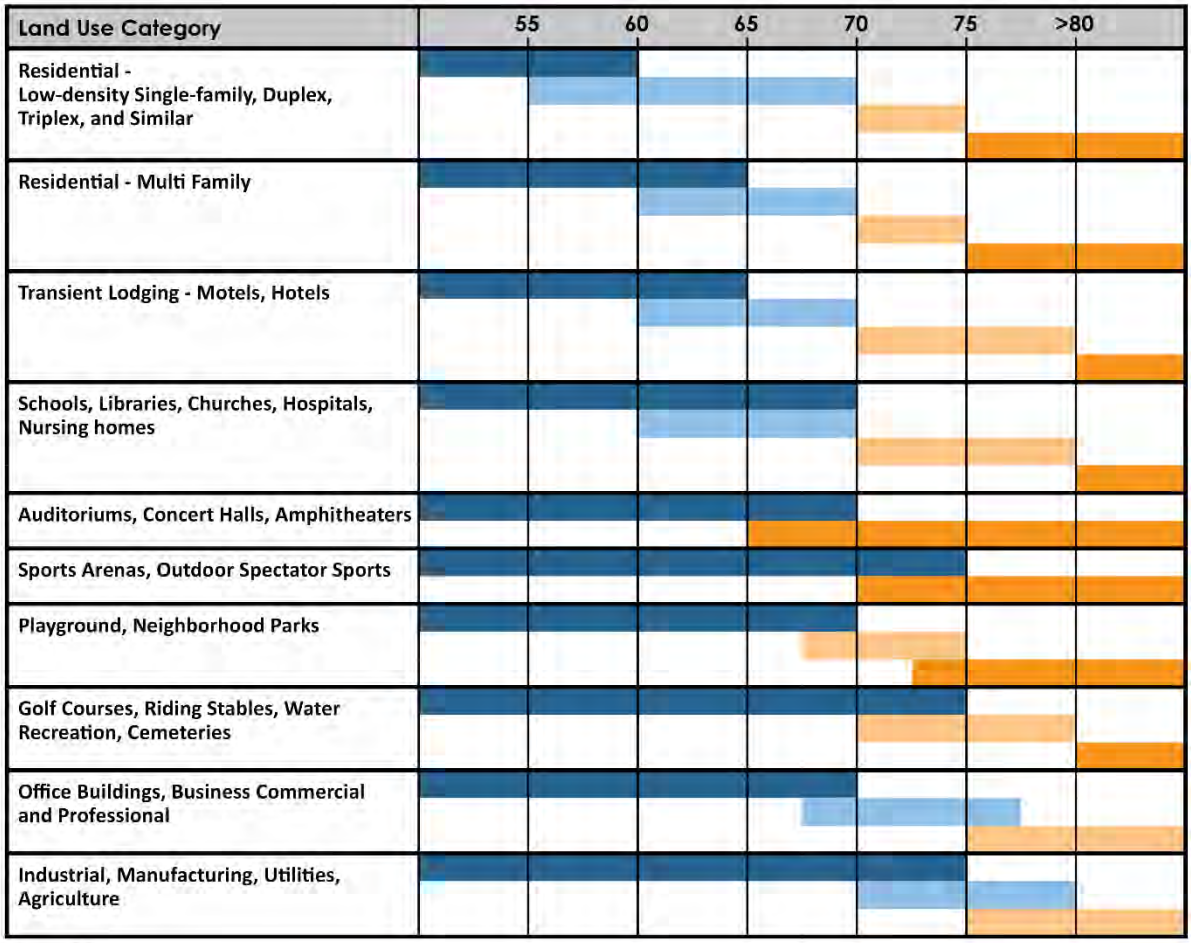
Noise Measurement

Noise is generally described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. Noise loudness is measured in decibels (dB). which are based on a logarithmic scale that condenses the range in sound pressure levels to a more usable number range. A weighted decibel (dBA) is an additional measure of sound that adjusts the sound rating scale to levels consistent with the sensitivity range of the human ear. For example, people perceive a sound 10 dBA higher than another sound as being twice as loud, and 20 dBA higher as being four times as loud. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). *(Source: New Text)*

Noise Sensitive Uses

There are some land uses that are more sensitive to noise than others. Noise-sensitive land-uses include residential, residential care, child/elder care facilities, schools, places of worship, and hospitals Careful consideration of the location of sensitive land uses relative to noise sources is required to make sure noise levels are not disruptive. Residential neighborhoods are the most common noise sensitive areas in American Canyon. Homes are located on the western and eastern sides of the city, mostly away from Highway 29 and the noise-generating areas of the airport and commercial area to the north. Schools, daycares, and assisted living facilities are located within these quieter residential areas, ensuring they are also located away from major noise sources. *(Source: Story Maps)* Table S-1 shows the State guidelines for land use categories and associated acceptable noise levels. *(Source: New Text)*

Table S-1 Noise Compatibility Matrix



Legend

Normally Acceptable
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

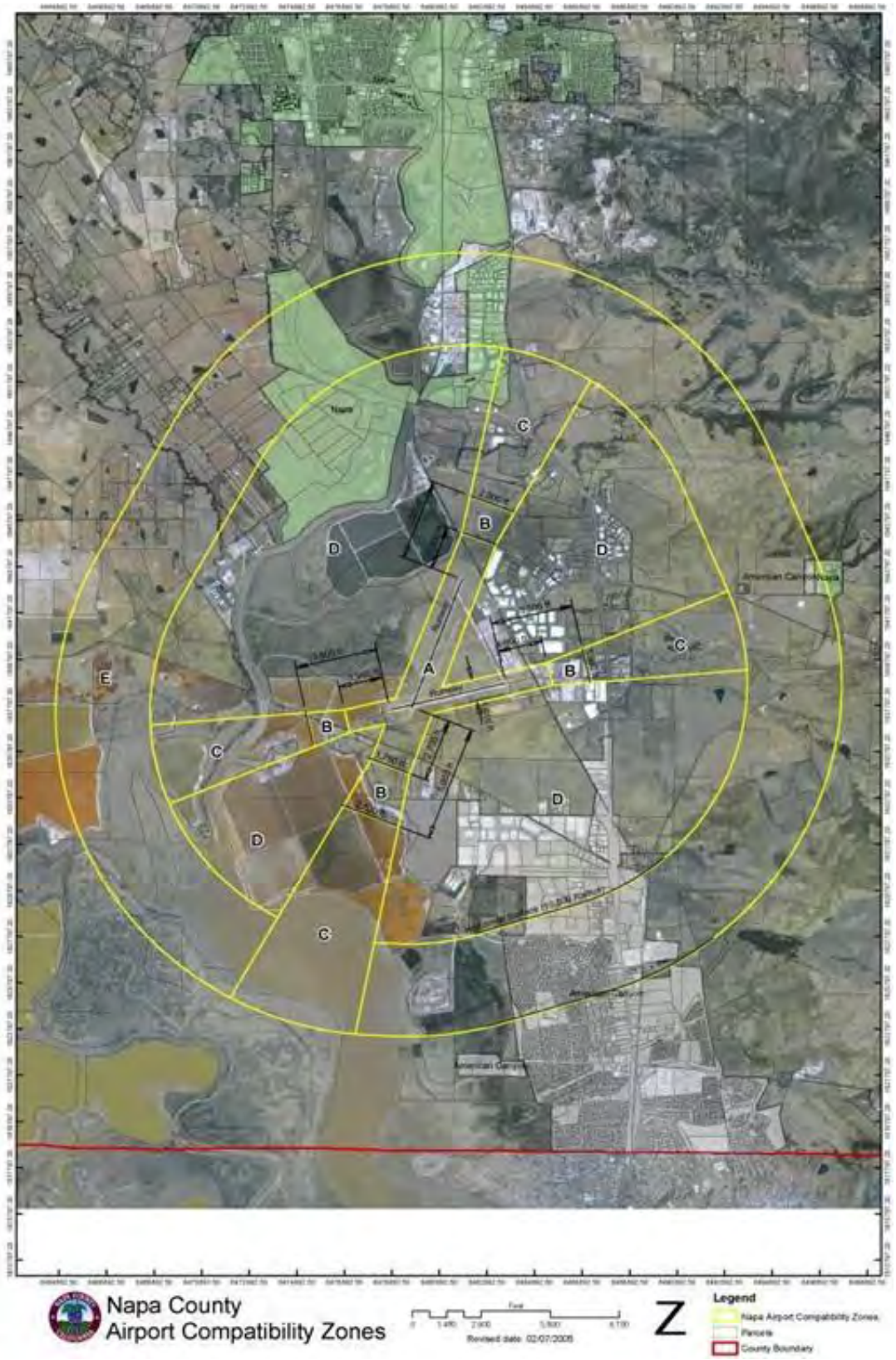
Clearly Unacceptable
New construction or development generally should not be undertaken.

Airport Noise

The Napa County Airport is located north of American Canyon, and the Napa County Land Use Commission oversees the expansion and compatibility of the airport with surrounding jurisdictions to ensure noise mitigation and public safety related to airport activities.

The Airport Land Use Compatibility Plan outlines compatibility criteria to evaluate and coordinate compatible land use planning and decision-making at the local, regional, and State levels. The Airport Land Use Compatibility Plan includes guidance on compatible land uses for designated compatibility zones (Figure 8, Tables 1 and 2).

S-Figure 8: Napa Airport Land



S-Table 1: Compatibility Zone Definitions

Zone A	Runway Protection Zone: Dimensioned to encompass the current and future Runway Protection Zones for the runways of the Napa County Airport, as defined under FAA regulations and shown on Figure 8. The zones also include areas lateral to the runway. These areas are regularly overflown by aircraft below 50 feet above the ground. For this reason, these areas are considered high risk with regard to accident potential and any structures, buildings, trees or obstacles may create a flight hazard. These areas are also affected by high noise levels.
Zone B	Approach/Departure Zone: This zone is defined as the areas where aircraft will be below 100 feet above ground level as determined by the type of approach anticipated for that runway. Approach slopes are designated on the Airport Compatibility Zones map, Figure 8. These areas are affected by substantial risk of accident potential due to the frequency of overflights at low altitudes. Noise levels are generally high with frequent loud single-events.
Zone C	Extended Approach/Departure Zone: This zone is defined as the area where aircraft will be below 300 feet above ground level as determined by the type of approach. The low altitude of the aircraft in these areas indicates moderate to high risk of accident potential. Properties in this zone will be affected by substantial noise.
Zone D	Common Traffic Pattern: This area is defined by the flight pattern for the Napa County Airport as illustrated on Figure 8. These areas are routinely overflown by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 feet above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes (especially on circle-to-land instrument approaches) a moderate level of risk exists.
Zone E	Other Airport Environs: An airport's influence area often extends beyond the typically defined compatibility zones during busy traffic hours and when larger aircraft are in the pattern. Aircraft overflights can occur anywhere in these areas when aircraft are departing or approaching an airport. Overflight annoyance is the

	primary impact element in these areas. The risk of accident is very low.

S-Table 2: Napa Airport Zone Land Use Densities

Zone	Location	Impact Elements	Maximum Densities (8)		
			Residential (1)	Other Structures (people/acres) (2)	
				In Structures	Total in and out of Structures
A (9)	Runway Protection Zone and Primary Surface	High risk High Noise Levels Low overflights below 50' AGL	0	0	10
B	Inner Approach / Departure Zone	Substantial risk High Noise Levels Low overflights below 100' AGL	0	10	25
C	Approach / Departure Zone	Moderate risk Substantial Noise Levels Low overflights below 300' AGL	0	50	75
D	Common Traffic Pattern	Moderate risk Frequent Noise Intrusion Low overflights below 1,000' AGL	0	100	150
E	Other Airport Environs	Low risk Overflight annoyance	See Note 7		

1. Residential land use and zoning designations are considered incompatible uses within the traffic pattern area (Zones A, B, C, and D) where aircraft overflights are frequent and at low altitude. The residential restrictions do not apply to residential uses allowable under agricultural land use and zoning designations.

2. The use should not attract more than the indicated number of persons per **net** acre. Net acreage is the total site area inclusive of parking areas and landscaping, less the area dedicated for streets. These densities are intended as general planning guidelines to aid in determining the acceptability of proposed land uses. Clustering of

development within the density parameters should be encouraged to protect and provide open land/safety areas. However, in Zones A, B, and C the density of any one acre of a parcel should not exceed twice the indicated number of people per acre.

3. Dedication of an avigation or overflight easement or deed notice is required as a condition of new development within all zones. Also, height limit restrictions are applicable to structures and trees in all zones in accordance with Federal Aviation Regulation Part 77 and local ordinances. Uses which may be hazardous to flight are prohibited in all zones.

4. These uses typically can be designed to meet the density requirements and other development conditions listed.

5. These uses typically do not meet the density requirements and other development conditions listed. They should be allowed only if a major community objective is served by their location in this zone and if mitigation measures (i.e., noise attenuation) are incorporated that will minimize potential conflicts.

6. NLR = Noise Level Reduction; I.e. the attenuation of sound level from outside to inside provided by the structure. Noise level reduction measures may be required in areas with high single-event noise levels and where noise-sensitive uses (schools, libraries, etc.) are proposed. Refer to Appendix C for criteria and noise attenuation measures.

7. Maximum residential densities in accordance with local adopted General Plans and zoning designations. Consideration should be given to the proximity of flight patterns, frequency of overflight, terrain conditions, and type of aircraft in determining acceptable locations of residential uses. Referral to the ALUC for review of development plans prior to approval is recommended.

8. The purpose of these criteria is to provide a basis for determining those land uses which are compatible with airport activities. Specific land uses will be allowed only in they are also consistent with applicable General Plan policies and zoning ordinances.

9. All lands in Zone A are either within the Airport's boundaries or are designated for acquisition in the Airport Master Plan.

10. Includes objects that penetrate FAR Part 77 surfaces, uses that would attract large numbers of birds (e.g., landfills), and uses that would create smoke, glare, distracting lights, or electronic interference.

11. Avigation easements will be required in lieu of overflight easements or deed notices where there is an appropriate public agency to review them.

Goals and Policies

Goal S-8:

A comfortable community environment that is free from excessive stationary and mobile noise and vibration. (Source: New Goal)

Policies

S-8.1: **Land Use Compatibility.** Use the land use-noise compatibility matrix in

S-8.2: Table S-1 to guide the siting of future land uses. *(Source: New Policy)*

S-8.3: **Sensitive Facilities**. Ensure appropriate noise mitigation is incorporated into the design of noise- sensitive facilities. *(Source: New Policy)*

S-8.4: **Site Design**. Minimize noise impacts to adjacent noise-sensitive land uses in site planning and project design. *(Source: New Policy)*

S-8.5: **Roadway Noise**. Encourage nonmotorized transportation alternatives for local trips and decrease excessive motor vehicle noise by implementing traffic-calming road design, lateral separation, natural buffers, and setbacks. *(Source: New Policy)*

S-8.6: **Highway Noise**. Continue to coordinate with California Department of Transportation (Caltrans) and the NVTA to complete the American Canyon SR 29 Corridor Improvement Project. *(Source: New Policy)*

S-8.7: **Noise Complaints.** The Noise Control Officer will continue to monitor and enforce noise complaints from residents, seek to resolve concerns where feasible, and make the enforcement process accessible to the general public. *(Source: New Policy)*

S-8.8: **Mobile Noise Sources.** Minimize exposure of sensitive receptors to noise from roads through land use decisions, by encouraging the siting of sensitive noise receptors away from high traffic roadways. *(Source: New Policy)*

S-8.9: **Noise Mitigation Measures.** Require heavy trucks to use designated truck routes that avoid residential and other sensitive land uses to the maximum degree feasible. When not feasible, investigate noise mitigation strategies such as noise barriers or truck travel restrictions, especially in areas of concern such as along American Canyon Road. *(Source: New Policy)*

S-8.10: **Railroad Noise.** Minimize exposure of sensitive receivers to railroad-related noise and vibration through land use decisions and, as appropriate, use of setbacks and/or noise insulation for new development. *(Source: New Policy)*

S-8.11: **Construction Noise.** Minimize exposure of sensitive receivers and enforce the limits in Section 8.12 of the municipal code for construction noise and vibration through methods such as restricting construction to daytime hours, use of sound barriers and/or other methods to dampen noise from construction equipment, and public notification prior to construction activities. *(Source: New Policy)*

S-8.12: **Cross-Jurisdictional Coordination.** If noise concerns related to the California Northern Railroad (CFNR) or Napa County Airport arise, coordinate with those entities to develop and implement appropriate responses. *(Source: New Policy)*

S-8.13: **Residential Outdoor Mechanical Equipment**. Require air conditioning units and pool equipment within residential areas be designed and sited in a manner that does not intrude upon the peace and quiet of adjacent noise-sensitive uses. *(Source: Existing Policy 11.2.3)*

S-8.14: **Vibration Impacts.** Require project specific vibration impact assessments for projects involving the use of vibration generating equipment such as pile drivers and vibratory rollers that could generate groundborne vibration levels. For projects with significant vibration impacts, require feasible mitigation measures to reduce ground vibration levels and exposure to sensitive receptors. *(Source: New Policy)*

Goal S-9:

Limit Aircraft noise impacts consistent with the Napa Airport Land Use Compatibility Plan (ALUCP). (Source: New Goal)

Policies

S-9.1: **Land Use Compatibility.** Restrict development of uses within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses (see Figure [x]). *(Source: Existing Policy 11.4.1)*

S-9.2: **Development Requirements.** Require development in the vicinity of Napa Airport comply with the Airport Land Use

Compatibility Plan (ALUP) noise standards. *(Source: Existing Policy 11.4.2)*

S-9.3: **Napa County Airport.** Work closely with Napa County Airport to ensure the airport's operations do not generate adverse noise conditions in the City of American Canyon. *(Source: Existing Policy 11.4.3)*

S-9.4: **ALUCP Consistency.** Require dedication of navigation or overflight easements and/or deed restrictions and real estate disclosure notifications, consistent with the requirements of the ALUCP, when new development or subdivisions are permitted on property within the jurisdiction of the Napa County Airport Land Use Commission (ALUC). *(Source: Existing Policy 1.27.3)*

S-9.5: **Height Restrictions.** Limit building heights for airspace protection in accordance with Federal Aviation Regulations (FAR) Part 77. *(Source: Existing Policy 1.27.4)*

S-9.6: **Clustered Development.** To the extent feasible, development in Zones C and D shall be clustered to preserve open land for safety purposes in accordance with the ALUCP. *(Source: Existing Policy 1.27.5)*

S-9.7: **Airport Planning Area.** Give consideration to the proximity of flight patterns, frequency of overflight, terrain conditions, and type of aircraft in determining the acceptable locations for residential uses within the Airport's planning area, outside of the Airport's common traffic pattern. *(Source: Existing Policy 1.27.6)*

S-9.8: **Helipad Proposals.** Refer helipad proposals anywhere within the City's Planning Area to the ALUC for a consistency determination. *(Source: Existing Policy 1.27.7)*

S-9.9: **Consistency Determination.** Refer all General Plan, Zoning Ordinance, Subdivision Ordinance, Specific Plan and building regulation amendments that affect areas within ALUCP zones to the ALUC for a consistency determination. *(Source: Existing Policy 1.27.8)*

Implementation Programs

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
A	**Emergency Centers.** Conduct an evaluation of public facilities that can be used as emergency centers to identify necessary retrofitting to ensure the stability and safety of the facility in the event of a disaster. Outline procedures for preparation and use of the identified facilities the during emergencies. *(Source: New Implementation Program)*	S-1.1	Public Works Community Development Police Fire District	■				
B	**County Fire and Police Coordination.** Meet annually with the County Fire and Police Departments to coordinate and evaluate the provision of emergency services to the City. *(Source: New Implementation Program)*	S-1.2	Fire District Police					■
C	**Water Agency Coordination.** Work with contracted water agencies to identify peak load water requirements for the City and plan for adequate water supply and delivery in the event of a disaster. *(Source: New Implementation Program)*	S-1.3	Public Works					■
D	**Prepare City Staff.** Update emergency protocols and provide trainings to City staff annually to ensure quick response in reestablishing/maintaining power, water, and roadway access in the event of a disaster. *(Source: New Implementation Program)*	S-1.4	Community Development Public Works Fire District Police					■
E	**Community Emergency Preparedness.** Create a community preparedness program to educate and prepare residents for disasters. The program can include emergency preparedness trainings for businesses and residents, increasing awareness on the City's emergency response plans and resources, providing checklists for personal and business emergency preparedness kits, and developing a network of emergency and medical response volunteers. *(Source: New Implementation Program)*	S-1.4 S-1.5 S-1.6	Community Development Police Fire District	■				

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
F	**Community Emergency Response Team (CERT).** Encourage community members and City staff to participate in FEMA's CERT program by distributing flyers/information to City departments, businesses, and social media. *(Source: New Implementation Program)*	S-1.4 S-1.5 S-1.6 S-1.10	Police Fire District	■				
G	**Information Sharing.** Distribute flyers and utilize social media to provide information on disaster preparedness, resources, and updates during emergencies. Regularly update emergency preparedness information on the City's website. *(Source: New Implementation Program)*	S-1.5	Police Fire District	■				
H	**Educate Vulnerable Populations.** Target educational emergency preparedness materials and trainings to the city's most vulnerable populations by distributing information to senior centers, daycares, schools, cultural centers/organizations, and employers with low-income, non-english speaking, and outdoor workers. Provide informational materials in multiple languages. *(Source: New Implementation Program)*	S-1.6	Community Development Police Fire District	■				
I	**Emergency Access Routes.** Regularly evaluate existing roadways, particularly along evacuation and emergency access routes, to ensure roads will have adequate capacity during times of emergency. Develop and implement improvement plans for roadways that do not have adequate capacity or require maintenance. *(Source: New Implementation Program)*	S-1.7	Public Works					■
J	**Fire Review.** Include fire department plan review and approval for new development and redevelopment projects that involve roadway design or redesign to ensure adequate emergency access is maintained. *(Source: New Implementation Program)*	S-1.7	Fire District					■

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
K	**Backup Power for Critical Facilities.** Identify critical facilities that do not have reliable power in the event of an emergency. Develop a plan to provide on-site backup power or other means of providing back up power to those facilities. *(Source: New Implementation Program)*	S-1.8	Public Works		■			
L	**Emergency Communication Plan.** Develop an emergency communication plan to evaluate and implement communication procedures and resources during and after a disaster. Review and update the plan at least once a year to incorporate new technologies, processes, and pprocedures as needed. *(Source: New Implementation Program)*	S-1.9	Community Development		■			
M	**Employee Training Plan.** Update and implement the employee training plan to include up to date training requirements for City employees based on the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). *(Source: New Implementation Program)*	S-1.10	Administration	■				
N	**Volunteer Registry.** Create a registry of volunteers who live and work in the city and can assist in the event of an emergency. (New Program). *(Source: New Implementation Program)*	S-1.11	Police Fire District	 ■				
O	**Emergency Alerts for Single Access Neighborhoods.** Update the City's local alert system, Nixle, to provide tailored emergency alerts and evacuation directions to residents in neighborhoods with a single evacuation route. *(Source: New Implementation Program)*	S-1.13	Police Fire District	 ■				
P	**Residential Secondary Access.** Develop and implement a plan to add a second route of ingress/egress for neighborhoods with fewer than two evacuation routes to the extent feasible. *(Source: New Implementation Program)*	S-1.14	Community Development Public Works	■				

	Programs	Implements Which Policy(ies)	Responsible / Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
Q	**Single Access Neighborhood Outreach.** Provide and distribute flyers with emergency access and preparedness information tailored for specific neighborhoods with only one ingress/egress route. *(Source: New Implementation Program)*	S-1.13	Police Fire District					
R	**Critical Facilities Siting.** During the project development and review process, ensure new and expanded critical infrastructure is located outside of high risk hazard areas, or is retrofitted to appropriately withstand such hazard events if such location is not possible. *(Source: New Implementation Program)*	S-1.16	Community Development Public Works					■
S	**Inventory Critical Facilties.** Inventory City owned critical facilities to identify facilities that require retrofitting to bring them up to modern safety standards for natural disasters and outline what improvements are needed. *(Source: New Implementation Program)*	S-1.19	Public Works					■
T	**Critical Facilties Funding.** Designate a City staff member to identify and pursue funding opportunities and available grants for critical facilties improvements to improve resiliency to natural disasters. *(Source: New Implementation Program)*	S-1.19	Public Works					
U	**Site Design Standards.** Develop specific site design and maintenance standards, such as requirements for maintaining defensible space surrounding structures, for development on the eastern side of the city, in proximity to the high fire hazard severity zones. *(Source: New Implementation Program)*	S-2.1	Fire District Community Development		■			
V	**Retrofit Incentives Programs.** Develop and promote incentives for building improvements such as installation of fire sprinklers for existing structures to improve fire safety in existing development. *(Source: New Implementation Program)*	S-2.3 S-2.9	Public Works Fire District		■			

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
W	**Fire Safety Education.** Distribute flyers with information on fire safety, including wildland and structural fire prevention, evacuation protocols, and guidelines for defensible space and other hazards around structures. *(Source: New Implementation Program)*	S-2.5	Fire District	■				
X	**Fire Equipment.** Regularly inventory and test fire equipment and water supply availability to evaluate the City's capacity to suppress and respond to fires. *(Source: New Implementation Program)*	S-2.6 S-2.12	Fire District					■
Y	**Evacuation Route Capacity.** Evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios as part of the next update to the Napa County Operational Area Multi-jurisdictional Hazard Mitigation Plan, in accordance with AB 747. *(Source: New Implementation Program)*	S-1.8	Community Development Fire District					 ■
Z	**Fire Safety Audits.** Offer fire safety audits to property owners and residents to enhance fire prevention for existing structures. *(Source: New Implementation Program)*	S-2.9	Fire District					■
AA	**Fire Protection Plans.** Update the municipal code to establish requirements for fire protection plans for new development projects. *(Source: New Implementation Program)*	S-2.10	Fire District Community Development		 ■			
BB	**Defensible Space.** Update the municipal code to establish requirements for defensible space for development in high and very high fire hazard severity zones. *(Source: New Implementation Program)*	S-2.11	Fire District Community Development		 ■			
CC	**Water Supply.** Regularly evaluate the city's water supply and water fire flow to ensure adequate capacity during wildfire/fire events. *(Source: New Implementation Program)*	S-2.12	Fire District Public Works					 ■
DD	**Emergency Roadway Maintenance.** Prioritize emergency roadway maintenance projects within the City's Capital Improvement Plan. *(Source: New Implementation Program)*	S-2.14	Public Works		■			

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
EE	**Storm Drain Maintenance.** Encourage community members to assist in maintaining storm drains by providing instructions for clearing debris from stormdrains on the City's website and posting links ot the information to social media before storm events. *(Source: New Implementation Program)*	S-3.1	Public Works					■
FF	**Flood Improvement Projects.** Develop and implement an improvement plan to outline and prioritize capital improvement projects for low-lying, flood-prone, and sea level rise areas and seek funding for those projects. *(Source: New Implementation Program)*	S-3.3 S-3.4	Public Works			■		
GG	**Flood Management Training.** Work with FEMA and other floodplain management authorities to receive annual training regarding floodplain regulations, best practices, and management. *(Source: New Implementation Program)*	S-3.3	Public Works					■
HH	**Flood Prevention in New Development.** Develop mitigation and design guidelines for new construction to protect development from flood and sea level rise impacts. *(Source: New Implementation Program)*	S-3.2 S-3.6	Community Development		■			
II	**Wetland Management Plan.** Work with other agencies to develop and implement the American Canyon Wetlands Restoration Plan and to preserve the ecological integrity of wetland areas within the city. *(Source: New Implementation Program)*	S-3.6	Community Development Public Works			■		
JJ	**Publicly-Owned Critical Facilities.** Inventory critical facilities and other public buildings that are exposed to seismic shaking or are at an elevated risk of seismic shaking or liquefaction. Seek funding to conduct retrofits to City-owned infrastructure to improve safety and provide emergency power backup to reduce vulnerability related to seismic hazards. *(Source: New Implementation Program)*	S-4.1 S-4.2	Public Works		■			

	Programs	~~Implements~~ Which Policy(ies)	Responsible / Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
KK	**Funding to Identify Vulnerable Critical Facilities.** Seek grant funding to identify and retrofit critical facilities and infrastructure that is vulnerable to geologic hazards. *(Source: New Implementation Program)*	S-4.2	Public Works Community Development					
LL	**Privately-Owned Critical Facilities.** Work with businesses and organizations to encourage building retrofits to privately owned critical faicilities to improve safety and provide emergency power backup. *(Source: New Implementation Program)*	S-4.1 S-4.2	Public Works		■			
MM	**California Building Code. A**dopt new California Building Code requirements, when necessary, to promote the use of updated design standards. *(Source: New Implementation Program)*	S-4.1 S-4.3	Community Development					■
NN	**Geologic Studies.** Continue to enforce the California Building Code and the Alquist-Priolo Earthquake Fault Zoning Act that require geologic studies to be performed so that habitable structures and essential facilities will be sited away from active and potentially active faults. *(Source: New Implementation Program)*	S-4.1 S-4.3 S-4.4	Community Development					■
OO	**Water Infrastructure.** Evaluate and monitor earthquake and seismic safety of existing water infrastructure and identify weaknesses. Develop improvement programs for infrastructure that is susceptible or damaged by seismic events. *(Source: New Implementation Program)*	S-4.2	Public Works		■			
PP	**Hazardous Materials Transport.** Designate and enforce safe routes through the city for the transport of hazardous materials. *(Source: New Implementation Program)*	S-5.1	Waste Management		■			
QQ	**Hazardous Waste Information.** Provide information on proper disposal of household and industrial hazardous waste to businesses, in City Hall, and on the City's website. *(Source: New Implementation Program)*	S-5.2 S-5.3	Waste Management	■				

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
RR	**Hazardous Waste Disposal.** Work with Recology American Canyon to adjust hazardous waste drop off limits and potentially expand curbside pick up beyond motor oil. *(Source: New Implementation Program)*	S-5.2	Public Works	■				
SS	**Medical Waste Disposal.** Distribute information on proper medical waste disposal to businesses and residents. *(Source: New Implementation Program)*	S-5.2	Waste Management	■				
TT	**Environmental Site Assessment.** If determined by the City to be necessary, a Phase I Environmental Site Assessment in accordance with ASTM International methodologies shall be completed for a development proposal prior to project approval. If the Phase I Environmental Site Assessment determines hazardous materials may be present, a Phase II Environmental Site Assessment may be required. If the Phase II ESA for the development site indicates that contaminants are detected in the subsurface at the project site, the project applicant shall prepare a Soil Management Plan for impacted soils prior to the start of construction.	S-5.6	Community Development Public Works	■				
UU	**Airport Land Use Consistency.** Maintain consistency between the land use designations and the Napa County Airport Land Use Compatibility Plan. *(Source: New Implementation Program)*	S-6.1	Community Development					■
VV	**ALUC Consistency**. Monitor Airport Land Use Commission planning efforts and update City land use designations as appropriate. *(Source: New Implementation Program)*	S-6.2	Community Development					■
WW	**Restrict Siting of Sensitive Land Uses**. Update the municipal code to restrict siting of sensitive land uses in the approach/departure or common traffic pattern zones of the Napa County Airport, consistent with the land use restrictions in the Napa County Airport Land Use Compatibility Plan. *(Source: New Implementation Program)*	S-6.3	Community Development		■			

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
XX	**Water Conservation Education.** Distribute information to the public on incentives for water conservation best practices. *(Source: New Implementation Program)*	S-7.1	Public Works	■				
YY	**State Water Conservation Programs.** Update the municipal code to implement and enforce State mandated water conservation programs. *(Source: New Implementation Program)*	S-7.1	Public Works	■				
ZZ	**Climate Action Plan.** Develop a Climate Action Plan or expand the City's Energy Efficiency Climate Action Plan to address and plan for climate change impacts. *(Source: New Implementation Program)*	S-7.2	Community Development		■			
AAA	**Sea Level Rise.** Identify public and critical facilities vulnerable to sea level rise impacts and develop improvement plans to implement retrofits or relocate facilities as appropriate. *(Source: New Implementation Program)*	S-7.2	Community Development Public Works		■			
BBB	**Napa County Climate Action Plan.** Participate in the developmentment and encourage adoption of the Napa County Climate Action Plan as well as subsequent updates. *(Source: New Implementation Program)*	S-7.3	Community Development	■				
CCC	**Napa County Climate Action Committee.** Attend the Napa County Climate Action Committee meetings and work with the committee on regional and local climate action efforts. *(Source: New Implementation Program)*	S-7.3	Community Development					■
DDD	**Drought Tolerant Landscaping.** Require the use of drought tolerant landscaping in new construction. *(Source: New Implementation Program)*	S-7.10	Community Development	■				
EEE	**Rebate Programs.** Work with water providers to evaluate the feasibility of expanding rebate programs for the replacement of lawns and toilets to other water fixtures and updates. *(Source: New Implementation Program)*	S-7.4	Public Works		■			

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
FFF	**Urban Forest Master Plan.** Develop an Urban Forest Master Plan to identify areas within the city that need additional tree canopy, including street trees, to mitigate the impacts of the urban heat island effect. *(Source: New Implementation Program)*	S-7.4	Community Development Public Works		■			
GGG	**Green Roofs.** Explore the opportunity to incorporate green roof systems into local design guidelines for new development. *(Source: New Implementation Program)*	S-7.4	Community Development		■			
HHH	**Extreme Heat Relief.** Identify and publicize facilities where residents can seek refuge from extreme heat, such as libraries, community centers, or other public facilities. *(Source: New Implementation Program)*	S-7.5	Community Development Public Works	■				
III	**Extreme Heat Education.** Distribute information regarding preparation for extreme heat days and heat related illness to community centers, senior centers, and daycares and schools. Provide informational materials in mutliple languages. *(Source: New Implementation Program)*	S-7.6	Community Development	■				
JJJ	**Air Conditioning Alternatives.** Update the municipal code to establish standards for air conditioning alternatives to reduce energy demand and provide cooling during extreme heat events. *(Source: New Implementation Program)*	S-7.7	Community Development		■			
KKK	**Resilient Public Critical Facilities.** Upgrade public critical facilities such as libraries and community centers to incorporate resiliency and preparedness to extreme heat events and poor air quality, prioritizing the protection of public health for vulnerable populations. *(Source: New Implementation Program)*	S-7.8 S-7.9	Community Development Public Works		■			
LLL	**Bus Stop Shading.** Install shade structures and/or plant shade trees at bus stops that do not currently provide shading. *(Source: New Implementation Program)*	S-7.8	Public Works		■			

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
MMM	**Open Space Maintenance.** Evaluate climate change impacts on the city's managed open space areas and create a maintenance plan to protect vegetation from heat and drought. *(Source: New Implementation Program)*	S-7-10	Public Works		■			
NNN	**City Tree Management.** Create a City tree management plan to monitor and maintain City owned trees. *(Source: New Implementation Program)*	S-7.11	Public Works		■			
OOO	**Critical Facilities Improvements.** Identify, seek funding for, and implement improvement projects to protect critical facilities against poor air quality and extreme heat. *(Source: New Implementation Program)*	S-7.12	Public Works		■			
PPP	**Community Outreach Partnerships.** Partner with local organizations and non profits to educate residents on climate change hazards, with specific emphasis on vulnerable populations. *(Source: New Implementation Program)*	S-7.13	Community Development Police Fire District					■
QQQ	**Noise Compatibility Matrix.** Continue to enforce Chapter 8.12 *Community Noise* of the municipal code. *(Source: New Implementation Program)*	S-8.1 S-8.3	Community Development Police		■			
RRR	**Acoustical Analyses.** Require applicants to submit an acoustical analysis for projects near sensitive land uses or involving new or expanded sensitive land uses and require appropriate mitigation measures to reduce noise impacts if necessary to less than significant levels. *(Source: New Implementation Program)*	S-8.3	Community Development					■
SSS	**Noise Insultation.** Require new residential development meet the California Noise Insulation Standards (Title 24 of the California Administrative Code) for interior and exterior noise levels. *(Source: New Implementation Program)*	S-8.5	Community Development					■

	Programs	~~Implements~~ Which Policy(ies)	Responsible Supporting Department(s)	2020 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
TTT	**Vibration Impact Assessment.** Require project specific vibration impact assessments and vibration impact reduction measures for new development projects using major vibration generating equipment. *(Source: New Implementation Program)*	S-8.7	Community Development					■



9 Environmental Justice

The Environmental Justice Element establishes environmental justice goals, policies, and implementation programs to ensure all members of the American Canyon community (i.e., residents, workers, business owners, local organizations, and visitors) regardless of race, ethnicity, age, gender, religion, sexual orientation, disability, and socio-economic status feel valued, safe, respected, included, and secure.

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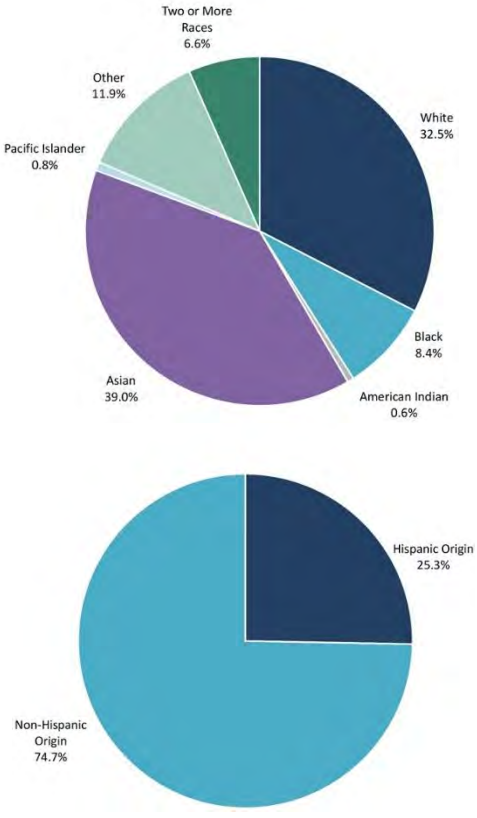
Environmental Justice

The State of California defines Environmental Justice as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations, and policies.

Today, and throughout much of California and United States history, communities with lower incomes, lower levels of education, and higher proportions of minority residents often bear a disproportionately large burden of exposure to environmental hazards. These environmental inequities are largely a result of land use policy and zoning regulations (e.g., residential uses located adjacent to industrial uses). The environmental justice goals, polices, and implementation programs in this Element seek to address these systemic inequities.

Racial and Ethnic Diversity

The city is home to a variety of races and cultures. Diversity is the representation of different groups, and in American Canyon no single US Census-reported race category makes up more than 40 percent of the local population total. About four in ten residents are Asian, three in ten are White, and almost one in ten are Black. About one quarter of residents' report being ethnically Hispanic.



Source: US Census, 2019

Introduction

Legal Requirements

The Planning for Healthy Communities Act of 2016 (Senate Bill 1000) was established to address the role of environmental justice in local and regional planning practice. Through Senate Bill 1000, cities and counties are required to identify environmental justice communities (called "disadvantaged communities") within their planning area and incorporate environmental justice related goals and policies into their general plans. According to the Bill, environmental justice goals and policies could be integrated into several sections of a general plan or created as a standalone element. The City of American Canyon created this standalone element to address environmental justice goals, policies, and objectives for the community consistent with State law. As of 2022, there are no disadvantaged communities within the City of American Canyon.

Additionally, Government Code Section 65302.10 requires that all general plans identify and analyze Disadvantaged Unincorporated Communities (DUCs) outside of a city's boundaries but within or adjacent to a city's sphere of influence (SOI). DUCs are defined as inhabited unincorporated areas with 10 or more housing units and a median household income that is less than 80 percent

of the statewide median household income. As of 2022, there are no DUCs adjacent to or within American Canyon's SOI.

Relationship to Other General Plan Goals, Policies, and Implementation Programs

State law requires the General Plan, and all individual elements collectively form an "integrated, internally consistent, and compatible statement of policies." The goals, policies, and programs of this Justice Element are consistent with and build upon the goals, policies, and programs contained in other elements of the General Plan. The goals, policies, and programs established in this Element seek to reduce health risks in American Canyon through strategies such as reducing pollution exposure, improving air quality, and promoting public facilities, food access, safe and sanitary homes, and physical activity; promote civil engagement in the public decision-making process; and prioritize improvements and programs that address the needs of today and the future.

Many policies that address environmental justice impacts and improve the quality of life for American Canyon residents are already present in other General Plan elements. EJ-Table 1, below, provides a list of these policies. The goals, policies, and programs in the Environmental Justice Element aim to fill gaps and ensure the General Plan fully addresses community member needs.

Household Income Distribution

The 2019 median household income in American Canyon was about $99,400, 12 percent higher than the Napa County median income of $88,500. The median income in American Canyon grew by an average of about 2.4 percent per year over the past decade, a rate comparable to inflation in the economy.

By 2019, over 23 percent of American Canyon households had an annual income in the range of $100,000 to $149,999, compared to 19 percent countywide. About seven percent have an annual income below $25,000, compared to nearly 10 percent in Napa County as a whole.

EJ-Table 1: Policies in Other Elements Supporting Environmental Justice Efforts

Policy Number	Policy Title	Page Number
Civic Engagement		
LU-15.7	Community Outreach	LU-33
U-8.1	Recycling Education and Information	U-17
ENV-6.6	Public Input	ENV-24
S-1.6	Public Training	S-10
S-1.7	Public Awareness	S-10
S-5.5	Safe Use and Disposal	S-28
S-7.13	Climate Change Impact Outreach	S-34
S-7.14	Monitoring	S-34
Pollution Exposure		
LU-5.3	Truck Access	LU-20
ENV-11.1	Regional Air Quality Efforts	ENV-38
S-5.4	Storage and Disposal	S-28
S-5.2	Cleanup Sites	5-28

EJ-Table 1: Policies in Other Elements Supporting Environmental Justice Efforts

Policy Number	Policy Title	Page Number
Physical Activity		
LU-1.4	Compact Development Pattern	LU-15
MOB-1.7	Promote Walking and Bicycling	M-30
Public Facilities and Services		
ENV-5.5	American Canyon Bicycle and Pedestrian Trail Plans.	ENV-18
ENV-5.10	Urban Trails	ENV-18
ENV-6.3	Park System	ENV-24
ENV-10.10	Active Transportation	ENV-36
ENV-11.9	Countywide Bicycle and Pedestrian Plans	ENV-39
LU-7.1	Adequate Public Facilities	LU-22
MOB-1.24	Bicycle Facilities	M-32
MOB-1.25	Street Trees	M-32
S-1.2	Critical Facilities	S-10
Land Use and Development		
MOB-1.11	Reduce the Need to Drive	M-30
MOB-1.23	Pedestrian Connections to Employment Destinations	M-32
ENV-6.2	Parks Master Plan	ENV-24
LU-5.4	Industrial Operations	LU-20
LU-5.5	Prevent Adverse Impacts	LU-20
LU-12.14	Industrial Performance Standards	LU-30
ENV-1.6	Urban Forest	ENV-7
ENV-11.3	Separate Sensitive Land Uses	ENV-38
MOB-6.4	Location of Industrial Development	M-42
Managing Environmental Concerns		
ENV-5.12	Climate Adaptation	ENV-19
S-7.9	Resilient Hubs	S-34
LU-10.13	Climate Change Adaptation	LU-27
ENV-9.1	Greenhouse Gas Emissions Reductions	ENV-34
ENV-9.5	Vehicle Miles Travelled Reduction	ENV-35
Infrastructure Accessibility, Design, and Maintenance		
LU-2.5	Active Transportation	LU-16
LU-10.14	Safe Pedestrian and Bicycle Mobility	LU-27
MOB-1.5	Sidewalks	M-30
MOB-1.22	Non-motorized Circulation System	M-32
MOB-2.3	Bicycle Safety	M-34
U-2.3	Retrofits Existing Buildings	U-8

EJ-Table 1: Policies in Other Elements Supporting Environmental Justice Efforts

Policy Number	Policy Title	Page Number
ENV-6.1	Park Standards	ENV-24
ENV-6.13	Park Accessibility	ENV-25
Health and Safety		
MOB-2.1	Vision Zero	M-34
MOB-2.5	Speeds on Residential and Arterial Streets	M-34
Safe and Sanitary Housing		
LU-10.11	Property Maintenance Programs	LU-26
U-9.6	Residential Energy Efficiency	U-20
ENV-10.4	Energy Retrofit Program	ENV-36
S-2.3	Retrofit Strategy	S-16
S-2.9	Property and Building Improvements	S-17

Source: City of American Canyon, 2023

Background

California law defines "disadvantaged communities" as areas most afflicted with a combination of economic, health, and environmental burdens. As a result, they are more likely to suffer a lower quality of life and increased health problems. To identify local disadvantaged communities, the Governor's Office of Planning and Research (OPR) recommends utilizing the California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify designated disadvantaged communities.

CalEnviroScreen 4.0 Methodology

Developed by the Office of Environmental Health Hazard Assessment (OEHHA), the CalEnviroScreen tool identifies disadvantaged communities throughout California. In October 2021, OEHHA released CalEnviroScreen 4.0 which was used to prepare this Element. CalEnviroScreen 4.0 uses existing environmental, health, and socioeconomic data to rank census tracts based on 20 distinct indicators. The 20 indicators are grouped into four indicator categories which are summed into two primary data groupings (see EJ-Table 2):

Pollution Burden

- **Environmental Effects Indicators.** Based on the locations of toxic chemicals in or near communities.
- **Exposure Indicators:** Based on measurements of different types of pollution that people may come into contact with.

Population Characteristics

- **Socioeconomic Factor Indicators.** Based on conditions that may increase peoples' stress or make healthy living difficult and cause them to be more sensitive to pollution effects.
- **Sensitive Populations.** Based on conditions that measure the number of people in a community who may be more affected by pollution because of their age or underlying health.

EJ-Table 2: CalEnviroScreen 4.0 Indicators

Pollution Burden	
Exposure Indicators	**Environmental Effect Indicators**
• Ozone Concentrations	• Cleanup Sites
• PM2.5 Concentrations	• Groundwater Threats
• Diesel PM Emissions	• Hazardous Waste
• Drinking Water Contaminants	• Impaired Water Bodies
• Children's Lead Risk from Housing	• Solid Waste Sites and Facilities
• Pesticide Use	
• Toxic Releases from Facilities	
• Traffic Impacts	
Population Characteristics	
Sensitive Populations Indicators	**Socioeconomic Factor Indicators**
• Asthma Emergency Department Visits	• Educational Attainment
• Cardiovascular Disease (Heart Attacks)	• Housing Burdened Low-Income Households
• Low Birth Weight Infants	• Linguistic Isolation
	• Poverty
	• Unemployment

Source: California Communities Environmental Health Screening Tool (CalEnviroScreen 4.0), Office of Environmental Health Hazard Assessment (OEHHA), 2022.

To identify potential disadvantaged communities, CalEnviroScreen produces a percentile ranking of each census tract to demonstrate burdens present in that tract relative to the rest of the State. The percentile ranking is calculated by combining the indicator scores for each census tract in EJ-Table 2. In general, the higher the CalEnviroScreen score, the more impacted a community is by pollution burdens and population vulnerabilities. For example, a 80th percentile ranking for a census tract would mean that the census tract is in the top 20 percent of all CalEnviroScreen scores statewide. Designated disadvantaged communities are those communities that scored within the highest 25 percent of census tracts across California (overall CalEnviroScreen percentile scores of 75 or higher).

Census Tracts in American Canyon

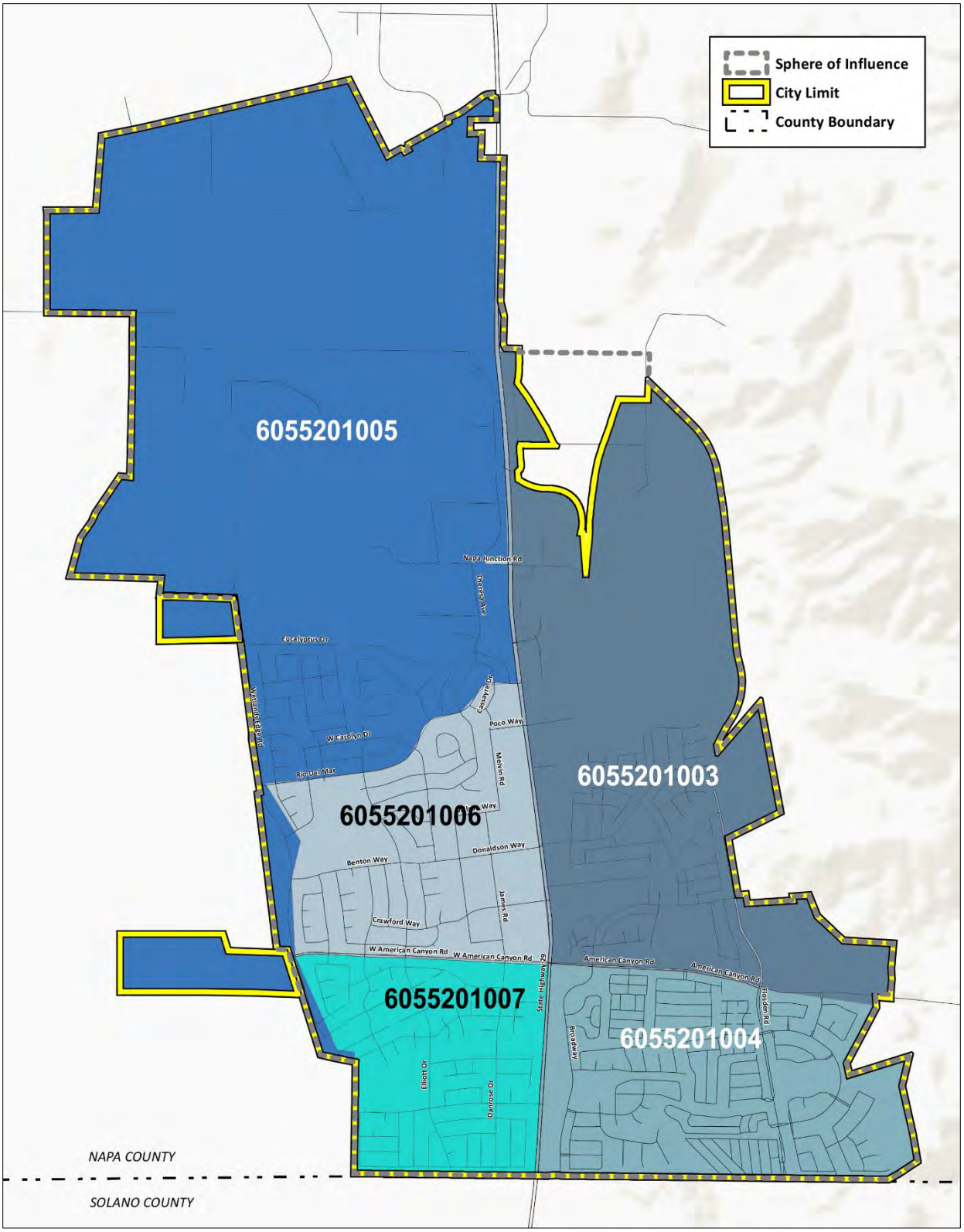
The American Canyon planning area is comprised of five census tracts. A census tract is a geographical region defined for the purpose of documenting population data. Sometimes census tracts coincide with a city limit, whereas others exist entirely within an unincorporated county. Occasionally a census tract will exist in both the unincorporated county and city limits. Three of the five American Canyon planning area census tracts include unincorporated Napa County areas. See EJ-Table 3, below, and EJ-Figure 1.

EJ-Table 3: American Canyon Census Tracts

Census Tract	Census Tract Location	
	Entirely Within SOI	Within City SOI and County
6055201003		X
6055201004		X
6055201005		X
6055201006	X	
6055201007	X	

Source: United States Census Topologically Integrated Geographic Encoding and Referencing (TIGER) 2020 database, 2022.

EJ-Figure 1: American Canyon Sphere of Influence Census Tracts



Environmental Justice in American Canyon

Disadvantaged Communities

Disadvantaged communities are those with an overall CalEnviroScreen 4.0 percentile score of 75 or higher (the highest 25 percent of census tracts across California).

Disadvantaged Community Analysis

Based on 2019 data, American Canyon has no census tracts that are at or below the statewide median income[1]. Fortunately, as shown in EJ-Table 4, and EJ-Figure 2, no census tracts within the American Canyon planning area received an overall CalEnviroScreen percentile score at or above the 75th percentile. This means there are no identified disadvantaged communities within the city or Planning Area. Census tracts 6055201003 and 6055201005 received the highest CalEnviroScreen scores of 62 and 63, respectively. As shown on Figure EJ-1, Census tracts 6055201003 and 6055201005 encompass very large areas outside the City Limits and include industrial uses in the northern areas of the city, around Napa Airport, and vineyards northeast of the city. In contrast, census tracts 6055201004, 6055201006, and 6055201007 which are limited to American Canyon city limits and the open space hill immediately east of the La Vigne neighborhood received the lowest scores with an average overall CalEnviroScreen score of 31.

EJ-Table 4: American Canyon CalEnviroScreen 4.0 Score Overview

Census Tract	Pollution Burden Percentile	Population Characteristics Percentile	Overall CalEnviroScreen 4.0 Score
6055201003	74	48	62
6055201004	8	45	24
6055201005	73	50	63
6055201006	14	46	30
6055201007	13	63	39

Source: California Communities Environmental Health Screening Tool (CalEnviroScreen 4.0), Office of Environmental Health Hazard Assessment (OEHHA), 2022.

Pollution Burden

Table EJ-Table 4 presents the CalEnviroScreen pollution burden scores for all associated tracts in American Canyon. The pollution burden score is calculated

[1] California's median income for 2019 was $41,870 *Source: State of California Franchise Tax Board*

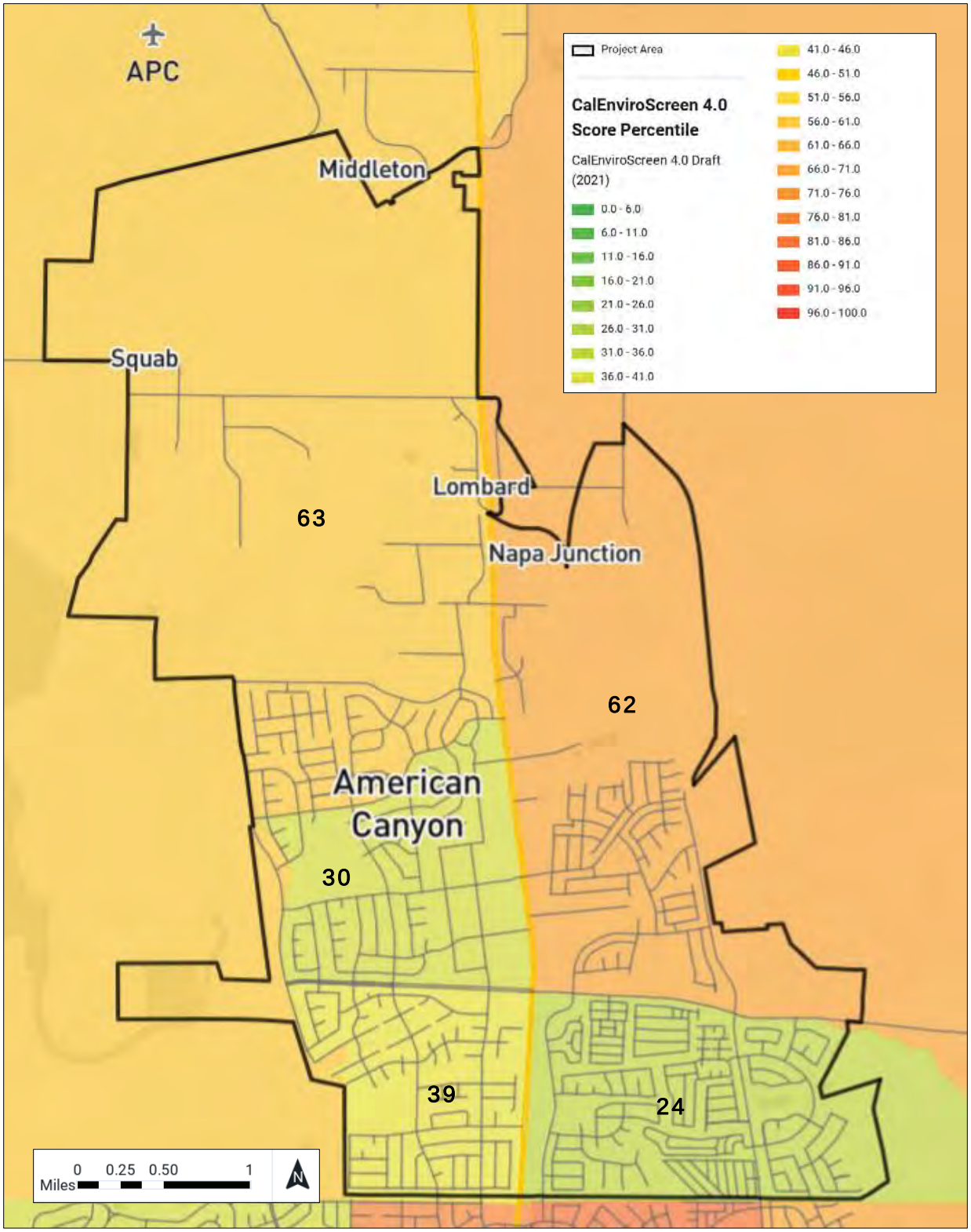
by measuring a range of pollution exposure and environmental indicators that people may encounter within their environment (see EJ-Table 2 for a list of indicators).

Fortunately, no census tracts in American Canyon received a pollution burden percentile score in or above the 75th percentile. Census tracts with the lowest pollution burden are primarily located in American Canyon, while census tracts with the highest pollution burden percentiles are located in the northern census tracts that extend well beyond the city limits into Napa County (see EJ-Figure 2).

Population Characteristics

Table EJ-Table 4 presents the CalEnviroScreen population characteristics burden scores for all associated tracts in American Canyon. The population characteristics burden score is calculated using a range of sensitive population and socioeconomic factor indicators. Certain population characteristics and socioeconomic factors are often related to health conditions such as asthma, low-birth weight, and cardiovascular disease. Socioeconomic factors such as lower educational attainment, linguistic isolation, poverty, unemployment, and housing burden are often found in populations that also have a higher risk of health conditions (see EJ-Table 2 for a list of indicators). No census tracts in American Canyon received a population characteristics burden percentile score in or above the 75th percentile.

EJ-Figure 2: Overall CalEnviroScreen 4.0 Scores



Goals and Policies

This section identifies goals and policies which seek to ensure all American Canyon community members (i.e., residents, workers, business owners, local organizations, and visitors) regardless of race, ethnicity, age, gender, religion, sexual orientation, disability, and socio-economic status feel valued, safe, respected, included, and secure.

Goal EJ-1: Affordable Housing

Support equal and fair access to affordable housing options for all residents. (Source: New Goal)

Policies

EJ-1.1: **Affirmatively Further Fair Housing.** Promote and affirmatively further fair housing policies and programs. *(Source: New Policy)*

EJ-1.2: **Review and Update of Housing Policies.** Periodically review and update, as necessary, local housing policies and procedures to ensure they do not pose impediments to furthering fair housing. *(Source: New Policy)*

EJ-1.3: **Housing Affordability and Access.** Support the development and preservation of affordable housing throughout the city for a variety of income levels. *(Source: New Policy)*

EJ-1.4: **Housing Element Implementation.** Support implementation of the Housing Element policies to address equal and fair access to affordable housing options for all residents. *(Source: New Policy)*

Goal EJ-2: Health and Safety

Ensure residents have healthy and safe living conditions. (Source: New Goal)

Policies

EJ-2.1: **Education and Awareness.** Support and expand education programs that increase awareness among residents about property maintenance and neighborhood quality standards. *(Source: New Policy)*

EJ-2.2: **Safe and Sanitary Housing**. Through implementation of the Housing Element, the City shall provide standards for development that promote safe and sanitary housing. *(Source: New Policy)*

EJ-2.3: **Housing Support Services**. Through implementation of the Housing Element, continue support for regional and nonprofit agency efforts that provide housing support services. *(Source: New Policy)*.

EJ-2.4: **Housing Support Services**. Through implementation of the Housing Element, continue support for regional and nonprofit agency efforts that provide housing support services. *(Source: New Policy)*.

Goal EJ-3: Land Use Equity

Ensure all land use decisions benefit American Canyon residents and do not create a disproportionate burden to any resident based on location, income, race, color, educational status, or national origin. (Source: New Goal)

Policies

EJ-3.1: **Environmental Justice Considerations**. Consider potential adverse health and safety impacts associated with land use decisions and reduce negative impacts on residents from hazardous materials, industrial activities, facility locations, and design features. *(Source: New Policy)*

EJ-3.2: **New Incompatible Land Uses.** Avoid the introduction of new incompatible land uses and consider the potential impacts of adding uses with environmental hazards into existing residential areas. *(Source: New Policy)*

EJ-3.3: **Environmental Protection.** Evaluate and implement environmental protection measures within the City's authority that support equitable treatment of all neighborhoods. *(Source: New Policy)*

EJ-3.4: **Capital Improvements.** When preparing a Capital Improvement Programs, consider reducing existing infrastructure deficiencies in lower-income neighborhoods. *(Source: New Policy)*

EJ-3.5: **Vision Zero Mobility.** Support and fund a Local Road Safety Program to that evaluates priority measures to improve the safety of trails and streets in all areas of the City. *(Source: New Policy)*

EJ-3.6: **Accessible Infrastructure.** Implement a City-wide accessibility plan to improve accessible pathways throughout the City. *(Source: New Policy)*

EJ-3.7: **Combat Heat Island Impacts**. Consider the addition of trees in new street and trail construction to reduce the heat island impacts of new paved surfaces. *(Source: New Policy)*

Goal EJ-4: Policy Inclusiveness

Support meaningful and inclusive participation of all community members in the decision-making process. (Source: New Goal)

Policies

EJ-4.1: **Accessibility to City Events.** Schedule City events using different days, times, and formats (i.e., virtual and digital accessibility) to encourage and facilitate participation among community members with work, school, and other obligations that conflict with more traditional scheduling. *(Source: New Policy)*

EJ-4.2: **Innovative Communication.** Promote and implement new and innovative approaches to facilitate communication between

members of the community and City-elected officials and staff members. *(Source: New Policy)*

EJ-4.3: **Transparent Public Decision-Making.** Ensure transparent public decision-making processes through effective public outreach, engagement, and participation that is inclusive of socially disadvantaged individuals and groups. *(Source: New Policy)*

EJ-4.4: **Leadership Development.** Promote and implement programs that educate local residents about the roles of each municipal department and local decision-making processes. *(Source: New Policy)*

EJ-4.5: **Municipal Employee Recruitment.** Evaluate and implement "state of the art" employment recruitment procedures that reduce or eliminate opportunities for intrinsic bias in employment application and screening. *(Source: New Policy)*

EJ-4.6: **Diverse Employment Opportunities.** Support measures to streamline the development review process to facilitate new development that will provide diverse employment opportunities from construction and ongoing business operations. *(Source: New Policy)*

EJ-4.7: **Open and Inclusive Recreation.** Support municipal and private nonprofit recreation events that appeal to all segments of society. *(Source: New Policy)*

Goal EJ-5: Healthy Environment

Ensure all residents have access to healthy foods, education, green spaces, and medical services. (Source: New Goal)

Policies

EJ-5.1: **Community-Supported Agriculture.** Support community-supported agriculture/food production, such as community gardens and cottage food operations. *(Source: New Policy)*

EJ-5.2: **Acceptance of Government-Issued Vouchers.** Coordinate with farmers market vendors and local food retailers to continue to

accept payment through Electronic Benefit Transfer (EBT), which allows residents in the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to purchase food with their program benefits. *(Source: New Policy)*

EJ-5.3: **Access to Community Assets.** Identify and address gaps in access to residential, commercial, recreation facilities, natural open space areas, and physical and mental health resources, to help ensure that these resources are equitably available to all residents. *(Source: New Policy)*

EJ-5.4: **Integrated and Accessible Park System.** Continue to develop an integrated park system that is safe and accessible. *(Source: New Policy)*

Goal EJ-6: Education and Lifelong Learning

Support exceptional variety and quality of Education and Lifelong Learning opportunities that reach community members throughout their lives. (Source: New Goal)

Policies

EJ-6.1: **Joint Ventures** Support policies, projects and programs that facilitate shared use and joint development of resources with education providers and nonprofit organizations that provide recreational facilities, and cultural, intellectual, and artistic opportunities. *(Source: New Policy)*

EJ-6.2: **Recreation as Education** Seek opportunities to include educational lessons in recreation programs. *(Source: New Policy)*

EJ-6.3: **Education Partnerships** Support awareness of Education and Lifelong Learning service providers that operate autonomously from the City. *(Source: New Policy)*

EJ-6.4: **American Canyon Library** Support policies, projects and programs that recognize the American Canyon Library as a central element in American Canyon's citywide educational system. *(Source: New Policy)*

Implementation Programs

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
A	**Implement Housing Element Policies** Implement and enhance Housing Element goals and policies to ensure that future improvements in the environmental justice community do not result in a net loss of affordable housing or displacement of existing residents. *(Source: New Implementation Program)*	EJ-1.1 EJ-1.3	Community Development Planning Division					■
B	**Review and Update of Housing Related Policies** Review and update, as necessary, local housing policies and programs to ensure they support and do not pose impediments to furthering fair housing. *(Source: New Implementation Program)*	EJ-1.1 EJ-1.2	Community Development Planning Division					■
C	**Establish Best Practices.** Explore and implement best practices for innovative housing options such as tiny homes, cooperatives, community land trusts, etc. that prioritize community ownership and support resident efforts to build intergenerational wealth. *(Source: New Implementation Program)*	EJ-1.3	Community Development Planning Division					■
D	**Educational Resources for Housing.** Maintain and update information on the City website that contains resources related to affordable housing, rental assistance, tenant rights, homeownership, homelessness services, and other special needs resources. *(Source: New Implementation Program)*	EJ-2.1	Community Development Planning Division					■
E	**Racial, Social, and Environmental Justice Outreach.** The City shall prepare and use clear and inclusive outreach materials, expand media campaigns, and implement other strategies (i.e., translation services) to increase and advance racial, social, and environmental justice initiatives. *(Source: New Implementation Program)*	EJ-4.1 EJ-4.2 EJ-4.3	City Manager Community Development					■

	Programs	Implements Which Policy(ies)	Responsible Supporting Department(s)	2023 – 2025	2026 – 2030	2031 – 2040	Annual	Ongoing
F	**Community Engagement.** The City shall prepare and implement programs that include new and innovative mechanisms to communicate and engage members of the community who are not typically active in civic issues to foster stronger relationships with the City such as mobile device surveys, community meetings, and community roundtables. *(Source: New Implementation Program)*	EJ-4.2	City Manager Community Development					■
G	**Constraints to Healthcare.** Evaluate and remove local governmental constraints that might hinder the provision of high-quality healthcare services and resources are accessible and near residential neighborhoods. *(Source: New Implementation Program)*	EJ-5.3	Planning Division Community Development					■
H	**Park and Open Space Access.** Establish procedures wich encourage the development of urban open space and recreation opportunities such as plazas and public community gathering spaces provided by both non-residential and residential development. *(Source: New Implementation Program)*	EJ-5.4	Planning Division Community Development		■			

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Notice of Availability of a Draft Environmental Impact Report for the City of American Canyon General Plan Update and Public Meeting to Review the Environmental Document

Date:	September 28, 2024
To:	State Clearinghouse and Interested Public Agencies, Parties, and Organizations
From:	Brent Cooper, AICP, Community Development Director
Subject:	Notice of Availability of a Draft Environmental Impact Report for the City of American Canyon General Plan Update (State Clearinghouse [SCH] No. 2022070038)

NOTICE IS HEREBY GIVEN that the City of American Canyon (City) has prepared a Draft Environmental Impact Report (Draft EIR) for the City of American Canyon General Plan Update (project). The Draft EIR will be available for public review and comment from September 28, 2024 through November 12, 2024.

Project Location: The General Plan Update will encompass the City of American Canyon city limits, the Sphere of Influence, Urban Limit Line, and historic water service area (Figure 1 and Figure 2).

Project Description: The project is an update to the City's current General Plan, which includes the following chapters: Introduction, Land Use Element, Housing Element, Economic Development Element, Circulation Element, Utilities Element, Public Services and Facilities Element, Parks and Recreation Element, Natural and Historic & Cultural Resources Element, Geology Element, Flood Hazards Element, and Noise Element. The project establishes the City's vision for future development through the horizon year of 2040. The project would serve as the City's primary guide for future land use and development decisions in a way that meets the community needs and priorities while serving as a key tool for influencing and improving the quality of life for residents and businesses. As such, it serves as the "blueprint" for future development and conservation of a community. The 2040 General Plan Update will help the City plan for important community issues, such as community growth; health, housing, mobility, and infrastructure needs; climate change; and environmental protection. It will also set the stage for future social, physical, and economic development of the city.

The land use map for the General Plan Update is provided in Figure 3. The project would change some of the land use designations; however, these changes primarily resolve inconsistencies between existing uses and the General Plan land use designations. Compared to existing conditions, there could be additional buildout from implementation of the 2040 General Plan. Overall, compared to existing conditions, the project could add a total of 3,379 additional residential units and approximately 5,704,000 square feet of commercial, retail, hotel, industrial, warehouse, and research and development uses.

Project Alternatives: The EIR evaluates a reasonable range of proposed project alternatives that, consistent with CEQA, meet most of the proposed project objectives and reduce or avoid potential environmental effects, including a required No Project Alternative.

Potential Environmental Effect Areas: The Draft EIR analyzes impacts for each resource area included in the CEQA Guidelines Appendix G checklist. The project would result in significant and unavoidable

impacts to greenhouse gas emissions, construction noise, and transportation impacts. The project would result in less than significant impacts with mitigation for the following environmental resources: aesthetics, air quality, biological resources, cultural resources, and wildfire. The project would result in either no impacts or less than significant impacts on the following environmental resources: agriculture and forestry resources, energy, geology and soils, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems.

Hazardous Waste Sites: There are no known hazardous waste sites that are on a list prepared pursuant to Government Code Section 65962.5 (Cortese List).

Availability of the Draft Environmental Impact Report: The Draft EIR, including the technical appendices and any documents incorporated by reference, can be reviewed at the following website: https://ceqanet.opr.ca.gov/2022070038 and at: https://portal.laserfiche.com/Portal/Browse.aspx?id=70149&repo=r-f53bdda4. A hard copy of the Draft EIR and technical appendices can also be reviewed at these locations during the identified business hours:

American Canyon City Hall
4831 Broadway Street, Suite 201
American Canyon, CA 94503
Monday through Friday 8 a.m. – 5 p.m.
Saturday–Sunday: Closed

Active Adults Center
2185 Elliot Drive
American Canyon, CA 94503
Hours: Monday - Friday 9:00 a.m. to 2:00 p.m.
Saturday–Sunday: Closed

American Canyon Library
300 Crawford Way
American Canyon, CA 94503
Monday, Tuesday, and Thursday through Saturday 10 a.m. – 6 p.m.
Wednesday 12 p.m. – 8 p.m.
Sunday Closed

Comments on the Draft Environmental Impact Report: The Draft EIR will be available for public comment for a 45-day review period as specified by CEQA Guidelines Section 15105. In accordance with the time limits established by CEQA, the Draft EIR public review period will begin **September 28, 2024** and end **November 12, 2024**. Please provide your written/typed comments (including name, affiliation, telephone number, and contact information) via US mail or web link shown below by 5:00 p.m. on **Tuesday, November 12, 2024:**

General Plan 2040 Project
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Comment Submittal Web Form Here.

Public Meeting: During the 45-day review period, on October 24, at 6:30 p.m., the Planning Commission will hold a public meeting to review the Draft EIR. The meeting will take place via a hybrid format of both in-person and teleconference. The meeting will be located City Hall, 4381 Broadway, Suite 201, American Canyon, California 94503. For those joining the meeting virtually, please use the information as follows, which will also be included in the Planning Commission meeting agenda when it is published.

Join Meeting - Zoom
Webinar ID: 876 0659 2529
Passcode: 123456

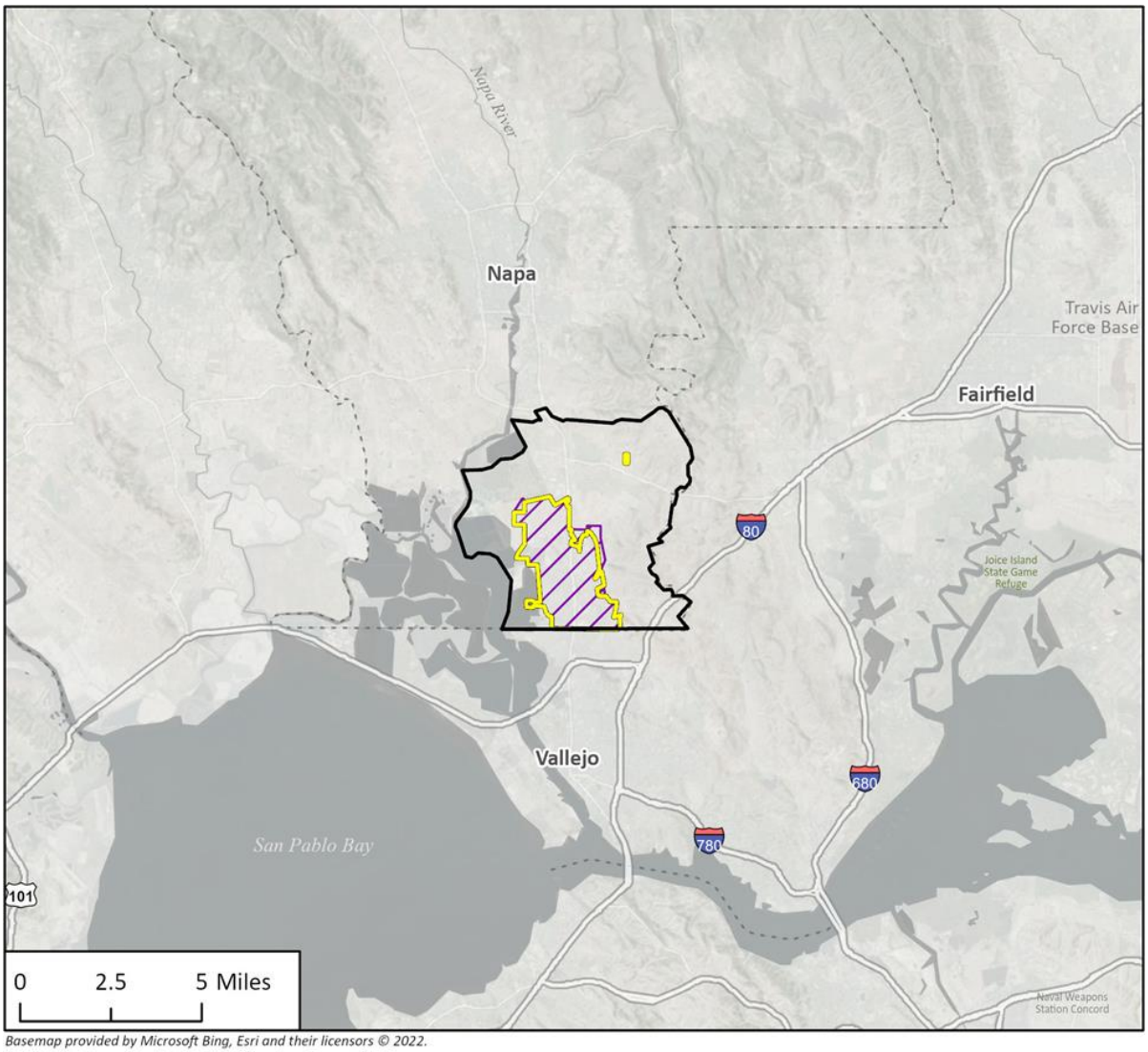
The meeting agenda will be published on the City website HERE. The meeting will be broadcast on the City website HERE, Napa Valley TV HERE and YouTube HERE.



_____ 09.28.24

Brent Cooper, AICP, Community Development Director Date

Figure 1 Regional Location

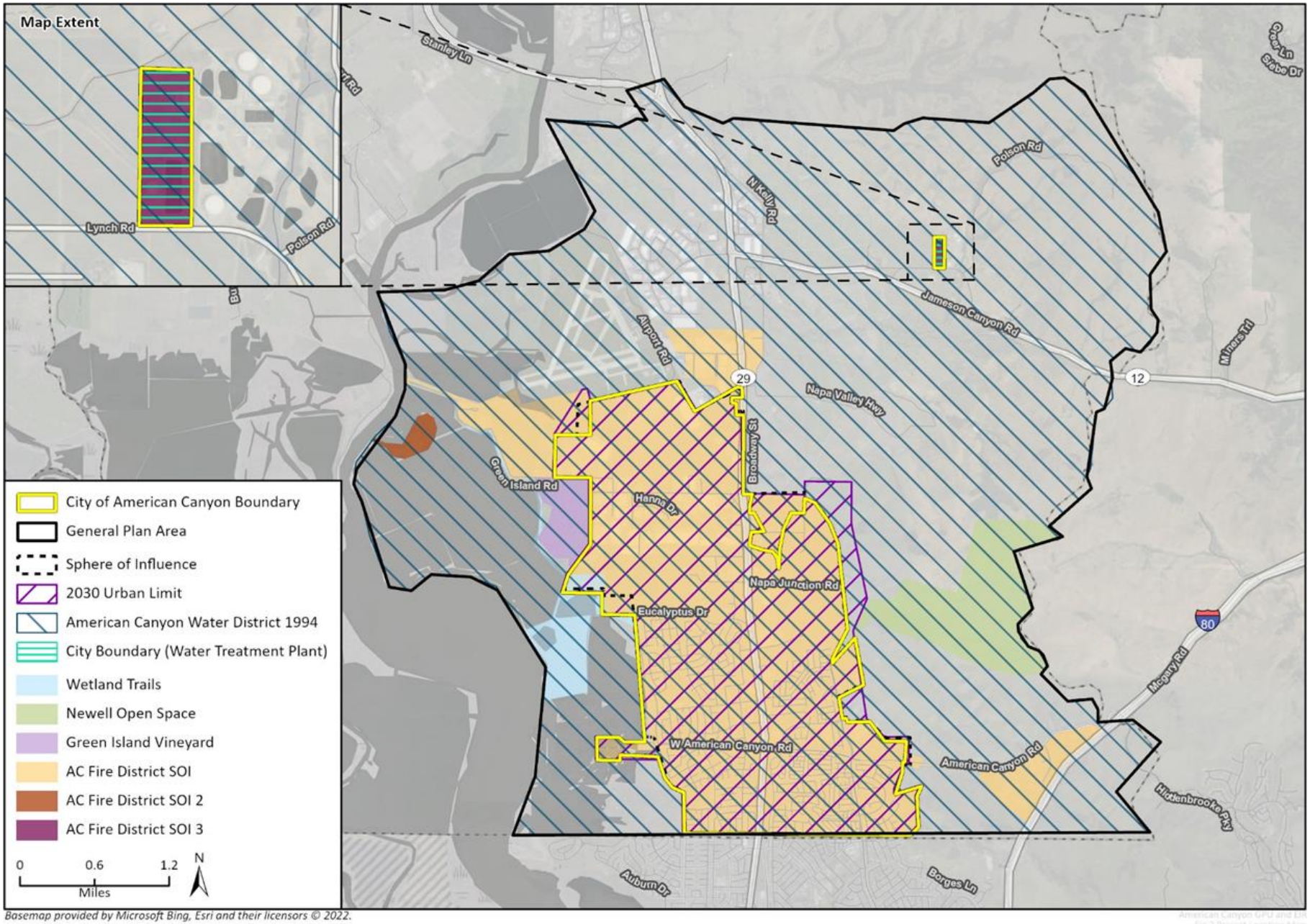


Basemap provided by Microsoft Bing, Esri and their licensors © 2022.
Additional data provided by the City of American Canyon, 2022.

City of American Canyon Boundary
General Plan Area
2030 Urban Limit
Project Location
N

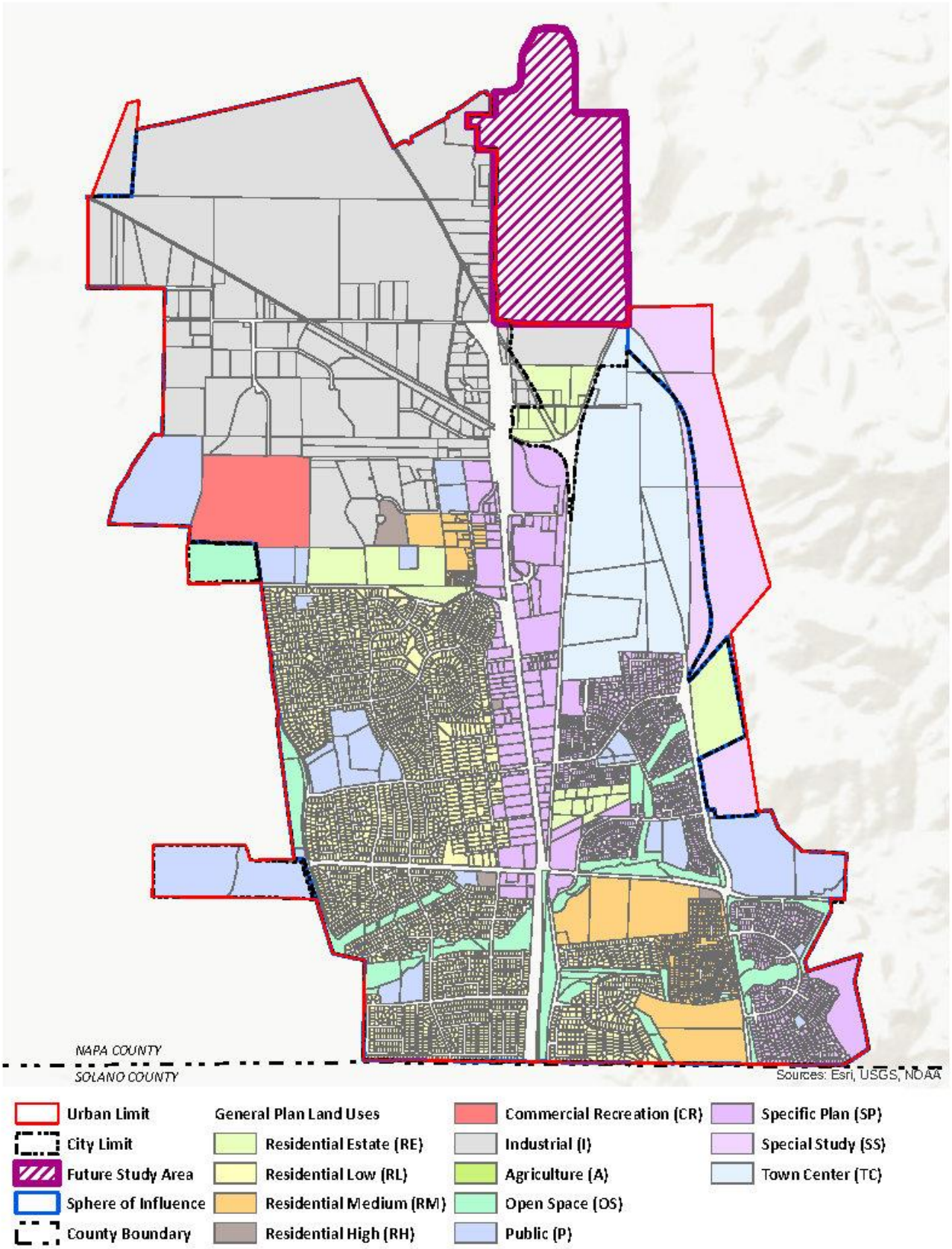


Figure 2 Project Location



Basemap provided by Microsoft Bing, Esri and their licensors © 2022.
Additional data provided by the City of American Canyon, 2022.

Figure 3 2040 General Plan Land Use Designations



TITLE

NVR&G Vertical Metal Post Perimeter Fence Design Permit

RECOMMENDATION

Continue this item to the next regular Planning Commission meeting of November 21, 2024

CONTACT

Brent Cooper, AICP, Community Development Director

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Economic Development and Vitality: "Attract and expand diverse business and employment opportunities."

ATTACHMENTS:

None

TITLE

Watson Ranch Specific Plan Lot 7 Design Permit and Tentative Subdivision Map

RECOMMENDATION

Adopt a Resolution recommending the City Council of the City of American Canyon approve a Vesting Tentative Subdivision Map for Watson Ranch Lot 7 to create 136 single-family home lots on 12.86 acres within the Watson Ranch Specific Plan Medium Density Residential-16 zoning district located west of Marcus Road, Assessor's Parcel Number 059-430-045 (File No. PL24-0012); and

Adopt a Resolution approving Design Permit for Watson Ranch Lot 7 to create 136 single-family homes on 12.86 acres within the Watson Ranch Specific Plan Medium Density Residential-16 zoning district located west of Marcus Road, Assessor's Parcel Number 059-430-045 (File No. PL24-0013).

CONTACT

William He, AICP, Senior Planner

BACKGROUND & ANALYSIS

Table 1: Site Information

General Plan Designation	WRSP MDR-16
Zoning District	WRSP MDR-16
Site Size	12.86 acres
Present Use	Undeveloped lot
Surrounding Zoning and Uses	North: WRSP Open Space (OS) / Vacant lot South: WRSP High Density Residential (HDR) / Lemos Pointe Apts. East: WRSP MDR-16 / Harvest Subdivision West: Rail road parcel / rail road
Acces	Site Access is provided from Marcus Rd

History: The project site is part of the Watson Ranch Specific Plan (WRSP) approved by the City Council in November 2018. The WRSP consists of 309 acres north of the Vintage Ranch subdivision and east of the Napa Junction shopping center. The specific plan includes 1,253 dwelling units, approximately 50 acres of parks, and a new hotel. Within the WRSP, 252 acres are owned by

American Canyon I, LLC and 57 acres are owned by the Newell Family interests. The Watson Ranch Lot 7 Subdivision (Project) is being developed by KB Homes (Applicant).

Proposed Development: On June 25, 2024, KB Homes (Applicant) submitted a Design Permit and a Subdivision Map application for development of 136 single-family homes on a 12.86-acre site in the Medium Density Residential 16 (MDR16) Zone in Watson Ranch. The project consists of 66 alley loaded plans and 70 traditional plans with front-facing garages. The two-story homes range from 1,412 SF to 2,160 SF with three to five bedrooms and include a two-car garage. The site is west of the Marcus Rd and Cartier Street intersection and accessible by Marcus Rd.

The Vesting Tentative Subdivision Map (VTM) proposes to develop 136 single-family lots, 4 streets, 2 private alleys, 7 private driveways, and 6 non-residential parcels on Lot 7 of Watson Ranch. The 4 streets (A, B, C, and D) will be dedicated to the City for public use. The "traditional" home lots have a minimum size of 38' x 75' and the "alley loaded" home lots have a minimum size of 32' x 68'. The landscape lots will be managed by the Watson Ranch Lot 7 homeowners association (HOA). A condition of approval will require the applicant to provide an address plan for review and approval.

The Fire Code for a project of this size requires two main fire-fighting vehicle access points. One access is provided by the project entrance. A second access is provided by a 20-foot wide emergency vehicle access lane (EVA) that begins off Marus Road, north of the Lemos Pointe apartments, and continues along the east side of a large detention basin located at the southwest of the project. The EVA will also serve as an off-street bicycle lane maintained by the HOA that extends through the subdivision.

The Watson Ranch Lot 7 VTM Resolution, conditions of approval, and preliminary civil plans are available as Attachment 1. If the VTM Resolution is approved, the VTM will proceed to the City Council for review and approval on November 19, 2024.

The architecture consists of two types: Traditional and Alley Loaded homes. The traditional homes consist of traditional, ranch, and farmhouse designs, each with 3 different color schemes. The Alley Loaded homes consist of farmhouse, craftsman, and prairie designs, each with 3 different color schemes. The homes feature concrete flat tile roofing, stucco finish, decorative siding, and decorative window shutters. The homes will include a 6' tall good-neighbor fence, which will be required to be stained for weatherproofing. The architectural plans are available in Attachments 2.3 and 2.4.

The Watson Ranch Lot 7 Design Permit Resolution, conditions of approval, architecture plans, and landscaping plans are available as Attachment 2. A location map is available as Attachment 3.

Site Specific Issues

Minor Specific Plan Amendment

During the entitlement process, the applicant requested two exceptions to the Medium Density Residential 16 Zone development standards. The project requests an 18.5 feet garage setback in lieu of the 20-foot garage setback as required in the WRSP MDR-16 development standards. The reduction would be 1.5 feet or a difference of 7%. Additionally, the project requests an increase of floor-area-ratio to 0.77 in lieu of 0.70 as required by the WRSP MDR-16 development standard. The increase will be 0.7, or a difference of 10%.

The applicant provided several reasons for the reduced garage setback. First, the typical public parking space is 9 feet by 18 feet, and an 18.5 feet long driveway exceeds the required parking dimension. Second, the neighborhood has been designed so that there is no 18.5-foot driveway adjacent to a sidewalk, where there is no possibility that a parked car in the driveway will encroach onto the sidewalk. Third, the project homes require the reduced setback to provide additional living space on the first floor and maintain a 10-foot rear yard. Lastly, the applicant explained that the 20-foot garage setback was intended to accommodate a "swing-up" garage door. However, a roll-up garage door will not need the additional space and can be accommodated by an 18 foot driveway.

The applicant also provided reasons for the increased FAR. First, the Watson Ranch Lot 7 is consistent with the goals of the WRSP MDR16 Zone in developing housing. The project affects 10 lots, of which 8 of them exceed the FAR standard by 0.02. Additionally, the increased FAR allows the project to build larger homes. While the max density of the MDR16 zone is 16 dwelling units per acre, the applicant proposed 136 units with a density of 12.5 dwelling units per acre. This enables the applicant to provide larger homes on the lots, which requires a larger FAR. A decreased FAR would result in homes just over 1,000 SF, which makes it harder to develop homes with more than two bedrooms. The applicant's justification letters are available in Attachment 4.

According to ACMC Section 19.17.070, specific plan amendments may be processed concurrently with an entitlement application, such as a design permit. According to WRSP Section 9.6.3.2, the Community Development Director may approve Minor WRSP Amendments if the application meets findings identified in section WRSP Section 9.6.3.3. Because the Design Permit application and WRSP Minor Amendment was processed concurrently, the Planning Commission will be the approval body for both items. Appeals to the Planning Commission decision for either item will be reviewed by the City Council.

Off-street Bicycle Trail

According to WRSP Figure 7.5, an off-street bicycle and pedestrian trail is required along the south, west, and north perimeter of Watson Ranch Lot 7. The project proposes to modify the trail so that the western portion of the trail does not travel adjacent to the railroads. The proposed trail will enter from Marcus road and turn at the EVA east of the stormwater basin and go northward pass Street D and turn out back to Marcus Road. The width of the EVA is 20' and the width of Street D will be 38.5', with 8.5' of sidewalk on the west side. A stretch of the trail between the EVA and Street B/Alley E will have sharrows and appropriate signage. A map of the WRSP trails is available as Attachment 5.

The modification of the trail was proposed because the grade levels to the west property line has a grade difference of 3:1 and riding a bicycle by an active rail road can be unpleasant. Additionally, moving the bicycle lane to the east side of the detention basin allows nearby homes to enjoy a 20' walking path and bicycle lane.

Alley Loaded Homes

The project includes alley loaded homes that are a first for the City. Alley loaded homes are thinner than traditional homes and have their main entrances in the front and garages in the rear. Garages face each other in a private "alley". The Alley plans will include a side yard easement which gives each home the exclusive use of the neighboring side yard, creating usable open space for each lot to enjoy. The CC&R's for the community will provide use restrictions, maintenance requirements and dispute resolution procedures related to the side yard easements. The WRSP provides guidance on Alley Loaded homes for the MDR-16 Zone in WRSP Table 6.2.2.

Enhanced Elevations

According to the Watson Ranch Specific Plan Section A.4.2.2, equal concern should be given to side elevations on corner lots and rear elevations where visible to the public. All homes will have 4-sided architecture, but enhanced aesthetic wrapping shall be provided for the side and rear of homes visible to the public located on Lots 1, 16, 17, 32, 33, 49, 50, 66, 67, 78, 79, 90, 91, 92, 93, 94, 96, 97, 99, 100, 102, 103, 105, 106, 108, 109, 110, 111, 114, 119, 122, 123, 127, 130, 131, 133, 134, and 136. A map of the enhanced lots is available on Attachment 6.

Landscaping

The applicant provided a landscaping plan that includes Arbutus Standard, Princeton Sentry Gingko, Saratoga Laurel, and Chinese Pistache trees for the street and open spaces. A purple plum and two varieties of Crape Myrtle trees will be provided as accent trees for the homes. Each home lot will have a minimum of one tree in the front yard.

Standard Conditions

There has been a significant effort in planning and entitling Watson Ranch. These entitlements include: a General Plan Amendment, Watson Ranch Specific Plan (and related Zoning), Large Lot Vesting Tentative Map, and Development Agreement. The project is subject to the American Canyon Municipal Code, the WRSP policies and mitigation measures, the WRSP Development Agreement, and the AC-1 Master Conditions of Approval.

Given the significant analysis already completed, Standard Conditions for the AC-1 portion of Watson Ranch provides a standardized method to ensure each development project will construct its share of physical improvements and environmental mitigation from the Watson Ranch Program Environmental Impact Report. A copy of the AC-1 Master resolution and conditions of approval are available in VTM Exhibit B, Attachment 1.

Public Outreach:

City outreach occurred between July 14, 2024, and October 18, 2024. A copy of the public notification addresses and map is included in Attachment 7. Specific events are outlined below:

Jul. 14. 2024 – Project posted on website
Jul. 15, 2024 – Neighborhood letters to introduce the project sent within 500 feet
Oct. 11, 2024 – Public Notice of Planning Commission Meeting Posted on Bulletin Board at City Hall and at Public Safety Building.
Oct. 12, 2024 – Public Hearing Notice mailed to property owners and residents within 500 feet
Oct. 12, 2024 – GovDelivery Notice of Public Hearing Bulletin sent to email subscribers list (4,340 + people)
Oct. 12, 2024 – Public Notice of Planning Commission Meeting published in newspaper.
Oct. 18, 2024 – Staff report published and GovDelivery Notice of public review workshop sent to e-mail subscribers list (4,340 +/-)
Oct. 23, 2024 – GovDelivery Notice Reminder of Planning Commission meeting sent to email subscribers list (4,340 +/-)
Oct. 24, 2024 – Planning Commission Meeting

The public comments and responses are included in Attachment 8.

FISCAL IMPACT

The Watson Ranch Lot 7 Subdivision Map and Design Permit required a developer's deposit for review and processing, so there is no fiscal impact for staff's time. If the Planning Commission approves the project, then the City will gain 136 single-family homes, which provides additional tax revenue.

ENVIRONMENTAL REVIEW

The environmental impacts of the Watson Ranch Specific Plan (WRSP) Project, which includes the proposed Watson Ranch Lot 7 Subdivision, were adequately considered in the certified Final EIR for the Watson Ranch Specific Plan Project (State Clearinghouse No. 2015022030) which includes findings, a Mitigation Monitoring and Reporting Program, and a Statement of Overriding Considerations for the Project. Approval of the proposed Design Permit is based on the Final EIR and complies with CEQA. Under CEQA, the Watson Ranch Specific Plan Project FEIR is a program EIR and is generally assumed to be used at a "development level." See, e.g., CEQA Guidelines § 15168. There is no substantial evidence of changed circumstances under CEQA Guidelines section 15162 requiring further CEQA review as the whole of the approvals sought are contemplated under the Project FEIR analysis.

ATTACHMENTS:

1.0 WR Lot 7 Subdivision - Reso
1.1 WR Lot 7 Exhibit A VTM Specific Conditions
1.2 WR Lot 7 Exhibit B AC1 Master Conditions

1.3 WR Lot 7 Exhibit C VTM Plans
2.0 WR Lot 7 Design Permit - Reso
2.1 WR Lot 7 DP - Exhibit A Specific Conditions
2.2. Exhibit B Watson Ranch 7 SFD Architecture Plans
2.3. Exhibit C Watson Ranch 7 Alley Architecture Plans
2.4. Exhibit D Watson Ranch 7 Preliminary Landscape Plans
2.5 Exhibit E - Yocha Dehe Protocols
2.6 Exhibit F - Confirmation of Conditions of Approval
3. WR Lot 7 - Location Map
4. Letters of Justification for Minor Amendment
5. WRSP Trail Locations
6. Map of Enhanced Elevations
7. Public Notice Package
8. Public Comments

PC RESOLUTION NO. 2024-XX

A RESOLUTION RECOMMENDING THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON APPROVE A VESTING TENTATIVE SUBDIVISION MAP FOR WATSON RANCH LOT 7 TO CREATE 136 SINGLE FAMILY HOME LOTS ON 12.86 ACRES WITHIN THE WATSON RANCH SPECIFIC PLAN MEDIUM DENSITY RESIDENTIAL-16 ZONING DISTRICT LOCATED WEST OF MARCUS ROAD, ASSESSOR'S PARCEL NUMBERS 059-430-045 (FILE NO. PL24-0012)

WHEREAS, pursuant to Section 65300 of the State Planning and Zoning Law, the City of American Canyon (City) has adopted a General Plan to provide comprehensive long-range planning and a blueprint of the City's future form, including land use and circulation maps that specify the roadway network and the distribution of types and intensities of land; and

WHEREAS, the City of American Canyon General Plan land use and zoning designation for the property known as the Watson Ranch Specific Plan property is Town Center, which requires the approval of a specific plan to designate the land uses, range of residential and nonresidential densities and unified design standards within the Watson Ranch Specific Plan property; and

WHEREAS, on November 6, 2018, the City Council of the City of American Canyon adopted an Ordinance approving the Watson Ranch Specific Plan that provides for the development of the approximately 309-acre Watson Ranch Specific Plan site with a mixed use community component including a mixed use town center (Napa Valley Ruins and Garden), 1,253 residential units, approximately 23 acres of improved parks, an additional 30 acres of parks, trails and open space, a 10-acre school site, roads and supporting water, wastewater, recycled water and storm drainage infrastructure; and

WHEREAS, on June 18, 2019, the City Council approved the Watson Ranch Specific Plan Development Agreement (Ordinance 2019-06, Agreement 2019-A107); and

WHEREAS, on June 25, 2024, KB Homes "Applicant" submitted the Watson Ranch Lot 7 Vesting Tentative Subdivision Map "Project" for development of 136 single-family home lots, 4 streets, 2 private alleys, 7 private drives, and 6 non-residential parcels on a 12.86-acre site located west of Marcus Rd, Accessor's Parcel Number 059-430-045 (PL24-0012); and

WHEREAS, Chapter 18.22.055 of the Municipal Code sets forth findings required for approval of a tentative subdivision map; and

WHEREAS, the proposed map is consistent with the City of American Canyon General Plan, Municipal Code and the Watson Ranch Specific Plan; and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), a final environmental impact report (Final EIR) was prepared for the Watson Ranch Specific Plan, which included the proposed Vesting Tentative Map (VTM), having analyzed the actions contemplated by the VTM and includes required mitigation measures, a Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Program; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on October 24, 2024 on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby recommends the City Council of the City of American Canyon approve the Vesting Tentative Subdivision Map for Watson Ranch Lot 7 (PL24-0012), subject to the following Findings and Conditions of Approval.

SECTION 1: Findings Regarding Environmental Review pursuant to the California Environmental Quality Act (CEQA)

1. The City of American Canyon makes the following findings and determinations based on substantial evidence in the record as a whole pursuant to the California Environmental Quality Act (Pub. Res. Code §§ 21000 *et seq*.) and its Guidelines (California Code of Regulations, Title 14 §§ 15000, *et seq*.), as each is amended from time to time ("CEQA").

2. Pursuant to CEQA, an Environmental Impact Report (EIR) was prepared, supplemented, and certified for the Watson Ranch Project ("Project EIR"). The Project EIR considered and analyzed the significant adverse environmental impacts of, related mitigation measures for, and reasonable alternatives to, the planning, development, construction, operation, and maintenance of the proposed uses of the Property implemented through the "Project Approvals" of the "Project," including without limitation, the General Plan Amendment, Watson Ranch Specific Plan (and related Zoning), Large Lot Vesting Tentative Map, and Development Agreement. In accordance with CEQA, City certified as legally adequate and complete the Project EIR, and approved the development allowed and approved by said existing and future Project Approvals contemplated by the Project EIR and the Development Agreement.

3. The proposed Vesting Tentative Map for that Watson Ranch Lot 7 is a contemplated "Project Approval" under the Project EIR and the Development Agreement. Under CEQA, a Specific Plan EIR, like the Watson Ranch Specific Plan Project EIR, is generally assumed to be used at a "development level." *See, e.g.,* CEQA Guidelines § 15168. Under controlling CEQA law, particularly CEQA Guidelines section 15162, the legal question is whether the Project EIR, itself, needs updating (through a Subsequent or Supplemental EIR) before the City can consider and approve the Watson Ranch Lot 7 VTM, or whether the Project EIR provides the appropriate CEQA compliance work for the City's consideration and approval of the Watson Ranch Lot 7 VTM. For the following reasons and findings, by law, no such Subsequent or Supplemental EIR can be required by the City, and the Project EIR provides the appropriate CEQA compliance work for the City's consideration and approval of the Watson Ranch Lot 7 VTM.

   First, CEQA Guidelines section 15162 provides as follows [*City responses to the issues raised by Section 15162 are provided in bracketed, italicized text below*]:

   (a) When an EIR has been certified . . . for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

   (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; [*There is no substantial evidence in the light of the whole record revealing any changes proposed in the Project, let alone changes that will involve involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The Watson*

Ranch Lot 7 VTM implements the Watson Ranch Specific Plan Project, and no new significant environmental effects or substantial increase in the severity of previously identified significant effects not already addressed by the Project EIR will result from that implementation.]

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR . . . due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; [*There is no substantial evidence in the light of the whole record revealing circumstances under which the Project is undertaken which require major revisions to the Project EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects: the Watson Ranch Lot 7 VTM is anticipated by, and is the implementation of, the Watson Ranch Specific Plan Project (and Project Approvals), and no new significant environmental effects or a substantial increase in the severity of previously identified significant effects not already addressed by the Project EIR will result from that implementation.*]; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following [*There is no substantial evidence in the light of the whole record revealing any such new information of any kind has been presented*]:

(A) The project will have one or more significant effects not discussed in the previous EIR . . . [*There is no substantial evidence in the light of the whole record revealing that the Watson Ranch Lot 7 VTM will have one or more significant effects not discussed in the Project EIR: Instead, the Watson Ranch Lot 7 VTM is anticipated by, and are the implementation of, the Watson Ranch Specific Plan Project as fully analyzed by the Project EIR*];

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR [*There is no substantial evidence in the light of the whole record revealing that the Watson Ranch Lot 7 VTM will result in a situation where significant effects previously examined in the Project EIR will be substantially more severe than shown and discussed in the Project EIR: Instead, the Watson Ranch Lot 7 VTM are anticipated by, and are the implementation of, the Watson Ranch Specific Plan Project as fully analyzed by the Project EIR*];

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative [*There is no substantial evidence in the light of the whole record supporting a determination that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the project proponents decline to adopt the mitigation measure or alternative*.]; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects

on the environment, but the project proponents decline to adopt the mitigation measure or alternative. [*There is no substantial evidence in the light of the whole record supporting a determination that mitigation measures or alternatives which are considerably different from those analyzed in the Project EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. No such mitigation measure nor alternatives have been proposed, nor are warranted, and no rejection of such mitigation measure or alternative by the project applicant has taken place*.]

Because there is no substantial evidence in the record to support any of the findings set forth in CEQA Guidelines section 15162, as a matter of law, no additional CEQA work can be required by the City relating to the City's consideration and approval of the Watson Ranch Lot 7 VTM.

Second, similar to CEQA Guidelines section 15162, CEQA Guidelines section 15163 provides that a public agency may choose to prepare a "Supplement" to an EIR - rather than a "Subsequent" EIR - only if (1) any of the findings described in Section 15162 (above) would require the preparation of a Subsequent EIR, yet (2) only minor additions or changes would be necessary to make the Project EIR adequately apply to the changed situation. As stated above, because there is no substantial evidence in the record to support any of the findings set forth in CEQA Guidelines section 15162, then, as a matter of law, no finding can be made under CEQA Guidelines section 15163. Therefore, no additional CEQA work for the Watson Ranch Lot 7 VTM can be required by the City.

Third, and lastly, under the Development Agreement, "to the extent permitted or required by CEQA, City shall use . . . existing environmental assessments, declarations, reports and studies as adequately addressing the environmental impacts of the Project and its Subsequent Approvals without requiring new or supplemental environmental documentation." Development Agreement § 2.04(k). Because CEQA prohibits the City from requiring additional CEQA compliance work for the Watson Ranch Lot 7 VTM approval, for the reasons discussed above, the Development Agreement likewise enforces that CEQA requirement and prohibits additional "new or supplemental environmental documentation." Development Agreement § 2.04(k).

Therefore, the City finds and determines that the Project EIR provides the appropriate CEQA compliance documentation for the City's consideration and approval of the proposed Watson Ranch Lot 7 VTM.

SECTION 2. FINDINGS

American Canyon Municipal Code (ACMC) Section 18.22.055 provides that the planning commission shall not recommend approval and the city council shall not approve a tentative subdivision map if any of the following findings are made:

A. That the proposed tentative subdivision map is not consistent with the city's general plan or its elements or other applicable plans;

The proposed map is consistent with the General Plan because it will provide individual lots with adequate access and utility services to be developed with single family homes. The subdivision proposed to delineate parcels that reflect the proposed land uses and street layout of the Watson Ranch Specific Plan.

B. That the design or improvement of the proposed subdivision is not consistent with the city's general plan or its elements or any other applicable plans;

The proposed improvements for the subdivision are consistent with the City's General Plan, Watson Ranch Specific Plan, and the Watson Ranch Development Agreement, including the size of individual lots, as analyzed in the staff report for this project.

C. That the site is not physically suitable for the type of development proposed;

The subdivision site is physically suitable for the type of development because it is relatively flat and has space to accommodate the proposed 70 single-family home lots and 66 alley-loaded home lots.

D. That the site is not physically suitable for the proposed density of development proposed;

The site is physically suitable for the proposed density of development because the density of development will comply with the limits set out in the Watson Ranch Specific Plan and can be improved and provided with necessary utilities to serve the future development.

E. That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat;

The subdivision and related improvements would not adversely affect wildlife habitat areas, as described in the Watson Ranch Environmental Impact Report (SCH # 2015022030), approved by the City Council on November 6, 2018.

F. That the design of the subdivision or the type of improvements is likely to cause serious public health problems;

The subdivision improvements are consistent with the improvements provided for other development in the City and are not likely to cause serious health problems. In addition to typical improvements, the applicant is required to provide a bicycle lane along their frontage adjacent to Marcus Rd. The bicycle lane will extend the bicycle lane north, which runs parallel to the Napa Valley Vine Trail.

G. That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the city council may approve a tentative subdivision map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to one previously acquired by the public. This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction and no authority is granted to the city council to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision;

The project pose no conflicts with easements. The project will be required to dedicate Streets A, B, C, and D for public use.

H. That the discharge of waste water, including sewage and stormwater runoff, from the proposed subdivision would result in a violation of existing water quality requirements prescribed by the regional water quality control board.

All wet utilities are already constructed (stubbed) along Marcus Road. There will be no conflicts with the regional water quality board.

The Vesting Tentative Subdivision Map for Watson Ranch Lot 7 (PL24-0012) is recommended for approval because none of the findings to disapprove the proposed subdivision can be made, subject to the following conditions.

SECTION 3: CONDITIONS OF APPROVAL

The Watson Ranch Lot 7 VTM incorporates specific conditions of approval included as Exhibit A, and the adopted Master Conditions of Approval for the AC-1 Portion of Watson Ranch (Resolution No. 2020-106) as Exhibit B to this Resolution.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 24th day of October, 2024, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

Brando Cruz, Chair

ATTEST:

_____

Nicolle Hall, Deputy City Clerk

APPROVED AS TO FORM:

_____

William D. Ross, City Attorney

EXHIBITS:

A. Watson Ranch Lot 7 VTM Conditions of Approval
B. Master Conditions of Approval for AC-1 Portion of Watson Ranch (Resolution 2020-106)
C. Vesting Tentative Subdivision Map for Watson Ranch Lot 7 (PL24-0012)

EXHIBIT A

SPECIFIC CONDITIONS – WATSON RANCH LOT 7 VESTING TENTATIVE MAP

APPROVAL, EXHIBITS, AND EXPIRATION

Planning Conditions

Specific Condition	***Developer Obligations***	***Mechanism***	***Implementation***	***Status***
1.	The Vesting Tentative Subdivision Map for Watson Ranch Phase Lot 7 (PL24-0012; APN 059-430-045) (sometimes referred to herein as "Watson Ranch Lot 7 VTM" and sometimes referred to herein as the "Project") to subdivide Large Lot 7 (approximately 12.86-acres) into 136 single-family house lots, 4 streets, 2 private alleys, 7 private drives, and 6 non-residential parcels, is approved as shown on the Vesting Tentative Map for Watson Ranch Lot 7 prepared by Carlson, Barbee & Gibson, revised through September, 2024, consisting of multiple sheets, marked "Exhibit C" to the Resolution approving Watson Ranch Lot 7 VTM, and on file in the Community Development Department. The final map for Watson Ranch Lot 7 VTM is referred to herein as the "Final Map."	Watson Ranch Lot 7 VTM	Final Map Recordation	Applicable
2.	The Master Conditions adopted for the AC-1 Portion of the Watson Ranch Specific Plan are attached hereto and incorporated herein by this reference as if set forth herein in full, and shall apply to the Project where relevant, i.e., where such Master Conditions set general principles applicable to all Parcels comprising the AC-1 portion of the Watson Ranch Specific Plan, and/or where such Master Conditions set specific requirements relating to Lot 7, which Lot 7 comprises the land within the Watson Ranch Lot 7 VTM.	SIA (Site Improvement Agreement)	Execution of SIA	Applicable
3.	Development of the subdivision and the individual lots comprising Watson Ranch Lot 7 VTM shall be subject to the Watson Ranch Lot 7 Residential Design Guidelines, on file in the Community Development Department.	Design Guidelines	Building Permit	Applicable
4.	WATSON RANCH LOT 7 VTM shall have that life set forth in the Watson Ranch Specific Plan Development Agreement (Development Agreement).	Development Agreement	Final Map	Applicable
5.	Applicant shall defend, indemnify, and hold harmless the City of American Canyon, its elected and appointed officials, employees, volunteers, and legal counsel, as set forth in the Development Agreement.	Development Agreement	Final Map	Applicable
6.	Applicant shall be responsible for paying for charges related to the processing of WATSON RANCH LOT 7 VTM as set forth in the Development Agreement.	Development Agreement	Final Map	Applicable

7.	Compliance of the Project with City's Inclusionary Housing Requirements is as set forth in the Development Agreement.	Development Agreement	Sale of Parcel 24 (Lemos Pointe Apartments)	Completed
8.	Applicant shall make all public dedications shown on WATSON RANCH LOT 7 VTM through the Final Map, and City shall accept those public dedications.	Final Map	Recordation	Applicable
9.	According to the Watson Ranch Specific Plan Section A.4.2.2, equal concern should be given to side elevations on corner lots and rear elevations where visible to the public. Enhanced aesthetic wrapping shall be provided for the side and rear of homes visible to the public located on Lot 1, 16, 17, 32, 33, 49, 50, 66, 67, 78, 79, 90, 91, 92, 93, 94, 96, 97, 99, 100, 102, 103, 105, 106, 108, 109, 110, 111, 114, 119, 122, 123, 127, 130, 131, 133, 134, and 136.	WRSP	Building Permit Issuance	Applicable
10.	Prior to the issuance of the first building permit, the applicant shall provide a landscaping plan for non-residential Parcels A, B, C, and D.	City Standards	Building Permit Issuance	Applicable

Public Works Conditions

GENERAL CONDITIONS OF APPROVAL

Specific Condition	***Developer Obligations***	***Mechanism***	***Implementation***	***Status***
11.	The Applicant shall be responsible for all City plan check, map check and inspection costs. The Applicant shall establish a Developer Deposit Account with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer. Additional funds may be required based upon actual costs.	Development Agreement	Relevant City Act	Applicable
12.	All improvements shall be designed in accordance with the American Canyon Municipal Code (ACMC), City of American Canyon Engineering Standard Plans and Specifications for Public Improvements (City Standards), except as specifically noted otherwise in these conditions.	Specific Conditions	Improvement Plans Submittal	Applicable
13.	All existing overhead utilities, both on-site and along project frontages, and all new utilities to serve the project, shall be placed underground. Exceptions may be allowed for surface mounted transformers, pedestal mounted terminal boxes and meter cabinets.	Specific Conditions	Improvement Plans Submittal	Applicable

14.	Unless otherwise explicitly permitted by the Development Agreement, all existing wells, septic tanks and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Services or other designated agency. If there are none, the Project engineer shall provide a letter describing the scope of the search done to make this determination.	Development Agreement	Relevant Permit	Applicable
15.	A detailed Soils Investigation/Geotechnical Report shall be prepared and submitted for review. The report shall address, at a minimum, potential for liquefaction, R-values, expansive soils and seismic risk. The improvement plans shall incorporate all design and construction criteria recommended in the Geotechnical Report.	Specific Conditions	Improvement Plans Submittal	Applicable
16.	A Drainage Report prepared by a California Registered Civil Engineer shall be submitted for review with the initial submittal of the Improvement Plans. The Drainage Report shall include hydrologic and hydraulic calculations to support the design and sizing of all public and private drainage facilities including storm drains, detention facilities, and weirs. The report shall include hydraulic grade line profiles for all proposed storm drains for the 10-year, 25-year and 100-year storm events.	Specific Conditions	Improvement Plans Submittal	Applicable
17.	A final detailed post-construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared and submitted for review and approval. The SWCP shall be prepared in accordance with the latest edition of the *Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual* and the requirements of the State Water Resources Control Board Phase II Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ). It is the City's discretion whether to accept alternative treatment facilities other than bioretention.	Specific Conditions	Improvement Plans Submittal	Applicable
18.	A Post Construction Stormwater Operations and Maintenance Plan that includes a plan sheet showing all storm drain and water quality infrastructure that is to be maintained, along with detailed instructions and schedules for the ongoing maintenance and operation of all post-construction stormwater BMPs shall be submitted for review and approval by the City Engineer. Once approved, the Applicant shall enter into an	Specific Conditions	Improvement Plans Submittal	Applicable

	agreement (transferrable to future Homeowner's Association) with the City that provides the terms, conditions, and security associated with the ongoing requirements of the Post Construction Stormwater Best Management Practices.			
19.	Final Maps, as defined in the Subdivision Map Act, shall be prepared by a licensed surveyor or civil engineer. Final Maps shall show all lots, parcels, rights-of-way, and easement(s), and shall be submitted to the City Engineer for review. Final Maps shall be in substantial conformance with the approved Tentative Map and all applicable conditions of approval. Final Maps are not valid until they have been approved by the City and recorded. Closure calculations shall be provided at the time of each initial Final Map submittal. All calculated points within the maps shall be based upon one common set of coordinates. All information shown on the Final Maps shall be directly verifiable by information shown on the closure calculation printout. The point(s) of beginning shall be clearly defined. All lot acreages shall be shown on the Final Maps and shall be verifiable from information shown on the closure calculation printout. A current title report (within past 30 days) shall be submitted at the time of each initial Final Map submittal.	Specific Conditions	Final Map Approval and Recordation	Applicable
20.	Where relevant, Applicant shall secure all necessary rights-of-way and public and private easements for both onsite and offsite Public Improvements. Public rights-of-way and easements shall be dedicated to the City on the Final Map or granted by separate instrument. If granted by separate instrument, Applicant shall prepare all necessary legal descriptions and deeds.	Specific Conditions	Final Map Dedication and Recordation	Applicable
21.	To the extent any offsite public improvements require the acquisition of property not currently owned by the Applicant or the City, the Applicant shall first make a good-faith effort to acquire the necessary property rights, however if the Applicant makes such an effort and is unable to acquire such rights, then the Applicant may request the City acquire the necessary property rights through the exercise of eminent domain provided that the Applicant enters first into an agreement with the City to pay for all costs incurred by the City to acquire such rights and if the City does not acquire the rights necessary to allow the offsite public improvements to be completed by the Applicant within statutory timeline provided by law, then the Applicant	Specific Conditions	Final Map Submitted	Applicable

	shall be relieved of the obligation to construct those off-site improvements only to the extent they require property not currently owned by the Applicant or the City. The Applicant shall make a good-faith effort to identify and acquire the necessary property rights at the earliest opportunity. A good faith offer includes identification of property rights needed (permanent and temporary), appraisal of the value of the highest and best use of the property, and a bonafide offer to pay this amount at the close of escrow.			
22.	The Applicant shall submit all site Improvement Plans, prepared by a registered Civil Engineer, for review and approval of the City's Public Works Department. **Please be aware that this is separate submittal from the building permit application.** The final plan set shall include all civil, landscape and joint trench drawings under a single cover sheet. No final grading or other construction shall be performed until the Improvement Plans have been approved. The Applicant shall not begin clearing, grubbing, or rough grading at the site prior to approval of the Improvement Plans, unless explicitly approved by the City of American Canyon through the standard grading and utilities only permit process. An Encroachment Permit is required for any work within City right of way. Encroachment Permits will not be issued prior to the approval of the Improvement Plans.	Specific Conditions	Improvement Plans Submittal	Applicable
23.	All Public Improvements, including without limitation street, water mains, sewer mains, recycled water facilities, and storm drains shall be clearly labeled as Public" on the Improvement Plans, along with clear demarcation points where they become Public. Likewise, all Private Improvements, including without limitation, alleys, drives, streetlights and storm drains, shall be clearly labeled as Private " on the Improvement Plans, along with clear demarcation points.	Specific Conditions	Improvement Plans Submittal	Applicable
24.	All public water service laterals or services (domestic, recycled and fire water) shall include approved backflow prevention devices.	Specific Conditions	Improvement Plans Submittal	Applicable
25.	Cathodic protection shall be provided for all water valves, fittings, hydrants, meters, backflow devices, ductile iron pipe, and other metal appurtenances, regardless of the findings of any soils corrosivity analysis. Cathodic Protection Details shall be included in the Improvement Plans.	City Standards	During Construction	Applicable

26.	The Applicant shall keep adjoining public and private streets free and clean of project dirt, mud, materials, and debris during the construction period in accordance with an approved SWPPP and Erosion and Sediment Control Plan using appropriate BMPs and as is found necessary by the City Engineer.	Specific Conditions	During Construction	Applicable
27.	If any hazardous material is encountered during the construction of this project, all work shall be immediately stopped and the Fire Department, Napa County Department of Environmental Services or other designated agency, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.	Specific Conditions	During Construction	Applicable
28.	Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines shall be installed in a manner that will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.	Specific Conditions	During Construction	Applicable
29.	Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil and/or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.	Specific Conditions	During Construction	Applicable
30.	All new fire hydrants shall be covered with burlap sacks until the hydrants have been tested and found to be in conformance with City flow requirements. No storage of combustible materials or construction of building shall be permitted until all hydrants meet City flow requirements.	Specific Conditions	Pre- and during construction	Applicable
31.	Prior to placing the final lift of asphalt, all public storm drains and sanitary sewer lines shall be video inspected at the Applicant's expense. All video media (CD, DVD, or portable hard drive) shall be submitted to the City. If any inadequacies are found, they shall be repaired prior to the placement of the final lift of asphalt.	Specific Conditions	Prior to placing the final lift of asphalt	Applicable

32.	All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this Project shall be the responsibility of the Applicant and shall be repaired to the satisfaction of the City at the Applicant's expense.	Specific Conditions	During and post Construction	Applicable
33.	After all of the new underground utilities within existing public streets have been installed, the entire affected areas shall be milled and repaved to present a neat finished pavement area. Multiple trench patches are not acceptable.	Specific Conditions	Pre- and during construction	Applicable
34.	All construction stormwater pollution prevention best management practices (BMP's) shall be installed as the first order of work and in accordance with the *State Water Resources Control Board's General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2022-0057-DWQ, as amended)*, the Applicant's Storm Water Pollution Prevention Plan (SWPPP), and the City's Erosion and Sediment Control Plan in accordance with the City's MS4 Permit. All stormwater BMP's shall be maintained to the satisfaction of the Qualified SWPPP Developer (QSD), Qualified SWPPP Practitioner (QSP), and the City Engineer.	Specific Conditions	Pre-Construction	Applicable
35.	With the exception of water used for loading and testing of potable water lines, all construction water used for the project shall be obtained from a source other than American Canyon potable water sources. The Applicant shall provide verification that an outside source of construction water, e.g., recycled water, has been established and will be available for the duration of the project construction.	Specific Conditions	Any Construction and Grading Activity	Applicable
36.	The development shall comply with the City's Zero Water Footprint policy.	Specific Conditions	Relevant Permit	Applicable
37.	All Public Improvement landscaping shall be designed to use recycled water for irrigation. Recycled water landscaping shall be designed to comply with California Code of Regulations Title 22 and shall include design details to prevent runoff of recycled water. The irrigation system shall include an ET/SMART controller.	Specific Conditions	Improvement Plans Submittal	Applicable

SPECIAL CONDITIONS OF APPROVAL

Specific Condition	***Developer Obligation***	***Mechanism***	***Implementation***	***Status***
38.	The Applicant shall submit Improvement Plans prepared by a registered Civil Engineer (Engineer of Record) in substantial conformance with the preliminary civil plans titled "Vesting Tentative Map, Watson Ranch – Lot 7" prepared by CBG Engineers, dated September 27, 2024, except as modified by these conditions. This shall be a single set of improvement plans for all of the improvements in all phases.	Specific Conditions	Improvement Plans Submittal	Applicable
39.	Improvement Plans shall be tied to the State of California coordinate system.	Specific Condition	Improvement Plans Submittal	Applicable
40.	The Applicant shall design and construct all the **Public Improvements** as shown on the Vesting Tentative Map, Watson Ranch – Lot 7, except as modified below: a. Provide a gate at the entrance to the EVA/Trail at the intersection of Street A. b. Provide a safety barrier at the edge of the trail/pedestrian access east side of Basin D. c. The open end of all storm drainage pipes shall be designed and equipped with a barrier that will prevent a person, pets or wild animals from entering the storm drainage system.	Specific Condition	Improvement Plans Submittal	Applicable
41.	The Applicant shall design and construct all the Private Improvements as shown on the Vesting Tentative Map, Watson Ranch - Lot 7, noted below: a. All Drives and Alleys b. Streetlights within drives and alleys. c. Storm drain facility collecting drainage from Drives and Alleys.	Specific Conditions	Improvement Plans Submittal	Applicable
42.	Prior to SUBMITTAL OF THE IMPROVEMENT PLANS, the Applicant shall: a. Submit the City's "Improvement Plan Checklist". b. Pay an initial cash deposit for City plan check services in amount to be determined by the City prior to the time of submittal. The Project engineer shall contact City staff to discuss submittal details to determine initial deposit amount. c. Provide the following: (1) Public Street Repair Plan	Specific Conditions	Improvement Plans Submittal	Applicable

	(2) Utility Plan and Joint Trench Plan (3) Construction Storm Water Pollution Prevention Plan (SWPPP) and a City Erosion and Sediment Control Plan (ESCP) (4) Drainage Report (5) Post-Construction Stormwater Control Plan (SWCP) (6) Geotechnical Report (7) Construction Traffic Control Plan. d. Submit a water and sewer Will Serve application. e. Per Watson Ranch Specific Plan, the driveway length from the back of sidewalk to the front of the garage shall be 20 feet. The Vesting Tentative Map shows 18 feet driveway length and does not comply. Submit a Design and Construction Exception Request for the non-conformance driveway length for approval. If the request is denied, the applicant shall redesign the site to comply with the requirement.			
42.	Prior to APPROVAL OF THE IMPROVEMENT PLANS, the Applicant shall: a. Provide written acknowledgment by the Geotechnical Engineer of Record that the Plans incorporate all design and construction criteria specified in the Geotechnical Report. b. Provide documentation demonstrating that the existing PG&E pole line easements (1463 OR 766) has been quitclaimed or otherwise vacated. c. Provide documentation demonstrating that the existing roadway easement in favor of Richard J. Falls (Book L, Deeds page 170) has been quitclaimed or otherwise vacated. d. Furnish proof that all permits that may be required by the California Department of Fish & Game, State and Regional Water Quality Control Board, US Army Corps of Engineers and any other regulatory agencies with jurisdiction over the proposed construction have been obtained.	Specific Conditions	Improvement Plans Submittal	Applicable

	e. Complete and submit the City's Erosion and Sediment Control Plan (ESCP) Template. Applicant may refer to a SWPPP, as appropriate, by referencing page number within the SWPPP that addresses the requirements of the ESCP. f. Submit a copy of the Notice of Intent and WDID# for coverage under the State Water Resources Control Board's General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2022-0057-DWQ).			
43.	Prior to COMMENCEMENT OF CONSTRUCTION ACTIVITIES, the Applicant shall: a. Pay off all current account balances with the City of American Canyon. b. Pay an inspection fee in amount to be determined at the time of commencement for the City's inspection of the Public Improvements. c. Conduct a pre-construction meeting with representatives of the City whereby the Applicant, the Legally Responsible Party (LRP), Qualified SWPPP Practitioner (QSP), Qualified SWPPP Developer (QSD), and/or the Contractor provides the following: (1) Six (6) full-size bond copies of the approved Improvement Plans for the City's use. (2) One (1) job-site copy of the latest edition of the City Standards for the Contractor use. (3) One (1) job-site copy of the SWPPP for use by the LRP, QSP, QSD, and Contractor. (4) Electronic copies of Improvement Plans and SWPPP	Specific Conditions	Improvement Plans Submittal	Applicable
44a.	Prior to RECORDATION OF EACH FINAL MAP, the applicant shall: a. Construct all of the Public and Private Improvements to the satisfaction of the City.	Specific Conditions	Improvement Plans Submittal	Applicable

	Alternatively, the Applicant may enter into a Subdivision Improvement Agreement with the City agreeing to complete all of the Public and Private improvements within that final map phase prior to Occupancy of the first unit on that final map. Such Agreements will require the Applicant to provide bonds, proof of workers compensation insurance, and general liability insurance in the forms and amounts as deemed satisfactory to the City.			
44b.	b. Establish a Homeowner's Association (HOA) in accordance with State law with recorded Codes, Covenants, & Restrictions (CC&Rs) that are satisfactory to the City Engineer and City Attorney to provide long-term and ongoing maintenance of all of the Private Improvements identified above. Specifically, the HOA will be responsible for the long-term and ongoing maintenance of the trails within the limits of the subdivision and the pavement of the emergency vehicle access/trail east of Basin D. The City will have enforcement authority over the HOA's maintenance obligations and the obligation to review and approved proposed changes amendments to the CC&R's. The CC&R's shall require the HOA to create and maintain a separate maintenance reserve fund in the amount of a percentage of the cost of constructing the HOA maintained improvements listed above. Said percentage will be determined by the City prior to recordation of the CC&Rs.	Specific Conditions	Improvement Plans Submittal	Applicable
44c.	c. Generally, in substantial conformity with that which is shown on the Watson Ranch – Lot 7 Vesting Tentative Map, convey all easements and dedications, public and private, for the construction, use and/or maintenance of roads or other access, drainage facilities, parks, utilities, and post-construction storm water management facilities in within each Final Map on said Final Map or by separate instruments. All dedications to the City shall be irrevocable	Specific Conditions	Improvement Plans Submittal	Applicable

	offers of dedication. Specific public offers of dedication include: i. Streets A, B, C and D in fee for public road and utility purposes. ii. An easement over Parcel C for public utility purposes. iii. An easement over Alley E, Alley F and Drives G through M for public utility purposes. iv. Furnish proof of payment of the mapping service fee as required by Napa County Board of Supervisors Resolution No. 92-119.			
45.	Parcels A, B, C and N shall be reserved by the owner and granted in fee to the Homeowners Association as common areas.	Specific Conditions	Improvement Plans Submittal	Applicable
46.	Alley E, Alley F and Drives G through M shall be reserved by the owner and granted in fee to the Homeowners Association as private streets.	Specific Conditions	Improvement Plans Submittal	Applicable
47.	Prior to APPROVAL OF A BUILDING PERMIT, the Applicant shall: a. Pay all account balances and current City and American Canyon Fire District fees (Mitigation & Capacity) based on the rates in effect at the time of permit issuance. These fees include, but may not be limited to the following: Traffic Mitigation, General Plan Update, Civic Facilities, Fire District, Water Capacity, Zero Water Footprint Mitigation and Wastewater Capacity.			
48.	Prior to acceptance of any public improvements of release of Project Bonds, the Applicant shall: a. Submit an inspector's punch list indicating that all of the public improvements are constructed in substantial conformance with the approved improvement plans and to the satisfaction of the City Engineer. b. Restore all adjacent off-site road surfaces to pre-project conditions.	Specific Conditions	Improvement Plans Submittal	Applicable

	c. Submit a certification by the Geotechnical Engineer of Record that all the work has been completed in substantial conformance with the recommendations in Soils Investigation/Geotechnical Report. d. Provide digital copy of the Improvement Plans that include all as-built or field changes, in digital (.pdf) and AutoCAD Civil 3D (.dwg) format (void of any AutoCAD block formats preventing full editing capabilities of the drawings), compatible with the City's current AutoCAD Civil 3D version, and tied to the NAD83 (California Zone 2, feet) coordinate system. e. Provide proof that all relevant Conditions of Approval have been satisfied. f. Provide a letter stating that all of the Developer's Conditions of Approval have been met. g. Provide a letter from the Civil Engineer of Record and Landscape Architect of Record certifying that all the site improvements were constructed and inspected in substantial conformance with the approved improvement plans and City Standards. h. Provide proof from the Architect of Record, Structural Engineer of Record, and/or other design professionals who signed the building permit plan submittal indicating that all building improvements have been constructed in substantial conformance with approved plans. i. Execute a post-construction Stormwater Operations and Maintenance Agreement with the City.			

Fire District Conditions

GENERAL - FIRE

Specific Condition	*Developer Obligation*	*Mechanism*	*Implementation*	*Status*
49.	In accordance with the standard mitigation measures and conditions of approval set forth by the City of American Canyon, the developer shall pay the Fire Impact Fees (see current Standard Fees and Charges adopted by resolution), prior to the issuance of any building permits.	Specific Condition	Issuance of Building Permit	Applicable
50.	New buildings and additions to existing buildings shall conform to requirements set forth in the currently adopted editions of the California Residential Code, California Fire Code, City of American Canyon amendments, and Nationally Recognized Standards.	Specific Condition	Relevant Permit	Applicable
51.	Buildings in excess of two stories shall pay Aerial Apparatus mitigation fees prior to the issuance of any building permits. (see current Standard Fees and Charges adopted by resolution).	Specific Condition	Relevant Permit	Applicable
52.	All new residential homes are required to be provided with fire sprinklers. Fire sprinkler plans, calculations, and material cut sheets shall be submitted for review and approval for each of the model homes. After that, each lot shall require an individual fire sprinkler permit. Fees shall be charged in accordance with the adopted fee schedule and paid prior to release of individual permits.	Specific Condition	Relevant Permit	Applicable
53.	All Fire related underground piping and fire appurtenances shall be shown on the Civil plan submittal. In addition to the Civil plan submittal, at least (1) plan set under separate cover shall be submitted to American Canyon Building Division for routing to the American Canyon Fire Protection District detailing all underground piping and related fire appurtenances including but not limited to underground piping, underground sweep detail, underground trench details showing depth of burial, type of backfill, manufacturer's specifications of piping, valves joints, fittings and calculated size and locations of thrust blocks, hydrants locations (designate public or private), gate shut-off valves, PIV's, FDC's, fire pumps, fire pump and/or riser rooms.	Specific Condition	Relevant Permit	Applicable
54.	Underground utility contractor, architect and fire sprinkler contractor shall coordinate the location of risers and control valves prior to the issuance of a building permit.	Specific Condition	Relevant Permit	Applicable
55.	Fire Department plan review shall be based on the information submitted at the time of permit application. Any changes to the approved/permitted scope of work including additions, alterations, demolition, repair or a change in occupancy/use may impact the project requirements, including but not	Specific Condition	Relevant Permit	Applicable

	limited to the installation of additional fire protection systems or components shall be submitted as revision. Revisions shall be approved prior to inspections being completed.			
56.	An approved water supply capable of supplying the required fire flow for fire protection systems shall be provided to all premises upon which facilities or buildings are hereby constructed or moved into or within the City. Required fire flow and hydrant distribution shall be in accordance with Appendix B and C of the California Fire Code. Applicant shall demonstrate on plan submittal; square footage of each building on plan and provide the required fire flow information. Applicant shall demonstrate that the number and spacing of onsite fire hydrants meets with requirements of the California Fire Code.	Specific Condition	Relevant Permit	Applicable
57.	Fire Protection systems shall be installed in accordance with provisions set forth in the California Fire Code as amended by the American Canyon Fire Protection District and the applicable National Fire Protection Association Standard.	Specific Condition	Relevant Permit	Applicable
58.	Fire Apparatus Access Roads shall be designed in accordance with provisions set forth in the California Fire Code Chapter 5 and Appendix D as amended by the American Canyon Fire Protection District and the applicable Public Works Standard.	Specific Condition	Relevant Permit	Applicable
59.	Fire apparatus access roads shall have an unobstructed minimum width of 20 feet (curb to curb) and a minimum unobstructed vertical clearance of 13’ 6”. They shall have an all-weather paved surface capable of supporting a GVW of 71,000 pounds.	Specific Condition	Relevant Permit	Applicable
60.	Access roads shall be completed with all-weather surfaces prior to the stockpiling of combustible materials or beginning combustible construction. Fire apparatus access shall be provided to within 150 feet of the most remote portions of all building from an approved exterior route. If this cannot be achieved fire apparatus turn arounds will be needed.	Specific Condition	Relevant Permit	Applicable
61.	Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. Vertical traffic calming in the form of speed pumps, humps or dips are prohibited along fire access roads without prior approval of the fire Code Official. The minimum width and clearances established in Section 503.2.1 shall be maintained at all times.	Specific Condition	Relevant Permit	Applicable
62.	When required by the Fire Chief, fire apparatus access roads shall be designated as Fire Lanes and appropriate signs and/or markings installed in accordance with the California Vehicle Code and approved City standards.	Specific Condition	Relevant Permit	Applicable
63.	Parking shall not be permitted on roads / alleys less than 26-feet in width. Parking on one side of the street is permitted when the road is between 27-feet and 35-feet.	Specific Condition	Relevant Permit	Applicable

64.	Where applicable improvement plan submittals for permit shall include locations of fire lane red curbing and fire lane signage. Please refer to and include City Public Works Standard FP-2A & 2B with plan submittals for permitting.	Specific Condition	Relevant Permit	Applicable
65.	The City of American Canyon requires that a fire hydrant be in service within 250 feet of the furthest point of construction prior to the stockpiling of combustible materials for the beginning of construction.	Specific Condition	Relevant Permit	Applicable

APPLICABLE MITIGATION MEASURES FROM THE WATSON RANCH PROGRAM EIR

Mitigation Measures with strikethrough text do not apply.

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.1: Aesthetics					
~~**Mitigation Measure 4.1-1: *Water Tank Visibility*.** As required by the 2004 *Proposed Water Tanks (2) Mitigated Negative Declaration*, construction plans for the Zone 3 water tank shall incorporate the following mitigation:~~ ~~1. A landscaped earthen berm shall be constructed around the tank site to eliminate direct views of the water tank as much as feasible from the areas surrounding the tank site. The earthen berm shall be landscaped with trees and other vegetation suitable to the City, such as evergreen trees, to screen the water tank from surrounding areas, reduce soil erosion, and blend the berm with the surrounding vegetation.~~ ~~2. The water tank shall be painted a neutral color deemed appropriate by the City so the tank blends with the surrounding hillside vegetation as much as possible.~~	~~Approval of water tank plans~~	~~Prior to issuance of grading permit~~	~~City of American Canyon~~		
Mitigation Measure 4.1-3: *Lighting Plan*. Prior to any site disturbance activities, the Project Applicant shall submit a construction lighting plan to the City for approval. The construction lighting plan shall ensure that the minimum amount of lighting is used to meet safety requirements and to ensure that limited spillover occurs to nearby sensitive uses. All lighting shall be directed downward and away from surrounding land uses.	Approval of construction lighting plan	Prior to any site disturbance activities	City of American Canyon		

Section 4.2: Air Quality and Greenhouse Gas Emissions					
Mitigation Measure 4.2-1: *Construction Fugitive Dust Emissions*. The following Bay Area Air Quality Management District (BAAQMD) Best Management Practices (BMPs) and additional mitigation measures for fugitive dust control shall be required for all construction activities within the project area. These measures would reduce fugitive dust emissions primarily during soil movement and grading, but also during vehicle and equipment movement on unpaved project sites. *Basic BMPs that Apply to All Construction Sites* 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). 5. All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.	Notes on construction plans; site inspections to verify BMPs are implemented	During construction activities	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
8. A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action, if necessary, within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. *Additional BMPs that Apply to All Construction Sites* 1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content may be verified by lab samples or moisture probe. 2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. 3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks shall have at maximum 50 percent air porosity. 4. For areas that are to remain open space (e.g., not a road, building, or otherwise structurally covered area), vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. 5. All trucks and equipment, including their tires, shall be washed off prior to leaving the site. 6. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel. 7. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent. Before starting on-site construction activities, the contractor or Project Applicant shall submit a site-specific dust control plan (Plan) to the American Canyon Planning Division for review and approval. The Project Applicant shall ensure that all applicable requirements of the Plan have been incorporated into the contract specifications. The Plan shall state, in reasonable detail, how the Contractor shall meet the requirements above. The Plan shall include a certification statement that the Contractor agrees to comply fully with the Plan.					

Mitigation Measure 4.2-2: *Operational Emissions Reductions*. The total reduction in ROG and NO_X emissions that would be achieved from implementation of Mitigation Measure 4.2-2a, the TDM program, and Mitigation Measure 4.2-2b, the CAP mitigation strategies, would be calculated at the time the final TDM program and CAP strategies are determined. If the ROG and NO_X emissions reduction from implementation of Mitigation Measures 4.2-2a and 4.2-2b are determined by a qualified air quality expert to reduce the project's emissions to below the BAAQMD operational thresholds contained in the 2017 BAAQMD CEQA Air Quality Guidelines, no further mitigation would be required. If the ROG and NO_X emissions reduction from implementation of Mitigation Measures 4.2-2a and 4.2-2b do not reduce the project's emissions to below the BAAQMD operational thresholds identified in the 2017 BAAQMD CEQA Air Quality Guidelines, Mitigation Measure 4.2-2c, purchase of emission offsets, would be pursued.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
~~**Mitigation Measure 4.2-2a (same as Mitigation Measure 4.12-3a in Section 4.12, *Transportation and Traffic*): *Transportation Demand Management (TDM) Program*.** Prior to issuance of the first building permit for the non-residential use areas (i.e., Napa Valley Ruins & Gardens [NVR&G] and hotel), the Project Applicant shall develop a TDM program for the non-residential use areas (i.e., NVR&G and hotel) and shall submit the TDM program to the City Department of Public Works for review and approval. A qualified air quality expert shall prepare a calculation of the ROG and NO_X emissions reductions that would result from implementation of the TDM program. The Project Applicant shall be responsible for funding and overseeing the delivery of trip reduction/TDM proposed programs and strategies, which may include, but are not limited to, the following:~~ 1. ~~Establishment of carpool, buspool, or vanpool programs;~~ 2. ~~Vanpool purchase incentives;~~ 3. ~~Cash allowances, passes or other public transit subsidies and purchase incentives;~~ 4. ~~Preferential parking locations for ridesharing vehicles;~~	~~Approval of TDM Program~~	~~Prior to issuance of first building permit for the nonresidential use area (i.e., NVR&G and hotel)~~	~~City of American Canyon~~		

5. ~~Computerized commuter rideshare matching services;~~ 6. ~~Guaranteed ride-home program for ridesharing;~~ 7. ~~Bicycle programs including bike purchase incentives, storage, and maintenance programs;~~ 8. ~~On-site car share and bike share service;~~ 9. ~~Preparation of a Parking Management Plan to address parking accommodations for large events; 10. Designation of an on-site transportation coordinator for the project;~~ 11. ~~Transit and trip planning resources such as commute information kiosk;~~ 12. ~~Employer-provided showers, changing rooms, and clothing lockers for office employees that commute via active transportation;~~ 13. ~~Bicycle route mapping resources;~~ 14. ~~Participation in future citywide Transportation Management Association (TMA); and~~ 15. ~~Submit annual reports to the City regarding TDM activities.~~					
Mitigation Measure 4.2-2b: *Operational Emissions Reduction Strategies*. To reduce ROG and NO_X emissions within the project site, the project shall include feasible operational emissions reduction strategies as part of its final design. The specific strategies may include, but are not limited to, the measures described below; however, other measures may be implemented: ○ Prior to issuance of the first building permit for each phase of the project, the Project Applicant shall develop operational emissions reduction strategies, which could include the mitigation strategies identified in **Table 4.2-8, Summary of Operational CAP Mitigation Strategies**, to provide options for reducing ROG and NO_X emissions from operation of the project. The operational emissions reduction strategies shall be submitted to and approved by the City, prepared by a qualified air quality technical expert, and evaluate the emissions reduction strategies in relation to the project's emissions.	Recommendations from Air Quality Technical Report that identify updated project emissions calculations and feasible operational emissions reduction strategies	Prior to issuance of the first building permit for the project	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial

Table 4.2-8 Summary of Operational CAP Mitigation Strategies

Description	Approximate CAP Reduction (lb/day)[a] ROG	NO_X
Exceed 2016 Title 24 (15%)	0.19	1.67
Solar Water Heating	0.15	1.31
Residential Electric Vehicles	0.09	0.49
Non-Residential EV Charging (5% of spaces)	0.17	0.93
Preferential parking locations for ridesharing vehicles; Computerized commuter rideshare matching services; and/or Guaranteed ride-home program for ridesharing	0.44	3.01
On-site car share and bike share service	0.08	0.46
Unbundled parking; shared parking; eliminate on-street parking	0.13	0.93
Bicycle and pedestrian network	0.13	0.91
Reduce distance to major transit stop	0.52	3.57
Expand transit coverage	0.06	0.40
Other Traffic Reductions (every additional 1%)	0.20	1.15
Smart Traffic Signals (or Traffic Signal Synchronization)	0.60	3.44
Solar swimming pool heating	0.03	0.25
Electrify landscaping equipment	0.15	0.06

SOURCE: Refer to Tables Ops-7 through Ops-13, in EIR Appendix B2.

NOTE:

a. Measures are not all additive. See detailed assumptions and magnitudes assumed for each measure in source above.

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.2-2c: *Purchase Emission Offsets*. Prior to the issuance of the final Certificate of Occupancy for Phase 1 or prior to the issuance of the first residential building permit in Phase 2, whichever occurs first, the Project Applicant would, partially or wholly, purchase offset credits if determined to be feasible based on information available at the time implementation would be required. To reduce ROG and NO_X emissions depending on the reductions achieved through Mitigation Measure 4.2-2a and Mitigation Measure 4.2-2b, and if this mitigation is implemented. o The Project Applicant or its designee shall pay a mitigation offset fee to the BAAQMD Bay Area Clean Air Foundation (Foundation)[1] in an amount to be determined at the time of the impact. The fee would offset emissions that exceed the threshold of significance after implementation of Project- Level Reduction Strategies and the TDM Program described above to the extent feasible. o The Project Applicant would implement Mitigation Measure 4.2-2c through payment of a mitigation offset fee to the BAAQMD's Foundation in an amount not to exceed $30,000 per weighted ton per year of ozone precursors per year requiring emissions offsets plus a 5 percent administrative fee to fund one or more emissions reduction projects within the San Francisco Bay Area Air Basin (SFBAAB). The fee shall be determined by the City of American Canyon Planning Division in consultation with the Project Applicant and be based on the type of projects available at the time of the payment. The offset fee is calculated to be "roughly proportional" to the operational air quality impacts. Documentation of payment shall be provided to the City of American Canyon or its designated representative. The current process for payment of offset fees is detailed above. As required by this mitigation measure, payment of offset fees would proceed according to BAAQMD procedures when initiated. The Project Applicant or its designee would enter into a memorandum of understanding (MOU) with the BAAQMD's Foundation. The MOU would include details regarding the funds to be paid, the administrative fee, and the timing of the emissions reduction project. Acceptance of this fee by the BAAQMD shall serve as an	Bay Area Air Quality Management District Memorandum of Understanding	Prior to the issuance of the final Certificate of Occupancy for Phase 1 or prior to the issuance of the first residential building permit in Phase 2, whichever occurs first	City of American Canyon		

[1] More information on the Bay Area Clean Air Foundation can be found at Bay Area Air Quality Management District (BAAQMD), Bay Area Clean Air Foundation, 2015, available at http://www.baaqmd.gov/about-the-air-district/bay-area-clean-air-foundation.

acknowledgment and commitment by the BAAQMD to (1) implement an emissions reduction project(s) within a timeframe to be determined based on the type of project(s) selected and after receipt of the mitigation fee to achieve the emission reduction objectives specified above, and (2) provide documentation to City of American Canyon or its designated representative and to the Project Applicant describing the amount of and the project(s) funded by the mitigation fee, including the amount of emissions of ROG and NO_X reduced (tons per year) within SFBAAB from the emissions reduction project(s). If there is any remaining unspent portion of the mitigation offset fee following implementation of the emission reduction project(s), the Project Applicant shall be entitled to a refund in that amount from the BAAQMD. To qualify under this mitigation measure, the specific emissions retrofit project must result in emission reductions within SFBAAB that would not otherwise be achieved through compliance with existing regulatory requirements.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.2-3a: *Architectural Coatings*. The applicant shall use low-VOC architectural coatings during construction for all buildings, which shall have VOC content that is more stringent than local requirements prescribed in Bay Area Air Quality Management District (BAAQMD) Regulation 8 Organic Compounds, Rule 3 Architectural Coatings as revised on July 1, 2009. Coatings that meet the "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint would qualify.	Notes on construction plans indicating the use of low-VOC architectural coatings during construction of all buildings	Prior to issuance of building permits	City of American Canyon		

Mitigation Measure 4.2-3b: *Tier 4 Construction Equipment*. To reduce construction emissions to below the 2017 BAAQMD CEQA Air Quality Guidelines, prior to start of construction activities after the occupancy of Phase 1, the Project Applicant shall submit to the City either: • Documentation showing that all off-road construction equipment used prior to the start of construction activities after the occupancy of Phase 1 with greater than 25 hp and operating for more than 20 hours total over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 4 off-road emission standards. or, • Provide supplemental analysis prepared by a qualified air quality specialist to show that emissions of ROG and NO_X would not exceed the thresholds from the 2017 BAAQMD CEQA Air Quality Guidelines using other methods.	Documentation of compliance with the 2017 BAAQMD CEQA Air Quality Guidelines based on the type of construction equipment used or supplemental analysis prepared by a qualified air quality specialist	Prior to the start of construction activities after the occupancy of Phase 1	City of American Canyon		
Mitigation Measure 4.2-5: *Construction Emissions Minimization*. To reduce construction emissions to below the thresholds identified in the 2017 BAAQMD CEQA Air Quality Guidelines, prior to the start of construction of each of the following—Phase 1 area south of the NVR&G and the off-site Rio Del Mar roadway improvements and Phase 4—the Project Applicant shall submit to the City either: • Documentation showing that all off-road construction equipment used in the southwestern portion of Phase 1 of construction (located directly south of Napa Valley Ruins & Gardens), the entirety of Phase 4 of construction, and the off-site Rio Del Mar roadway improvements with greater than 25 hp and operating for more than 20 hours total over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 2 off-road emission standards and have been retrofitted with an CARB Level 3 Verified Diesel Emissions Control Strategy. Equipment with engines meeting Tier 4 Interim or Tier 4 Final off-road emission standards automatically meet this requirement. or, • Provide supplemental analysis prepared by a qualified air quality specialist to show health risks at on- and off-site sensitive receptors would not exceed the thresholds from the 2017 BAAQMD CEQA Air Quality Guidelines using other methods.	Documentation of compliance with the 2017 BAAQMD CEQA Air Quality Guidelines based on the type of construction equipment used or supplemental analysis prepared by a qualified air quality specialist	Prior to the start of construction of the Phase 1 area south of the NVR&G and the off-site Rio Del Mar roadway improvements and Phase 4	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.2-7: *GHG Emissions Reductions*. The total reduction in GHG emissions that would be achieved from implementation of Mitigation Measure 4.2-2a, the TDM program, and Mitigation Measure 4.2-7a, the GHG reduction strategies, would be calculated at the time the final TDM program and GHG reduction strategies are determined. If the GHG emissions reduction from implementation of Mitigation Measures 4.2-2a and 4.2-7a are determined by a qualified air quality expert to reduce the project's emissions to below the operational thresholds of 2.67 MT CO_2e per service population per year, no further mitigation would be required. If the GHG emissions reduction from implementation of Mitigation Measures 4.2-2a and 4.2-7a do not reduce the project's emissions to below this threshold, Mitigation Measure 4.2-7b, purchase of GHG emission offsets, would be pursued.					

Mitigation Measure 4.2-7a: *GHG Reduction Strategies*. To reduce greenhouse gas (GHG) emissions within the project site and to maximize the project's ability to achieve the GHG operational threshold of 2.67 MT CO_2e per service population per year, the project shall include feasible operational GHG emissions reduction strategies as part of its final design. The specific strategies of the program may include, but are not limited to, the measures described below; however, other measures may be implemented:

- All development shall, at a minimum, meet the Title 24, Part 6 (2016), standards, or the most current Title 24, Part 6, standard, whichever is more conservative. All residences shall meet the anticipated 2019 Title 24 Standards to achieve Zero Net Electricity. The GHG emissions benefit from residential Zero Net Electricity was included in the unmitigated inventory.
- Prior to issuance of the first building permit for each phase of the project, the Project Applicant shall identify operational GHG emissions reduction strategies that could include the strategies identified in **Table 4.2-14, Summary of Operational GHG Mitigation Strategies**, which provides options for reducing GHG emissions from project operation. The operational GHG emissions reduction strategies shall be submitted to and approved by the City, developed by a qualified air quality technical expert, and evaluate the emissions reduction strategies in relation to the project's emissions.

Table 4.2-14 Summary of Operational GHG Mitigation Strategies

Description	Approximate Reduction MT CO_2e/year[a]
Exceed 2016 Title 24 (15%)	354
Exceed 2016 Title 24 (15%, electricity only, non-residential only)	27
High-efficiency lighting	126
Purchase 100% renewable electricity (non-residential benefit only, as residences assumed to achieve zero net electricity)	709
Zero net electricity—non-residential	709
Solar water heating	317
Solar panels	484

Calculations from a GHG technical expert based on specific strategies incorporated into the project

Prior to issuance of building permits for each phase

City of American Canyon

Mitigation Measures		Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
Residential electric vehicles	352					
Non-residential EV charging (5% of spaces; 54 total)	667					
Preferential parking locations for ridesharing vehicles; computerized commuter rideshare matching services; and/or guaranteed ride-home program for ridesharing	807					
On-site car share and bike share service	54					
Unbundled parking; shared parking; eliminate on-street parking	249					
Bicycle and pedestrian network	244					
Reduce distance to transit station	957					
Expand transit coverage	107					
Other traffic reductions (for every 1%)	137					
Smart traffic signals (or traffic signal synchronization)	410					
Institute recycling and composting services (additional 50% diversion)	1,334					
Solar swimming pool heating	344					
Planting trees	354					
Electrify landscaping equipment	1.6					
SOURCE: Refer to Tables Ops-14 through Ops-21 in EIR Appendix B2. NOTE: a. Measures are not all additive. See detailed assumptions and magnitudes assumed for each measure in source above.						

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.2-7b: *Purchase GHG Emission Offsets*. In order to determine whether or to what extent the purchase of GHG emissions offsets is necessary to reduce greenhouse gas (GHG) emissions for each year that the GHG emissions exceed the threshold of 2.67 MT CO_2e per service population per year for the lifetime of the project (assumed to be 30 years), the operational GHG emissions reduction program described above in Mitigation Measure 4.2-7a will include a plan for the purchase of GHG offsets. The amount of offsets needed will take into account the GHG emissions reductions associated with the TDM program and the operational GHG emissions reduction program. Additionally, the feasibility of offsets shall be evaluated at the time implementation would be required. If feasible, the plan shall include: ○ The plan for the purchase of GHG offsets shall include timing requirements, which take into account calculations showing actual emissions of the project, which could take into account phase-in of occupancy, reductions in vehicle emissions, as well as other factors that affect emissions. ○ GHG emission offsets could include any of the following sources: (1) the California Air Resources Board (CARB) quarterly allowance auctions held as part of its Cap-and-Trade Program; (2) the Greenhouse Gas Reduction Exchange (GHG Rx); or (3) Approved Registries recognized by the State of California, which currently include the Climate Action Reserve (CAR), American Carbon Registry (ACR), and Verra (formerly Verified Carbon Standard). ○ The amount of offsets purchased shall depend on the cost per annual metric ton of CO_2e reductions, the overall cost feasibility of this measure, which shall be determined based on information available at the time implementation would be required, and the on-site GHG reduction measures. ○ To demonstrate compliance, the Project Applicant or its designee would provide the following documentary evidence to City's Planning Division: An attestation from an Approved Registry or other source described above that the Project Applicant or its designee has retired a given quantity of carbon offsets. Offsets from the approved	Calculations from a GHG technical expert based on specific strategies incorporated into the project and, if necessary and feasible, attestation from an Approved Registry or other source described above regarding the purchase of required carbon offsets	Evaluated prior to issuance of building permits for each phase	City of American Canyon		

sources above satisfy defined standards and incorporate principles of GHG emissions reduction accounting. These principles ensure the offsets use relevant methodologies and assumptions, represent additional reductions that would not otherwise be achieved by law, do not double count reductions, and are enforceable.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.3: Biological Resources					
Mitigation Measure 4.3-1a: *Protocol-Level Surveys*. Prior to issuance of a grading permit, written proof shall be submitted that a qualified botanist conducted preconstruction CDFW protocol-level surveys during the appropriate blooming periods for the 19 special-status plants (listed above in Table 4.3-1, Special Status Species Potentially Occurring in the Study area) within the WRSP site, off-site water improvement area (OSWA) and other off-site areas. The qualified botanist shall conduct surveys to following performance standards. Typically, two surveys are required to capture the blooming periods of all the species. These surveys would be conducted in early spring between March and April and in summer between June and August to capture the flowering times of all species. Individual flowering times for these 19 species are included in the species accounts above. These surveys should be performed in compliance with CDFW (2018b) and USFWS (2002) published survey guidelines. A technical report prepared by the botanist describing the results of the survey shall be provided to the City for review and approval prior to issuance of a grading permit. If no special-status plants are found during focused surveys, then these plants would be assumed to be absent from the WRSP site, OSWA, and other off-site areas. The botanist would document the findings in a technical memorandum to the lead agency, as appropriate, and no further mitigation would be required. If special-status plants are found during focused surveys, Mitigation Measure 4.3-1b shall be implemented.	Submittal of technical memorandum	Prior to issuance of a grading permit	City of American Canyon		
Mitigation Measure 4.3-1b: *Measures to Implement if Special-Status Plants Are Found*. If special-status plants are found during focused surveys, prior to issuance of a grading permit, written proof shall be submitted that the following measures were implemented:	Issuance of a Biology Report and	Prior to issuance of grading permit	City of American Canyon,		

a. Information regarding the special-status plant populations shall be reported to the California Natural Diversity Database (CNDDB). b. The Project Applicant in consultation with City, CDFW, and/or the USFWS (as appropriate) shall assess if any individual or population can be avoided during project implementation. If any viable populations can be avoided, the avoided areas shall be clearly marked in the field by a qualified botanist and avoided during construction activities. Construction activities shall be set back a minimum of 100 feet or further in accordance with the recommendation of the qualified botanist. A qualified botanist shall monitor the avoided areas throughout the time that construction activities occur adjacent to the avoided areas where special-status plants occur and document the successful avoidance in a report to the City, and CDFW and/or the USFWS as appropriate. Before ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to the species' presence and the importance of avoiding impacts to this species and its habitat. c. If special-status plant populations are present and cannot be avoided or are found to have been impacted by project construction and operation activities, resulting in their mortality despite implementing the avoidance measures under the preceding Item b, consultations with the CDFW and/or the USFWS shall be required. A mitigation plan to compensate for the loss of special-status plant species shall be prepared and submitted for review and approval of the CDFW or the USFWS, as applicable. This plan shall be developed by a qualified botanist in consultation with the appropriate agencies, prior to the start of local construction activities in the area where the special-status plant populations are found. The mitigation plan shall conform to the following specific performance standards. The plan shall detail appropriate replacement ratios, which shall be a minimum of 1:1 based on area and number of plants and may be increased based on the recommendation of the botanist or the relevant resource agency to achieve no net	Mitigation Plan, if necessary		CDFW, and/or USFWS, as necessary		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
loss of habitat. The plan shall describe the location of the mitigation site, methods for implementation (e.g., construction techniques, timing and sequencing, watering, soil properties, and other necessary specifications), success criteria (e.g., minimum 75 percent plant survival after 5 years, 75 percent vegetative cover by desirable species or comparable to existing conditions, and a viable, self-sustaining plant community), monitoring and reporting protocols, and contingency measures that shall be implemented if the initial mitigation fails. The mitigation plan may include the collection of seeds, propagules, and top soils under the supervision of a qualified botanist from the WRSP site for installation at the mitigation site. The mitigation site may be located on the WRSP site or in close proximity to the WRSP site. If on-site options are not available, off-site areas may be considered if the qualified biologist in consultation and the agencies agree that potentially impacted plants can be planted and/or propagated successfully. The mitigation plan shall be submitted to the City for approval prior to the issuance of permits that would affect the special-status plant population(s). d. If mitigation is required for loss of special-status plant populations, the Project Applicant shall establish, maintain, and monitor the mitigation area identified in the plan for 5 years following the completion of construction and restoration activities. Annual monitoring reports shall be submitted to the City and, if required, the resource agencies at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, planting specifications, a site layout map, descriptions of materials used, and justification for any deviations from the mitigation plan.					
Mitigation Measure 4.3-1c: *Biological Resources Awareness Training Program*. A USFWS-approved biologist shall conduct a biological resources awareness training session for all construction personnel prior to any ground-disturbing activities such as grading or vegetation removal. The performance standards for the training shall include a description of special-status species and their habitats, their status and regulatory protection, general protection measures to be implemented to protect special-status species and minimize take, and a delineation of limits of the work area as established by an approved biologist. General protection from project permits shall be included, to include construction speed limits, trash	Completion of a biological resources awareness training session	Prior to any ground disturbing activities	City of American Canyon		

containment and removal, restriction of pets and firearms, and fueling setbacks from sensitive habitats.					
Mitigation Measure 4.3-1d: *Preconstruction Surveys for California Red-Legged Frogs*. Preconstruction surveys for California red-legged frogs shall be conducted prior to grading or earth-moving activities within the WRSP site and within the OSWA to ensure project activities do not result in direct take of dispersing or entrapped California red-legged frog individuals. The performance standards for the preconstruction survey are as follows. USFWS-approved biologist shall conduct preconstruction surveys at least 24 hours prior to any grading or earth-moving activities within the WRSP site and within the OSWA. Any California red-legged frogs that are found during these surveys shall be salvaged and relocated by a USFWS-approved biologist under an incidental take permit issued by the USFWS to suitable California redlegged frog habitat as determined in coordination with USFWS and CDFW. The nearby California redlegged frog preserve, also known as the NVUSD Open Space, located to the southeast of the study area, can serve as suitable relocation habitat. All observed and relocated California red-legged frogs shall be reported to USFWS and CDFW within 5 days, and records of any special-status species or natural communities detected should be entered into the California Natural Diversity Database (CNDDB).	Submittal of documentation to verify surveys were completed and frogs relocated, if found	Prior to any ground disturbing activities	City of American Canyon, CDFW, and/or USFWS, as necessary		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.3-1e: *Procedures if California Red-Legged Frogs Are Identified*. If individual California red-legged frogs are identified during construction activities within the WRSP or OSWA, all work within 200 feet of the frog shall immediately stop and a biologist approved by the USFWS to relocate California red-legged frogs shall be consulted immediately (see Mitigation Measure 4.3-1g for additional requirements). Work shall not commence within 200 feet of the frog's location until an approved biologist has cleared the area of California red-legged frogs.	Submittal of documentation from a qualified biologist regarding work stoppage and relocation efforts, as necessary	During construction activities	City of American Canyon and/or USFWS, as necessary		

Mitigation Measure 4.3-1f: ***California Red-Legged Frog and Western Pond Turtle Exclusion Fencing*****.** Prior to any ground-disturbance activities, suitable exclusion fencing shall be installed along the outside edge of the off-site water storage tank and connecting pipeline and roadway construction footprint to ensure that western pond turtles and migrating California red-legged frogs are precluded from being able to move into designated work areas. A USFWS-approved biologist shall delineate the fence line and be present during initial installation to ensure that California red-legged frogs and western pond turtles are not trapped within the fence. This fence shall remain in good condition throughout the duration of construction activities and be checked by a USFWS-approved biological monitor. Exclusion fencing shall consist of a 3-foot wall of 0.25-inch mesh and be attached by welded galvanized wire (or equivalent USFWS-approved fencing such as Ertek™ fencing). The fence shall be buried along the bottom margin for 4 inches into the ground, or if soils are not stable, shall be landscape stapled with 7-inch staples every 3 inches along the bottom of the fence. The approximate 3 feet of fencing above the ground should be anchored to metal T-posts installed every 8 feet along the length of the fence.	Submittal of documentation verifying that exclusion fencing was installed and other mitigation requirements were met	Documentation shall be submitted prior to any ground disturbing activities within off-site water improvement area; site inspections shall occur during construction	City of American Canyon and/or USFWS, as necessary		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.3-1g: *Construction Monitoring for California Red-Legged Frog*. A USFWS approved biologist shall monitor all construction activities within designated California red-legged frog critical habitat, which includes the entire off-site water improvement area. The following measures shall be implemented to avoid and minimize impacts to California red-legged frogs: a. During site grading and construction of the off-site water storage tank and pipeline, a biological monitor shall be on site at all times during ground-disturbing activities; b. A biologist approved by USFWS to relocate frogs shall be available for consultation as needed; c. If a California red-legged frog individual is identified, all work within 200 feet of the frog shall stop and the on-site biological monitor shall observe the frog until it has been relocated off site by a USFWS approved biologist; relocation habitat shall be determined in coordination with USWFS; d. In the event that red-legged frogs are identified and must be relocated, the following performance standards shall apply: 1. Capture and relocation of California red-legged frogs may only be authorized pursuant to an incidental take authorization issued by the USFWS. Project applicants shall provide the City with proof of incidental take authorization prior to any relocation of California red-legged frogs. 2. Individuals shall only be relocated into USFWS approved locations where habitat has a full complement of existing and/or expanded habitat features that are required for the species' life history (i.e., foraging habitat, burrows, aquatic habitat, etc.); 3. Releasing individuals into habitats, where mortality is higher than reproduction, shall be avoided; and 4. Prevalence of disease or competition by non-native species (e.g., chytrid fungus presence in aquatic California red-legged frog habitat) shall be evaluated before animals are relocated. e. All observed and relocated California red-legged frogs shall be reported to USFWS within 5 days.	Submittal of documentation to verify monitoring occurred and other mitigation requirements were met	During construction within off-site water improvement area	City of American Canyon and/or USFWS, as necessary		
Mitigation Measure 4.3-1h: Mitigation for the California Red-Legged Frog. The Project Applicant shall mitigate for all permanent and temporary impacts to California red-legged	Compensation agreement with	Prior to any ground	City of American		

frog habitat in compliance with the following minimum performance standards. For the permanent loss of California red-legged frog habitat, the Project Applicant shall provide compensation with an equivalent amount of acreage at a minimum ratio of 1:1 (estimated at 309 acres), through the preservation of suitable mitigation lands approved by the USFWS and the City. The habitat mitigation may be achieved through (1) establishment of a permittee responsible habitat management lands (see discussion on AC-1's proposed Mitigation Area, Draft EIR pp. 4.3-49 and 4.3-50) or (2) purchase of credits from a USFWS-approved conservation bank such as the Ridgetop Conservation Bank near Benicia. Areas that are temporarily disturbed in the OSWA shall be reestablished to similar topographic conditions and replanted with native vegetation to mitigate temporary impacts to California red-legged frog habitat. Any permittee-responsible mitigation property shall be protected in perpetuity under a conservation easement (CE), management plan, habitat establishment plans, and funding mechanism approved by the City and USFWS. Funding for management shall include direct costs for initial establishment of the site, interim management, and establishment of a non-depleting endowment for the long-term maintenance, management, and monitoring of the CE.	USFWS, including compensatory mitigation and replanting for temporary disturbance	disturbing activities on the WRSP or off-site water improvement area sites	Canyon and/or USFWS, as necessary		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.3-1i: *Preconstruction Surveys for Western Pond Turtle*. a. ~~The Project Applicant shall enlist the services of a qualified biologist to conduct preconstruction surveys 14 days before and 24 hours prior to any ground-disturbing activities within 300 feet of the quarry pond or within 300 feet of drainages within the off-site water improvement area to ensure these activities do not result in direct take of western pond turtles. If western pond turtles are identified within work areas, the California Department of Fish and Wildlife (CDFW) shall be notified regarding the presence of the western pond turtles and all work shall stop until additional exclusion measures have been defined and authorization to proceed is obtained from CDFW. In general, the exclusion fencing described under Mitigation Measure 4.3-1f will provide appropriate exclusion.~~ b. ~~No person shall handle or otherwise harass any individual western pond turtle encountered during construction, with the exception of handling by the qualified biologist. If western pond turtles or their nests are observed during pre-construction surveys, a qualified biologist shall be on site to monitor construction in suitable western pond turtle habitat. Any western pond turtles found within the construction area shall be allowed to leave of its own volition, or if authorized by CDFW, western pond turtles shall be captured by a qualified biologist and relocated out of harm's way to the approved relocation sites. A plan shall be developed in consultation with and approved by CDFW to relocate the western pond turtle individuals to the nearest protected suitable pond turtle habitat. If a nest is located within a work area (typically nesting occurs between mid-June and mid-July), a qualified biologist shall delineate a 300-foot no-disturbance buffer between the nest and any areas of potential disturbance. Buffers shall be clearly marked with temporary fencing. Construction shall not be allowed to commence in the exclusion area until hatchlings have emerged from the nest, or the nest is deemed inactive by a qualified biologist. If a nest cannot be avoided, CDFW approval shall be needed to gather eggs, house them at a suitable facility for incubation, and release hatchlings into the pond or nearby creek system (Newell Creek or American Canyon Creek) as determined in coordination with CDFW.~~ c. ~~In the event that western pond turtles are identified and must be relocated, the following protocols and performance standards shall be addressed in the relocation plan:~~	~~Submittal of documentation to verify surveys were completed and turtles were relocated, if found~~	~~Prior to any ground disturbing activities near the quarry pond or drainages within the off-site water improvement area~~	~~City of American Canyon and/or CDFW, as necessary~~		

1. ~~Individuals shall only be relocated into habitat that has a full complement of existing and/or expanded habitat features that are required for the species' life history (i.e., foraging habitat, aquatic habitat, basking structures, etc.);~~ 2. ~~Releasing individuals into habitats, where mortality is higher than reproduction, would be avoided; and~~ 3. ~~Prevalence of disease or competition by non-native species (e.g., red-eared slider [*Trachemys scripta elegans*] presence in western pond turtle habitat) shall be evaluated before animals are relocated.~~ d. ~~Information regarding western pond turtle occurrences shall be reported to the CNDDB.~~					
Mitigation Measure 4.3-1j: ***Preconstruction Surveys for Breeding Birds, Including Raptors and Tricolored Blackbird.*** The following performance standards shall be followed: 1. For construction activities that occur between February 1 and August 31, preconstruction breeding bird surveys shall be conducted by a qualified biologist familiar with bird behavior and knowledge of nest types prior to and within 10 days of any initial ground-disturbance activities. Surveys shall be conducted within all suitable nesting habitat within 250 feet for passerines and 0.5 mile for raptors (see additional detailed performance standards for special-status raptors in Mitigation Measures 4.3-1k and 4.3-1l,	Submittal of documentation to verify that survey(s) have been conducted and other mitigation	Prior to construction activities that occur between February 1 and August 31; recurring for time	City of American Canyon, CDFW, and/or USFWS, as necessary		

	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
2.	below), to the extent land is accessible. Raptor surveys shall include a ground survey for nesting golden eagles following USFWS guidelines.[2] The survey also shall include searching for ground nesting raptors, such as short-eared owl and Northern harrier, following CDFW recommendations.	requirements were met	lapses greater than 14 days between project activities			
3.	If nesting raptors are detected, the qualified biologist shall establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. Buffers around active raptor nests shall be 500 feet for non-listed raptors, unless the qualified biologist determines that larger or smaller buffers are necessary to avoid impacts to nesting raptors. Factors to be considered for determining buffer size shall include the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers shall be maintained until the qualified biologist has determined					
4.	that young have fledged and are no longer reliant upon the nest or parental care for survival.					
5.	If known nesting trees (used for raptor nesting within the last 5 years) or tricolored blackbird colony nest sites are to be removed during construction activities, removal shall take place outside of the nesting season or until the nest or colony has been determined to be inactive. The Project Applicant in consultation with the CDFW shall develop a plan to replace known nest trees at a ratio of 3:1. If replacement planting is implemented, monitoring shall be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for the mitigation shall be 65 percent survival of all replacement plantings.					
	Construction activity, including vegetation removal within designated buffer zones, shall occur only outside the typical breeding season for raptors (September 16 to December 31), if raptors are determined to be present.					
	The following considerations apply to this mitigation measure:					

[2] Pagel, J.E., D.M. Whittington, and G.T. Allen. 2010. Interim Golden Eagle inventory and monitoring protocols; and other recommendations. Division of Migratory Bird Management, U.S. Fish and Wildlife Service.

	a) Survey results are valid for 14 days from the survey date. Should ground disturbance commence later than 14 days from the survey date, surveys shall be repeated. If no breeding birds are encountered, then work may proceed as planned. b) After commencement of work, if there is a period of no work activity of 14 days or longer during the bird breeding season, surveys shall be repeated to ensure birds have not established nests during inactivity. If new nests are encountered, buffers shall be established. c) Exclusion buffers sizes may vary, depending on habitat characteristics, project disturbance levels, and species, and are generally larger for raptors and colonial nesting birds. Exclusion buffers may be adjusted by a qualified biologist in coordination with USFWS and CDFW. Each exclusion buffer shall remain in place until the nest has successfully fledged or is otherwise inactive as determined by a qualified biologist. d) If birds establish nesting sites during work activities, it is assumed those birds are habituated to project disturbances and exclusion buffers may be adjusted by a qualified biologist. Disturbance activities within a minimum of 50 feet of the nest shall be postponed until a qualified biologist can determine to reduce the exclusion zone or the nest has successfully fledged.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial

Mitigation Measure 4.3-1k: *Preconstruction Surveys for Swainson's Hawk, Golden Eagle, and White-Tailed Kite*. The following performance standards shall be followed: 1. If construction activities occur between February 1 and August 31, the Project Applicant shall retain a qualified biologist to conduct surveys for Swainson's hawk, golden eagle, and white-tailed kite in accordance with the Swainson's Hawk Technical Advisory Committee 2000 guidelines (SHTAC 2000), or current species specific guidance. Surveys shall cover a minimum of a 0.5-mile radius around the construction area. If nesting Swainson's hawks, golden eagle, or white-tailed kites are detected, the qualified biologist shall establish a 0.5-mile no-disturbance buffer, although buffer widths may be adjusted, consistent with the performance standards in Mitigation Measure 4.3-1j, Item 5.c. Buffers shall be maintained until the qualified biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival. 2. If known nesting trees are to be removed during construction activities, removal shall take place outside of Swainson's hawk, golden eagle, and white tailed kite nesting season and the Project Applicant shall develop a plan to replace known nest trees at a ratio of 3:1. If replacement planting is implemented, monitoring shall be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for the mitigation shall be 65 percent survival of all replacement plantings. 3. In addition, the following mitigation measures shall be required to mitigate for the loss of raptor foraging habitat. The replacement ratios shall be consistent with the performance standards for Swainson's Hawk foraging habitat, identified in the CDFW staff report Regarding Mitigation for Impacts to Swainson's Hawk (*Buteo swainsoni*) in the Central Valley of California (1994): a. Construction activity, including vegetation removal, shall only occur outside the typical breeding season for raptors (September 16 to December 31), if nesting raptors are determined to be present. b. For projects within 1 mile of an active nest tree (the Swainson's Hawk Staff report defines an active nest tree as used during one or more of the last 5 years), the Project Applicant shall provide 1 acre of preserved Swainson's hawk foraging habitat for each acre of development authorized (1:1 ratio). c.For projects within 5 miles of an active nest tree, but greater than 1 mile from the nest tree, the Project Applicant shall provide 0.75 acre of preserved Swainson's hawk foraging habitat for each acre of development authorized (0.75:1 ratio). For projects within 10 miles of an active nest tree, but greater than 5 miles from the nest tree, the Project Applicant shall provide 0.5 acre of preserved Swainson's hawk foraging habitat for each acre of development authorized (0.5:1 ratio).	Submittal of documentation to verify that survey(s) have been conducted and other mitigation requirements were met	Prior to ground disturbing activities that occur between February 1 and August 31	City of American Canyon and/or CDFW, as necessary		

Mitigation lands shall be protected in perpetuity under a conservation easement and include an endowment fund for long-term resource management for raptor habitat. Preservation and management of Swainson's hawk foraging habitat under this criterion will also serve to mitigate the reduction of foraging habitat for golden eagle, white-tailed kite, and other grassland-associated raptors. The AC-1 proposed mitigation site for the California red-legged frog at the 321-acre Jaeger Conservation Area provides suitable foraging habitat mitigation (see Applicant Proposed Mitigation Area discussion above).					
Mitigation Measure 4.3-1l: ***Preconstruction Surveys for Burrowing Owls*****.** Burrowing owl Take Avoidance Surveys shall be conducted according to the methodologies and performance standards prescribed by the CDFW in the 2012 *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Take Avoidance Surveys shall be conducted 14 days prior or less to initiating ground disturbance. As burrowing owls may recolonize a site after only a few days, time lapses greater than 14 days between project activities require subsequent	Submittal of documentation to verify that survey(s) have been conducted	Prior to any ground disturbing activities; recurring for time lapses greater than	City of American Canyon and/or		

	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
a.	surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance to ensure absence. The following guidelines pertain to burrowing owl surveys:	and other mitigation requirements were met	14 days between project activities	CDFW, as necessary		
b.	Burrowing owl Take Avoidance Surveys shall be conducted by walking the entire WRSP site and (where possible) in accessible areas within 660 feet of the project disturbance footprint. The 660-foot buffer zone is surveyed to identify burrows and owls outside of the study area, which may be impacted by factors such as noise and vibration (heavy equipment) during project construction. Pedestrian survey transects shall be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines shall be 20 feet to 65 feet and shall be reduced to account for differences in terrain, vegetation density, and ground surface visibility. Poor weather may affect the surveyor's ability to detect burrowing owls thus, avoid conducting surveys when wind speed is greater than 20 kilometers per hour and there is precipitation or dense fog. To avoid impacts to owls from surveyors, owls and/or occupied burrows shall be avoided by a minimum of 160 feet wherever practical to avoid flushing owls from occupied burrows. Disturbance to occupied burrows shall be avoided during all seasons.					
c.	If burrowing owls are detected on the site, the following restricted activity dates and setback distances derived from the 2012 Staff Report on Burrowing Owl Mitigation (CDFW 2012), or as otherwise coordinated with the CDFW: o Occupied burrows shall not be disturbed during the nesting season, from February 1 through August 31;					
d.	o No disturbance shall occur within 50 meters (approximately 160 feet) of occupied burrows during October 16 through March 31 or within 200 meters (approximately 660 feet) April 1 through October 15; o No earth-moving activities or other disturbance shall occur within the aforementioned buffer zones of occupied burrows. These buffer zones shall be well-marked or fenced as well. If burrowing owls were found in the study area, a qualified biologist shall also delineate the extent of burrowing owl habitat on the site; and					

	○ Buffers may be modified by a qualified western burrowing owl biologist that is knowledgeable enough to establish buffer sizes that are commensurate with the acclimation of western burrowing owls to disturbance. These buffers if modified over that prescribed above, shall be coordinated with the CDFW. Finally, in accordance with the 2012 Staff Report, if burrowing owls were found nesting on site and must be passively removed in the non-nesting season (October 1 to February 1) to accommodate the project, suitable artificial burrows shall be established within appropriate habitat for western burrowing owls to minimize the potential for mortality of burrowing owls due to stress, lack of resources, or predation. The habitat enhancement plan shall be developed in coordination with the CDFW and the City of American Canyon. Information regarding the occurrence of burrowing owls at the WRSP site shall be reported to the CNDDB.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.3-1m: ***Preconstruction Surveys for Callippe Silverspot Butterfly Host Plant (Johnny Jump Up)*****.** Prior to construction a qualified botanist shall survey the off-site water improvement area (OSWA) for the host plant of the Callippe silverspot butterfly (Johnny jump up [*Viola pedunculata*]) during the plants blooming period of February to April in accordance with the performance standards provided in Mitigation Measures 4.3-1m through 4.3-1o. A qualified botanist is a person who has at least an undergraduate degree in entomology or a related field, has a minimum of 2 years' field experience, and is knowledgeable of identification of adult, egg, and larval life stages of butterflies. The botanist shall clearly demarcate the boundary of Johnny jump ups where this species occurs within the proposed OSWA on project plan maps. The Project Applicant shall avoid removal and disturbance to all identified Johnny jump ups and install orange construction fencing between any identified plant populations and construction activities to ensure that construction activities do not impact any host plants and/or life stages of the Callippe	Submittal of documentation to verify that survey(s) have been conducted and other mitigation requirements were met	Prior to construction activities in the offsite water improvement area that occur between February and April	City of American Canyon		

silverspot butterfly. If Johnny jump up plants are not identified within the OSWA or all identified Johnny jump up plants shall be avoided and protected from project disturbance, breeding Callippe silverspot butterflies will not be impacted, and further mitigation is not needed.					
Mitigation Measure 4.3-1n: *Presence Surveys for Callippe Silverspot Butterfly*. If Johnny jump ups are found in the area of disturbance and cannot be avoided, presence surveys for Callippe silverspot shall be conducted three times during the peak flight season in May and June the year prior to site disturbance by a qualified biologist. A qualified biologist is a person with at least an undergraduate degree in entomology or a related field with a minimum of 2 years' field experience and who is knowledgeable of identification of adult, egg, and larval life stages of butterflies. Walking transects spaced to allow 100 percent coverage of the off-site water improvement area (OSWA) area shall be conducted during the last week of May, second week of June, and last week of June. Surveys shall be conducted during times of warm, calm weather when butterflies are most active and shall not occur during precipitation, heavy fog, or wind speeds greater than 10 mph. If any life stage of Callippe silverspot butterfly is not identified during presence surveys, it is expected the survey area does not support breeding butterflies and Johnny jump up plants may be removed by hand from construction areas within the OSWA and further mitigation is not needed.	Submittal of documentation to verify that survey(s) have been conducted and other mitigation requirements were met	During May and June the year prior to any ground disturbing activities in the off-site water improvement area (if Johnny jump ups are found)	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.3-1o: *Protocols if Callippe Silverspot Butterflies Are Found*. If any life stage of Callippe silverspot butterfly is found during presence surveys, it is expected the survey area does support breeding butterflies. Prior to issuance of a grading permit, the Project Applicant shall submit written proof that the following measures were implemented: a. Information regarding the Callippe silverspot sightings shall be reported to the CNDDB. b. If federally listed species are present, consultation with the USFWS shall be required to determine the need for an incidental take permit and coordinate mitigation (see Item d, below). The applicant/entity constructing the facilities in the OSWA shall provide proof to the City prior to any ground disturbance that an incidental take permit has been obtained or written correspondence from the USFWS that no incidental take permit is required. c. If any individual Johnny jump up plant or population can be avoided during project implementation, it shall be clearly marked in the field by a qualified botanist and avoided during construction activities. Before ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to Callippe silverspot identification, this species' host plant presence and the importance of avoiding impacts to this species and its habitat. d. If occupied breeding habitat or nectar food sources for Callippe silverspot butterfly would be directly impacted by the project, a mitigation plan shall be developed by a qualified biologist in consultation with the USFWS prior to the start of local construction activities. The plan shall detail appropriate habitat replacement ratios, which shall be a minimum of 1:1 based on breeding habitat area and anticipated number of host plants and 3:1 for native nectar plants, location of the mitigation site, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures that shall be implemented if the initial mitigation fails. The mitigation site may be located on the WRSP site or in occupied habitat in proximity to the WRSP site. If on-site options are not available, off-site areas may be considered (e.g., Jaeger Conservation Area). The success criteria and monitoring requirements for Callippe silverspot butterfly mitigation areas shall be as described in Mitigation Measure 4.3-1b, Item c. The mitigation	Submittal of documentation to verify that survey(s) have been conducted and other mitigation requirements were met	Prior to issuance of grading permit for the off-site water improvement area	City of American Canyon		

plan shall include continuing presence surveys, seeding or plantings of Callippe silverspot host and nectar plants, and invasive plant species removal to enhance butterfly habitat. e. If mitigation is required for incidental take of Callippe silverspot butterflies or their habitat, the Project Applicant shall establish, maintain, and monitor the mitigation area identified in the plan for 5 years following the completion of construction and restoration activities. Monitoring reports shall be submitted to the USFWS at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, a site layout map, presence survey results, and justification for any deviations from the mitigation plan. f. In lieu of the above prescribed mitigation, requirements may be satisfied via the purchase of qualified mitigation credits or the preservation of off-site habitat in coordination with the USFWS, as appropriate.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.3-1p: ***Preconstruction Surveys and Avoidance Measures for the American Badger*****.** Performance standards for preconstruction surveys and avoidance measures for badger are: a. Preconstruction surveys shall be conducted for the American badger within 7 days prior to ground-disturbing activities in grassland habitats within the study area and off-site water improvement area (OSWA). Surveys shall be conducted by a qualified wildlife biologist with experience and knowledge in identifying badger burrows and include walking parallel transects looking for badger burrows and sign. Any badger burrows identified shall be mark and mapped on WRSP site maps. b. If active badger dens are identified within the study are or OSWA a no-work buffer of 200 feet shall be established around the den and associated occupied areas. If avoidance is not feasible, a biologist shall determine if the burrow is being used as an active maternity den through utilization of remote cameras. If young are determined to be present, the burrow shall be avoided until the young have vacated the burrow as determined by a qualified biologist. If the burrow is determined not to be an active maternity den and young are not present, in coordination with the CDFW (CDFW), a one-way eviction door shall be installed between September 1 and January 1 to passively relocate the badger and to avoid impacts during the breeding season. If the badger digs back into the burrow, CDFW staff may allow the use of live traps to relocate badgers to suitable habitat away from the area of project impact. c. If capture/active or passive relocation of American badgers is determined to be necessary in consultation with CDFW, the Applicant shall prepare a relocation plan for review and approval by CDFW and the City prior to any relocation. The Relocation Plan shall address measure to minimize potential for mortality due to stress, predation, or lack of available burrows. If active relocation is deemed appropriate and approved by CDFW, the relocation plan shall address the following protocols: 1. Individuals shall only be actively relocated into habitat that has a full complement of existing and/or expanded habitat features that are required for the species' life history (i.e., foraging habitat, burrows, aquatic habitat, etc.); 2. Finally, prevalence of disease or competition by non-native species shall be evaluated before animals are actively relocated; and	Submittal of documentation that surveys have been conducted, and burrows have been avoided, or badgers have been relocated in coordination with CDFW	Prior to ground disturbing activities in grassland habitats within the WRSP site and the off-site water improvement area	City of American Canyon and/or CDFW, as necessary		

3. Prevalence of disease or competition by non-native species shall be evaluated before animals are actively relocated.					
~~**Mitigation Measure 4.3-2a: *CDFW Streambed Alteration Agreement*.** The Project Applicant shall be required to obtain a Lake and Streambed Alteration Agreement (LSAA) from the California Department of Fish and Wildlife (CDFW). Subject to the final terms of the LSAA, the following performance standards shall be implemented:~~ • ~~Construction activities and equipment staging shall be designed to avoid and minimize direct and indirect impacts to wetlands and riparian habitat;~~ • ~~Construction occurring in the vicinity of riparian areas shall be delimited with a minimum 20-foot setback to avoid intrusion of construction activities into sensitive habitat;~~ • ~~Construction areas within 500 feet of riparian habitat shall be subject to best management practices under the General National Pollutant Discharge Elimination System Permit; and~~ • ~~To offset temporary and permanent impacts to riparian habitats, mitigation at a minimum ratio of 1:1 shall be provided, or as required by the LSAA.~~	~~Submittal of documentation, including copy of LSAA, verifying permit has been obtained and mitigation measures have been implemented~~	~~Prior to construction activities~~	~~City of American Canyon and CDFW~~		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.3-2b: *Protocol-Level Surveys*. Prior to issuance of a grading permit, the Project Applicant shall submit written proof that a qualified biologist conducted preconstruction CDFW protocol-level surveys during the appropriate blooming periods for occurrence of sensitive natural communities, especially purple needlegrass grasslands) within the footprint of the construction activities at the WRSP site, off-site water improvement area (OSWA), and other off-site project features. These surveys should be performed in compliance with the most recent CDFW survey protocol, currently 2018. If no sensitive vegetation communities are found during focused surveys of the project footprint, then sensitive vegetation communities would be assumed to be absent from OSWA. The botanist shall document the findings in a technical memorandum to the lead agency, as appropriate, and no further mitigation would be required. If sensitive vegetation communities are found	Submittal of documentation to verify that survey(s) have been conducted and other mitigation requirements were met	Prior to issuance of a grading permit for the off-site water improvement area	City of American Canyon and/or CDFW, as necessary		

within the footprint of the project activities during focused surveys, Mitigation Measure 4.3-2c shall be implemented.					
~~**Mitigation Measure 4.3-2c:** ***Measures to Implement if Sensitive Natural Vegetation Communities Are Found.*** If a sensitive vegetation community is found during focused surveys, prior to issuance of a grading permit, the Project Applicant shall submit written proof that the following measures were implemented in compliance with the following performance standards:~~ ~~a. Information regarding the sensitive vegetation community shall be reported to the CNDDB.~~ ~~b. If any sensitive vegetation community can be avoided during project implementation, it shall be clearly marked in the field by a qualified botanist and avoided during construction activities. Before ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to the community's presence and the importance of avoiding impacts to this sensitive vegetation community.~~ ~~c. If sensitive vegetation communities are present and cannot be avoided, consultations with the CDFW and/or the USFWS shall be required. A mitigation plan to compensate for the loss of the sensitive vegetation community could be required. This plan may be developed by a qualified botanist in consultation with the appropriate agencies prior to the start of local construction activities. The plan shall detail appropriate replacement ratios, which shall be a minimum of 1:1 based on area and number of plants and may be increased based on the recommendation of the botanist or the relevant resource agency to achieve no net loss of habitat. The plan shall describe the location of the mitigation site, methods for implementation (e.g., construction techniques, timing and sequencing, watering, soil properties, and other necessary specifications), success criteria (e.g., minimum 75 percent plant survival after 5 years, 75 percent vegetative cover by desirable species or comparable to existing conditions, and a viable, self-sustaining plant community), monitoring and reporting protocols, and contingency measures that shall be implemented if the initial mitigation fails. The mitigation plan may include the collection of seeds, propagules, and top soils under the supervision of a qualified botanist from the WRSP site for installation at the mitigation site. The mitigation site may be located on the WRSP site, such as within the pipeline disturbance corridor, or~~	~~Submittal of documentation to verify that survey(s) have been conducted and other mitigation requirements were met~~	~~Prior to issuance of a grading permit~~	~~City of American Canyon and/or CDFW, as necessary~~		

~~in close proximity to the WRSP site. If on-site options are not available, off-site areas may be considered. The mitigation plan shall be submitted to the City for approval prior to the issuance of permits that would affect the respective sensitive vegetation communities.~~ d. ~~If mitigation is required for loss of sensitive vegetation communities, the Project Applicant shall establish, maintain, and monitor the mitigation area identified in the plan for 5 years following the completion of construction and restoration activities. Annual monitoring reports shall be submitted to the City and the resource agencies at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, planting specifications, a site layout map, descriptions of materials used, and justification for any deviations from the mitigation plan.~~					

~~**Mitigation Measure 4.3-3a: *Wetlands and Other Waters Avoidance and Minimization Effects.*** Final project design shall avoid and minimize the fill of wetlands and other waters to the greatest practicable extent. Areas that are avoided shall be subject to best management practices under the National Pollutant Discharge Elimination System Permit Construction General Permit, as described in Mitigation Measure 4.7-1. To minimize indirect effects, the Project Applicant shall design and implement a wetland management plan and stormwater management system to maintain a minimum normal inflow equivalent (roughly equivalent to the 2-year storm event) to the into each avoided wetland system. Any stormwater from impervious surfaces shall be pretreated prior discharge into the avoided wetlands. The management plan shall include a minimum 5-year monitoring plan to document performance and conditions in the avoided wetlands. The minimum performance standard shall be no reduction in avoided wetland acreage. If the project fails to achieve performance standards, remedial actions to correct deficiencies shall be implemented and additional mitigation shall be provided to offset temporal losses. The Plan shall be developed in consultation with the U.S. Army Corps of Engineers and San Francisco Bay Regional Water Quality Control Board and approved by the City.~~	~~Preparation and implementation of a Wetland Management Plan and Stormwater Management System~~	~~Prior to construction activities in areas near wetlands and other waters~~	~~City of American Canyon, U.S. Army Corps of Engineers, and/or San Francisco Bay Regional Water Quality Control Board, as necessary~~		
Mitigation Measure 4.3-3b: *Invasive Species Management*. Where perennial or seasonal water features are maintained outside of the quarry pond, invasive species, such as non-native fish, bullfrogs, and plants, could cause significant adverse impacts to populations of special-status species utilizing adjacent habitats and downstream reaches. To reduce these potentially significant impacts, an invasive species management plan shall be developed for seasonal wetlands, ditches, and detention basins. This plan shall include intermittent surveys	Preparation and implementation of an Invasive Species Management Plan	Implementation of an Invasive Specific Management Plan	City of American Canyon		

for invasive species and potential actions to manage these species, such as draining basins or actively capturing bullfrogs. The plan shall also include adaptive measures to be implemented should the above actions fail to adequately manage bullfrogs and other non-native invasive species. Note: This mitigation measure does not apply to Quarry Pond, which cannot be effectively drained and cannot be effectively managed to remove invasive fish and bullfrogs without other potential significant effects.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
~~**Mitigation Measure 4.3-3c:** ***Mitigation for Wetlands and Other Waters.*** Where jurisdictional wetlands and other waters cannot be avoided, to offset temporary and permanent impacts that would occur as a result of the project, mitigation for preservation, restoration, and creation shall be provided through the following mechanisms and subject to the following performance standards:~~ 1. ~~Purchase or dedication of land to provide wetland preservation, restoration or creation. If restoration is available and feasible, then a ratio of at least 2:1 shall be used. Where practical and feasible, on-site mitigation shall be implemented whenever possible.~~ 2. ~~If on-site mitigation is used, a wetland mitigation and monitoring plan shall be developed by a qualified biologist in coordination with the California Department of Fish and Wildlife, U.S. Army Corps of Engineers, and/or Regional Water Quality Control Board that details mitigation and monitoring obligations for temporary and permanent impacts to wetlands and other waters as a result of construction activities. The plan shall quantify the total acreage lost to jurisdictional areas and describe mitigation ratios for lost habitat. The plan shall also include:~~ a. ~~Annual success criteria, including plant survivorship and vigor to be determined by counting individuals of each species and comparing the counts to the numbers originally planted for that species. A minimum survival rate of 75 percent of installed plants is required for all years including at least 2 years' post-irrigation;~~ b. ~~Means for controlling invasive species near plantings; and~~	~~Submittal of documents verifying restoration and compensatory mitigation has been implemented, if needed~~	~~Prior to construction activities in areas near wetlands and other waters~~	~~City of American Canyon, CDFW, U.S. Army Corps of Engineers, and/or San Francisco Regional Water quality Control Board, as necessary~~		

c. A description of mitigation areas and monitoring and reporting requirements. 3. The mitigation and monitoring plan shall be submitted to the appropriate regulatory agencies for approval. If monitoring suggests that the performance standards outlined above are not being met, corrective actions shall be implemented. Possible contingency measures include, but are not limited to: 4. Replanting of native trees and shrubs; 5. Adjusting the quantity and timing of irrigation to develop a schedule that better meets the characteristics of the site and the needs of the plants; 6. Installing additional protective wire cages around plants to minimize damage from wildlife or other sources; 7. Incorporating additional monitoring events in an attempt to address site deficiencies proactively; or 8. Adjusting the weed maintenance methods or schedule to address specific problems that arise.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
~~**Mitigation Measure 4.3-4:** ***Preconstruction Surveys for Bats.*** A qualified biologist shall conduct a passive habitat assessment for bat use and habitat a minimum of 6 months prior to project construction activities in known or potential bat roosting habitat in the ruins and trees in the WRSP area which shall conform to the performance standards below. If the habitat assessment reveals bat activity, then a qualified bat biologist shall conduct a presence absence survey during peak activity periods. Survey methods, timing, duration, and species shall be provided for review and approval by the lead agency prior to habitat disturbance. Human intrusion into an active roost could be damaging to a population, particularly during the maternity season, March 15 through September 15, when females are aggregated and rearing defenseless young. To reduce potentially significant impacts to sensitive bat species during surveys by the qualified biologist, the following shall be verified:~~ a. ~~Qualifications to determine adequate knowledge and experiences with the particular species for which they are surveying; and~~ b. ~~Demonstrable experience with bat surveys in specific roost types for project-specific conditions. Should bat species be confirmed on site either through the habitat assessment or during surveys, then at minimum the following shall be implemented:~~ a. ~~Species-specific avoidance methods to avoid disturbance;~~ b. ~~Evaluate the impact, including the length of time of disturbance, equipment noise, and the type of habitat present within the project footprint;~~ c. ~~Develop work windows for building demolition, tree trimming, or tree removal (typically August 31 through October 15 when young would be self-sufficiently volant and prior to hibernation and March 1 to April 15 to avoid hibernating or maternity colonies);~~ d. ~~Identify appropriate buffers outside of this work window;~~ e. ~~Outline specific timing of building demolition, renovation, or tree trimming or removal; and~~ f. ~~Incorporate and implement mitigation measures to offset any impacts to bat roosts on site through bat-friendly design and integrated bat roost construction. When designing new or renovated buildings, architects can include safe and attractive roosting opportunities for bats such as wall cavities in buildings. This includes the construction of~~	~~Submittal of documentation to verify that survey(s) have been conducted and other mitigation requirements were met~~	~~Within six month of the demolition of onsite structures~~	~~City of American Canyon~~		

~~connected bat boxes or design of other artificial bat roost habitat in remodeled structures (see Erickson et al. 2002) to enhance roosting opportunities on structures.~~					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.4: Cultural Resources					
Mitigation Measure 4.4-2: *Unanticipated Discovery of Archaeological Resources*. If prehistoric or historic-era archaeological resources are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the City of American Canyon. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. The Project Applicant shall retain a Secretary of the Interior-qualified archaeologist to inspect the findings within 24 hours of discovery and inform the City of American Canyon If it is determined that the project may damage a historical resource or a unique archaeological resource (as defined pursuant to CEQA and the CEQA Guidelines), construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared in accordance with PRC § 21083.2 and CEQA Guidelines § 15126.4; approved by the City; and implemented to the satisfaction of the archaeologist. In consultation with the City, the archaeologist shall determine when construction may commence. Consistent with § 15126.4(b)(3), the mitigation plan shall recommend preservation in place, as a preference, or, if preservation in place is not feasible, data recovery through excavation. If preservation in place is feasible, this may be accomplished through one of the following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before	Submit documentation of findings and mitigation plan, if resources are encountered	During grading activities	City of American Canyon		

building appropriate facilities on the resource site; or (4) deeding resource site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to recover the scientifically consequential information from and about the resource, which shall be reviewed and approved by the City prior to any excavation at the resource site. Treatment of archaeological resources shall follow the requirements of PRC § 21083.2. Treatment for most resources shall consist of (but would not necessarily be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.					
Mitigation Measure 4.4-3: *Unanticipated Discovery of Paleontological Resources*. If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the City of American Canyon. The Project Applicant shall retain a qualified paleontologist to inspect the findings within 24 hours of discovery. The paleontologist shall assess the nature and importance of the find and, if necessary, develop appropriate treatment measures in conformance with Society of Vertebrate Paleontology standards, and in consultation with the City of American Canyon. The Project Applicant shall implement the final treatment measures.	Submit documentation of findings and verification of treatment measures, if resources are encountered	During grading activities	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion

				Date	Initial
Mitigation Measure 4.4-4: *Unanticipated Discovery of Human Remains*. If human remains are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the City of American Canyon. The City shall contact the Napa County Coroner to affirmatively indicate to the City that no investigation of the cause of death is required. The Native American Heritage Commission (NAHC) shall be contacted within 24 hours if the Coroner determines that the remains are Native American. The NAHC shall then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC § 5097.98), who in turn shall make recommendations to the City of American Canyon for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines § 15064.5(d)).	Submit documentation of findings and treatment measures, if remains are encountered	During grading activities	City of American Canyon		
Section 4.5: Geology, Soils, and Seismicity					
~~**Mitigation Measure 4.5-4: *Geotechnical Requirements for the Quarry Pond*.** Prior to issuance of any building permits, the Project Applicant shall submit to the City plans that are consistent with the geotechnical recommendations of a minimum setback of 3:1 (horizontal:vertical) from the toe of the existing quarry pond bank. Any proposed plans inside of the 3:1 setback, shall be the subject of a detailed slope stability analysis by a current California registered Geotechnical Engineer or Engineering Geologist where proposed slopes must meet minimum factor of safety requirements as determined by the most recent California Building Code for both static and dynamic (earthquake) conditions. Graded cut-and-fill slopes over 15 feet shall be no steeper than 3:1 with slopes up to 15 feet no steeper than 2:1. Other measures, such as use of retaining walls and geogrid reinforcement or corrective grading, shall be implemented as necessary in accordance with the specific geotechnical recommendation informed by the aforementioned detailed slope stability analysis and outlined in the design level geotechnical report.~~	~~Submit grading plans for Quarry Lake Pond~~	~~Prior to issuance building permits~~	~~City of American Canyon~~		
Section 4.6: Hazards and Hazardous Materials					
~~**Mitigation Measure 4.6-1a: *Evaluation for Lead-Based Paint or Coatings, Asbestos-Containing Materials, or Polychlorinated Biphenyls*.** The Project Applicant shall submit documentation to the City to verify that all proposed areas for demolition or modification have been assessed by California state licensed contractors for the potential presence of~~	~~Submit documentation of findings~~	~~Prior to demolition activities~~	~~City of American Canyon~~		

~~lead-based paint or coatings, asbestos containing materials, and polychlorinated biphenyl-containing equipment prior to issuance of a demolition permit.~~					
Mitigation Measure 4.6-1b: ***Health and Safety Plan*****.** If the assessment required by Mitigation Measure 4.6-1a finds presence of lead-based paint, asbestos, and/or polychlorinated biphenyls, prior to any construction or demolition activities on the project site, the Project Applicant shall submit to the City for approval and shall implement a health and safety plan to protect workers from risks associated with hazardous materials during abatement, demolition or renovation of affected structures.	Submit and receive approval of Health and Safety Plan	Prior to demolition of structures containing lead-based paint, asbestos, and/or polychlorinated biphenyls	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
~~Mitigation Measure 4.6-1c: *Lead-Based Paint Removal Plan.*~~ ~~If the assessment required by Mitigation Measure 4.6-1a finds presence of lead-based paint, prior to any demolition of structures containing lead-based paint, the Project Applicant shall submit to the City for approval and shall implement a lead-based paint removal plan in accordance with City and California Code of Regulations Title 8, §§ 1532.1 et seq., requirements. The plan shall specify, but not be limited to, the following elements for implementation:~~ • ~~Develop a removal specification approved by a Certified Lead Project Designer;[3]~~ • ~~Ensure that all removal workers are properly trained;~~ • ~~Contain all work areas to prohibit off-site migration of paint chip debris;~~ • ~~Remove all peeling and stratified lead-based paint on building and non-building surfaces to the degree necessary to safely and properly complete demolition activities according to recommendations of the survey. The demolition contractor shall be responsible for the proper containment and disposal of intact lead-based paint on all equipment to be cut and/or removed during the demolition;~~ • ~~Provide on-site personnel and area air monitoring during all removal activities to ensure that workers and the environment are adequately protected by the control measures used;~~ • ~~Clean up and/or vacuum paint chips with a high efficiency particulate air (HEPA) filter;~~ • ~~Collect, segregate, and profile waste for disposal determination; or~~ • ~~Properly dispose of all waste.~~	~~Submit and receive approval of LeadBased Paint Removal Plan~~	~~Prior to demolition of structures containing leadbased paint~~	~~City of American Canyon~~		
~~Mitigation Measure 4.6-1d: *Asbestos Abatement.*~~ ~~If the assessment required by Mitigation Measure 4.6-1a finds asbestos, prior to undertaking demolition or construction activities involving asbestos disturbance, the Project Applicant shall, demonstrate to the City that asbestos abatement shall be conducted by a California state licensed contractor prior to building demolition. Abatement of known or suspected asbestos-containing materials shall occur prior to demolition or construction activities that would disturb those materials.~~	~~Submit documentation that abatement has been completed~~	~~Prior to demolition of structures containing asbestos~~	~~City of American Canyon~~		

[3] A Lead Project Designer is defined in CCR Title 17, Division 1, Chapter 8.

~~Pursuant to an asbestos abatement plan developed by a state-certified asbestos consultant and approved by the City, all asbestos-containing materials shall be removed and appropriately disposed of by a state certified asbestos contractor in accordance with Caltrans transportation requirements and any requirements of the receiving facility.~~					
~~**Mitigation Measure 4.6-1e:** ***Polychlorinated Biphenyl Abatement.*** If the assessment required by Mitigation Measure 4.6-1a finds polychlorinated biphenyls (PCBs), prior to undertaking demolition or construction activities that could disturb potential PCBs, the Project Applicant shall ensure that PCB abatement shall be conducted prior to building demolition or renovation. The Project Applicant shall demonstrate to the satisfaction of the City that PCBs shall be removed by a qualified contractor and transported in accordance with Caltrans requirements.~~	~~Submit documentation of PCB abatement~~	~~Prior to demolition of structures containing PCBs~~	~~City of American Canyon~~		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
~~**Mitigation Measure 4.6-2a:** ***Phase I Recommendations.*** Prior to commencement of construction, the Project Applicant shall contract a qualified environmental consulting firm with state registered professionals (Professional Engineers or Geologists) to carry out the recommendations contained in the April 14, 2015, Phase I Environmental Site Assessment report by ENGEO Incorporated pertaining to the potential environmental concerns. The Phase I report included recommendations for collection of surface soil samples for laboratory analysis and oversight of other earthwork activities. The findings of the soil sampling effort shall be submitted to the Napa County Environmental Health Division (NCEHD) prior to initiating any earthwork activities on the project site for direction on whether any further sampling or remediation may be necessary.~~	~~Submit documentation that recommendations of the Phase I Environmental Site Assessment have been implemented, as necessary~~	~~Prior to commencement of construction~~	~~City of American Canyon~~		
~~**Mitigation Measure 4.6-2b:** ***Soil Management Plan.*** The project shall submit and obtain approval of a Soil Management Plan from the Napa County Environmental Health Division (NCEHD) prior to initiating any earthwork activities on the project site. During construction, the contractor shall cease any earthwork activities upon discovery of any suspect soils or groundwater (e.g., petroleum odor and/or discoloration) during construction in accordance with a Soil Management Plan prepared for the project by a qualified environmental consultant and approved by the NCEHD. The contractor shall notify the NCEHD upon discovery of suspect soils or groundwater and retain a qualified environmental firm to collect soil samples to confirm the level of contamination that may be present. If contamination is found to be present, any further proposed groundbreaking activities within areas of identified or suspected contamination shall be conducted according to a site specific health and safety plan, prepared by a California state licensed professional. The contractor shall follow all procedural direction given by NCEHD and in accordance with the Soil Management Plan prepared for the site to ensure that suspect soils are isolated, protected from runoff, and disposed of in accordance with transportation laws and the requirements of the licensed receiving facility.~~	~~Submit NCEHD-approved Soil Management Plan and Health and Safety Plan, as necessary~~	~~Prior to grading and during construction~~	~~City of American Canyon and/or Napa County Environmental Health Division, as necessary~~		

Mitigation Measure 4.6-2c: ***Removal of Contaminated Soil or Groundwater*****.** If contaminated soil or groundwater is encountered and identified constituents exceed human health risk levels, the Project Applicant shall submit documentation to the City to verify that it has been delineated, removed, and disposed of off site in compliance with the receiving facilities' requirements prior to construction of any building foundation.	Submit documentation of removal of contaminated soil or groundwater, if encountered	Prior to construction of any building foundation	City of American Canyon		
Mitigation Measure 4.6-4: ***Development within 50 Feet of the Pacific Gas & Electric (PG&E) Pipeline/Easement*****.** Prior to issuance of building or grading permits, Project Applicant shall submit documentation to the City to verify that development plans located within 50 feet of the existing PG&E pipeline/easement, including utilities that may intersect the existing PG&E pipeline, have been submitted to PG&E Gas Transmission Integrity Management and PG&E Land Development for review and approval. Project Applicant plans for all proposed improvements located within this zone shall adhere to the requirements of PG&E Gas Transmission Integrity Management and PG&E Land Development, including without limitation, setback requirements, depth of cover over pipeline, location of trees and maintenance requirements, minimum separation of crossing utilities, trail location, as well as any relocation requirements, if applicable.	Submit development plans for any activities within 50 feet of the existing PG&E pipeline/easement	Prior to issuance of building or grading permits for any activities within 50 feet of the existing PG&E pipeline/easement.	City of American Canyon and/or PG&E, as necessary		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.7: Hydrology and Water Quality					
Mitigation Measure 4.7-1: *Stormwater Pollution Prevention Plan (SWPPP)*. Prior to issuance of grading permits for the project, the Project Applicant shall submit documentation to the City to verify that a Storm Water Pollution Prevention Plan (SWPPP) has been prepared in accordance with the requirements of the statewide National Pollutant Discharge Elimination System (NPDES) Construction General Permit. The SWPPP shall be designed, without limitation, to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled; (2) where not otherwise required to be under a Regional Water Quality Control Board permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site best management practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity; and (4) stabilization BMPs are installed to reduce or eliminate pollutants after construction is completed. The SWPPP shall be prepared by a qualified SWPPP developer and included as part of construction specifications. The SWPPP shall include the minimum BMPs required for the identified Risk Level in accordance with NPDES Construction General Permit requirements. BMPs could include, but are not necessarily limited to the use of straw bales, silt fences, fiber rolls, hydroseeding, preservation of existing vegetation, straw mulch, washing of truck tires prior to exiting site, protection of existing storm drain inlets, dedicated refueling areas with secondary containment, and on-site storage of spill prevention kits. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook-Construction or the Caltrans *Stormwater Quality Handbook Construction Site BMPs Manual*.	Submit Stormwater Pollution Prevention Plan	Prior to issuance of grading permits	City of American Canyon		

Mitigation Measure 4.7-2: *Water Discharge Requirements for Dewatering*. For areas that may encounter groundwater during excavation activities, the Project Applicant shall incorporate San Francisco Regional Water Quality Control Board (SFRWQCB) discharge requirements into construction specifications for any dewatering activities that may be necessary. The Project Applicant shall provide all requested plans and protocols and incorporate any SFRWQCB additional comments or requests into project specifications for construction activities. Dewatering plans shall include, without limitation, an assessment of water quality, protocols for containment, and thresholds for discharge. No discharge of pumped water for dewatering shall occur prior to approval from SFRWQCB.	Submittal of dewatering plans	During excavation and grading activities	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Mitigation Measure 4.7-3a: *Post-Construction Stormwater Controls*. Prior to approval of tentative maps or issuance of building permits for the project, the Project Applicant shall submit documentation to the City to verify that post-construction stormwater controls have been included in the site design in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase II Small Municipal Separate Storm Sewer Systems (MS4) Permit and the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual. The Project Applicant shall prepare the final Stormwater Control Plan (SCP) and any necessary changes by the City or the SFRWQCB shall be incorporated into project design plans to ensure the required controls are in place and adhere to the requirements of the NPDES Phase II Small MS4 Permit and consistent with the BASMAA manual. At a minimum, the SCP shall demonstrate how the following measures shall be incorporated into the project: • Low-impact development (LID) site design principles (e.g., preserving natural drainage channels, treating stormwater runoff at its source rather than in downstream centralized controls); • Source control best management practices (BMPs) in the form of design standards and structural features for all proposed areas of development; • Source control BMPs for landscaped areas shall be documented in the form of a Landscape Management Plan that relies on Integrated Pest Management and also includes pesticide and fertilizer application guidelines designed to minimize any off-site discharge; and • Treatment control measures (e.g., bioretention, porous pavement, vegetated swales) targeting any potential pollutants such as sediment, pathogens, metals, nutrients (nitrogen and phosphorus compounds), oxygen-demanding substances, organic compounds (e.g., PCBs, pesticides), oil and grease, and trash and debris. The SCP shall demonstrate that the project has the land area available to support the proposed BMP facilities sized per the required water quality design storm.	Submit documentation of compliance with the NPDES Phase II Small Municipal Separate Storm Sewer Systems Permit and the Bay Area Stormwater management Agencies Association Postconstruction Manual	Prior to approval of tentative maps or issuance of building permits	City of American Canyon		

Mitigation Measure 4.7-3b: *Compliance with the MS4 Permit*. Prior to issuance of any building permits, the Project Applicant shall submit documentation to the City to demonstrate adherence to Provision E.12.h of the Municipal Separate Storm Sewer Systems (MS4) Permit, which requires that an Operation and Maintenance Program is implemented for post-construction stormwater management features. Responsible parties and funding for long-term maintenance of all Best Management Practices (BMPs) must be specified within the Operation and Maintenance Plan. This Plan shall specify a regular inspection schedule of stormwater treatment facilities in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) MS4 Permit. Reports documenting inspections and any remedial action conducted shall be submitted regularly to the City for review and approval.	Submit documentation that an Operation and Maintenance Program has been implemented for post-construction stormwater management features	Prior to issuance of building permits	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.9: Noise					
Mitigation Measure 4.9-1: *Construction Noise*. To reduce the potential for noise impacts due to construction of the project, the Project Applicant shall require construction contractors to implement the following measures: • Stationary construction noise sources shall not be located within 200 feet of residence. If necessary to locate this equipment within 200 of existing residences, stationary equipment shall be shielded by temporary noise barriers or acoustic enclosures that are long and tall enough to break line of sight. • Noise barriers or shielding shall be erected for construction work associated with on-site construction activities that involves heavy construction equipment and occurs within 200 feet of residences for an extended period of time (i.e., more than 2 weeks). The barriers shall be long enough to break line of sight and at least 8 feet in height.	Submit documentation verifying implementation of mitigation implementation, including construction Noise Management Plan	During construction activities	City of American Canyon		

• Equipment warm up areas and equipment storage areas shall not be located closer than 500 feet of adjacent residences. • All heavy construction equipment and all stationary noise sources (such as diesel generators) shall have properly functioning manufacturer-installed mufflers. • Stationary noise sources, such as temporary generators and pumps, shall be positioned as far from nearby receivers as possible, within temporary enclosures and shielded by barriers (which could reduce construction noise by as much as 5 dB), or other measures, to the extent feasible. • Use "quiet" models of air compressors and other stationary equipment where such technology exists. ● Prohibit unnecessary idling of internal combustion engines. • To further reduce the potential for impacts, a Construction Noise Management Plan shall be prepared and shall include the following: ○ A process by which to provide a minimum of 2 weeks' advance notice to all residences located within 200 feet of construction activities that are expected to occur for a period of 2 weeks or longer within a defined area, including the approximate start and end dates of such activities. ○ Signs shall be posted at all project entrances upon commencement of construction for the purposes of informing all contractors/subcontractors, their employees, agents, material haulers, and all other persons at the project of the basic requirements of Mitigation Measure 4.9-1. ○ Publicly visible signs shall be posted on security fencing at multiple locations around the perimeter of the project construction boundary that include: ■ Permitted construction days and hours. ■ A telephone number and designated person to contact for registering noise complaints. The designated person shall be available to respond to, and if necessary through complaint verification, take corrective action to ensure that noise emissions from the offending equipment or activity is addressed. Corrective action shall be applied immediately if feasible, and within no later than 48 hours after receipt of the noise complaint. The designated person shall track complaints and corrective actions taken to resolve noise complaint issues.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Section 4.12: Transportation and Traffic					
~~**Mitigation Measure 4.12-3a (same as Mitigation Measure 4.2-2a in Section 4.2, *Air Quality and Greenhouse Gas Emissions*): *Transportation Demand Management (TDM) Program*.** Prior to issuance of the first building permit for the non-residential use areas (i.e., Napa Valley Ruins & Gardens [NVR&G] and hotel), the Project Applicant shall develop a TDM program for the non-residential use areas (i.e., NVR&G and hotel) and shall submit the TDM program to the City Department of Public Works for review and approval. The Project Applicant shall be responsible for funding and overseeing the delivery of trip reduction/TDM proposed programs and strategies, which may include, but are not limited to, the following:~~ 1. ~~Establishment of carpool, buspool, or vanpool programs;~~ 2. ~~Vanpool purchase incentives;~~ 3. ~~Cash allowances, passes or other public transit subsidies and purchase incentives;~~ 4. ~~Preferential parking locations for ridesharing vehicles;~~ 5. ~~Computerized commuter rideshare matching services;~~ 6. ~~Guaranteed ride-home program for ridesharing;~~ 7. ~~Bicycle programs including bike purchase incentives, storage, and maintenance programs;~~ 8. ~~On-site car share and bike share service;~~ 9. ~~Preparation of a Parking Management Plan to address parking accommodations for large events;~~ 10. ~~Designation of an on-site transportation coordinator for the project;~~ 11. ~~Transit and trip planning resources such as commute information kiosk;~~ 12. ~~Employer-provided showers, changing rooms, and clothing lockers for office employees that commute via active transportation;~~ 13. ~~Bicycle route mapping resources;~~ 14. ~~Participation in future citywide Transportation Management Association (TMA); and~~ 15. ~~Submit annual reports to the City regarding TDM activities.~~	~~Approval of TDM program~~	~~Prior to issuance of first building permit for the nonresidential use area (i.e., NVR&G and hotel)~~	~~City of American Canyon~~		

RESOLUTION NO. 2020-106

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON APPROVING THE MASTER CONDITIONS OF APPROVAL FOR AC-1 PORTION OF WATSON RANCH

WHEREAS, pursuant to Section 65300 of the State Planning and Zoning Law, the City of American Canyon (City) has adopted a General Plan to provide comprehensive long-range planning and a blueprint of the City's future form, including land use and circulation maps that specify the roadway network and the distribution of types and intensities of land; and

WHEREAS, the City of American Canyon General Plan land use and zoning designation for the property known as the Watson Ranch Specific Plan property is Town Center, which requires the approval of a specific plan to designate the land uses, range of residential and nonresidential densities and unified design standards within the Watson Ranch Specific Plan property; and

WHEREAS, on November 6, 2018, the City Council of the City of American Canyon adopted an Ordinance approving the Watson Ranch Specific Plan that provides for the development of the approximately 309-acre Watson Ranch Specific Plan site with a mixed use community component including a mixed use town center (NVRG), 1253 residential units, approximately 23 acres of improved parks, an additional 30 acres of parks, trails and open space, a 10 acre school site, roads and supporting water, wastewater, recycled water and storm drainage infrastructure; and

WHEREAS, on June 18, 2019, the City Council approved the Watson Ranch Specific Plan Development Agreement (Ordinance 2019-06, Agreement 2019-A107); and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), a final environmental impact report (Final EIR) was prepared for the Watson Ranch Specific Plan, and includes required Mitigation Measures; and

WHEREAS, on November 19, 2020, the City of American Canyon Planning Commission conducted a duly-noticed public hearing and unanimously recommended City Council approval of the Master Conditions of Approval for AC-1 Portion of Watson Ranch; and

WHEREAS, a duly-noticed public hearing was held by the City Council of the City of American Canyon on December 15, 2020 on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby approves the Master Conditions of Approval for AC-1 Portion of Watson Ranch as attached hereto as Exhibit A.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby makes the following findings consistent with the California Environmental Quality Act (CEQA).

SECTION 1: Findings Regarding Environmental Review pursuant to the California Environmental Quality Act (CEQA).

1. The City of American Canyon makes the following findings and determinations based on substantial evidence in the record as a whole pursuant to the California Environmental Quality Act (Pub. Res. Code §§ 21000 *et seq.*) and its Guidelines (California Code of Regulations, Title 14 §§ 15000, *et seq.*), as each is amended from time to time ("CEQA").

2. Pursuant to CEQA, an Environmental Impact Report was prepared, supplemented, and certified for the Watson Ranch Project ("Project EIR"). The Project EIR considered and analyzed the significant adverse environmental impacts of, related mitigation measures for, and reasonable alternatives to, the planning, development, construction, operation, and maintenance of the proposed uses of the Property implemented through the "Project Approvals" of the "Project," including without limitation, the General Plan Amendment, Watson Ranch Specific Plan (and related Zoning), Large Lot Vesting Tentative Map, and Development Agreement. In accordance with CEQA, City certified as legally adequate and complete the Project EIR, and approved the development allowed and approved by said existing and future Project Approvals contemplated by the Project EIR and the Development Agreement.

3. The proposed Master Conditions of Approval for AC-1 Portion of Watson Ranch is a contemplated "Project Approval" under the Project EIR and the Development Agreement. Under CEQA, a Specific Plan EIR, like the Watson Ranch Specific Plan Project EIR, is generally assumed to be used at a "development level." *See, e.g.,* CEQA Guidelines § 15168. Under controlling CEQA law, particularly CEQA Guidelines section 15162, the legal question is whether the Project EIR, itself, needs updating (through a Subsequent or Supplemental EIR) before the City can consider and approve the Master Conditions of Approval for AC-1 Portion of Watson Ranch, or whether the Project EIR provides the appropriate CEQA compliance work for the City's consideration and approval of the Master Conditions of Approval for AC-1 Portion of Watson Ranch. For the following reasons and findings, by law, no such Subsequent or Supplemental EIR can be required by the City, and the Project EIR provides the appropriate CEQA compliance work for the City's consideration and approval of the Master Conditions of Approval for AC-1 Portion of Watson Ranch.

   First, CEQA Guidelines section 15162 provides as follows [*City responses to the issues raised by Section 15162 are provided in bracketed, italicized text below*]:

   (a) When an EIR has been certified . . . for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

   (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; [*There is no substantial evidence in the light of the whole record revealing any changes proposed in the Project, let alone changes that will involve involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The Master Conditions of Approval for AC-1 Portion of Watson Ranch implement the Watson Ranch Specific Plan Project, and no new significant environmental effects or substantial increase in the severity of previously identified significant effects not already addressed by the Project EIR will result from that implementation.*]

   (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR . . . due to the involvement of

new significant environmental effects or a substantial increase in the severity of previously identified significant effects. [*There is no substantial evidence in the light of the whole record revealing circumstances under which the Project is undertaken which require major revisions to the Project EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects: the Master Conditions of Approval for AC-1 Portion of Watson Ranch are anticipated by, and are the implementation of, the Watson Ranch Specific Plan Project (and Project Approvals), and no new significant environmental effects or a substantial increase in the severity of previously identified significant effects not already addressed by the Project EIR will result from that implementation.*]; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following [*There is no substantial evidence in the light of the whole record revealing any such new information of any kind has been presented*]:

(A) The project will have one or more significant effects not discussed in the previous EIR . . . [*There is no substantial evidence in the light of the whole record revealing that the Master Conditions of Approval for AC-1 Portion of Watson Ranch will have one or more significant effects not discussed in the Project EIR: Instead, the Master Conditions of Approval for AC-1 Portion of Watson Ranch are anticipated by, and are the implementation of, the Watson Ranch Specific Plan Project as fully analyzed by the Project EIR*];

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR [*There is no substantial evidence in the light of the whole record revealing that the Master Conditions of Approval for AC-1 Portion of Watson Ranch will result in a situation where significant effects previously examined in the Project EIR will be substantially more severe than shown and discussed in the Project EIR: Instead, the Master Conditions of Approval for AC-1 Portion of Watson Ranch are anticipated by, and are the implementation of, the Watson Ranch Specific Plan Project as fully analyzed by the Project EIR*];

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative [*There is no substantial evidence in the light of the whole record supporting a determination that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the project proponents decline to adopt the mitigation measure or alternative.*]; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. [*There is no substantial evidence in the light of the whole record supporting a determination that mitigation measures or alternatives which are considerably different from those analyzed in the Project EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. No such mitigation measure nor alternatives have been proposed,*

nor are warranted, and no rejection of such mitigation measure or alternative by the project applicant has taken place.]

Because there is no substantial evidence in the record to support any of the findings set forth in CEQA Guidelines section 15162, as a matter of law, no additional CEQA work can be required by the City relating to the City's consideration and approval of the Master Conditions of Approval for AC-1 Portion of Watson Ranch.

Second, similar to CEQA Guidelines section 15162, CEQA Guidelines section 15163 provides that a public agency may choose to prepare a "Supplement" to an EIR - rather than a "Subsequent" EIR - only if (1) any of the findings described in Section 15162 (above) would require the preparation of a Subsequent EIR, yet (2) only minor additions or changes would be necessary to make the Project EIR adequately apply to the changed situation. As stated above, because there is no substantial evidence in the record to support any of the findings set forth in CEQA Guidelines section 15162, then, as a matter of law, no finding can be made under CEQA Guidelines section 15163. Therefore, no additional CEQA work for the Master Conditions of Approval for AC-1 Portion of Watson Ranch can be required by the City.

Third; and lastly, under the Development Agreement, "to the extent permitted or required by CEQA, City shall use . . . existing environmental assessments, declarations, reports and studies as adequately addressing the environmental impacts of the Project and its Subsequent Approvals without requiring new or supplemental environmental documentation." Development Agreement § 2.04(k). Because CEQA prohibits the City from requiring additional CEQA compliance work for the Master Conditions of Approval for AC-1 Portion of Watson Ranch approvals, for the reasons discussed above, the Development Agreement likewise enforces that CEQA requirement and prohibits additional "new or supplemental environmental documentation." Development Agreement § 2.04(k).

Therefore, the City finds and determines that the Project EIR provides the appropriate CEQA compliance documentation for the City's consideration and approval of the proposed Master Conditions of Approval for AC-1 Portion of Watson Ranch.

PASSED, APPROVED and **ADOPTED** at a regularly scheduled meeting of the City Council of the City of American Canyon held on the 15th day of December, 2020, by the following vote:

AYES:	Council Members Aboudamous, Joseph, Washington, Vice Mayor Oro, Mayor Garcia
NOES:	None
ABSTAIN:	None
ABSENT:	None

Leon Garcia

Leon Garcia, Mayor

ATTEST:

Cherri Walton, Interim City Clerk

APPROVED AS TO FORM:

William D. Ross, City Attorney

EXHIBITS:

A. Master Conditions of Approval for AC-1 Portion of Watson Ranch

MASTER CONDITIONS OF APPROVAL
FOR AC-1 PORTION OF WATSON RANCH

A. MASTER CONDITIONS - GENERALLY

Master COA #	*Developer Obligations*	*Mechanism*	*Implementation; Parcel #*	*Status*
1. .	These Master Conditions of Approval ("Master Conditions") adopted by the City of American Canyon ("City") relate only to the American Canyon I, LLC portion of the City's Watson Ranch project ("Project"). American Canyon I, LLC shall also be referred to herein as "AC-1," "Master Developer," "Developer," and/or "Applicant," and shall include successors, as explained and controlled by the Development Agreement between the City and AC-1 ("Development Agreement"). Unless otherwise defined in these Master Conditions, terms and phrases used in these Master Conditions shall have that meaning set forth in the Development Agreement. The Development Agreement, as amended over time, shall control over these Master Conditions and any subsequent "Specific Conditions," as described herein. These Master Conditions provide certain provisions of the Development Agreement. However, regardless of whether present or not in these Master Conditions, the entire Development Agreement, as amended over time, shall apply to, and control over, these Master Conditions.	Relevant Subsequent Approvals	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable or Satisfied
2.	The Project's "Large Lot Vesting Tentative Map" was approved and later recorded as the "Large Lot Final Map," producing twenty four (24) lots/parcels ("Large Lot Parcels"). Each of those Large Lot Parcels will be further subdivided over time creating additional lots/parcels. These Master Conditions apply to the Project, the large Lot Parcels, and all such subsequent subdivision map approvals. The idea behind these Master Conditions is to establish a consistent set of "rules" (Conditions of Approval) that can be used throughout the implementation of the Project, thereby ensuring certainty and efficiency.	Relevant Subsequent Approvals	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
3.	These Master Conditions also express certain requirements from the Watson Ranch Specific Plan.	Relevant Subsequent Approvals	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
4.	These Master Conditions also contain the relevant Mitigation Measures relating to the Project, including without limitation, the EIR's Mitigation Monitoring and Reporting Program, as clarified, updated and refined by these Master Conditions to reflect implementation progress.	Relevant Subsequent Approvals	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
5.	These Master Conditions also contain requirements from the City's standard Subdivision Improvement Agreement ("SIA") in order to streamline the future SIA process. Subsequent subdividing of the Project will involve SIAs, which SIAs will employ these Master Conditions.	SIA	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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6.	In addition to these Master Conditions, "Specific Conditions of Approval" (also referred to as "Specific Conditions) resulting from the subsequent subdivision map approvals, Design Permit/Guidelines approvals, and/or other development approvals may be drafted and imposed on a Large Lot Parcel's subsequent development. Such Specific Conditions may stand alone and be imposed in addition to these Master Conditions, and/or may be added to these Master Conditions over time. Any and all such Specific Conditions shall be subject to and controlled by these Master Conditions, which Master Conditions shall be be subject to, and controlled by, the Development Agreement. If a conflict arises between these Master Conditions, and/or any Specific Conditions and the express and/or implied provisions of the Development Agreement, as amended over time, the Development Agreement shall control. Where possible, these Master Conditions describe the "Mechanism" for satisfying the Master Condition (for example, subdivision map approval, adopted Design Guidelines, etc.), the "Implementation" timing of the Master Condition (for example, Building Permit issuance), and the "Status" of such Master Condition performance (whether the requirement is still "Applicable, whether it has been "Completed," etc.). Additionally, through subsequent "mapping" of a particular Large Lot Parcel pursuant to the Subdivision Map Act, listed Master Conditions applicable to that Parcel may be further organized into relevant Phases (phased final maps) of that Parcel, if applicable. As used in these Master Conditions, a reference to "All" or "All Parcels" shall mean that the Master Condition is setting a general rule that applies to the development of any and all Large Lot Parcels. When these Master Conditions provide that the Master Condition in question shall apply to "Applicable Parcels," that means that each Parcel over which the Master Backbone Infrastructure (MBI) in question lies and/or abuts (and therefore the Parcel is responsible for the "Parcel's MBI Portion") is one of the "Applicable Parcels."	Relevant Subsequent Approvals	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
7.	As used in these Master Conditions, the following definitions shall apply. "SIA" shall mean the relevant/applicable "Subdivision Improvement Agreement." "Major Backbone Infrastructure" work or "MBI" shall have that meaning provided by the Development Agreement. "Public Improvements" work shall mean infrastructure improvements to be constructed by Developer, and then dedicated to, accepted by, and opertated and maintained by, City. "Private Improvements" shall mean infrastructure improvements that shall be constructed by Developer and not be dedicated to, accepted by, and opertated and maintained by, City. "Improvement Plans" shall mean those improvement plans and specifications relating to MBI, Public Improvements, and/or Private Improvements. Developer shall obtain City approval of all Improvement Plans for the relevant MBI, Public Improvements, and/or Private Improvements work. All work on the relevant MBI, Public Improvements, and/or Private Improvements shall be performed by Developer at the places, at the grades, with the materials, and in the manner as shown on the City-approved Improvement Plans. Additionally, the phrase: "Pre-Final Map, Final Map Recordation, Grading Permit, Construction Permit, Building Permit, Occupancy Permit" shall mean that the timing of performance of the particular Master Condition will be satisfied at one of those performance events, as will be determined by the Subsequent Approval.	Relevant Subsequent Approvals	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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8.	Unless otherwise set forth in these Master Conditions, or unless otherwise agreed to by City and Developer, each Parcel shall be responsible for the entirety of the design and construction of the "Master Backbone Infrastructure" (also "MBI") of the Public Improvement for the geographic distance of the Parcel's entire frontage on such MBI, and/or the entire geographic distance that such MBI traverses such Parcel ("Parcel's MBI Portion"). For example, if the MBI in question is Rio Del Mar, then the Parcel in question shall be responsible for the design and construction of all of that portion of Rio Del Mar that traverses and/or abuts such Parcel, i.e., the "Parcel's MBI Portion." Such Parcel MBI Portion design and construction shall be to the "ultimate design" of the MBI in question, including without limitation, ultimate width, depth, curb, gutter, sidewalk, street lighting, landscaping, etc. City, Developer, and the owner/builder of the relevant Parcel (if different than Developer) may by mutual agreement refine the requirements of this Master Condition. Therefore, if the Master Conditions provide that the Master Condition in question shall apply to "Applicable Parcels," that means that each Parcel over which the MBI in question lies and/or abuts (and therefore the Parcel is responsible for the "Parcel's MBI Portion") is one of the "Applicable Parcels." If the MBI in question traverse and/or abuts more than one Parcel, then the responsibility of each such Parcels shall be determined ("Proportional Share") and the first Parcel (of such Parcels) to develop shall be responsible for the design and construction of all of that portion of MBI and that traverses and/or abuts such first Parcel (i.e., the "Parcel's MBI Portion") and such first Parcel shall have the right to secure a Reimbursement Agreement from the City so that such first Parcel is reimbursed by such other Parcels for such other Parcels' Proportional Share at such time when such other Parcel(s) would have otherwise been responsible to provide such MBI, or at such other time/or by such means as is mutually agreed to by City and Developer.	Applicable Parcels Parcel's MBI Portion Reimburse	Pre-Final Map, final map recordation, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
9.	When Parcel-necessary infrastructure has not yet been brought to the physical (geographic) location of the Parcel in question to be developed (the "Relevant Parcel"), then the development of such Relevant Parcel shall require (unless otherwise agreed between City and Developer) that such Relevant Parcel shall provide and construct all of the MBI otherwise required of other Parcels (the Parcel MBI Portion of all such other Large Lot Parcels) over which the MBI is needed to traverse and/or abut in order to access the Relevant Parcel and bring and provide such Parcel-necessary infrastructure to the Relevant Parcel. In such a case, the Relevant Parcel shall have the right to secure a Reimbursement Agreement from the City so that the costs of such additional provision and construction by the Relevant Parcel of the MBI otherwise required of such other Parcels is reimbursed to the Relevant Parcel at such time as such other Parcel(s) would have otherwise been responsible to provide such infrastructure, or at such other time/or by such means as is mutually agreed to by City and Master Developer.	Relevant Parcels Parcel's MBI Portion Reimburse	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
10.	When a Large Lot Parcel is further subdivided, it shall have its own separate SIA and attached Exhibit(s) containing relevant Master Conditions and any other Specific Conditions, as described herein.	SIA	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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11.	These Master Conditions apply to Developer, and Developer's successors, as more specifically set forth in the Development Agreement, as amended over time.	Relevant Subsequent Approvals	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

B. MASTER CONDITIONS - SPECIFIC PLAN

Master COA #	*Developer Obligations*	*Mechanism*	*Implementation; Parcel #*	*Status*
12.	PHASING OF PRIVATE DEVELOPMENT NVR&G is a development priority in the Specific Plan. Development of the NVR&G may commence pursuant to the phasing plan as part of phase 1. If not initiated during phase 1 of the residential development, the NVR&G must commence development in conjunction with the start of phase 2 of the residential development. Developer shall have the right to commence development of any portion of the NVR&G at any time provided necessary MBI and other Public Improvements are constructed and operational before or at the time of occupancy of such portion of the NVR&G.	Relevant Subsequent Approvals	Relevant Parcel	Applicable

C. MASTER CONDITIONS – DEVELOPMENT AGREEMENT

Master COA #	*Section and Page*	*Developer Obligations*	*Mechanism*	*Implement.*	*Status*
13.		The entire Development Agreement, as amended, shall apply. Any reference in these Master Conditions to "Development Agreement" shall mean the Development Agreement by and between AC-1 and City, as amended over time. The following Master Conditions provide certain terms and conditions set forth in the Development Agreement, and shall automatically be amended as the Development Agreement is amended over time. Not all Development Agreement terms and conditions are set forth below; however, all terms and conditions of the Development Agreement, as amended over time, shall nonetheless apply to the Project, the Project Approvals, these Master Conditions, and any Specific Conditions, regardless of whether or not set forth herein.	Relevant Subsequent Approvals	Pre-Final Map, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
14.	§§ 2.06 through 2.07 Page 32	As more particularly described in the Development Agreement, if chosen by Master Developer in its sole and exclusive discretion, Master Developer shall be responsible for the design and construction of the "Phase 1 Newell Drive Initial Access." The Phase 1 Newell Drive Initial Access shall begin (commence) from the existing terminus of Newell Drive,	Relevant Subsequent Approvals Certain proceeds	As set forth in Development Agreement (e.g., Pre-Final Map,	Applicable

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		northward to the intersection of Newell Drive and Rio Del Mar then westward on Rio Del Mar to the intersection of Rio Del Mar and Loop Road, then northward on Loop Road to include "Loop Road Segment 1," as that term is defined in Section 2.07 of the Development Agreement, and as shown on *Exhibit B* to the Development Agreement, and *Exhibit A* to these Master Conditions.	from State of California will help fund portions of the Newell Drive Initial Access	SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit)	
15.	§ 2.06(c)(1) Page 32	As more particularly described in the Development Agreement, if chosen by Master Developer in its sole and exclusive discretion, Master Developer shall be responsible for the design and construction of the "Phase 2 Newell Drive Initial Access." The Phase 2 Newell Drive Initial Access shall include the extension of Rolling Hills Drive from the Phase 1 terminus of Rolling Hills Drive northward to the intersection of Rolling Hills Drive and Rio Del Mar, and the extension of Loop Road from the Phase 1 terminus of Loop Road, to the northward edge of Loop Road Segment 2, as both are shown on *Exhibit B* to the Development Agreement, and *Exhibit A* to these Master Conditions.	Applicable Parcels	As set forth in Development Agreement	Applicable
16.	§ 2.06(c)(1) Page 32	As more particularly described in the Development Agreement, before the 743rd building permit for a residential structure on the Project can be issued by the City, Developer, at Developer's sole and exclusive discretion, shall construct one of the following roadway improvements (all shown on *Exhibit B* to the Development Agreement and *Exhibit A* to these Master Conditions.): A. Commencing from the intersection of Loop Road and Rio Del Mar westward on Rio Del Mar to the intersection of Rio Del Mar and SR 29, as shown on Exhibit B to the Development Agreement. B. Commencing from the intersection of Loop Road and Rio Del Mar westward on Rio Del Mar, then southward as Rio Del Mar becomes South Napa Junction, to the intersection of South Napa Junction and SR 29, as shown on *Exhibit B* to the Development Agreement, and *Exhibit A* to these Master Conditions. Any and all affordable residential housing units built in the Watson Ranch Specific Plan shall be exempt from, and therefore shall not be included, in determining the 743 residential housing unit count or any other residential unit cap.	Applicable Parcels	As set forth in Development Agreement	Applicable
17.	§ 2.07(a) Page 34	Developer shall not be responsible for any fees and costs related to the City Attorney, and/or any City Special Legal Counsel regarding any railroad crosswsing, roadway, and/or other MBI.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit,	Applicable

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				Construction Permit, Building Permit, Occupancy Permit	
18.	§ 2.07(c)(1) Page 34	At the time of Building Permit issuance for a "Model Plan Review" (model home plan review) residential unit, Developer shall pay to City Processing Fees in the amount designated for that size/type of model home residential unit set forth in *Exhibit C* to the Development Agreement. Said amount of Processing Fees shall be considered to be in Calendar Year 2019 dollars, and, commencing in 2020, that amount shall be increased each year by the relevant year's percentage amount set forth in the Construction Cost Index for the San Francisco Region.	Applicable Parcels	Building Permit	Applicable
19.	§ 2.07(c)(2) Page 34	At the time of Building Permit issuance for an "After Model Plan Review" residential unit, Developer shall pay to City Processing Fees in the amount designated for that size/type of After Model Plan Review residential unit set forth in Exhibit C to the Development Agreement. Said amount of Processing Fees shall be considered to be in Calendar Year 2019 dollars, and, commencing in 2020, that amount shall be increased each year by the relevant year's percentage amount set forth in the Construction Cost Index for the San Francisco Region.	Applicable Parcels	Building Permit	Applicable
20.	§ 2.07(c) Page 34	Processing of project approvals shall be performed pursuant to the Development Agreement.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
21.	§ 2.07(c)(3) Pages 34-35	Developer shall pay, one or some combination of the following options, in Developer's sole and exclusive discretion: A. To City, those Processing Fees that at the time Processing Fees are due to City reflects the amount that City actually expends to provide such processing services, which City actual expenditures shall not include any administrative fees, charges, and/or assessments; and/or B. To a third-party consultant ("Processing Consultant") acceptable to City and contracted directly with Developer the amount that the Processing Consultant and Developer contract for such processing services. Should	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		Developer desire to contract with a particular Processing Consultant, prior to entering into such contract, Developer shall provide written notice to City at least thirty (30) days prior to Developer entering into such Processing Consultant contract (the "30-day period"), which notice to City shall address such intended contract, including without limitation, naming the intended Processing Consultant. Within thirty (30) days of receipt of such notice from Developer, City shall indicate its consent or objections, in writing. If City fails to raise objection to Developer within such 30-day period, City consent shall be deemed provided. If City raises objection to such Developer-noticed Processing Consultant within said 30-day period, then the Resolution Process set forth in the Development Agreement shall apply. City and Developer shall maintain and update a list of Processing Consultants acceptable to City. And/or, C. To a Processing Consultant acceptable to City and contracted directly with Developer and City (a three-party agreement) the amount that the Processing Consultant and Developer contract for such processing services. Again, City and Developer shall maintain and update a list of Processing Consultants acceptable to City.			
22.	§ 2.07(d) Pages 35-36	In Developer's sole and exclusive discretion, Developer shall pay Inspection Fees for residential development, MBI, in-tract infrastructure, NVRG and Hotel, and/or any other Project construction requiring inspection, in either or some combination of the following options: 1. To City, those Inspection Fees that at the time Inspection Fees are due to City reflects the amount that City actually expends to provide such inspection services, which City actual expenditures shall not include any administrative fees, charges, and/or assessments; and/or; 2. To a third-party consultant acceptable to City and contracted directly with Developer ("Inspection Consultant") the amount that the Inspection Consultant and Developer contract for such inspection services. Should Developer desire to contract with a particular Inspection Consultant, prior to entering into such contract, Developer shall provide written notice to City at least thirty (30) days prior to Developer entering into such Inspection Consultant contract (the "30-day period"), which notice to City shall address such intended contract, including without limitation, naming the intended Inspection Consultant. Within thirty (30) days of receipt of such notice from Developer, City shall indicate its consent or objections, in writing. If City fails to raise objection to Developer within such 30-day period, City consent shall be deemed provided. If City raises objection to	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		such Developer-noticed Inspection Consultant within said 30-day period, then the Resolution Process set forth in the Development Agreement shall apply. City and Developer shall maintain and update a list of Inspection Consultants acceptable to City. And/or, 3. To an Inspection Consultant acceptable to City and contracted directly with Developer and City (a three-party agreement) the amount that the Inspection Consultant and Developer contract for such inspection services. Again, City and Developer shall maintain and update a list of Inspection Consultants acceptable to City.			
23.	§ 2.07(f) Page 37	During the Term of the Development Agreement, Developer shall not pay any past, current and/or future City development fees, impact fees, mitigation fees and/or any and all other impact fees imposed on development in the City in any and all categories (collectively, "City Impact Fees"). Such City Impact Fees that Developer shall not pay during the Term of the Agreement include, without limitation, Civic Facility Fees, Wastewater Capacity Fees, Water Capacity Fees, Traffic Impact Fees, Parks & Recreation Fees, and/or General Plan Update Fees, and any other present or future City Impact Fee imposed on development to mitigate Project impacts and provide funding for public infrastructure, services and/or facilities.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
24.	§ 2.07(h)(1)(D) Page 39	Developer shall improve and construct the relevant portions of Newell Drive, including and excluding, as follows: Newell Drive Segment 1, with the exception that the portion of such Newell Drive Segment 1 improvements located on the Newell Property that Developer shall improve and construct shall be limited to one-half (1/2) width of a typical roadway section (as shown in the Specific Plan), which provides for a single travel lane in each direction.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
25.	§ 2.07(h)(1)(E) Page 39	Developer's commencement of Watson Ranch Specific Plan's Phase 4 of residential development shall be conditioned upon Developer's commencement of "Developer's Newell Drive Obligations," provided the relative/relevant "City Precursors" (prerequisites) to each such Developer's Newell Drive Obligations have been satisfied by City, all as provided in the Development Agreement.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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26.	§ 2.07(h)(1)(E) Page 40	If at Developer's planned commencement of Watson Ranch Specific Plan's Phase 4 of residential development, the City Precursors are not fully satisfied and in place, then Developer may commence development of the Watson Ranch Specific Plan's Phase 4 of residential development and shall no longer be responsible for Developer's Newell Drive Obligation. The status of the City Precursors shall be addressed in the Annual Review of the Development Agreement in order to keep the Parties apprised of status.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
27.	§ 2.07(h)(2) Page 40	Regarding Rio Del Mar With an At-Grade Railroad Crossing. A railroad crossing at Rio Del Mar is anticipated for the Project by the General Plan and Specific Plan. The Parties generally desire that the railroad crossing at Rio Del Mar be an "at-grade" crossing. However, the Parties also recognize that time, money, and the authority of others, including without limitation governmental agencies such as the California Public Utilities Commission ("PUC"), have influence and authority over such at-grade crossing options. Further, the Parties recognize that time savings, certain Developer financial obligation reductions, and other factors may make a grade-separated crossing at Rio Del Mar more attractive and achievable. Lastly, the Parties recognize that should an at-grade or grade-separated railroad crossing at Rio Del Mar prove unsuccessful, there exists a private at-grade railroad crossing at South Napa Junction that is the subject of a previous settlement agreement. Therefore, which railroad crossing to pursue will be an evolving analysis by the Parties as they work through the many issues. At any time period during which an at-grade railroad crossing is being pursued, Developer, exercising its sole and exclusive discretion, shall have the right to assert to City that such an at-grade application should be abandoned and/or otherwise put aside and that a grade-separated railroad crossing at Rio Del Mar shall be pursued. If such an assertion is made, then such at-grade application will be abandoned and/or otherwise put aside and a grade-separated railroad crossing at Rio Del Mar shall be pursued by the Parties.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
28.	§ 2.07(h)(2)(C) Pages 42-43	When Developer or City is required by the Development Agreement (below) to construct (or cause the financing and/or construction of) At-Grade Rio Del Mar improvements, such improvements shall be constructed and improved at such time as set forth in the Project s relevant subdivision map approval. That being stated, general construction and improvement obligations regarding At-Grade Rio Del Mar are as follows: i. Developer shall be responsible for the construction and improvement of At-Grade Rio Del Mar Segment	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit,	Applicable

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		1 at such time as set forth in the Project's relevant subdivision map approval, provided that Developer shall be reimbursed by City for Developer's full costs related to such construction and improvement of such At-Grade Rio Del Mar Segment 1, and provided that such full reimbursement by City to Developer shall occur the earlier of the following events: Within thirty (30) days of the date of the recording of any final subdivision map regarding the "Adobe Property," or within thirty (30) days of the date of the City's issuance of any Building Permit regarding the Adobe Property. For the purposes of the Development Agreement, the "Adobe Property" shall mean that property depicted on *Exhibit A* to the Development Agreement. Further, for the purposes of the Development Agreement, Developer's full costs (including without limitation, a reasonable construction management fee in an amount consistent with practices within the trades for such roadway construction, and every other task required) related to such construction and improvement of such At-Gracie Rio Del Mar Segment l shall be referred to as "Developer's At-Grade Rio Del Mar Segment 1 Costs"; ii. Developer shall be responsible for the construction and improvement of At-Grade Rio Del Mar Segment 2 at such time as set forth in the Project's relevant subdivision map approval, provided that Developer shall be reimbursed by City for Developer's full costs related to such construction and improvement of such At-Grade Rio Del Mar Segment 2, with such reimbursement being a priority, and coming from funds City secures through City's imposition on other development in the City some form of fees, charges, assessments and/or other means, and further provided that such City reimbursement obligation to Developer shall continue until such time as-Developer is fully so reimbursed, or the Development Agreement's Term concludes, whichever occurs first. For the purposes of the Development Agreement, Developer's full costs related to such construction and improvement of such At-Grade Rio Del Mar Segment 2 shall be referred to as "Developer's At-Grade Rio Del Mar Segment 2 Costs"; iii. The details of the "At-Grade Rio Del Mar Railroad Crossing Segment" are addressed in subdivision		Occupancy Permit	

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		(h)(4) of the Section 2.07 of the Development Agreement; iv. Developer shall be responsible for the construction and improvement of At-Grade Rio Del Mar Segment 3 at such time as set forth in the Project's relevant subdivision map approval; v. Developer shall be responsible for the construction and improvement of At-Grade Rio Del Mar Segment 4 at such time as set forth in the Project's relevant subdivision map approval; and, vi. Developer shall be responsible for the construction and improvement of At-Grade Rio Del Mar Segment 5 at such time as set forth in the Project's relevant subdivision map approval.			
29.	§ 2.07(h)(3)(B) Pages 44-45	It is understood by the Parties that all such right-of-way dedications shall reflect the right-of-way requirements of the General Plan and Specific Plan, and that if City is responsible for securing the dedication, that City shall secure the dedication at City's sole cost and expense and at such time as the Parties agree is necessary to ensure the absence of Developer construction delay on the Rio Del Mar Improvements. City shall coordinate the acquisition of right-of-way from the relevant property owner, with the goal being the full dedication of Grade-Separated Segment A and Grade-Separated Segment B, and Grade-Separated E at no cost to the Parties. The Parties recognize that if eminent domain or other City actions are necessary to acquire the right-of-way from the relevant property owner(s) needed for the construction of Grade-Separated Segment A, Grade-Separated Segment B, and Grade-Separated E, delays may occur and shall be allowed. Should eminent domain be required, acquisition shall be by, and at the sole and exclusive cost and expense of, City. Regarding the dedication of the relevant Segments of Grade-Separated Rio Del Mar, the following shall apply: i. City shall secure the dedication of Grade-Separated Rio Del Mar Segment A; ii. City shall secure the dedication of Grade-Separated Rio Del Mar Segment B; iii. The details of the "Grade-Separated Rio Del Mar Railroad Crossing Segment" are addressed below in subdivision (h)(4) of the Section 2.07 of the Development Agreement;	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		iv. Developer shall dedicate to City, upon the Project's first recorded subdivision map (e.g., the final map relating to the Large Lot Vesting Tentative Map), Grade-Separated Rio Del Mar Segment C; v. Developer shall dedicate to City, upon the Project's first recorded subdivision map (e.g., the final map relating to the Large Lot Vesting Tentative Map), Grade-Separated Rio Del Mar Segment D; and vi. City secured the dedication of Grade-Separated Rio Del Mar Segment E through the recordation of the Newell Parcel Map.			
30.	§ 2.07(h)(3)(C) Pages 45-46	It is understood by the Parties that when Developer or City is required by the Development Agreement (below) to construct (or cause the financing and/or construction of) Grade-Separated Rio Del Mar improvements, such improvements shall be constructed and improved at such time as set forth in the Project's relevant subdivision map approval. That being stated, general construction and improvement obligations regarding Grade-Separated Rio Del Mar are as follows: i. Developer shall be responsible for the construction and improvement of Grade-Separated Rio Del Mar Segment A at such time as set forth in the Project's relevant subdivision map approval, provided that the portion of the costs to Developer of constructing and improving Grade-Separated Rio Del Mar Segment A that is equal to "Developer's At-Grade Rio Del Mar Segment 1 Costs" shall be reimbursed by City to Developer, and provided that such reimbursement by City to Developer (for the dollar amount of the portion of the costs to Developer of constructing and improving Grade-Separated Rio Del Mar Segment A that is equal to "Developer's At-Grade Rio Del Mar Segment 1 Costs") shall occur the earlier of the following events: Within 30 days of the date of the recording of any final subdivision map regarding the Adobe Property, or within 30 days of the date of any City issuance of any Building Permit regarding the Adobe Property. ii. Developer shall be responsible for the construction and improvement of Grade-Separated Rio Del Mar Segment B at such time as set forth in the Project's relevant subdivision map approval, provided that the portion of the costs to Developer of constructing and improving Grade-Separated Rio Del Mar Segment B that is equal to "Developer's At-Grade Rio Del Mar	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		Segment 2 Costs" shall be reimbursed by City to Developer, and provided that such reimbursement by City to Developer (for the dollar amount of the portion of the costs to Developer of constructing and improving Grade-Separated Rio Del Mar Segment B that is equal to "Developer's At-Grade Rio Del Mar Segment 2 Costs") shall be a priority, and shall come from funds come from funds City secures through City's imposition on other development in the City some form of fees, charges, assessments and/or other means, and further provided that such City reimbursement obligation to Developer shall continue until such time as Developer is fully so reimbursed, or the Development Agreement's Term concludes, whichever occurs first. iii. The details of the "Grade-Separated Rio Del Mar Railroad Crossing Segment" are addressed in the Development Agreement; iv. Developer shall be responsible for the construction and improvement of Grade-Separated Rio Del Mar Segment C at such time as set forth in the Project's relevant subdivision map approval; v. Developer shall be responsible for the construction and improvement of Grade-Separated Rio Del Mar Segment D at such time as set forth in the Project's relevant subdivision map approval; and vi. Developer shall be responsible for the construction and improvement of Grade-Separated Rio Del Mar Segment E at such time as set forth in the Project's relevant subdivision map approval.			
31.	§ 2.07(h)(3)(E) Page 47	It is understood by the Parties that right-of-way dedications shall reflect the right-of-way requirements of the General Plan and Specific Plan, and that if City is responsible for securing the dedication under the Development Agreement, that City shall secure the dedication at City's sole cost and expense and at such time as the Parties agree is necessary to ensure the absence of Developer construction delay on South Napa Junction. City shall coordinate the acquisition of right-of-way from the relevant property owner, with the goal being the full dedication of South Napa Junction Segment 1 and/or South Napa Junction Segment 2 at no cost to the Parties. The Parties recognize that if *eminent domain* or other City actions are necessary to acquire the right-of-way from the relevant property owner(s) needed for the construction South Napa Junction Segment 1 and/or South Napa Junction Segment 2,	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		delays may occur and shall be allowed. Should *eminent domain* be required, acquisition shall be by, and at the sole and exclusive cost and expense of, City. Regarding the dedication of the relevant Segments of South Napa Junction, the following shall apply: i. City shall secure the dedication of South Napa Junction Segment 1; ii. City shall secure the dedication of South Napa Junction Segment 2; iii. The details of the "South Napa Junction Railroad Crossing" are addressed in subdivision (h)(4) of the Section 2.07 of the Development Agreement; The details of the "South Napa Junction Railroad Crossing" are addressed in subdivision (h)(4) of the Section 2.07 of the Development Agreement.			
32.	§ 2.07(h)(3)(F) Page 48	General construction and improvement obligations regarding South Napa Junction are as follows: i. Developer shall be responsible for the construction and improvement of South Napa Junction Segment 1 at such time as set forth in the Project's relevant subdivision map approval, provided that Developer shall be reimbursed by City for Developer's full costs related to such construction and improvement of such South Napa Junction Segment 1, and provided that such full reimbursement by City to Developer shall occur the earlier of the following events: The recording of any final subdivision map regarding the "Adobe Property," or the City issuance of any Building Permit regarding the Adobe Property. For the purposes of the Development Agreement, the "Adobe Property" shall mean that property depicted on *Exhibit A* to the Development Agreement. Further, for the purposes of the Development Agreement, Developer's full costs related to such construction and improvement of such South Napa Junction Segment 1 shall be referred to as "Developer's South Napa Junction Segment 1 Costs"; ii. Developer shall be responsible for the construction and improvement of South Napa Junction Segment 2 at such time as set forth in the Project's relevant subdivision map approval, provided that Developer shall be reimbursed by City for Developer's full costs related to such construction and improvement of such South Napa Junction Segment 2, with such reimbursement being a priority, and coming from funds City secures through City's imposition on other development in the City some form of fees, charges, assessments and/or other means, and further provided that such	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		City reimbursement obligation to Developer shall continue until such time as Developer is fully so reimbursed, or the Development Agreement's Term concludes, whichever occurs first; iii. The details of the "South Napa Junction Railroad Crossing" are addressed in subdivision (h)(4) of the Section 2.07 of the Development Agreement; iv. Developer shall be responsible for the construction and improvement of South Napa Junction Segment 3 at such time as set forth in the Project's relevant subdivision map approval; v. Developer shall be responsible for the construction and improvement of South Napa Junction Segment 4 at such time as set forth in the Project's relevant subdivision map approval; and, vi. Developer shall be responsible for the construction and improvement of South Napa Junction Segment 5 at such time as set forth in the Project's relevant subdivision map approval.			
33.	§ 2.07(h)(4)(B) Page 49	City shall be responsible for making any and all application(s) to such relevant public agencies including without limitation the PUC for any and all such rail crossing(s), and Developer shall be responsible for coordinating and paying for the consultants needed to support that effort. Developer shall be responsible for all City Staff costs and fees relating to whichever/all railroad crossings pursued, which City Staff costs and fees reflect the amount that City actually expends for such City Staff costs and fees, which City actual expenditures shall not include any administrative fees, charges, and/or assessments; Developer shall not be responsible for the City costs and fees relating to the City Attorney, and any additional City-hired special legal counsel, regarding whichever/all railroad crossings are pursued.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
34.	§ 2.07(h)(4)(C) Pages 49-50	If Developer, in its sole and exclusive discretion, determines to pursue the At-Grade Railroad Crossing, then the following shall apply: i. Developer shall provide City written notice that Developer has determined to pursue the At-Grade Railroad Crossing; and ii. Developer shall be responsible for the costs and fees related to such At-Grade Railroad Crossing Segment. Developer shall be responsible for all costs related to the SR 29/Rio Del Mar Tie-in, up to a maximum of $2.5 million. Any amount beyond such $2.5 million shall be subject to the "Resolution Process" requirements of Section 2.03 of the Development Agreement, where the Parties will endeavor to resolve the amount in excess of $2.5 million dollars. City shall	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		be responsible for making application to all relevant public agencies - including without limitation, the California Department of Transportation ("CalTrans") - to secure encroachment Permits required to build that SR 29 Tie-In Developer decides to pursue (either the SR 29/Rio Del Mar Tie-In or the SR 29/South Napa Junction Tie-In). Developer shall be responsible for the costs and fees related to such City cooperation, coordination and application, including the costs and fees related to City Staff, which City Staff costs and fees reflect the amount that City actually expends for such City Staff costs and fees, which City actual expenditures shall not include any administrative fees, charges, and/or assessments; time; however, Developer shall not be responsible for any costs and fees relating to the City Attorney and/or Special Counsel hired by City to assist. Developer shall be reimbursed by City for Developer's costs (up to a maximum of $2.5 million - any amount beyond such $2.5 million shall be subject to the "Resolution Process" requirements of Section 2.03 of the Development Agreement) related to such construction and improvement of such SR 29/Rio Del Mar Tie-in in two ways: First, the first fifty percent (50%) of Developer's costs related to such construction and improvement of such SR 29/Rio Del Mar Tie-shall be reimbursed by City to Developer at the earlier of the following events: Within 30 days of the date of the recording of any final subdivision map regarding the Adobe Property, or within 30 days of the date of City's issuance of any Building Permit regarding the Adobe Property; and Second, the second and final 50% of Developer's costs related to such construction and improvement of such SR 29/Rio Del Mar Tie-shall be reimbursed by City to Developer, with such reimbursement being given priority, and such reimbursement coming from funds City secures through City's imposition on other development in the City some form of fees, charges, assessments and/or other means, and further provided that such City reimbursement obligation to Developer shall continue until such time as Developer is fully so reimbursed, or the Development Agreement's Term concludes, whichever occurs first.			
35.	§ 2.07(h)(2)(D) Pages 50-51	If Developer, in its sole and exclusive discretion, determines to pursue the Grade-Separated Railroad Crossing, then the following shall apply: i. Developer shall provide City written notice that Developer has determined to pursue the Grade-Separated Crossing at Rio Del Mar. ii. Developer shall be responsible for all costs and fees related to the Grade-Separated Railroad Crossing Segment, including the costs and fees related to City Staff time, which City Staff time costs and fees reflect the amount that City	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		actually expends for such City Staff costs and fees, which City actual expenditures shall not include any administrative fees, charges, and/or assessments; however, Developer shall not be responsible for any costs and fees relating to the City Attorney and/or Special Counsel hired by City to assist.			
36.	§ 2.07(h)(2)(E) Pages 51-52	If neither the At-Grade Railroad Crossing Segment nor the Grade-Separated Railroad Crossing Segment is pursued by Developer and/or either or both are pursued but denied by the PUC (and/or others), and/or either or both are pursued but abandoned by Developer, then if Developer, in its sole and exclusive discretion, determines to pursue the existing at-grade railroad crossing at South Napa Junction, then the following shall apply: i. Developer shall provide City written notice that Developer has determined to pursue the at-grade railroad crossing at South Napa Junction; and ii. Developer shall be responsible for the costs and fees related to such South Napa Junction Railroad Crossing Segment. iii. Developer shall be responsible for all costs and fees related to the SR 29/South Napa Junction Tie-In, up to a maximum of $2.5 million. Any amount beyond such $2.5 million shall be subject to the "Resolution Process" requirements of Section 2.03 of the Development Agreement, where the Parties will endeavor to resolve the amount in excess of $2.5 million dollars. City shall be responsible for making application to all relevant public agencies - including without limitation, the California Department of Transportation ("CalTrans") - to secure encroachment Permits required to build that SR 29 Tie-In Developer decides to pursue (either the SR 29/Rio Del Mar Tie-In or the SR 29/South Napa Junction Tie-In). Developer shall be responsible for the costs and fees related to such City cooperation, coordination and application, including the costs and fees related to City Staff time, which City Staff costs and fees reflect the amount that City actually expends for such City Staff costs and fees, which City actual expenditures shall not include any administrative fees, charges, and/or assessments; however, Developer shall not be responsible for any costs and fees relating to the City Attorney and/or Special Counsel hired by City to assist. Developer shall be reimbursed by City for Developer's costs (up to a maximum of $2.5 million - any amount beyond such $2.5 million shall be subject to the "Resolution Process" requirements of Section 2.03 of the Development Agreement) related to such construction and improvement of such SR 29/South Napa Junction Tie-In in two ways: First, the first fifty percent (50%) of Developer's costs related to such construction and improvement of such SR 29/South Napa Junction Tie-In shall	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		be reimbursed by City to Developer at the earlier of the following events: The recording of any final subdivision map regarding the Adobe Property, or the City issuance of any Building Permit regarding the Adobe Property; and Second, the second and final 50% of Developer's costs related to such construction and improvement of such SR 29/South Napa Junction Tie-In shall be reimbursed by City to Developer, with such reimbursement being a priority, and coming from funds City secures through City's imposition on other development in the City some form of fees, charges, assessments and/or other means, and further provided that such City reimbursement obligation to Developer shall continue until such time as Developer is fully so reimbursed, or the Development Agreement's Term concludes, whichever occurs first.			
37.	§ 2.07(h)(5)(B) Page 52	City and Developer shall cooperate and coordinate their efforts to secure approval of the SR 29 Tie-In that Developer decides to pursue (either the SR 29/Rio Del Mar Tie-In or the SR 29/South Napa Junction Tie-In) in a manner to ensure the absence of Developer construction delay on either the At-Grade Rio Del Mar, Grade-Separated Rio Del Mar improvements, or South Napa Junction improvements.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
38.	§ 2.07(h)(6) Page 52	Relating to the Loop Road Improvements: A. Developer shall dedicate to City at such relevant Project subdivision map recordation date, that land described in *Exhibit B* to the Development Agreement. B. Developer shall construct (or cause the finance and construction of) at such time as set forth in the Specific Plan (and such relevant Project subdivision map approval), those roadway improvements described in Exhibit C to the Development Agreement (collectively, the "Loop Road Improvements"). The Loop Road Improvements are comprised of "Loop Road Segment 1," "Loop Road Segment 2," and "Loop Road Segment 3," as shown on *Exhibit B* to the Development Agreement , and *Exhibit A* to these Master Conditions.	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
39.	§ 2.07(h)(7) Pages 52-53	Relating to the Rolling Hills Drive Improvements: A. Developer shall dedicate to City at such relevant Project subdivision map recordation date, that land described in *Exhibit B* to the Development Agreement, and *Exhibit A* to these Master Conditions (collectively, the "Rolling Hills Drive Improvements").	Applicable Parcels	Pre-Final Map, SIA, Grading Permit, Construction Permit, Building Permit,	Applicable

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		B. Developer Developer shall construct (or cause the finance and construction of) at such time as the commencement of Watson Ranch Specific Plan's Phase 2 of residential development (and such relevant Project subdivision map approval) or sooner if required to meet secondary access requirements for residential development, those roadway improvements described in *Exhibit B* to the Development Agreement.		Occupancy Permit	
40.	§ 2.07(h)(8) Page 53	Relating to Underground Utilities: A. Developer shall dedicate to City at such relevant Project subdivision map recordation date those underground utility and storm drain infrastructure improvements within the Project subdivision map required by the Project subdivision map's development. B. Developer shall construct (or cause the finance and construction of) at such time as set forth in such relevant Project subdivision map approval, those underground utility and storm drain infrastructure improvements within the Project required by the Project's development.	Applicable Parcels	Pre-Final Map; Final Map Recordation	Applicable
41.	§ 2.07(k) Page 53	Developer shall dedicate to City at such relevant Project subdivision map recordation date and improve at such time as set forth in the Specific Plan and such relevant Project subdivision map approval, approximately three and fifty-five/one hundredths (3.55) acres of the Property for use as "Park A," as more particularly set forth in Exhibit B to the Development Agreement. Developer shall be obligated to contribute no more than five million six hundred thousand ($5,600,000) for the improvement of Park A; said $5,600,000 maximum shall include any and all Processing Fees, Building Permit Fees, User Fees, and/or Inspection Fees. Notwithstanding the forgoing, the $5,600,000 amount (for the improvement of Park A) shall be considered to be in Calendar Year 2019 dollars, and, commencing in 2020, that amount shall be increased each year by the relevant year's percentage amount set forth in the Construction Cost Index for the San Francisco Region, until such Park A improvements are completed. Consistent with the foregoing, the Parties shall work together to secure that portion of Park A that sits on the Newell Property, including seeking to have the controlling owners of the Newell Property dedicate such portion to the City through existing and/or future subdivision maps. Developer's obligation to improve/construct Park A shall commence only after both fee title to that portion of Park A that sits on the Newell Property has been secured and is in City	Applicable Parcels	Pre-Final Map; Final Map Recordation, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		possession, and the Specific Plan's Phase 2 of development of the Project has commenced.			
42.	§ 2.07(l) Page 53-54	Developer shall dedicate to City at such relevant Project subdivision map recordation date and improve at such time as set forth in at such relevant Project subdivision map approval, approximately five and fifty-seven/one hundredths (5.57) acres for use as "Park B," as more particularly set forth in *Exhibit B* to the Development Agreement. Developer shall be obligated to contribute no more than two million eight hundred thousand dollars ($2,800,000) for the improvement of Park B; said $2,800,000 maximum shall include any and all Processing Fees, and/or Inspection Fees. Notwithstanding the forgoing, the $2,800,000 amount (for the improvement of Park B) shall be considered to be in Calendar Year 2019 dollars, and, commencing in 2020, that amount shall be increased each year by the relevant year's percentage amount set forth in the Construction Cost Index for the San Francisco Region, until such Park B improvements are completed. Consistent with the foregoing, the Parties shall work together to secure that portion of Park B that sits on the Newell Property, including seeking to have the controlling owners of the Newell Property dedicate such portion to the City through existing and/or future subdivision maps. Developer's obligation to improve/construct Park B shall commence only after both: fee title to that portion of Park B that sits on the Newell Property has been secured and is in City possession; and the Specific Plan's Phase 3 of development of the Project has commenced.	Applicable Parcels	Pre-Final Map; Final Map Recordation, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
43.		Developer shall dedicate to the City, at such relevant Project subdivision map recordation date, and improve at such time as set forth in such relevant Project subdivision map approval, approximately sixty-seven one hundredths (.67) acres for use as the "Napa Valley Vine Trail," as more particularly set forth in Exhibit B to the Development Agreement. Developer shall be obligated to contribute no more than four hundred sixty thousand dollars ($460,000) for the improvement of the Napa Valley Vine Trail; said $460,000 maximum shall include any and all Processing Fees, and/or Inspection Fees. Notwithstanding the forgoing, the $460,000 amount (for the improvement of the Napa Valley Vine Trail) shall be considered to be in Calendar Year 2019 dollars, and, commencing in 2020, that amount shall be increased each year by the relevant year's percentage amount set forth in the Construction Cost Index for the San Francisco Region, until such Napa Valley Vine Trail improvements are completed. Consistent with the foregoing, the Parties shall work together to secure that portion of the Napa Valley Vine Trail that sits on the Newell Property, including seeking to have the controlling owners of the Newell Property dedicate such portion to the	Applicable Parcels	Pre-Final Map; Final Map Recordation, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		City through existing and/or future subdivision maps. Said Developer's obligation to improve the Napa Valley Vine Trail shall commence only after fee title to that portion of the Napa Valley Vine Trail that sits on the Newell Property has been secured and is in City possession. The Parties recognize the City has exercised its discretion in requiring the Developer to construct various Class I trails including the Napa Valley Vine Trail and the River to Ridge Trail. The Parties shall coordinate and cooperate, including without limitation, the entering into of any necessary or desirous "Measure T Funding Equivalent Set-Aside Agreement," regarding the accounting procedures used to memorialize the Developer's costs in dedicating and improving said Class I trails with express purpose of maximizing the amount of "Measure T Funding Equivalent Set-Aside" defined by that certain Napa Valley Transportation Authority – Tax Authority Measure T Ordinance, and that certain Measure T Funding Agreement by and between the City and the Napa Valley Transportation Authority – Tax Authority.			
44.	§ 2.07(n) Page 54-55	Developer shall dedicate to the City at such relevant Project subdivision map recordation date approximately two (2) acres of the Property for use as the "Community Plaza and Community Center Site" (which includes the required parking for the use), as more particularly set forth in *Exhibit B* to the Development Agreement. The Parties recognize that Developer, in Developer's sole and exclusive discretion, may save the "Silos" depicted in the Specific Plan, and if Developer determines to so save the Silos, then Developer may move the location of the Community Plaza and Community Center Site further south to accommodate the Silos preservation. City shall complete the improvements to the Community Plaza and the Community Center Site as set forth in the Specific Plan.	Applicable Parcels	Pre-Final Map; Final Map Recordation, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable
45.	§ 2.07(o) Page 55	Developer shall dedicate an easement to the City, at such relevant Project subdivision map recordation date, and improve at such time as set forth in at such relevant Project subdivision map approval, approximately six and seventy one hundredths (6.7) acres of the Property for use as the "Quarry Lake Park," as more particularly set forth in Exhibit B to the Development Agreement. Developer shall be obligated to contribute no more than one million six hundred thousand dollars ($1,600,000) for the improvement of the Quarry Lake Park; said $1,600,000 maximum shall include any and all Processing Fees, and/or Inspection Fees. Developer may, in Developer's sole and exclusive discretion, further improve the Quarry Lake Park with additional uses that complement the "Napa Valley Ruins & Gardens" (described herein). The $1,600,000 maximum (for the improvement of Quarry Lake Park) shall be considered to be in Calendar Year 2019 dollars, and,	Applicable Parcels	Pre-Final Map; Final Map Recordation, Grading Permit, Construction Permit, Building Permit, Occupancy Permit	Applicable

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		commencing in 2020, that amount shall be increased each year by the relevant year's percentage amount set forth in the Construction Cost Index for the San Francisco Region, until such Quarry Lake Park improvements are completed.			

D. MASTER CONDITIONS – SUBDIVISION IMPROVEMENT AGREEMENTS

Master COA #	*Developer Obligations*	*Mechanism*	*Implement.*	*Status*
46.	At Developer's expense, in a good and workmanlike manner, Developer shall furnish all required materials and labor for all of the relevant MBI, Public Improvements, and/or Private Improvements work shown on all Improvement Plans prepared by Developer's engineer of record, and submitted to and approved by City.	SIA	SIA	Applicable
47.	Developer shall do all work and furnish all materials necessary to complete the relevant MBI, Public Improvements, and/or Private Improvements work in accordance with the approved Improvement Plans for the relevant MBI, Public Improvements, and/or Private Improvements work, or with any changes required or ordered by said City's Engineer for the relevant MBI, Public Improvements, and/or Private Improvements work, which, in his/ her reasonable opinion, are necessary or required to complete the relevant MBI, Public Improvements, and/or Private Improvements work. All construction work on the relevant MBI, Public Improvements, and/or Private Improvements work must be performed solely by licensed contractors, and the word "Developer" when used in this Agreement shall mean and include all such licensed contractors performing such construction on Developer's behalf or account.	SIA	SIA	Applicable
48.	Completion of the relevant MBI, Public Improvements, and/or Private Improvements work shall be accomplished within 24 months of the execution of the relevant SIA, subject to the Developer protections provided by the Development Agreement, and subject to extensions granted by City-. Additionally, to the extent greater than the Developer protections provided by the Development Agreement, City shall extend the relevant SIA, as needed, in the event "good cause" is shown by Developer.	SIA	SIA	Applicable
49.	Developer shall replace or have replaced, repair or have repaired, as the case may be, or pay to the City, the entire cost of replacements or repairs, of any and all public and/or private (non-Developer) property damaged or destroyed by reason of any work done on the relevant MBI, Public Improvements, and/or Private Improvements work under the relevant SIA, whether such public property be owned by the United States or any agency thereof, or the State of California, or any agency or political subdivision thereof, or by the City or by any public or private corporation, partnership or association, or by any person whomsoever, or by any combination of such owners. Such replacement and/or repair cost shall not exceed the cost of such property damage or destruction suffered.	SIA	SIA	Applicable

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50.	Developer shall, at Developer's sole expense, obtain all necessary permits and licenses for the approval and construction of the relevant MBI, Public Improvements, and/or Private Improvements work, give all necessary notices, and pay all fees and taxes required. Developer shall furnish to City proof of having obtained required workers' compensation insurance coverage prior to commencing any relevant MBI, Public Improvements, and/or Private Improvements work.	SIA	SIA	Applicable
51.	Developer shall ensure competent supervision of all relevant MBI, Public Improvements, and/or Private Improvements work at all times. The Developer, at Developer's expense, shall have a registered civil engineer establish the horizontal and vertical control survey, if necessary, to construct the relevant MBI, Public Improvements, and/or Private Improvements work in accordance with the plans and specifications for such relevant MBI, Public Improvements, and/or Private Improvements work.	SIA	SIA	Applicable
52.	Developer shall at all times maintain proper facilities and provide safe access for inspection to all parts of the work on the relevant MBI, Public Improvements, and/or Private Improvements work, and to the shops wherein the work is in preparation, to assure that the relevant MBI, Public Improvements, and/or Private Improvements work shall be done in accordance with the approved Improvement Plans for such relevant MBI, Public Improvements, and/or Private Improvements work.	SIA	SIA	Applicable
53.	Developer shall furnish to City all of the following: a) A surety bond or bonds in the amount equal to 100% of the estimated cost of the on the relevant MBI, Public Improvements, and/or Private Improvements work, as security for the faithful performance of all the provisions of the relevant SIA, including without limitation, the repair and reconstruction of defective work on the relevant MBI, Public Improvements, and/or Private Improvements work. Such surety bond shall remain in effect at a minimum of thirty-five (35) days beyond the date of Notice of Completion of the relevant MBI, Public Improvements, and/or Private Improvements work b) A surety bond or bonds in the amount equal to 50% of the estimated cost of the relevant MBI, Public Improvements, and/or Private Improvements work, as security to guarantee payment in full of all persons who perform labor upon or furnish materials to be used in construction of the relevant MBI, Public Improvements, and/or Private Improvements work. Such surety bond shall remain in effect at a minimum of thirty-five (35) days beyond the date of Notice of Completion of the relevant MBI, Public Improvements, and/or Private Improvements work. c) A surety bond in the amount of 10% of the estimated cost of the relevant MBI, Public Improvements, and/or Private Improvements work as security for the warrantee of all the provisions of the relevant SIA, including without limitation the repair and reconstruction of defective work provisions of such Agreement. Such surety bond shall remain in effect at a minimum of thirty-five (35) days beyond the date of Notice of	SIA	SIA	Applicable

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	Completion of the relevant MBI, Public Improvements, and/or Private Improvements work. d) All surety bonds referenced shall be prepared on the standard forms provided by City and available from City's Engineer. e) Consistent with the Development Agreement, other forms of surety – such as irrevocable letters of credit, cash deposits, savings account(s), certificate(s) payable to City, etc. - in a form equivalent to each said surety bonds may be proposed by Developer, and shall be accepted by City in place of such surety bonds described herein, provided such other form of surety is satisfactory to City's City Attorney, and provided that all legal expenses incurred by City in reviewing and approving said other forms of surety be paid by Developer. f) Developer shall maintain such surety bonds and/or approved other form of surety in full force and effect consistent with the terms of the relevant SIA, including any extensions of time to such relevant SIA. In the event Developer fails to meet the Developer obligation(s) for which the relevant surety bond or other form of approved surety was provided, then, contingent upon City having properly followed and exhausted the requirements of the Development Agreement, City shall have the right to call upon each such relevant surety bond or other approved form of surety to satisfy the Developer obligation(s) for which such relevant surety bond or other approved form of surety was provided to City.			
54.	Title to, and ownership of, all relevant MBI and/or Public Improvements which are to be delivered to City as shown on the Improvement Plans shall vest absolutely in City upon completion and acceptance of such relevant MBI and/or Public Improvements by City, which City shall accept.	SIA	SIA	Applicable
55.	If, within a period of one (1) year after final acceptance by City of any MBI and/or Public Improvements work performed under the applicable SIA, any such MBI and/or Public Improvement work fails to fulfill any of the requirements of such applicable SIA or the Improvement Plans referred to therein, Developer shall, without delay and without any cost to City, repair or replace or reconstruct any such failure regarding such MBI and/or Public Improvements work. Any dispute between City and Developer on this topic shall be addressed through the provisions of the Development Agreement. City may, at its option, make the necessary repairs or replacements or perform the necessary work, again, with the provisions of the Development Agreement applying regarding the resolution of such City payment and actions. Likewise, City may, but shall not be required to and without limitation, draw upon the applicable surety bond or other approved form of security deposited by Developer and/or take such action as authorized under the relevant SIA and the Development Agreement.	SIA	SIA	Applicable
56.	Notwithstanding any other provision of an applicable SIA, neither Developer nor any of Developer's agents or contractors are or shall be considered to be agents of City in connection with the performance of Developer's obligations under the applicable SIA.	SIA	SIA	Applicable

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57.	Inspections, Improvement Plans review, and other services performed shall be pursuant to the Development Agreement.	SIA	SIA	Applicable
58.	The Development Agreement shall apply regarding all inspection, Improvement Plan review, and other services performed by City or others chosen by Developer after the execution of the relevant SIA.	SIA	SIA	Applicable
59.	In the event any such notice of breach is given and surety is present, Developer's surety shall have the duty to take over and complete the work and the Public Improvements; provided, however, that if the surety, within ten (10) days after serving upon it such notice of breach, does not give City written notice of its intention to take over and complete the performance of the contract, and does not commence performance thereof within ten (10) days after notice to City of such election, City may take over the work and prosecute the same to completion by contract or any other method City may deem advisable, for the account and at the expense of Developer, and Developer's surety shall be liable to City for any direct costs or damages occasioned City thereby, and, in such event, City without liability for so doing, may take possession of, and utilize in completing the work, such materials, appliances, plant and other property belonging to Developer as may be on the site of the work and necessary therefor.	SIA	SIA	Applicable
60.	Developer shall not commence work under this contract until Developer shall have obtained all insurance required under this section and such insurance shall have been reasonably approved by City as to form, amount, and carrier. A lapse in any required insurance coverage during this Agreement shall be a breach of this Agreement. Developer agrees that if the aforesaid insurance is not kept in full force and effect, City may terminate this Agreement upon ten (10) days prior notice to Developer, unless Developer delivers evidence of insurance to City within such ten (10) day period.	SIA	SIA	Applicable
61.	Developer shall take out and maintain during the life of this contract such insurance as shall protect City, its elected and appointed officials, officers, directors, attorneys, agents (including outside consultants), and employees and each of them,, and Developer and any agents and employees performing work covered by this contract from claims for damages for personal injury, including death, as well as from claims for property damage which may arise from Developer's or any sub-contractor's operations under this contract, whether such operations be by Developer or by anyone directly or indirectly employed by Developer.	SIA	SIA	Applicable
62.	The certificate or policy of insurance shall name the City (and such, other entities or individuals of the City as are indemnified under the contract, such as "... its elected and appointed officials, officers, directors, attorneys, agents, and employees...") as additional, or co--insureds with the Developer. The amounts of such insurance shall be as follows: a) <u>Public Liability Insurance.</u> In an amount not less than $1,000,000 for injuries, including, but not limited to, death to any one person and subject to the same limit for each person in an amount not less than <u>$1,000, 000</u> on account of any one occurrence;	SIA	SIA	Applicable

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	b) Property Damage Insurance. In an amount of not less than $1,000,000 for damage to the property of each person on account of any one occurrence; c) Comprehensive Automobile Liability. Bodily injury liability coverage of $1,000,000 for each person in any one accident and $1,000,000 for injuries sustained by two or more persons in any one accident. Property damage liability of $1,000,000 for each accident. d) Worker's Compensation Insurance. In the amounts required by law.			
63.	City shall not, nor shall any officer, agent or employee thereof, be liable or responsible for any accident, loss or damage happening or occurring in the work specified in this Agreement prior to the completion, approval and/ or acceptance of the same; nor shall the City, nor any of its elected and appointed officials, officers, directors, attorneys, agents (including outside consultants), and employees and each of them, thereof, be liable for any persons or property injured by reason of said work or by reason of the acts or omissions of the Developer, its officers, agents or employees, in the performance of said work. Prior to the completion, approval, or acceptance of the work, the Developer agrees to indemnify, defend and save harmless the City, its elected and appointed officials, officers, directors, attorneys, agents (including outside consultants), and employees and each of them, from and against any and all liability, expense, including defense costs and legal fees, and claims for damages of any nature whatsoever, including, but not limited to, bodily injury, death, personal injury, or property damage arising from the Developer's operations or its services hereunder, including any workers' compensation suits, liability, or expense, arising from or connected with services by any person pursuant to this Agreement, whether arising from activities of Developer or any of Developer's contractors, subcontractors or by persons directly or indirectly employed by or acting as agent for Developer or arising out of the use of any patent or patented article in the construction of said work. Developer agrees to, and shall upon request, promptly and fully defend City and its elected and appointed officials, officers, directors, attorneys, agents (including outside consultants), and employees and each of them,, from any suits or actions at law or equity for damages caused, or alleged to have been caused, by reason of the activities hereinabove identified as being the responsibility of Developer.	SIA	SIA	Applicable
64.	Developer shall comply with all applicable provisions of the California Labor Code.	SIA	SIA	Applicable
65.	Developer shall at all times from the effective date of this Agreement to the completion and acceptance of the Public Improvementsby the City, give good and adequate warning of each and every dangerous condition caused by the construction of said Public Improvementsand will protect the traveling public therefrom.	SIA	SIA	Applicable
66.	Developer warrants that it has control of the real property reserved, or needed for the installation of the Public Improvements, and the streets in which it is to be placed, as is necessary to allow it to carry out its obligations under this Agreement.	SIA	SIA	Applicable

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67.	The acquisition price and costs and all other expenses of obtaining all easements required for the Public Improvementsshall be, paid by Developer. All necessary easements for the Public Improvements to be dedicated to City, if not already conveyed to City, shall be granted to City concurrently with the inspection and acceptance by the City of the relevant MBI, an/or Public Improvements.	SIA	SIA	Applicable
68.	All service connection charges for the Public Improvementsto be constructed to serve said parcel(s) of real property shall be the amounts described in the Development Agreement.	SIA	SIA	Applicable
69.	Upon the provision of reasonable notice, the City, its officers, agents, and employees and the Surety upon any bond shall have the right from and after the date of the execution of the relevant SIA to enter upon said parcel of real property and any property where appurtenant easements are located for purposes of inspection and investigation at any and all reasonable times.	SIA	SIA	Applicable
70.	When relevant to the MBI and/or Public Improvements work, Developer shall retain and pay the cost of the Geotechnical Engineer of Record to perform all testing and reporting of items including but not limited to, rough grading, sub-grade preparation and compaction, concrete testing, and asphalt testing and compaction. Such reports shall be made available to City upon City's request.	SIA	SIA	Applicable
81.	Developer shall retain and pay the cost of the Engineer of Record to certify the Private Improvements are constructed to their satisfaction and at the places, at the grades, with the materials and in the manner shown upon the plans and specifications therefor approved by the City' s Engineer.	SIA	SIA	Applicable

E. MASTER CONDITIONS – MITIGATION MEASURES

Master COA #	***Mitigation Measures***	***Method of Verification Timing; Parcel #***	***Status***
82.	**Mitigation Measure 4.1-1:** ***Water Tank Visibility.*** As required by the 2004 *Proposed Water Tanks (2) Mitigated Negative Declaration*, construction plans for the Zone 3 water tank shall incorporate the following mitigation: 1. A landscaped earthen berm shall be constructed around the tank site to eliminate direct views of the water tank as much as feasible from the areas surrounding the tank site. The earthen berm shall be landscaped with trees and other vegetation suitable to the City, such as evergreen trees, to screen the water tank from surrounding areas, reduce soil erosion, and blend the berm with the surrounding vegetation. 2. The water tank shall be painted a neutral color deemed appropriate by the City so the tank blends with the surrounding hillside vegetation as much as possible.	Approval of water tank plans	Prior to issuance of grading permit
83.	**Mitigation Measure 4.1-3:** ***Lighting Plan.*** Prior to any site disturbance activities, the Project Applicant shall submit a construction lighting plan to the City for approval. The construction lighting plan shall ensure that the minimum amount of lighting is used to meet safety requirements and to ensure that limited spillover occurs to nearby sensitive uses. All lighting shall be directed downward and away from surrounding land uses.	Design Guidelines	Complete upon Design Guidelines approval
84.	**Mitigation Measure 4.2-1:** ***Construction Fugitive Dust Emissions.*** The following Bay Area Air Quality Management District (BAAQMD) Best Management Practices (BMPs)	Notes on construction plans; site	During constructio n activities

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	and additional mitigation measures for fugitive dust control shall be required for all construction activities within the project area. These measures would reduce fugitive dust emissions primarily during soil movement and grading, but also during vehicle and equipment movement on unpaved project sites. *Basic BMPs that Apply to All Construction Sites* 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). 5. All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 8. A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action, if necessary, within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. *Additional BMPs that Apply to All Construction Sites* 1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content may be verified by lab samples or moisture probe. 2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. 3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks shall have at maximum 50 percent air porosity. 4. For areas that are to remain open space (e.g., not a road, building, or otherwise structurally covered area), vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. 5. All trucks and equipment, including their tires, shall be washed off prior to leaving the site. 6. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel. 7. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent. Before starting on-site construction activities, the contractor or Project Applicant shall submit a site-specific dust control plan (Plan) to the American Canyon Planning Division for review and approval. The Project Applicant shall ensure that all applicable requirements of the Plan have been incorporated into the contract specifications. The Plan shall state, in	inspections to verify BMPs are implemented	

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	reasonable detail, how the Contractor shall meet the requirements above. The Plan shall include a certification statement that the Contractor agrees to comply fully with the Plan.		
85.	**Mitigation Measure 4.2-2:** ***Operational Emissions Reductions.*** The total reduction in ROG and NO_X emissions that would be achieved from implementation of Mitigation Measure 4.2-2a, the TDM program, and Mitigation Measure 4.2-2b, the CAP mitigation strategies, would be calculated at the time the final TDM program and CAP strategies are determined. If the ROG and NO_X emissions reduction from implementation of Mitigation Measures 4.2-2a and 4.2-2b are determined by a qualified air quality expert to reduce the project's emissions to below the BAAQMD operational thresholds contained in the 2017 BAAQMD CEQA Air Quality Guidelines, no further mitigation would be required. If the ROG and NO_X emissions reduction from implementation of Mitigation Measures 4.2-2a and 4.2-2b do not reduce the project's emissions to below the BAAQMD operational thresholds identified in the 2017 BAAQMD CEQA Air Quality Guidelines, Mitigation Measure 4.2-2c, purchase of emission offsets, would be pursued.	Contingent on future conditions.	Applicable
86.	**Mitigation Measure 4.2-2a (same as Mitigation Measure 4.12-3a in Section 4.12,** ***Transportation and Traffic*****): *Transportation Demand Management (TDM) Program*.** Prior to issuance of the first building permit for the non-residential use areas (i.e., Napa Valley Ruins & Gardens ("NVRG") and hotel), the Project Applicant shall develop a TDM program for the non-residential use areas (i.e., NVRG and hotel) and shall submit the TDM program to the City Department of Public Works for review and approval. A qualified air quality expert shall prepare a calculation of the ROG and NO_X emissions reductions that would result from implementation of the TDM program. The Project Applicant shall be responsible for funding and overseeing the delivery of trip reduction/TDM proposed programs and strategies, which may include, but are not limited to, the following: 1. Establishment of carpool, buspool, or vanpool programs; 2. Vanpool purchase incentives; 3. Cash allowances, passes or other public transit subsidies and purchase incentives; 4. Preferential parking locations for ridesharing vehicles; 5. Computerized commuter rideshare matching services; 6. Guaranteed ride-home program for ridesharing; 7. Bicycle programs including bike purchase incentives, storage, and maintenance programs; 8. On-site car share and bike share service; 9. Preparation of a Parking Management Plan to address parking accommodations for large events; 10. Designation of an on-site transportation coordinator for the project; 11. Transit and trip planning resources such as commute information kiosk; 12. Employer-provided showers, changing rooms, and clothing lockers for office employees that commute via active transportation; 13. Bicycle route mapping resources; 14. Participation in future citywide Transportation Management Association (TMA); and 15. Submit annual reports to the City regarding TDM activities.	Approval of TDM Program	Prior to issuance of first building permit for the non-residential use area (i.e., NVR&G and hotel)
87.	**Mitigation Measure 4.2-2b:** ***Operational Emissions Reduction Strategies.*** To reduce ROG and NO_X emissions within the Project Site, the Project shall include feasible operational emissions reduction strategies as part of its final design. The specific strategies may include, but are not limited to, the measures described below; however, other measures may be implemented:	Recommendations from Air Quality Technical Report that identify updated project emissions	Prior to issuance of the first building

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	○ Prior to issuance of the first building permit for each phase of the Project, the Applicant shall develop operational emissions reduction strategies, which could include the mitigation strategies identified in **Table 4.2-8, Summary of Operational CAP Mitigation Strategies**, to provide options for reducing ROG and NO_X emissions from operation of the project. The operational emissions reduction strategies shall be submitted to and approved by the City, prepared by a qualified air quality technical expert, and evaluate the emissions reduction strategies in relation to the project's emissions.	calculations and feasible operational emissions reduction strategies	permit for the project
88.	**Mitigation Measure 4.2-2c:** ***Purchase Emission Offsets.*** Prior to the issuance of the final Certificate of Occupancy for Phase 1 or prior to the issuance of the first residential building permit in Phase 2, whichever occurs first, the Applicant would, partially or wholly, purchase offset credits if determined to be feasible based on information available at the time implementation would be required. To reduce ROG and NO_X emissions depending on the reductions achieved through Mitigation Measure 4.2-2a and Mitigation Measure 4.2-2b, and if this mitigation is implemented. ○ The Applicant or its designee shall pay a mitigation offset fee to the BAAQMD Bay Area Clean Air Foundation (Foundation)[1] in an amount to be determined at the time of the impact. The fee would offset emissions that exceed the threshold of significance after implementation of Project-Level Reduction Strategies and the TDM Program described above to the extent feasible. ○ The Project Applicant would implement Mitigation Measure 4.2-2c through payment of a mitigation offset fee to the BAAQMD's Foundation in an amount not to exceed $30,000 per weighted ton per year of ozone precursors per year requiring emissions offset. The fee shall be determined by the City of American Canyon Planning Division in consultation with the Applicant and be based on the type of projects available at the time of the payment. The offset fee is calculated to be "roughly proportional" to the operational air quality impacts. Documentation of payment shall be provided to the City of American Canyon or its designated representative. The current process for payment of offset fees is detailed above. As required by this mitigation measure, payment of offset fees would proceed according to BAAQMD procedures when initiated. The Applicant or its designee would enter into a memorandum of understanding (MOU) with the BAAQMD's Foundation. The MOU would include details regarding the funds to be paid, the administrative fee, and the timing of the emissions reduction project. Acceptance of this fee by the BAAQMD shall serve as an acknowledgment and commitment by the BAAQMD to (1) implement an emissions reduction project(s) within a timeframe to be determined based on the type of project(s) selected and after receipt of the mitigation fee to achieve the emission reduction objectives specified above, and (2) provide documentation to City of American Canyon or its designated representative and to the Project Applicant describing the amount of and the project(s) funded by the mitigation fee, including the amount of emissions of ROG and NO_X reduced (tons per year) within SFBAAB from the emissions reduction project(s). If there is any remaining unspent portion of the mitigation offset fee following implementation of the emission reduction project(s), the Project Applicant shall be entitled to a refund in that amount from the BAAQMD. To qualify under this mitigation measure, the specific emissions retrofit project must result in emission reductions within SFBAAB that would not otherwise be achieved through compliance with existing regulatory requirements.	Bay Area Air Quality Management District Memorandum of Understanding	Prior to the issuance of the final Certificate of Occupancy for Phase 1 or prior to the issuance of the first residential building permit in Phase 2, whichever occurs first

[1] More information on the Bay Area Clean Air Foundation can be found at Bay Area Air Quality Management District (BAAQMD), Bay Area Clean Air Foundation, 2015, available at http://www.baaqmd.gov/about-the-air-district/bay-area-clean-air-foundation.

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89.	**Mitigation Measure 4.2-3a:** ***Architectural Coatings.*** The applicant shall use low-VOC architectural coatings during construction for all buildings, which shall have VOC content that is more stringent than local requirements prescribed in Bay Area Air Quality Management District (BAAQMD) Regulation 8 Organic Compounds, Rule 3 Architectural Coatings as revised on July 1, 2009. Coatings that meet the "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint would qualify.	Notes on construction plans indicating use of low-VOC architectural coatings during construction of all buildings	Prior to issuance of building permits
90.	**Mitigation Measure 4.2-3b:** ***Tier 4 Construction Equipment.*** To reduce construction emissions to below the 2017 BAAQMD CEQA Air Quality Guidelines, prior to start of construction activities after the occupancy of Phase 1, the Project Applicant shall submit to the City either: ● Documentation showing that all off-road construction equipment used prior to the start of construction activities after the occupancy of Phase 1 with greater than 25 hp and operating for more than 20 hours total over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 4 off-road emission standards. or, • Provide supplemental analysis prepared by a qualified air quality specialist to show that emissions of ROG and NO_X would not exceed the thresholds from the 2017 BAAQMD CEQA Air Quality Guidelines using other methods.	Documentation of compliance with the 2017 BAAQMD CEQA Air Quality Guidelines based on the type of construction equipment used or supplemental analysis prepared by a qualified air quality specialist	Prior to the start of construction activities after the occupancy of Phase 1
91.	**Mitigation Measure 4.2-5:** ***Construction Emissions Minimization.*** To reduce construction emissions to below the thresholds identified in the 2017 BAAQMD CEQA Air Quality Guidelines, prior to the start of construction of each of the following—Phase 1 area south of the NVRG and the off-site Rio Del Mar roadway improvements and Phase 4—the Project Applicant shall submit to the City either: ● Documentation showing that all off-road construction equipment used in the southwestern portion of Phase 1 of construction (located directly south of Napa Valley Ruins & Gardens), the entirety of Phase 4 of construction, and the off-site Rio Del Mar roadway improvements with greater than 25 hp and operating for more than 20 hours total over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 2 off-road emission standards and have been retrofitted with an CARB Level 3 Verified Diesel Emissions Control Strategy. Equipment with engines meeting Tier 4 Interim or Tier 4 Final off-road emission standards automatically meet this requirement. or, • Provide supplemental analysis prepared by a qualified air quality specialist to show health risks at on- and off-site sensitive receptors would not exceed the thresholds from the 2017 BAAQMD CEQA Air Quality Guidelines using other methods.	Documentation of compliance with the 2017 BAAQMD CEQA Air Quality Guidelines based on the type of construction equipment used or supplemental analysis prepared by a qualified air quality specialist	Prior to the start of construction of the Phase 1 area south of the NVR&G and the off-site Rio Del Mar roadway improvements and Phase 4
92.	**Mitigation Measure 4.2-7:** ***GHG Emissions Reductions.*** The total reduction in GHG emissions that would be achieved from implementation of Mitigation Measure 4.2-2a, the TDM program, and Mitigation Measure 4.2-7a, the GHG reduction strategies, would be calculated at the time the final TDM program and GHG reduction strategies are determined. If the GHG emissions reduction from implementation of Mitigation Measures 4.2-2a and 4.2-7a are determined by a qualified air quality expert to reduce the project's emissions to below the operational thresholds of 2.67 MT CO_2e per service population per year, no further mitigation would be required. If the GHG emissions reduction from implementation of Mitigation Measures 4.2-2a and 4.2-7a do not reduce the project's	Contingent	Applicable

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	emissions to below this threshold, Mitigation Measure 4.2-7b, purchase of GHG emission offsets, would be pursued.		
93.	**Mitigation Measure 4.2-7a:** ***GHG Reduction Strategies.*** To reduce greenhouse gas (GHG) emissions within the project site and to maximize the Project's ability to achieve the GHG operational threshold of 2.67 MT CO_2e per service population per year, the project shall include feasible operational GHG emissions reduction strategies as part of its final design. The specific strategies of the program may include, but are not limited to, the measures described below; however, other measures may be implemented: ○ All development shall, at a minimum, meet the Title 24, Part 6 (2016), standards, or the most current Title 24, Part 6, standard, whichever is more conservative. All residences shall meet the anticipated 2019 Title 24 Standards to achieve Zero Net Electricity. The GHG emissions benefit from residential Zero Net Electricity was included in the unmitigated inventory. ○ Prior to issuance of the first building permit for each phase of the project, the Project Applicant shall identify operational GHG emissions reduction strategies that could include the strategies identified in **Table 4.2-14, Summary of Operational GHG Mitigation Strategies**, which provides options for reducing GHG emissions from project operation. The operational GHG emissions reduction strategies shall be submitted to and approved by the City, developed by a qualified air quality technical expert, and evaluate the emissions reduction strategies in relation to the project's emissions.	Calculations from a GHG technical expert based on specific strategies incorporated into the project	Prior to issuance of building permits for each phase
94.	**Mitigation Measure 4.2-7b:** ***Purchase GHG Emission Offsets.*** In order to determine whether or to what extent the purchase of GHG emissions offsets is necessary to reduce greenhouse gas (GHG) emissions for each year that the GHG emissions exceed the threshold of 2.67 MT CO_2e per service population per year for the lifetime of the project (assumed to be 30 years), the operational GHG emissions reduction program described above in Mitigation Measure 4.2-7a will include a plan for the purchase of GHG offsets. The amount of offsets needed will take into account the GHG emissions reductions associated with the TDM program and the operational GHG emissions reduction program. Additionally, the feasibility of offsets shall be evaluated at the time implementation would be required. If feasible, the plan shall include: ○ The plan for the purchase of GHG offsets shall include timing requirements, which take into account calculations showing actual emissions of the project, which could take into account phase-in of occupancy, reductions in vehicle emissions, as well as other factors that affect emissions. ○ GHG emission offsets could include any of the following sources: (1) the California Air Resources Board (CARB) quarterly allowance auctions held as part of its Cap-and-Trade Program; (2) the Greenhouse Gas Reduction Exchange (GHG Rx); or (3) Approved Registries recognized by the State of California, which currently include the Climate Action Reserve (CAR), American Carbon Registry (ACR), and Verra (formerly Verified Carbon Standard). ○ The amount of offsets purchased shall depend on the cost per annual metric ton of CO_2e reductions, the overall cost feasibility of this measure, which shall be determined based on information available at the time implementation would be required, and the on-site GHG reduction measures. To demonstrate compliance, the Project Applicant or its designee would provide the following documentary evidence to City's Planning Division: An attestation from an Approved Registry or other source described above that the Project Applicant or its designee has retired a given quantity of carbon offsets. Offsets from the approved sources	Calculations from a GHG technical expert based on specific strategies incorporated into the project and, if necessary and feasible, attestation from an Approved Registry or other source described above regarding the purchase of required carbon offsets	Evaluated prior to issuance of building permits for each phase

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	above satisfy defined standards and incorporate principles of GHG emissions reduction accounting. These principles ensure the offsets use relevant methodologies and assumptions, represent additional reductions that would not otherwise be achieved by law, do not double count reductions, and are enforceable.		
95.	**Mitigation Measure 4.3-1a through Mitigation Measure 4.3-41c:** ***Special-Status Plants, California Red-Legged Frogs, Western Pond Turtle, Breeding Birds, Including Raptors and Tri-colored Blackbird, Swainson's Hawk, Golden Eagle, and White-Tailed Kite, Burrowing Owls, Callippe Silverspot Butterfly Host Plant (Johnny Jump Up), Callippe Silverspot Butterfly, American Badger, CDFW Streambed Alteration Agreement, Wetlands and Other Waters, Bats.*** Developer shall be responsible for conducting all applicable studies, and obtaining any and all permits required by any and all State and/or Federal agencies. If such permits require the Developer to provide studies, reports, mitigation or other actions or measures, then the Developer shall provide such reports, mitigation or other actions or measures to the satisfaction of such governing State and/or Federal agencies. When requested by City, Developer shall send a letter to the City explaining such Developer compliance, and shall send City copies of compliance permits, letters, and/or other authorizations received by Developer from any such State and/or Federal agencies.	Compliance prior to issuance of applicable permit	Satisfied
96.	**Mitigation Measure 4.4-2:** ***Unanticipated Discovery of Archaeological Resources.*** If prehistoric or historic-era archaeological resources are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the City of American Canyon. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. The Project Applicant shall retain a Secretary of the Interior-qualified archaeologist to inspect the findings within 24 hours of discovery and inform the City of American Canyon If it is determined that the project may damage a historical resource or a unique archaeological resource (as defined pursuant to CEQA and the CEQA Guidelines), construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared in accordance with PRC § 21083.2 and CEQA Guidelines § 15126.4; approved by the City; and implemented to the satisfaction of the archaeologist. In consultation with the City, the archaeologist shall determine when construction may commence. Consistent with § 15126.4(b)(3), the mitigation plan shall recommend preservation in place, as a preference, or, if preservation in place is not feasible, data recovery through excavation. If preservation in place is feasible, this may be accomplished through one of the following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding resource site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to recover the scientifically consequential information from and about the resource, which shall be reviewed and approved by the City prior to any excavation at the resource site. Treatment of archaeological resources shall follow the requirements of PRC § 21083.2. Treatment for most resources shall consist of (but would not necessarily be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the	Submit documentation of findings and mitigation plan, if resources are encountered	During grading activities

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	significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.		
97.	**Mitigation Measure 4.4-3:** ***Unanticipated Discovery of Paleontological Resources.*** If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the City of American Canyon. The Project Applicant shall retain a qualified paleontologist to inspect the findings within 24 hours of discovery. The paleontologist shall assess the nature and importance of the find and, if necessary, develop appropriate treatment measures in conformance with Society of Vertebrate Paleontology standards, and in consultation with the City of American Canyon. The Project Applicant shall implement the final treatment measures.	Submit documentation of findings and verification of treatment measures, if resources are encountered	During grading activities
98.	**Mitigation Measure 4.4-4:** ***Unanticipated Discovery of Human Remains.*** If human remains are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the City of American Canyon. The City shall contact the Napa County Coroner to affirmatively indicate to the City that no investigation of the cause of death is required. The Native American Heritage Commission (NAHC) shall be contacted within 24 hours if the Coroner determines that the remains are Native American. The NAHC shall then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC § 5097.98), who in turn shall make recommendations to the City of American Canyon for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines § 15064.5(d)).	Submit documentation of findings and treatment measures, if remains are encountered	During grading activities
99.	**Mitigation Measure 4.5-4:** ***Geotechnical Requirements for the Quarry Pond.*** Prior to issuance of any building permits, the Project Applicant shall submit to the City plans that are consistent with the geotechnical recommendations of a minimum setback of 3:1 (horizontal:vertical) from the toe of the existing quarry pond bank. Any proposed plans inside of the 3:1 setback, shall be the subject of a detailed slope stability analysis by a current California registered Geotechnical Engineer or Engineering Geologist where proposed slopes must meet minimum factor of safety requirements as determined by the most recent California Building Code for both static and dynamic (earthquake) conditions. Graded cut-and-fill slopes over 15 feet shall be no steeper than 3:1 with slopes up to 15 feet no steeper than 2:1. Other measures, such as use of retaining walls and geogrid reinforcement or corrective grading, shall be implemented as necessary in accordance with the specific geotechnical recommendation informed by the aforementioned detailed slope stability analysis and outlined in the design level geotechnical report.	Submit grading plans for Quarry Lake Pond	Prior to issuance building permits
100.	**Mitigation Measure 4.6-1a:** ***Evaluation for Lead-Based Paint or Coatings, Asbestos-Containing Materials, or Polychlorinated Biphenyls.*** The Project Applicant shall submit documentation to the City to verify that all proposed areas for demolition or modification have been assessed by California state licensed contractors for the potential presence of lead-based paint or coatings, asbestos containing materials, and polychlorinated biphenyl-containing equipment prior to issuance of a demolition permit.	Submit documentation of findings	Prior to demolition activities
101.	**Mitigation Measure 4.6-1b:** ***Health and Safety Plan.*** If the assessment required by Mitigation Measure 4.6-1a finds presence of lead-based paint, asbestos, and/or polychlorinated biphenyls, prior to any construction or demolition activities on the project site, the Project Applicant shall submit to the City for approval and shall implement a health and safety plan to protect workers from risks associated with hazardous materials during abatement, demolition or renovation of affected structures.	Submit and receive approval of Health and Safety Plan	Prior to demolition of structures containing lead-based paint, asbestos, and/or

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			polychlorinated biphenyls
102.	**Mitigation Measure 4.6-1c:** ***Lead-Based Paint Removal Plan.*** If the assessment required by Mitigation Measure 4.6-1a finds presence of lead-based paint, prior to any demolition of structures containing lead based paint, the Project Applicant shall submit to the City for approval and shall implement a lead-based paint removal plan in accordance with City and California Code of Regulations Title 8, §§ 1532.1 et seq., requirements. The plan shall specify, but not be limited to, the following elements for implementation: ● Develop a removal specification approved by a Certified Lead Project Designer;[2] ● Ensure that all removal workers are properly trained; ● Contain all work areas to prohibit off-site migration of paint chip debris; ● Remove all peeling and stratified lead-based paint on building and non-building surfaces to the degree necessary to safely and properly complete demolition activities according to recommendations of the survey. The demolition contractor shall be responsible for the proper containment and disposal of intact lead-based paint on all equipment to be cut and/or removed during the demolition; ● Provide on-site personnel and area air monitoring during all removal activities to ensure that workers and the environment are adequately protected by the control measures used; ● Clean up and/or vacuum paint chips with a high efficiency particulate air (HEPA) filter; ● Collect, segregate, and profile waste for disposal determination; or ● Properly dispose of all waste.	Submit and receive approval of Lead-Based Paint Removal Plan	Prior to demolition of structures containing lead-based paint
103.	**Mitigation Measure 4.6-1d:** ***Asbestos Abatement.*** If the assessment required by Mitigation Measure 4.6-1a finds asbestos, prior to undertaking demolition or construction activities involving asbestos disturbance, the Project Applicant shall, demonstrate to the City that asbestos abatement shall be conducted by a California state licensed contractor prior to building demolition. Abatement of known or suspected asbestos-containing materials shall occur prior to demolition or construction activities that would disturb those materials. Pursuant to an asbestos abatement plan developed by a state-certified asbestos consultant and approved by the City, all asbestos-containing materials shall be removed and appropriately disposed of by a state certified asbestos contractor in accordance with Caltrans transportation requirements and any requirements of the receiving facility.	Submit documentation that abatement has been completed	Prior to demolition of structures containing asbestos
104.	**Mitigation Measure 4.6-1e:** ***Polychlorinated Biphenyl Abatement.*** If the assessment required by Mitigation Measure 4.6-1a finds polychlorinated biphenyls (PCBs), prior to undertaking demolition or construction activities that could disturb potential PCBs, the Project Applicant shall ensure that PCB abatement shall be conducted prior to building demolition or renovation. The Project Applicant shall demonstrate to the satisfaction of the City that PCBs shall be removed by a qualified contractor and transported in accordance with Caltrans requirements.	Submit documentation of PCB abatement	Prior to demolition of structures containing PCBs
105.	**Mitigation Measure 4.6-2a:** ***Phase I Recommendations.*** Prior to commencement of construction, the Project Applicant shall contract a qualified environmental consulting firm with state registered professionals (Professional Engineers or Geologists) to carry out the recommendations contained in the April 14, 2015, Phase I Environmental Site Assessment report by ENGEO Incorporated pertaining to the potential environmental concerns. The Phase I report included recommendations for collection of surface soil samples for laboratory analysis and oversight of other earthwork activities. The findings of the soil sampling effort shall be submitted to the Napa County Environmental Health	Submit documentation that recommendations of the Phase I Environmental Site Assessment have been	Prior to commencement of construction

[2] A Lead Project Designer is defined in CCR Title 17, Division 1, Chapter 8.

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	Division (NCEHD) prior to initiating any earthwork activities on the project site for direction on whether any further sampling or remediation may be necessary.	implemented, as necessary	
106.	**Mitigation Measure 4.6-2b:** ***Soil Management Plan*****.** The project shall submit and obtain approval of a Soil Management Plan from the Napa County Environmental Health Division (NCEHD) prior to initiating any earthwork activities on the project site. During construction, the contractor shall cease any earthwork activities upon discovery of any suspect soils or groundwater (e.g., petroleum odor and/or discoloration) during construction in accordance with a Soil Management Plan prepared for the project by a qualified environmental consultant and approved by the NCEHD. The contractor shall notify the NCEHD upon discovery of suspect soils or groundwater and retain a qualified environmental firm to collect soil samples to confirm the level of contamination that may be present. If contamination is found to be present, any further proposed groundbreaking activities within areas of identified or suspected contamination shall be conducted according to a site specific health and safety plan, prepared by a California state licensed professional. The contractor shall follow all procedural direction given by NCEHD and in accordance with the Soil Management Plan prepared for the site to ensure that suspect soils are isolated, protected from runoff, and disposed of in accordance with transportation laws and the requirements of the licensed receiving facility.	Submit NCEHD-approved Soil Management Plan and Health and Safety Plan, as necessary	Prior to grading and during constructio n
107.	**Mitigation Measure 4.6-2c:** ***Removal of Contaminated Soil or Groundwater*****.** If contaminated soil or groundwater is encountered and identified constituents exceed human health risk levels, the Project Applicant shall submit documentation to the City to verify that it has been delineated, removed, and disposed of off site in compliance with the receiving facilities' requirements prior to construction of any building foundation.	Submit documentation of removal of contaminated soil or groundwater, if encountered	Prior to constructio n of any building foundation
108.	**Mitigation Measure 4.6-4:** ***Development within 50 Feet of the Pacific Gas & Electric (PG&E) Pipeline/Easement*****.** Prior to issuance of building or grading permits, Project Applicant shall submit documentation to the City to verify that development plans located within 50 feet of the existing PG&E pipeline/easement, including utilities that may intersect the existing PG&E pipeline, have been submitted to PG&E Gas Transmission Integrity Management and PG&E Land Development for review and approval. Project Applicant plans for all proposed improvements located within this zone shall adhere to the requirements of PG&E Gas Transmission Integrity Management and PG&E Land Development, including without limitation, setback requirements, depth of cover over pipeline, location of trees and maintenance requirements, minimum separation of crossing utilities, trail location, as well as any relocation requirements, if applicable.	Submit development plans for any activities within 50 feet of the existing PG&E pipeline/easemen t	Prior to issuance of building or grading permits for any activities within 50 feet of the existing PG&E pipeline/ea sement.
109.	**Mitigation Measure 4.7-1:** ***Stormwater Pollution Prevention Plan (SWPPP)*****.** Prior to issuance of grading permits for the project, the Project Applicant shall submit documentation to the City to verify that a Storm Water Pollution Prevention Plan (SWPPP) has been prepared in accordance with the requirements of the statewide National Pollutant Discharge Elimination System (NPDES) Construction General Permit. The SWPPP shall be designed, without limitation, to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled; (2) where not otherwise required to be under a Regional Water Quality Control Board permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site best management practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity; and (4) stabilization BMPs are installed to reduce or eliminate pollutants after construction is completed. The SWPPP shall be prepared by a qualified SWPPP developer and included as part of	Submit Stormwater Pollution Prevention Plan	Prior to issuance of grading permits

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	construction specifications. The SWPPP shall include the minimum BMPs required for the identified Risk Level in accordance with NPDES Construction General Permit requirements. BMPs could include, but are not necessarily limited to the use of straw bales, silt fences, fiber rolls, hydroseeding, preservation of existing vegetation, straw mulch, washing of truck tires prior to exiting site, protection of existing storm drain inlets, dedicated refueling areas with secondary containment, and on-site storage of spill prevention kits. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook-Construction or the Caltrans *Stormwater Quality Handbook Construction Site BMPs Manual*.		
110.	**Mitigation Measure 4.7-2: *Water Discharge Requirements for Dewatering*.** For areas that may encounter groundwater during excavation activities, the Project Applicant shall incorporate San Francisco Regional Water Quality Control Board (SFRWQCB) discharge requirements into construction specifications for any dewatering activities that may be necessary. The Project Applicant shall provide all requested plans and protocols and incorporate any SFRWQCB additional comments or requests into project specifications for construction activities. Dewatering plans shall include, without limitation, an assessment of water quality, protocols for containment, and thresholds for discharge. No discharge of pumped water for dewatering shall occur prior to approval from SFRWQCB.	Submittal of dewatering plans	During excavation and grading activities
111.	**Mitigation Measure 4.7-3a: *Post-Construction Stormwater Controls*.** Prior to approval of tentative maps or issuance of building permits for the project, the Project Applicant shall submit documentation to the City to verify that post-construction stormwater controls have been included in the site design in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase II Small Municipal Separate Storm Sewer Systems (MS4) Permit and the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual. The Project Applicant shall prepare the final Stormwater Control Plan (SCP) and any necessary changes by the City or the SFRWQCB shall be incorporated into project design plans to ensure the required controls are in place and adhere to the requirements of the NPDES Phase II Small MS4 Permit and consistent with the BASMAA manual. At a minimum, the SCP shall demonstrate how the following measures shall be incorporated into the project: • Low-impact development (LID) site design principles (e.g., preserving natural drainage channels, treating stormwater runoff at its source rather than in downstream centralized controls); • Source control best management practices (BMPs) in the form of design standards and structural features for all proposed areas of development; • Source control BMPs for landscaped areas shall be documented in the form of a Landscape Management Plan that relies on Integrated Pest Management and also includes pesticide and fertilizer application guidelines designed to minimize any off-site discharge; and • Treatment control measures (e.g., bioretention, porous pavement, vegetated swales) targeting any potential pollutants such as sediment, pathogens, metals, nutrients (nitrogen and phosphorus compounds), oxygen-demanding substances, organic compounds (e.g., PCBs, pesticides), oil and grease, and trash and debris. The SCP shall demonstrate that the project has the land area available to support the proposed BMP facilities sized per the required water quality design storm.	Submit documentation of compliance with the NPDES Phase II Small Municipal Separate Storm Sewer Systems Permit and the Bay Area Stormwater management Agencies Association Post-construction Manual	Prior to approval of tentative maps or issuance of building permits
112.	**Mitigation Measure 4.7-3b: *Compliance with the MS4 Permit*.** Prior to issuance of any building permits, the Project Applicant shall submit documentation to the City to demonstrate adherence to Provision E.12.h of the Municipal Separate Storm Sewer Systems (MS4) Permit, which requires that an Operation and Maintenance Program is implemented for post-construction stormwater management features. Responsible parties and funding for long-term maintenance of all Best Management Practices (BMPs) must be	Submit documentation that an Operation and Maintenance Program has been	Prior to issuance of building permits

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	specified within the Operation and Maintenance Plan. This Plan shall specify a regular inspection schedule of stormwater treatment facilities in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) MS4 Permit. Reports documenting inspections and any remedial action conducted shall be submitted regularly to the City for review and approval.	implemented for post-construction stormwater management features	
113.	**Mitigation Measure 4.9-1: *Construction Noise.*** To reduce the potential for noise impacts due to construction of the project, the Project Applicant shall require construction contractors to implement the following measures: ● Stationary construction noise sources shall not be located within 200 feet of residence. If necessary to locate this equipment within 200 of existing residences, stationary equipment shall be shielded by temporary noise barriers or acoustic enclosures that are long and tall enough to break line of sight. ● Noise barriers or shielding shall be erected for construction work associated with on-site construction activities that involves heavy construction equipment and occurs within 200 feet of residences for an extended period of time (i.e., more than 2 weeks). The barriers shall be long enough to break line of sight and at least 8 feet in height. ● Equipment warm up areas and equipment storage areas shall not be located closer than 500 feet of adjacent residences. ● All heavy construction equipment and all stationary noise sources (such as diesel generators) shall have properly functioning manufacturer-installed mufflers. ● Stationary noise sources, such as temporary generators and pumps, shall be positioned as far from nearby receivers as possible, within temporary enclosures and shielded by barriers (which could reduce construction noise by as much as 5 dB), or other measures, to the extent feasible. ● Use "quiet" models of air compressors and other stationary equipment where such technology exists. ● Prohibit unnecessary idling of internal combustion engines. ● To further reduce the potential for impacts, a Construction Noise Management Plan shall be prepared and shall include the following: ○ A process by which to provide a minimum of 2 weeks' advance notice to all residences located within 200 feet of construction activities that are expected to occur for a period of 2 weeks or longer within a defined area, including the approximate start and end dates of such activities. ○ Signs shall be posted at all project entrances upon commencement of construction for the purposes of informing all contractors/subcontractors, their employees, agents, material haulers, and all other persons at the project of the basic requirements of Mitigation Measure 4.9-1. ○ Publicly visible signs shall be posted on security fencing at multiple locations around the perimeter of the project construction boundary that include: ■ Permitted construction days and hours. ■ A telephone number and designated person to contact for registering noise complaints. The designated person shall be available to respond to, and if necessary through complaint verification, take corrective action to ensure that noise emissions from the offending equipment or activity is addressed. Corrective action shall be applied immediately if feasible, and within no later than 48 hours after receipt of the noise complaint. The designated person shall track complaints and corrective actions taken to resolve noise complaint issues.	Submit documentation verifying implementation of mitigation implementation, including construction Noise Management Plan	During constructio n activities
114.	**Mitigation Measure 4.12-3a (same as Mitigation Measure 4.2-2a in Section 4.2, *Air Quality and Greenhouse Gas Emissions*): *Transportation Demand Management (TDM) Program*.** Prior to issuance of the first building permit for the non-residential use areas (i.e.,	TDM program	Prior to issuance of first

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	Napa Valley Ruins & Gardens [NVR&G] and hotel), the Project Applicant shall develop a TDM program for the non-residential use areas (i.e., NVR&G and hotel) and shall submit the TDM program to the City Department of Public Works for review and approval. The Project Applicant shall be responsible for funding and overseeing the delivery of trip reduction/TDM proposed programs and strategies, which may include, but are not limited to, the following: 1. Establishment of carpool, buspool, or vanpool programs; 2. Vanpool purchase incentives; 3. Cash allowances, passes or other public transit subsidies and purchase incentives; 4. Preferential parking locations for ridesharing vehicles; 5. Computerized commuter rideshare matching services; 6. Guaranteed ride-home program for ridesharing; 7. Bicycle programs including bike purchase incentives, storage, and maintenance programs; 8. On-site car share and bike share service; 9. Preparation of a Parking Management Plan to address parking accommodations for large events; 10. Designation of an on-site transportation coordinator for the project; 11. Transit and trip planning resources such as commute information kiosk; 12. Employer-provided showers, changing rooms, and clothing lockers for office employees that commute via active transportation; 13. Bicycle route mapping resources; 14. Participation in future citywide Transportation Management Association (TMA); and 15. Submit annual reports to the City regarding TDM activities.		building permit for the non-residential use area (i.e., NVR&G and hotel)
115.	**Mitigation Measure 4.12-9: *Construction Management Plan*.** The Project Applicant shall develop and submit a Construction Management Plan (CMP) to the City of American Canyon prior to commencement of any construction activities, including construction activities associated with the transportation mitigation measures. The provisions of a CMP shall specifically address the characteristics of construction-related traffic associated with development. Such plans identify construction phasing and the level and type of construction-related traffic. The CMP shall identify construction truck routes to access the WRSP site, lane closures on existing public streets (if needed) including a plan for any necessary traffic control measures, and on-site staging requirements, and other information as required by the City. Once the construction truck routes have been approved, but before construction has started, the Project Applicant shall conduct a survey of existing conditions of pavement along the approved truck routes and submit documentation of the results to the City. When construction has been substantially completed such that there would be no further construction truck trips, the Project Applicant shall re-survey the construction truck routes. The Project Applicant shall be responsible for repairing damage to roadways used for construction vehicle access to the site and attributable to the project so that the roadway conditions are returned to their pre-construction conditions (or better) as documented in the pre-construction survey along the truck routes following the construction of the project.	Construction Management Plan	Prior to construction activities

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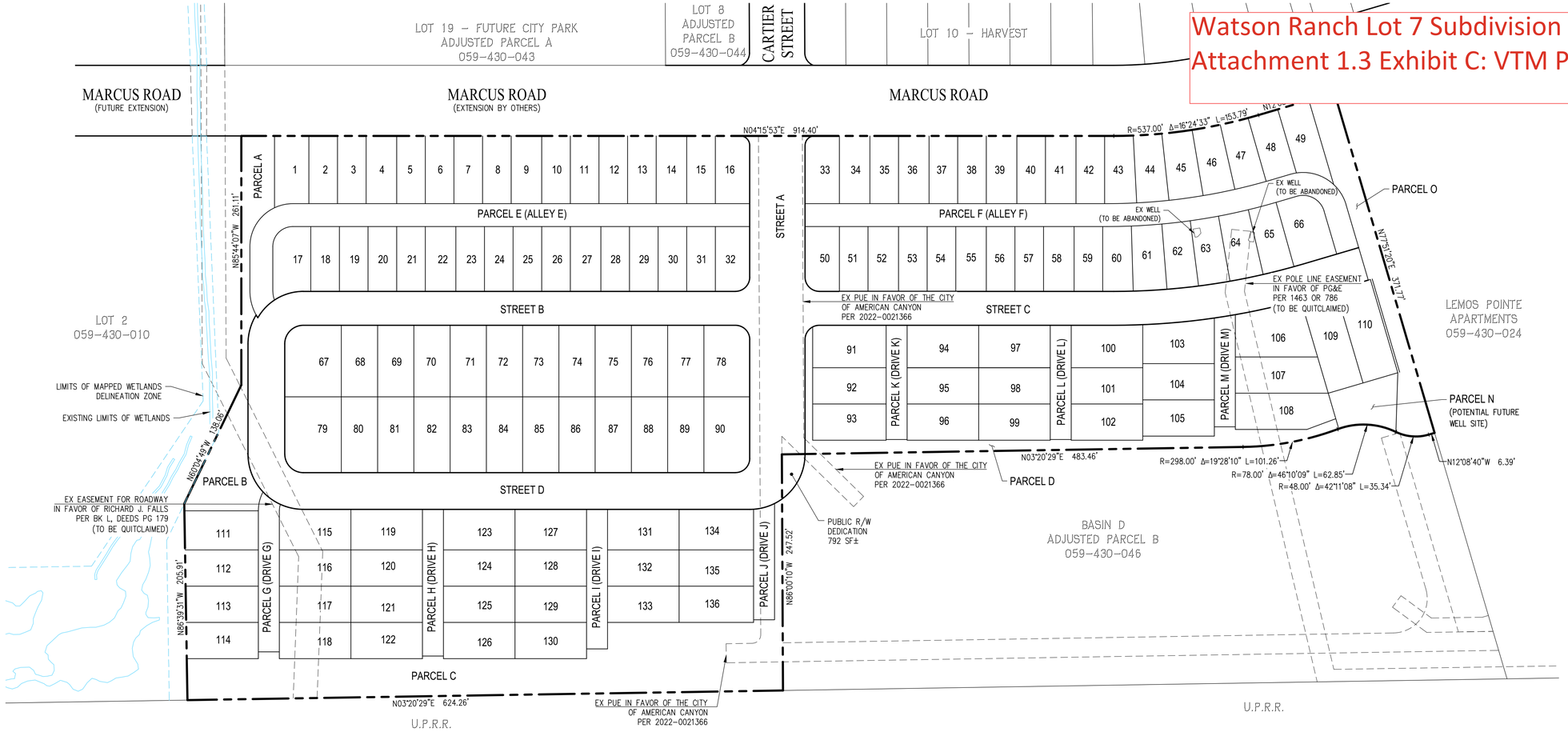
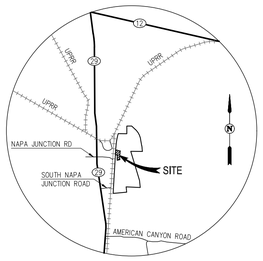
Watson Ranch Lot 7 Subdivision
Attachment 1.3 Exhibit C: VTM Plans





VICINITY MAP
NTS

SHEET INDEX

Sheet Number	Sheet Title
TM-1	VESTING TENTATIVE MAP
TM-2	VESTING TENTATIVE MAP
TM-3	STREET SECTIONS & SITE AREAS
TM-4	EXISTING CONDITIONS
TM-5	PRELIMINARY UTILITY PLAN
TM-6	PRELIMINARY GRADING & DRAINAGE PLAN
TM-7	PRELIMINARY GRADING CROSS SECTIONS
TM-8	PRELIMINARY STORMWATER CONTROL PLAN
TM-9.1	PRELIMINARY CIRCULATION & FIRE TRUCK ACCESS PLAN
TM-9.2	PRELIMINARY CIRCULATION & FIRE TRUCK ACCESS PLAN

GENERAL NOTES

1. OWNER/DEVELOPER: AMERICAN CANYON I, LLC
1001 42ND STREET, SUITE 200
OAKLAND, CA 94608
CONTACT: TERRENCE MCGRATH
PHONE: (510) 273-2001

2. DEVELOPER/BUILDER: KB HOME
4830 BUSINESS CENTER DRIVE, SUITE 150
FAIRFIELD, CA 94534
CONTACT: JERRY MARCUS
PHONE: (707) 389-7500

3. CIVIL ENGINEER: CARLSON, BARBEE, & GIBSON, INC.
2633 CAMINO RAMON, SUITE 350
SAN RAMON, CA 94583
CONTACT: WILLIAM CARLSON, PE 89309
PHONE: (925) 866-0322

4. GEOTECHNICAL ENGINEER ENGEO INC.
2010 CROW CANYON PLACE, SUITE 250
SAN RAMON, CA 94583
THEODORE P. BAYHAM, GE 2480
(925) 866-9000

5. ARCHITECT: KB HOME ARCHITECTURE
5230 PACIFIC CONCOURSE DRIVE, SUITE 330
LOS ANGELES, CA 90045
SOPIDA KETMANEE-FLORES
(424) 294-3718

6. LANDSCAPE ARCHITECT: VANDERTOOLEN ASSOCIATES
855 BORDEAUX WAY, SUITE 240
NAPA, CA 94558
CONTACT: DAVE BENNET
PHONE: (707) 224-2299

7. TOPOGRAPHIC SOURCE: EXISTING TOPOGRAPHY FOR THE SITE IS BASED ON THE APPROVED LOT 7 SHEET GRADING PLAN.

8. BENCHMARK: NAPA COUNTY BENCHMARK BM 934C. STATE WELL MONUMENT STAMPED B-55 IN CUL DE SAC AT NORTH END OF LOMBARD ROAD.
EL = 58.37' NGVD 29
(TO CONVERT TO NAVD88 = NGVD29 + 2.44')

9. A.P.N.'S: 059-430-045

10. EXISTING LAND USE: VACANT/AGRICULTURE

11. PROPOSED LAND USE: RESIDENTIAL

12. SITE AREA:
12.88± ACRES (GROSS)
8.29± ACRES (LOTS 1-136)
2.59± ACRES (PARCELS A-O)
2.00± ACRES (STREET DEDICATIONS, INCLUDES 0.02 AC± FROM APN 059-430-046)
10.92± ACRES NET (SITE AREA: LOTS 1-136 & STREET DEDICATIONS)

13. LOTS: 136 LOTS AND 15 PARCELS

14. RESIDENTIAL UNITS: 136 (LOTS 1-136)

15. GENERAL PLAN: TOWN CENTER (TC)

16. ZONING: MEDIUM DENSITY RESIDENTIAL – 16 (TC-1 MDR-16)

17. DENSITY: 10.6± DU/ACRE (GROSS)
12.5± DU/ACRE (NET)

18. WATER: CITY OF AMERICAN CANYON

19. SANITARY SEWER: CITY OF AMERICAN CANYON

20. STORM DRAIN: CITY OF AMERICAN CANYON

21. GAS & ELECTRIC: PACIFIC GAS AND ELECTRIC (PG&E)

22. TELEPHONE: AT&T

23. CABLE TV: COMCAST

24. FLOOD ZONE: FEMA FLOOD ZONE X – UNSHADED (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN).
(MAP NUMBER: 06055C0650E)

25. DIMENSIONS: ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO FINAL SUBDIVISION MAP.

26. EASEMENTS: EXISTING EASEMENTS MAY REQUIRE VACATION OR RELOCATION TO FACILITATE DEVELOPMENT. ALL PROPOSED, EXISTING, RELOCATED AND VACATED EASEMENTS TO BE SHOWN ON THE FINAL MAP OR BY SEPARATE INSTRUMENT AS NECESSARY.

27. STREETS (PUBLIC): STREETS A, B, C, & D TO BE PUBLIC STREETS, OWNED & MAINTAINED BY THE CITY OF AMERICAN CANYON.

28. STREETS (PRIVATE): ALLEYS E, & F & DRIVES G, H, I, J, K, L, & M TO BE PRIVATE STREETS, OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

29. DETENTION/STORMWATER ALL STORMWATER QUALITY TREATMENT AND DETENTION NEEDS FOR THE SITE TO BE PROVIDED AT EXISTING BASIN D, ADJUSTED PARCEL B, APN 059-430-046. THE EXISTING DETENTION/ STORMWATER QUALITY BASIN IS OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

30. PHASING: THIS PROJECT MAY BE PHASED. MULTIPLE FINAL MAPS MAY BE FILED ON THE LANDS SHOWN ON THIS VESTING TENTATIVE MAP IN ACCORDANCE WITH ARTICLE 4, SECTION 66456.1 OF THE SUBDIVISION MAP ACT. PHASING SHOWN ON THE VESTING TENTATIVE MAP IS PRELIMINARY AND SUBJECT TO THE FINAL MAP(S).

31. PARCELS: PARCELS TO BE PRIVATE AND MAINTAINED BY HOMEOWNERS ASSOCIATION.

32. WELLS: THERE ARE TWO (2) EXISTING WELLS ONSITE TO BE ABANDONED PER COUNTY OF NAPA REQUIREMENTS. A POTENTIAL NEW WELL AREA IS IDENTIFIED ON THE VESTING TENTATIVE MAP. FINAL WELL LOCATION TO BE DETERMINED AS PART OF THE FUTURE CONSTRUCTION DOCUMENTS.

33. OFFSITE IMPROVEMENTS: ROADWAY IMPROVEMENTS & UTILITY EXTENSIONS IN MARCUS ROAD, ALONG THE EASTERN PROPERTY LINE TO BE CONSTRUCTED BY THE MASTER DEVELOPER.

34. EASEMENTS (PSYE): THE ALLEY LOADED PRODUCT (LOTS 1-66) WILL HAVE PRIVATE SIDE YARD EASEMENTS ON THE ADJACENT LOT. SEE SHEET TM-2 FOR TYPICAL PSYE DETAIL. FINAL LIMITS OF PSYE TO BE SHOWN ON THE FINAL MAP OR BY SEPARATE INSTRUMENT.

ABBREVIATIONS

AC	ACRES/ASPHALT CONCRETE	PR	PROPOSED
AB	AGGREGATE BASE	PSYE	PRIVATE SIDE YARD EASEMENT
BD	BOUNDARY	PUE	PUBLIC UTILITY EASEMENT
BGL	BOTTOM OF GRAVEL LAYER	R	RADIUS
CB	CATCH BASIN	RET	RETURN/RETAINING
CL	CENTERLINE	RM	RECORDED MAP
CY	CUBIC YARD	R/W	RIGHT-OF-WAY
DW	DRIVEWAY	SF	SQUARE FOOT
ESMT	EASEMENT	SD	STORM DRAIN
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT	SLS	SEWER LIFT STATION
		SS	SANITARY SEWER
EX	EXISTING	S/W	SIDEWALK
FH	FIRE HYDRANT	TBC	TOP OF BEVELED CURB
HOA	HOMEOWNERS ASSOCIATION	TC	TOP OF GRAVEL LAYER
INV	INVERT	TGL	TOP OF GRAVEL LAYER
I.F.O.	IN FAVOR OF	TSL	TOP OF SOIL LAYER
L/S	LANDSCAPE	TYP	TYPICAL
MH	MANHOLE	W	WATER
N.T.S.	NOT TO SCALE		

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
		CENTERLINE
		LOT LINE
		RIGHT OF WAY
		EASEMENT LINE
		CURB & SIDEWALK
		TOP/TOE OF SLOPE
		RETAINING WALL
		EASEMENT

VESTING TENTATIVE MAP
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1"=60' DATE: SEPTEMBER 27, 2024
PL24-0012

0 60 120 180

cbg CIVIL ENGINEERS ▪ SURVEYORS ▪ PLANNERS
SAN RAMON ▪ (925) 866-0322
ROSEVILLE ▪ (916) 788-4456
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SHEET NO.
TM-1
OF 9 SHEETS

G:\1217-063\ACAD\VTM\TM01_VTM.DWG

LOT 6
ADJUSTED PARCEL D
059-430-036

LOT 19 – FUTURE CITY PARK
ADJUSTED PARCEL A
059-430-043

LOT 8
ADJUSTED
PARCEL B
059-430-044

CARTIER STREET

LOT 10 – HARVEST

MARCUS ROAD
(FUTURE EXTENSION)

MARCUS ROAD
(EXTENSION BY OTHERS)

MARCUS ROAD

PARCEL A

8' TRAIL & BIKE ROUTE

ALLEY E

PARCEL E

ALLEY F

PARCEL F

PARCEL O
MOUNTABLE CURB

LEMOS POINTE APARTMENTS
059-430-024

EX 8' TRAIL & BIKE ROUTE

8' TRAIL & BIKE ROUTE

LOT 2
059-430-010

MOUNTABLE CURB

STREET B

STREET C

STREET A

STREET D

LIMITS OF MAPPED WETLAND DELINEATION ZONE

EXISTING LIMITS OF WETLANDS

8' TRAIL & BIKE ROUTE

PARCEL B

PARCEL D

PARCEL N
(POTENTIAL FUTURE WELL SITE)

EXISTING EVA
(TO BE WIDENED FROM 17' TO 20')

PUBLIC R/W DEDICATION
792 SF±

EX 17' EVA
PR 20' EVA
& BIKE ROUTE

DRIVE G

DRIVE H

DRIVE I

DRIVE J

DRIVE K

DRIVE L

DRIVE M

PARCEL G

PARCEL H

PARCEL I

PARCEL J

PARCEL K

PARCEL L

PARCEL M

PARCEL C

BASIN D
ADJUSTED PARCEL B
059-430-046

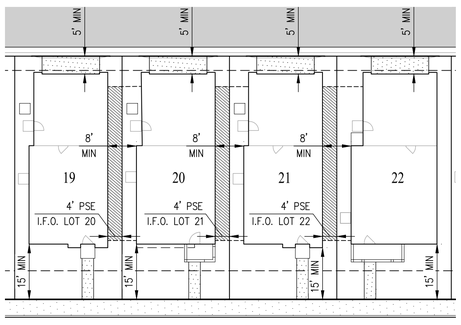
EXISTING UTILITY ACCESS ROAD TO REMAIN

EXISTING UTILITY ACCESS ROAD TO REMAIN

PROPOSED UTILITY ACCESS ROAD

624'

U.P.R.R.



TYPICAL PRIVATE SIDE YARD EASEMENT DETAIL

SHOWN FOR REFERENCE ONLY

FINAL LIMITS OF EASEMENTS TO BE VERIFIED WITH FINAL DESIGN & SHOWN ON THE FINAL MAP OR BY SEPARATE INSTRUMENT.

LEGEND

LINEWORK	DESCRIPTION
	PEDESTRIAN ROUTE/TRAIL
	BICYCLE ROUTE (SHARROWS & SIGNAGE TO BE INCLUDED IN FINAL CONSTRUCTION DOCUMENTS)
	EXISTING PEDESTRIAN/BICYCLE ROUTE

NOTES:

1. SEE SHEET TM-3 FOR LOT AND PARCEL AREA SUMMARY.
2. SEE SHEET TM-3 FOR PRELIMINARY STREET SECTIONS.
3. SEE PRIVATE PSYE. NOTE ON SHEET TM-1 & TYPICAL DETAIL ON THIS SHEET. PSYE'S APPLY TO LOTS 1-66.
4. ALL ALLEYS (E & F) & DRIVES (G-M) ARE PRIVATE. ALLEYS & DRIVES TO HAVE A PUE & EVAE. FINAL EASEMENT LIMITS TO BE SHOWN ON FINAL CONSTRUCTION DOCUMENTS.

VESTING TENTATIVE MAP
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1" = 50' DATE: SEPTEMBER 27, 2024
PL24-0012

0 50 100 150

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SHEET NO.
TM-2
OF 9 SHEETS

G:\1217-063\ACAD\VTM\TM02_VTM.DWG

LOT AREAS

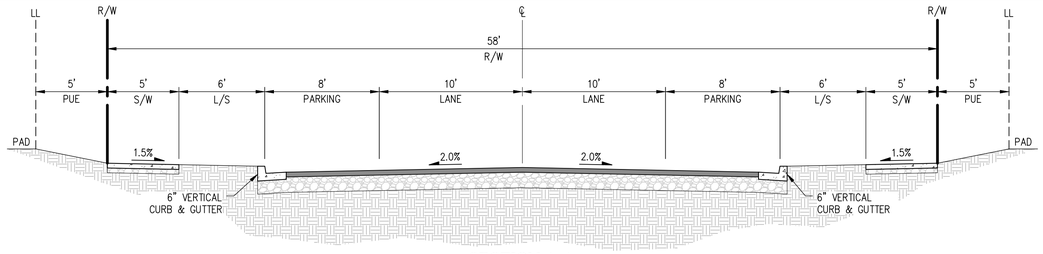
LOT	AREA (SF±)	LOT	AREA (SF±)
1	2,583	71	2,850
2	2,130	72	2,850
3	2,130	73	2,850
4	2,272	74	2,850
5	2,130	75	2,850
6	2,130	76	2,850
7	2,130	77	2,850
8	2,130	78	3,552
9	2,272	79	4,635
10	2,130	80	3,021
11	2,130	81	3,021
12	2,130	82	3,021
13	2,130	83	3,021
14	2,272	84	3,021
15	2,130	85	3,021
16	2,534	86	3,021
17	2,712	87	3,021
18	2,040	88	3,021
19	2,040	89	3,021
20	2,040	90	3,768
21	2,040	91	3,422
22	2,176	92	2,926
23	2,040	93	2,926
24	2,040	94	3,377
25	2,040	95	2,850
26	2,040	96	2,850
27	2,176	97	3,377
28	2,040	98	2,850
29	2,040	99	2,850
30	2,040	100	3,343
31	2,040	101	2,850
32	2,400	102	2,850
33	2,040	103	3,276
34	2,272	104	2,850
35	2,130	105	2,850
36	2,272	106	4,059
37	2,130	107	3,487
38	2,130	108	3,724
39	2,272	109	3,871
40	2,130	110	3,871
41	2,272	111	3,164
42	2,130	112	2,909
43	2,254	113	2,885
44	2,254	114	2,862
45	2,388	115	3,231
46	2,225	116	2,850
47	2,212	117	2,885
48	2,253	118	2,862
49	2,618	119	3,187
50	2,400	120	2,850
51	2,040	121	2,850
52	2,175	122	2,850
53	2,040	123	3,187
54	2,040	124	2,850
55	2,175	125	2,850
56	2,040	126	2,850
57	2,040	127	3,187
58	2,175	128	2,850
59	2,040	129	2,850
60	2,110	130	2,850
61	2,308	131	3,187
62	2,175	132	2,850
63	2,186	133	2,850
64	2,344	134	3,315
65	2,209	135	2,964
66	3,120	136	2,964
67	4,360	TOTAL AREA (LOTS 1–136)	361,379
68	2,850		
69	2,850		
70	2,850		

STREET PARCEL AREAS

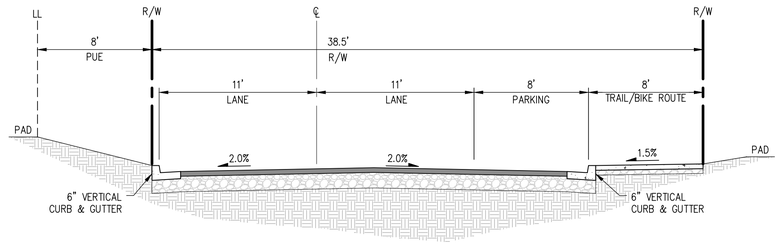
PARCEL	AREA (SF±)
E	14,303
F	14,815
G	3,538
H	3,382
I	3,217
J	2,599
K	2,634
L	2,634
M	2,547
TOTAL AREA (PARCEL E–M)	49,669

NON-STREET PARCEL AREAS

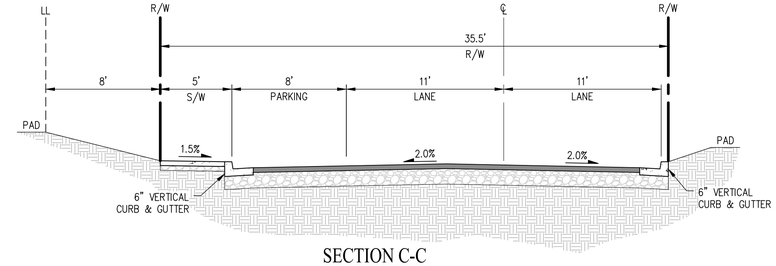
PARCEL	AREA (SF±)
A	4,582
B	5,528
C	32,513
D	7,994
N	3,907
O	8,910
TOTAL AREA (PARCEL A–D, N & O)	63,434



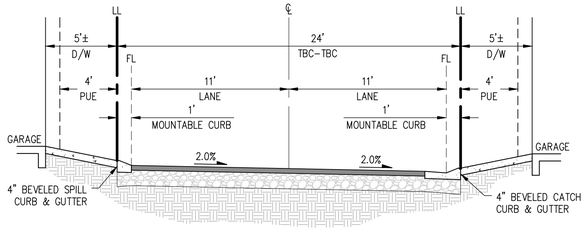
SECTION A-A
STREET A
SCALE 1"=5'



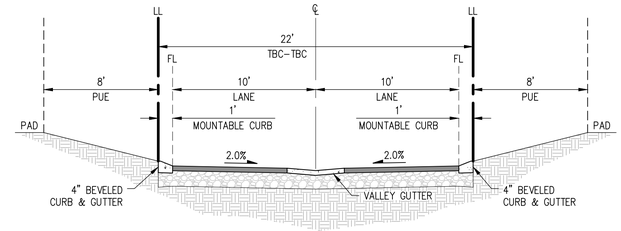
SECTION B-B
STREET D
SCALE: 1"=5'



SECTION C-C
STREET B, STREET C
SCALE: 1"=5'



SECTION D-D
ALLEY E, ALLEY F (PRIVATE STREETS)
SCALE: 1"=5'



SECTION E-E
DRIVES G–M (PRIVATE STREETS)
SCALE: 1"=5'

VESTING TENTATIVE MAP

VESTING TENTATIVE MAP

WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: NTS DATE: SEPTEMBER 27, 2024
PL24-0012

NOT TO SCALE

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SHEET NO.
TM-3
OF 9 SHEETS

G:\1217-063\ACAD\VTM\TM02_VTM.DWG

LOT 6
ADJUSTED PARCEL D
059-430-036

LOT 19 - FUTURE CITY PARK
ADJUSTED PARCEL A
059-430-043

LOT 8
ADJUSTED
PARCEL B
059-430-044

LOT 10 - HARVEST

MARCUS ROAD
(FUTURE EXTENSION)

MARCUS ROAD
(EXTENSION BY OTHERS)

MARCUS ROAD

EX 30" SD

EX 8" SS

EX 12" W

EX 12" RW

EX JT

EX 8" PRW

EX 12" SS

EX 8" RW STUB

EX 8" W STUB

EX 8" W STUBS (2)
(TO BE ABANDONED)

EX 8" RW STUB
(TO BE ABANDONED)

EX 8" RAW
WATER STUB

EX WELL
(TO BE ABANDONED)

EX WELL
(TO BE ABANDONED)

EX POWER POLE
(TO BE REMOVED)

EX ELEC

EX 42" SD

EX PUE IN FAVOR OF THE CITY
OF AMERICAN CANYON
PER 2022-0021366

EX POLE LINE EASEMENT
IN FAVOR OF PG&E
PER 1463 OR 786
(TO BE QUITCLAIMED)

OHW

LEMOS POINTE
APARTMENTS
059-430-024

LOT 2
059-430-010

LIMITS OF MAPPED WETLAND
DELINEATION ZONE

EXISTING LIMITS OF WETLANDS

EX EASEMENT FOR ROADWAY
IN FAVOR OF RICHARD J. FALLS
PER BK L, DEEDS PG 179
(TO BE QUITCLAIMED)

EX 24" SD STUB

EX 8" SS STUB

EX 42" OUTFALL

BASIN D
ADJUSTED PARCEL B
059-430-046

EXISTING STORMWATER
QUALITY/DETENTION BASIN

EX 8" SS

EX 24" SD STUB

EX 24" SD

EX 24" OUTFALL

EX 15" SS STUB

EX 15" SS

EX 24" SD (2)

FO

MHO

EX WOOD BOX CULVERT

U.P.R.R.

EX 30" SD

LEGEND

EXISTING		EXISTING	
	PROJECT BOUNDARY		METER BOX
	EASEMENT		FIRE HYDRANT
OHW	OVERHEAD ELECTRIC		UTILITY POLE
FO	FIBER OPTIC		STREET LIGHT
EX SD	STORM DRAIN PIPE	T / SL 2	JOINT TRENCH FACILITY (NOT LIMITED TO)
EX SS	SANITARY SEWER PIPE		
EX W	DOMESTIC WATER PIPE		
EX RW	RECYCLED WATER PIPE		
EX PRW	PRIVATE RAW WATER PIPE		
	MANHOLE		
	CATCH BASIN		

NOTES:

1. ALL EXISTING VEGETATION & TREES TO BE REMOVED.
2. ALL EXISTING FENCES ONSITE TO BE REMOVED.
3. EXISTING OVERHEAD POWER LINES & POWER POLES TO BE REMOVED.
4. EXISTING WELLS ONSITE (2) TO BE ABANDONED COUNTY OF NAPA REQUIREMENTS. A POTENTIAL WELL RELOCATION AREA IS IDENTIFIED ON THE VESTING TENTATIVE MAP. FINAL WELL RELOCATION AREA TO BE DETERMINED AS PART OF FUTURE CONSTRUCTION DOCUMENTS.
5. EXISTING TOPOGRAPHY FOR THE SITE IS BASED ON THE APPROVED LOT 7 SHEET GRADING PLAN.

VESTING TENTATIVE MAP
EXISTING CONDITIONS
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: SEPTEMBER 27, 2024
PL24-0012

0 50 100 150

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SHEET NO.
TM-4
OF 9 SHEETS

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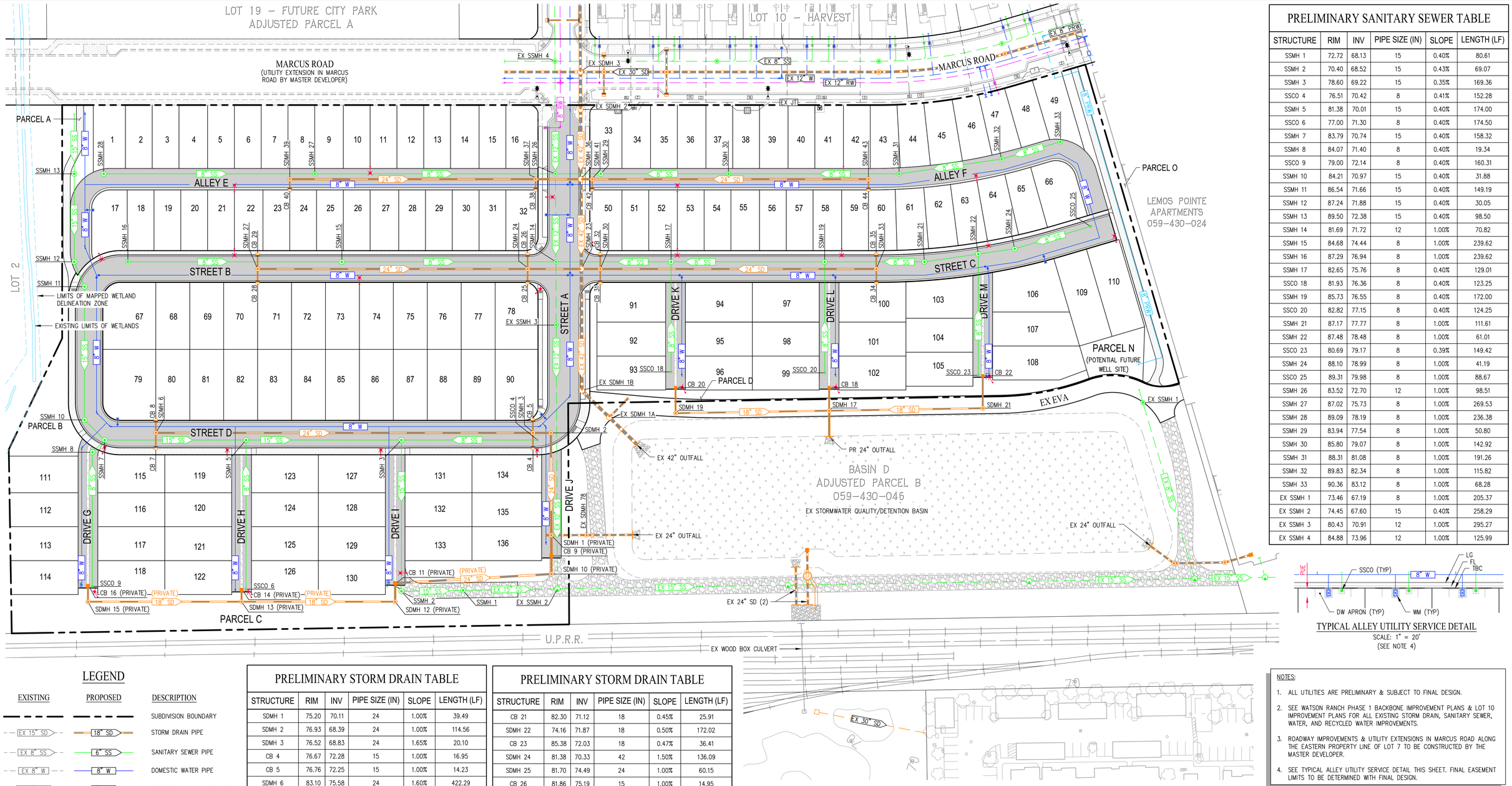

PRELIMINARY SANITARY SEWER TABLE

STRUCTURE	RIM	INV	PIPE SIZE (IN)	SLOPE	LENGTH (LF)
SSMH 1	72.72	68.13	15	0.40%	80.61
SSMH 2	70.40	68.52	15	0.43%	69.07
SSMH 3	78.60	69.22	15	0.35%	169.36
SSCO 4	76.51	70.42	8	0.41%	152.28
SSMH 5	81.38	70.01	15	0.40%	174.00
SSCO 6	77.00	71.30	8	0.40%	174.50
SSMH 7	83.79	70.74	15	0.40%	158.32
SSMH 8	84.07	71.40	8	0.40%	19.34
SSCO 9	79.00	72.14	8	0.40%	160.31
SSMH 10	84.21	70.97	15	0.40%	31.88
SSMH 11	86.54	71.66	15	0.40%	149.19
SSMH 12	87.24	71.88	15	0.40%	30.05
SSMH 13	89.50	72.38	15	0.40%	98.50
SSMH 14	81.69	71.72	12	1.00%	70.82
SSMH 15	84.68	74.44	8	1.00%	239.62
SSMH 16	87.29	76.94	8	1.00%	239.62
SSMH 17	82.65	75.76	8	0.40%	129.01
SSCO 18	81.93	76.36	8	0.40%	123.25
SSMH 19	85.73	76.55	8	0.40%	172.00
SSCO 20	82.82	77.15	8	0.40%	124.25
SSMH 21	87.17	77.77	8	1.00%	111.61
SSMH 22	87.48	78.48	8	1.00%	61.01
SSCO 23	80.69	79.17	8	0.39%	149.42
SSMH 24	88.10	78.99	8	1.00%	41.19
SSCO 25	89.31	79.98	8	1.00%	88.67
SSMH 26	83.52	72.70	12	1.00%	98.51
SSMH 27	87.02	75.73	8	1.00%	269.53
SSMH 28	89.09	78.19	8	1.00%	236.38
SSMH 29	83.94	77.54	8	1.00%	50.80
SSMH 30	85.80	79.07	8	1.00%	142.92
SSMH 31	88.31	81.08	8	1.00%	191.26
SSMH 32	89.83	82.34	8	1.00%	115.82
SSMH 33	90.36	83.12	8	1.00%	68.28
EX SSMH 1	73.46	67.19	8	1.00%	205.37
EX SSMH 2	74.45	67.60	15	0.40%	258.29
EX SSMH 3	80.43	70.91	12	1.00%	295.27
EX SSMH 4	84.88	73.96	12	1.00%	125.99

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
EX 15" SD	18" SD	STORM DRAIN PIPE
EX 8" SS	6" SS	SANITARY SEWER PIPE
EX 8" W	8" W	DOMESTIC WATER PIPE
EX 8" PRW	8" PRW	PROPOSED RAW WATER PIPE
EX 8" RW	8" RW	RECYCLED WATER PIPE
		STORM DRAIN MANHOLE
		SANITARY SEWER MANHOLE
		DRAINAGE INLET
		CATCH BASIN
		FIRE HYDRANT
		ELECTROLIER/STREET LIGHT
		BIORETENTION/DETENTION AREA

PRELIMINARY STORM DRAIN TABLE

STRUCTURE	RIM	INV	PIPE SIZE (IN)	SLOPE	LENGTH (LF)
SDMH 1	75.20	70.11	24	1.00%	39.49
SDMH 2	76.93	68.39	24	1.00%	114.56
SDMH 3	76.52	68.83	24	1.65%	20.10
CB 4	76.67	72.28	15	1.00%	16.95
CB 5	76.76	72.25	15	1.00%	14.23
SDMH 6	83.10	75.58	24	1.60%	422.29
CB 7	83.27	76.50	15	1.00%	16.95
CB 8	83.27	76.47	15	1.00%	13.95
CB 9	74.76	70.23	24	0.50%	23.20
SDMH 10	75.69	70.33	24	0.50%	20.24
CB 11	75.08	71.21	24	0.50%	175.30
SDMH 12	76.64	71.31	24	0.50%	20.73
SDMH 13	77.41	72.67	18	0.50%	172.00
CB 14	77.12	72.74	18	0.50%	13.23
SDMH 15	80.00	73.53	18	0.50%	172.00
CB 16	79.76	73.62	18	0.50%	17.61
SDMH 17	74.43	69.34	24	1.00%	19.60
SDMH 18	74.69	70.15	18	0.50%	61.19
CB 19	81.66	70.28	18	0.46%	28.68
SDMH 20	74.22	71.01	18	0.50%	172.02

PRELIMINARY STORM DRAIN TABLE

STRUCTURE	RIM	INV	PIPE SIZE (IN)	SLOPE	LENGTH (LF)
CB 21	82.30	71.12	18	0.45%	25.91
SDMH 22	74.16	71.87	18	0.50%	172.02
CB 23	85.38	72.03	18	0.47%	36.41
SDMH 24	81.38	70.33	42	1.50%	136.09
SDMH 25	81.70	74.49	24	1.00%	60.15
CB 26	81.86	75.19	15	1.00%	14.95
CB 27	81.84	75.20	15	1.00%	15.95
SDMH 28	86.23	78.42	24	1.30%	302.33
CB 29	86.39	79.12	15	1.00%	14.95
CB 30	86.39	79.13	15	1.00%	15.95
SDMH 31	81.68	71.92	24	0.40%	21.18
CB 32	81.83	75.00	15	1.00%	14.95
CB 33	81.82	75.01	15	1.00%	15.95
SDMH 34	86.00	73.15	24	0.40%	309.12
CB 35	86.16	79.33	15	1.00%	14.95
CB 36	86.15	79.34	15	1.00%	15.95
SDMH 37	83.73	71.84	42	1.50%	100.50
SDMH 38	83.94	75.92	24	1.00%	50.68
CB 39	83.81	76.78	15	1.00%	11.45
SDMH 40	87.24	78.67	24	1.00%	275.33

PRELIMINARY STORM DRAIN TABLE

STRUCTURE	RIM	INV	PIPE SIZE (IN)	SLOPE	LENGTH (LF)
CB 41	87.11	78.78	15	1.00%	11.45
SDMH 42	83.94	73.47	24	1.00%	12.65
CB 43	84.34	74.33	15	1.00%	11.45
SDMH 44	87.96	76.56	24	1.00%	309.33
CB 45	88.36	77.42	15	1.00%	11.45
EX SDMH 1	74.35	67.64	42	1.50%	43.00
EX SDMH 2	78.00	68.29	42	1.50%	43.00
EX SDMH 3	85.12	73.01	42	1.50%	78.00
EX SDMH 4	84.92	73.64	42	1.50%	42.00
EX SDMH 5	74.80	67.51	24	1.00%	51.00

TYPICAL ALLEY UTILITY SERVICE DETAIL

SCALE: 1" = 20'
(SEE NOTE 4)

NOTES:

1. ALL UTILITIES ARE PRELIMINARY & SUBJECT TO FINAL DESIGN.
2. SEE WATSON RANCH PHASE 1 BACKBONE IMPROVEMENT PLANS & LOT 10 IMPROVEMENT PLANS FOR ALL EXISTING STORM DRAIN, SANITARY SEWER, WATER, AND RECYCLED WATER IMPROVEMENTS.
3. ROADWAY IMPROVEMENTS & UTILITY EXTENSIONS IN MARCUS ROAD ALONG THE EASTERN PROPERTY LINE OF LOT 7 TO BE CONSTRUCTED BY THE MASTER DEVELOPER.
4. SEE TYPICAL ALLEY UTILITY SERVICE DETAIL THIS SHEET. FINAL EASEMENT LIMITS TO BE DETERMINED WITH FINAL DESIGN.

VESTING TENTATIVE MAP
PRELIMINARY UTILITY PLAN
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1" = 50' DATE: SEPTEMBER 27, 2024
PL24-0012

0 50 100 150

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ROSEVILLE • (916) 788-4456
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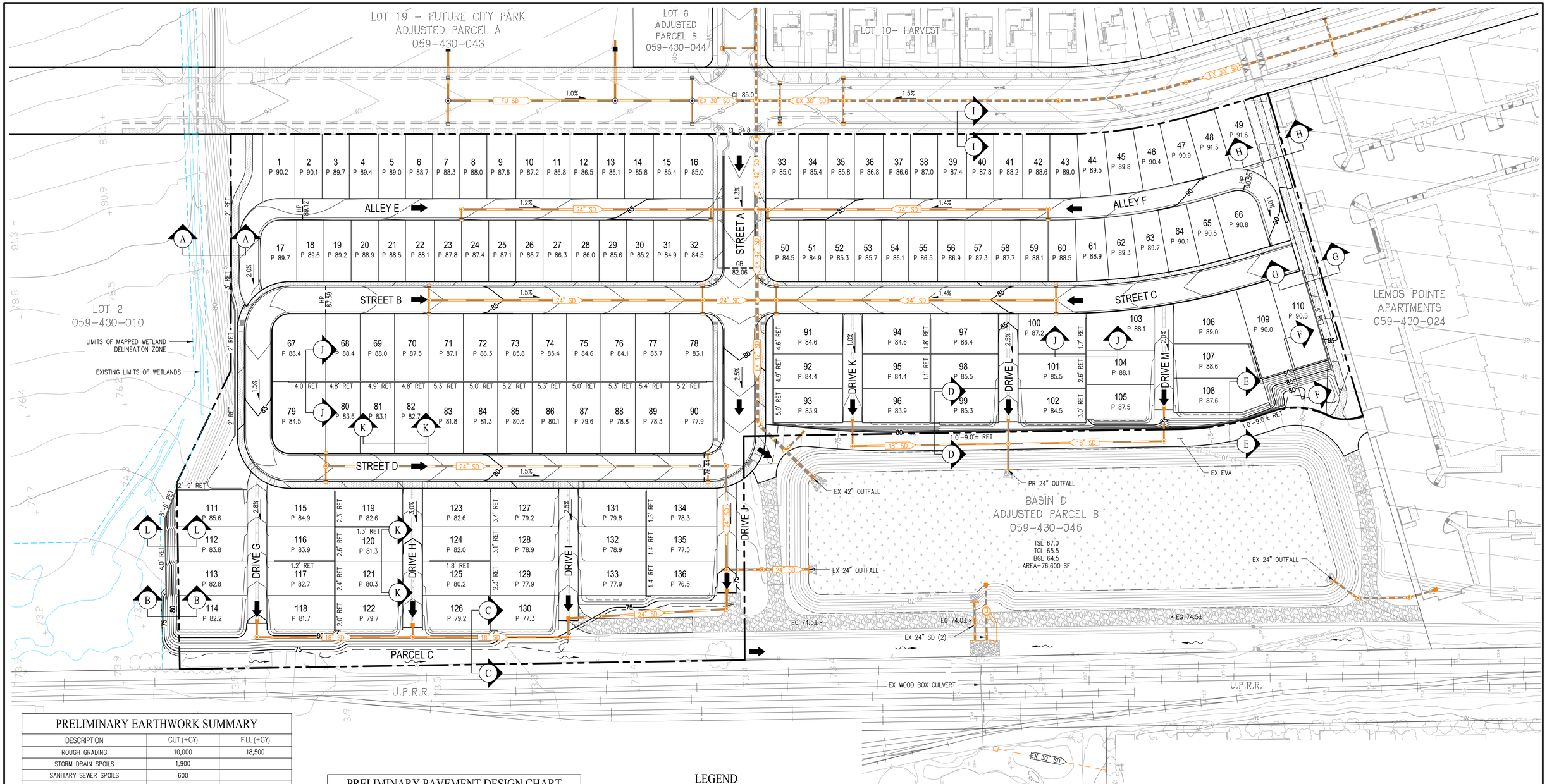
SHEET NO.
TM-5
OF 9 SHEETS

G:\1217-063\ACAD\VTM\TM05_UTILITY PLAN.DWG



PRELIMINARY EARTHWORK SUMMARY

DESCRIPTION	CUT (±CY)	FILL (±CY)
ROUGH GRADING	10,000	18,500
STORM DRAIN SPOILS	1,900	
SANITARY SEWER SPOILS	600	
DOMESTIC WATER SPOILS	500	
BUILDING SPOILS	2,720	
JOINT TRENCH SPOILS	900	
WALL SPOILS	1,880	
SUB–TOTAL	18,500	18,500
NET (BALANCE)	0	–

NOTES:

1. ASSUMES A STREET SECTION OF 3.5" AC/ 13" AB (WITH T.I. OF 6.0). FINAL STREET STRUCTURAL SECTION TO BE VERIFIED WITH FINAL DESIGN.
2. MASS GRADE QUANTITIES ARE MEASURED TO STREET SUBGRADE.
3. SPOILS QUANTITIES ARE PRELIMINARY. IT IS ASSUMED THAT TRENCH BACKFILL CAN BE NATIVE. CITY OF AMERICAN CANYON TO VERIFY TRENCH BACKFILL MATERIAL. CONTRACTOR'S FINAL QUANTITIES TO BE BASED ON APPROVED TRENCH SECTION. SPOIL QUANTITIES EXCLUDE SPOILS FOR LANDSCAPE ELEMENTS AND TREES.
4. NO ADJUSTMENTS WERE MADE FOR SOIL SHRINKAGE OR EXPANSION.
5. EARTHWORK QUANTITIES DO NOT INCLUDE ANY SOIL REMEDIATION OR GEOTECHNICAL WORK. IT IS ASSUMED ALL REMEDIAL GRADING HAS ALREADY OCCURRED.
6. ASSUMES 20 CY OF SPOILS PER LOT.

PRELIMINARY PAVEMENT DESIGN CHART

	TI	PCC	AC	AB
STREETS A–D	6	–	0.35' (4")	1.10' (13")
ALLEY E–F, DRIVE G–M (PRIVATE)	5	–	0.25' (3")	0.83' (10")
SIDEWALK	–	0.35' (4")	–	0.35" (4")

NOTES:

1. ALL GRADES ARE PRELIMINARY AND SUBJECT TO FINAL DESIGN.
2. STORM DRAIN SIZING IS PRELIMINARY AND SUBJECT TO FINAL DESIGN.
3. ALL ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON THE NGVD29 DATUM.
4. SEE SHEET TM–7 FOR PRELIMINARY GRADING CROSS SECTIONS.
5. RETAINING WALLS ARE NOT PROPOSED FOR PAD SPLITS OF 1.0' OR LESS. PADS WILL PICK–UP 1' OF GRADE DIFFERENCE IN THE FENCE KICKERBOARD.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
		CURB, GUTTER & SIDEWALK
12.0 ×	12.0 ×	SPOT ELEVATION
		GRADE BREAK
		FLOW DIRECTION
EX 18" SD	18" SD	STORM DRAIN PIPE
		STORM DRAIN MANHOLE
		CATCH BASIN
		DRAINAGE INLET
		DIRECTION OF OVERLAND RELEASE
		RETAINING WALL (RW)
		BIORETENTION AREA

VESTING TENTATIVE MAP
PRELIMINARY GRADING & DRAINAGE PLAN
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: SEPTEMBER 27, 2024
PL24-0012

0 50 100 150

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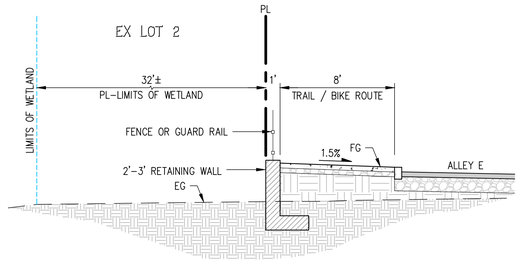
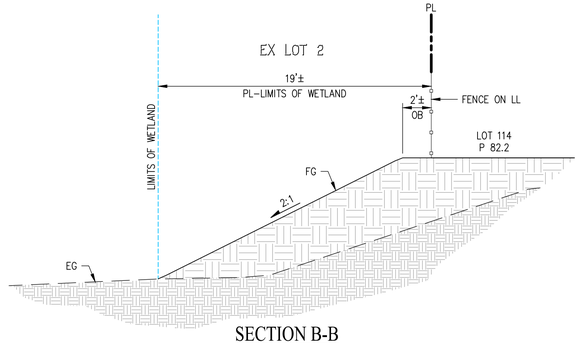
SHEET NO.
TM-6
OF 9 SHEETS

G:\1217-063\ACAD\VTM\TM06_GRADING & DRAINAGE.DWG



SECTION A-A
NOT TO SCALE



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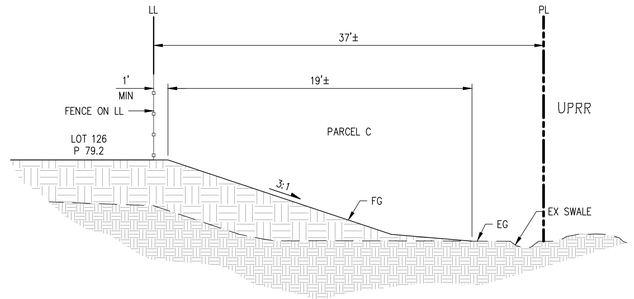

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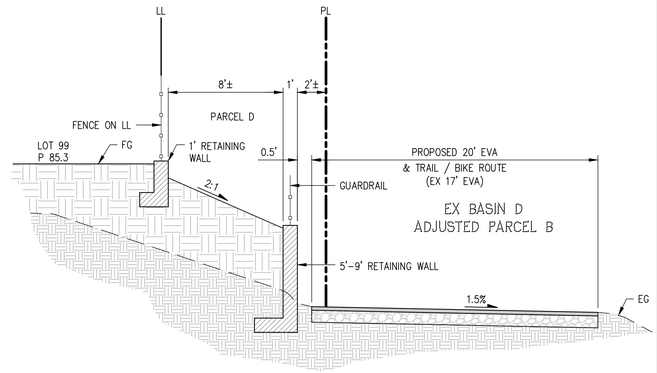

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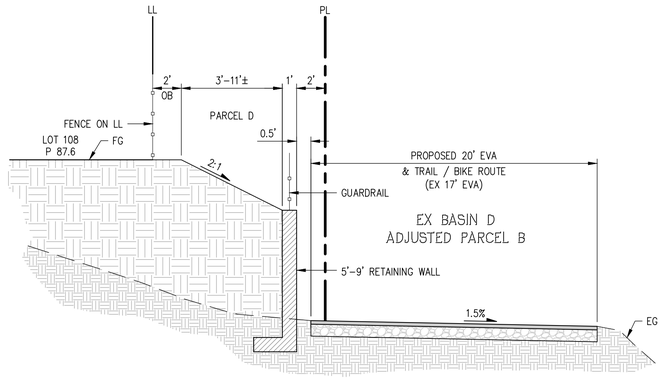
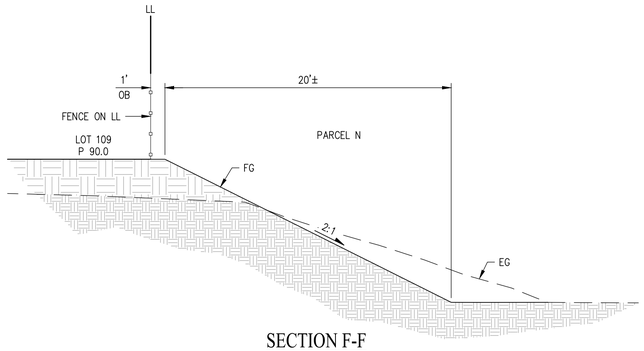
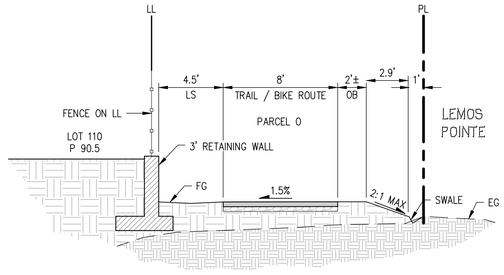


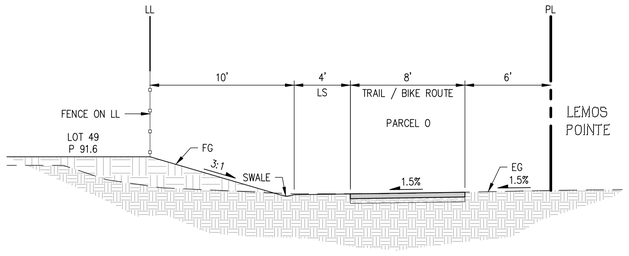
SECTION E-E
NOT TO SCALE



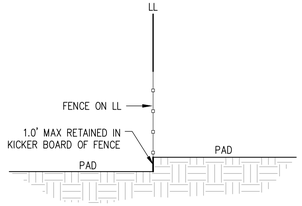
SECTION F-F
NOT TO SCALE



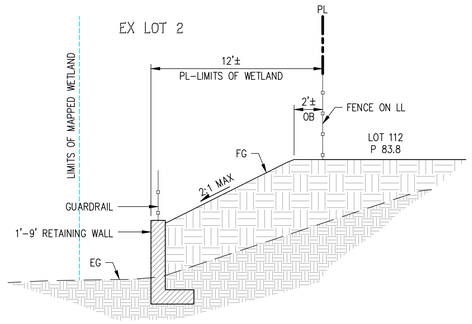
SECTION G-G
NOT TO SCALE



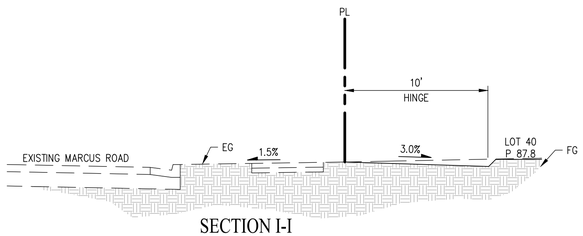
SECTION H-H
NOT TO SCALE



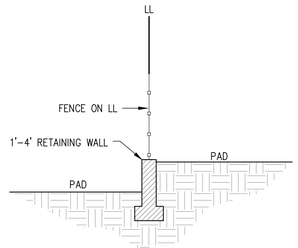
SECTION K-K
(TYP. LOT TO LOT RELATIONSHIP)
NOT TO SCALE



SECTION L-L
NOT TO SCALE



SECTION I-I
NOT TO SCALE



SECTION J-J
(TYP. LOT TO LOT RELATIONSHIP)
NOT TO SCALE

VESTING TENTATIVE MAP
PRELIMINARY GRADING CROSS SECTIONS
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1" = 80' DATE: SEPTEMBER 27, 2024
PL24-0012

0 120 240 360

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SHEET NO.
TM-7
OF 9 SHEETS

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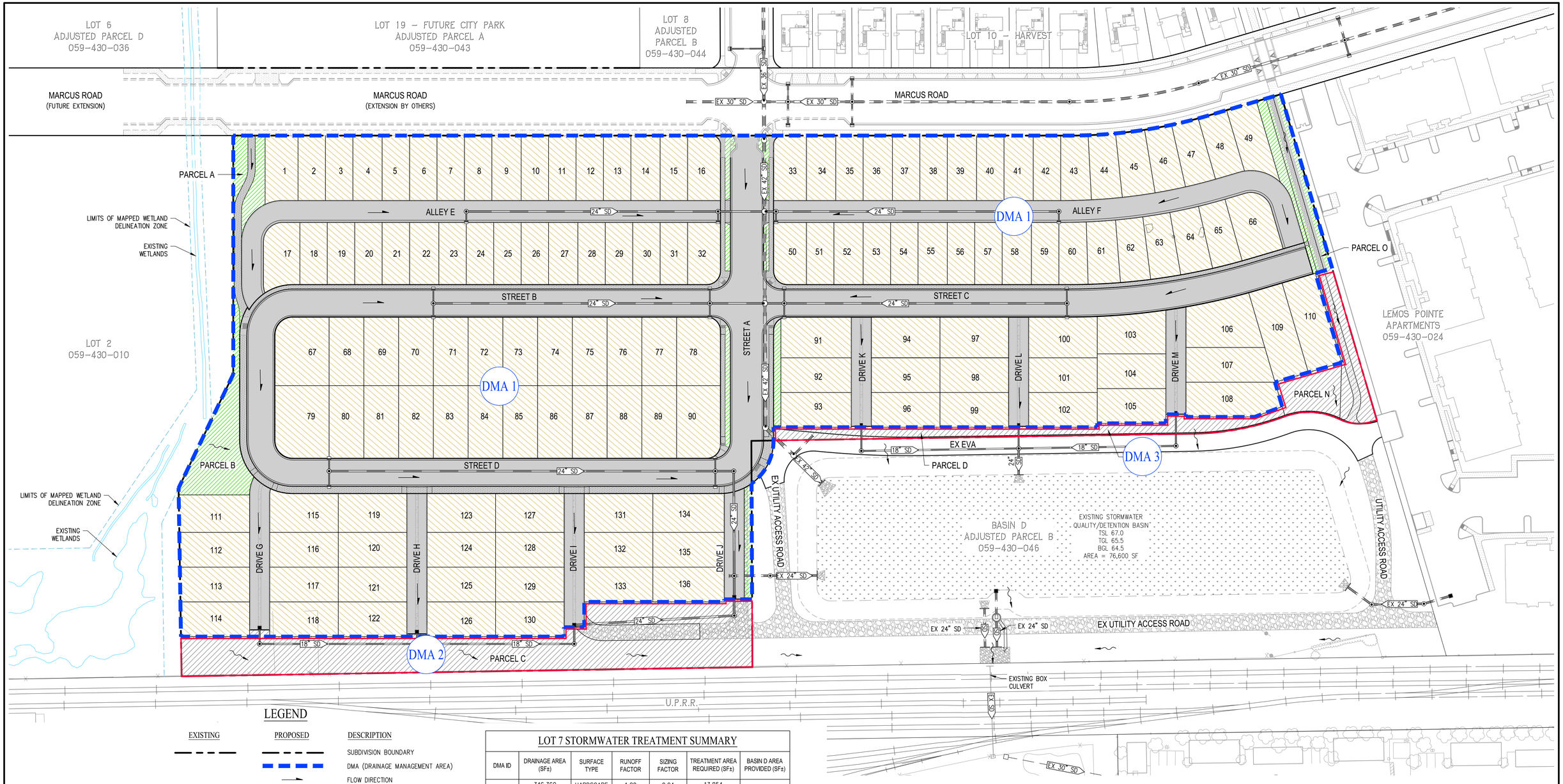

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
		DMA (DRAINAGE MANAGEMENT AREA)
		FLOW DIRECTION
		EARTH SWALE
EX 15" SD	18" SD	STORM DRAIN PIPE
		MANHOLE
		DRAINAGE INLET
		CATCH BASIN
		DEVELOPED LOT AREA
		IMPERVIOUS ASPHALT/CONCRETE AREA
		PERVIOUS AREA
		NOT A PART – SEE NOTES 4 & 5
		EXISTING BIORETENTION AREA
	DMA #	DMA ID

LOT 7 STORMWATER TREATMENT SUMMARY

DMA ID	DRAINAGE AREA (SF±)	SURFACE TYPE	RUNOFF FACTOR	SIZING FACTOR	TREATMENT AREA REQUIRED (SF±)	BASIN D AREA PROVIDED (SF±)
1	346,360	HARDSCAPE	1.00	0.04	13,854	76,600
	168,853	SOFTSCAPE	0.1	0.04	675	
2	1,453	HARDSCAPE	SEE NOTE 4			
	30,039	SOFTSCAPE				
3	1,411	HARDSCAPE	SEE NOTE 5			
	12,769	SOFTSCAPE				
TOTAL	560,885				14,530	

NOTES:

1. EXISTING STORMWATER QUALITY/DETENTION BASIN D APPROVED UNDER SEPARATE PERMIT. SEE WATSON RANCH PHASE 1A BACKBONE IMPROVEMENT PLANS FOR DETAILS.
2. SEE WATSON RANCH PHASE 1A BACKBONE IMPROVEMENT PLANS FOR ALL BACKBONE STORM DRAIN AND STORM WATER IMPROVEMENTS.
3. STORM DRAIN SIZING IS PRELIMINARY AND SUBJECT TO FINAL DESIGN.
4. DMA 2 WILL BE SELF-TREATING.
5. DMA 3 WILL BE SELF-TREATING.

VESTING TENTATIVE MAP
PRELIMINARY STORMWATER CONTROL PLAN
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: SEPTEMBER 27, 2024
PL24-0012

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SHEET NO.
TM-8
OF 9 SHEETS

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LOT 6
ADJUSTED PARCEL D
059-430-036

LOT 19 – FUTURE CITY PARK
ADJUSTED PARCEL A
059-430-043

LOT 8
ADJUSTED
PARCEL B
059-430-044

CARTIER STREET

LOT 10 – HARVEST

MARCUS ROAD
(FUTURE EXTENSION)

FUTURE FH

MARCUS ROAD
(EXTENSION BY OTHERS)

FUTURE FH

MARCUS ROAD

EX FH

EX FH

PARCEL A

EXISTING WETLAND

ALLEY E

ALLEY F

STREET B

STREET C

STREET A

STREET D

DRIVE G

DRIVE H

DRIVE I

DRIVE J

DRIVE K

DRIVE L

DRIVE M

PARCEL B

PARCEL C

PARCEL D

PARCEL N

PARCEL O

EX EVA

PR 20' EVA
(EX 17' EVA)

PR 20' EVA
(EX 17' EVA)

EX UTILITY ACCESS ROAD

UTILITY ACCESS ROAD

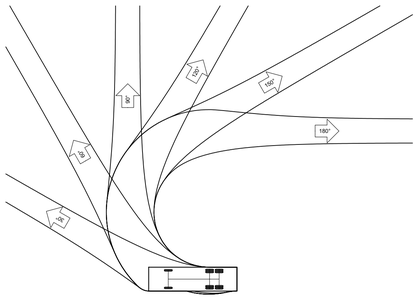
UTILITY ACCESS ROAD

LOT 2
059-430-010

LEMOS POINTE
APARTMENTS
059-430-024

BASIN D
ADJUSTED PARCEL B
059-430-046

U.P.R.R.



AMERICAN CANYON FIRE AERIAL APPARATUS
NOT TO SCALE

LEGEND

- SUBDIVISION BOUNDARY
- PROPOSED PAVEMENT AREA (FIRE ACCESSIBLE ROADWAY)
- EXISTING EMERGENCY VEHICLE ACCESS ROAD AREA (EVA). TO REMAIN.
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- FUTURE FIRE HYDRANT
- RED CURB (NO PARKING)
- S — STOP SIGN (PRELIMINARY LOCATION)

VESTING TENTATIVE MAP
PRELIMINARY CIRCULATION & FIRE TRUCK ACCESS PLAN
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: SEPTEMBER 27, 2024
PL24-0012

0 50 100 150

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SHEET NO.
TM-9.1
OF 9 SHEETS

G:\1217-063\ACAD\VTM\TM09_CIRCULATION & TRUCK ACCESS.DWG

LOT 6
ADJUSTED PARCEL D
059-430-036

LOT 19 – FUTURE CITY PARK
ADJUSTED PARCEL A
059-430-043

LOT 8
ADJUSTED
PARCEL B
059-430-044

CARTIER
STREET

LOT 10 – HARVEST

MARCUS ROAD
(FUTURE EXTENSION)

MARCUS ROAD
(EXTENSION BY OTHERS)

MARCUS ROAD

FUTURE FH

FUTURE FH

EX FH

EX FH

EX FH

EX FH

PARCEL A

EXISTING WETLAND

ALLEY E

ALLEY F

STREET B

STREET C

STREET D

STREET A

DRIVE G

DRIVE H

DRIVE I

DRIVE J

DRIVE K

DRIVE L

DRIVE M

PARCEL B

PARCEL C

PARCEL D

PARCEL N

PARCEL O

EX EVA

PR 20' EVA
(EX 17' EVA)

PR 20' EVA
(EX 17' EVA)

EX UTILITY ACCESS ROAD

UTILITY ACCESS ROAD

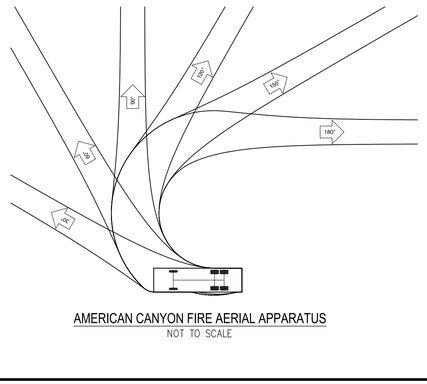
UTILITY ACCESS ROAD

LOT 2
059-430-010

LEMOS POINTE
APARTMENTS
059-430-024

BASIN D
ADJUSTED PARCEL B
059-430-046

U.P.R.R.



AMERICAN CANYON FIRE AERIAL APPARATUS
NOT TO SCALE

LEGEND

- SUBDIVISION BOUNDARY
- PROPOSED PAVEMENT AREA (FIRE ACCESSIBLE ROADWAY)
- EXISTING EMERGENCY VEHICLE ACCESS ROAD AREA (EVA). TO REMAIN.
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- FUTURE FIRE HYDRANT
- RED CURB (NO PARKING)
- S — STOP SIGN (PRELIMINARY LOCATION)

VESTING TENTATIVE MAP
PRELIMINARY CIRCULATION & FIRE TRUCK ACCESS PLAN
WATSON RANCH - LOT 7

CITY OF AMERICAN CANYON NAPA COUNTY CALIFORNIA
SCALE: 1"=50' DATE: SEPTEMBER 27, 2024
PL24-0012

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TM-9.2
OF 9 SHEETS

G:\1217-069\ACAD\VTM\TM09_CIRCULATION & TRUCK ACCESS.DWG

Attachment 2

PC RESOLUTION NO. 2024-XX

A RESOLUTION APPROVING A DESIGN PERMIT FOR WATSON RANCH LOT 7 TO CREATE 136 SINGLE FAMILY HOMES ON 12.86 ACRES WITHIN THE WATSON RANCH SPECIFIC PLAN MEDIUM DENSITY RESIDENTIAL-16 ZONING DISTRICT LOCATED WEST OF MARCUS ROAD, ASSESSOR'S PARCEL NUMBERS 059-430-045 (FILE NO. PL24-0013)

WHEREAS, on November 6, 2018, the City Council of the City of American Canyon adopted an Ordinance approving the Watson Ranch Specific Plan that provides for development of the approximately 309-acre Watson Ranch Specific Plan site with a mixed use community component including a mixed use town center (Napa Valley Ruins and Garden), 1,253 residential units, approximately 23 acres of improved parks, an additional 30 acres of parks, trails and open space, a 10-acre school site, roads and supporting water, wastewater, recycled water and storm drainage infrastructure; and

WHEREAS, on June 18, 2019, the City Council approved the Watson Ranch Specific Plan Development Agreement with Property Owner AC-1, LLC (Ordinance 2019-06, Agreement 2019-A107); and

WHEREAS, on June 25, 2024, KB Homes "Applicant" submitted the Watson Ranch Lot 8 Subdivision Map for development of 136 single-family homes on a 12.86-acre site in the Watson Ranch Specific Plan Medium Density Residential-16 (WRSP MDR-16) Zoning District (file number PL24-0012); and

WHEREAS, on June 25, 2024, the Applicant submitted the Watson Ranch Lot 8 Design Permit application for development of 136 single-family homes on a 12.86-acre site in the Watson Ranch Specific Plan Medium Density Residential-16 Zoning District (file number PL24-0013); and

WHEREAS, the 136 single-family homes consist of 70 traditional homes and 66 Alley Loaded homes; and

WHEREAS, on June 25, 2024, the Applicant included a request for a Minor Amendment to the WRSP MDR-16 Zone for reduced garage setbacks and increased floor-area-ratios; and

WHEREAS, in accordance with the American Canyon Municipal Code (ACMC) Section 19.17.070, specific plan amendments may be processed concurrently with an entitlement application; and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), a final environmental impact report (Final EIR) was prepared for the Watson Ranch Specific Plan, which included the proposed Design Permit, having analyzed the actions contemplated by the Design Permit and includes required mitigation measures, a Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Program; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on October 24, 2024 on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby approves the Watson Ranch Lot 7 Design Permit and Variance (PL24-0013), subject to the following Findings and Conditions of Approval.

SECTION 1: Findings Regarding Environmental Review pursuant to the California Environmental Quality Act (CEQA)

1. The City of American Canyon makes the following findings and determinations based on substantial evidence in the record as a whole pursuant to the California Environmental Quality Act (Pub. Res. Code §§ 21000 *et seq*.) and its Guidelines (California Code of Regulations, Title 14 §§ 15000, *et seq*.), as each is amended from time to time ("CEQA").

2. Pursuant to CEQA, an Environmental Impact Report (EIR) was prepared, supplemented, and certified for the Watson Ranch Project ("Project EIR"). The Project EIR considered and analyzed the significant adverse environmental impacts of, related mitigation measures for, and reasonable alternatives to, the planning, development, construction, operation, and maintenance of the proposed uses of the Property implemented through the "Project Approvals" of the "Project," including without limitation, the General Plan Amendment, Watson Ranch Specific Plan (and related Zoning), Large Lot Vesting Tentative Map, and Development Agreement. In accordance with CEQA, City certified as legally adequate and complete the Project EIR, and approved the development allowed and approved by said existing and future Project Approvals contemplated by the Project EIR and the Development Agreement.

3. The proposed Watson Ranch Lot 7 Design Permit is a contemplated "Project Approval" under the Project EIR and the Development Agreement. Under CEQA, a Specific Plan EIR, like the Watson Ranch Specific Plan Project EIR, is generally assumed to be used at a "development level." *See, e.g.,* CEQA Guidelines § 15168. Under controlling CEQA law, particularly CEQA Guidelines section 15162, the legal question is whether the Project EIR, itself, needs updating (through a Subsequent or Supplemental EIR) before the City can consider and approve the Watson Ranch Lot 7 Design Permit, or whether the Project EIR provides the appropriate CEQA compliance work for the City's consideration and approval of the Watson Ranch Lot 7 Design Permit. For the following reasons and findings, by law, no such Subsequent or Supplemental EIR can be required by the City, and the Project EIR provides the appropriate CEQA compliance work for the City's consideration and approval of the Watson Ranch Lot 8 Design Permit.

   First, CEQA Guidelines section 15162 provides as follows [*City responses to the issues raised by Section 15162 are provided in bracketed, italicized text below*]:

   (a) When an EIR has been certified . . . for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

   (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; [*There is no substantial evidence in the light of the whole record revealing any changes proposed in the Project, let alone changes that will involve involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The* ***Watson Ranch Lot 8 Design Permit*** *implements the Watson Ranch Specific Plan Project, and no new significant environmental effects or substantial increase in the severity of previously identified significant effects not already addressed by the Project EIR will result from that implementation.*]

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR . . . due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
[*There is no substantial evidence in the light of the whole record revealing circumstances under which the Project is undertaken which require major revisions to the Project EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects: the Watson Ranch Lot 8 Design Permit is anticipated by, and is the implementation of, the Watson Ranch Specific Plan Project (and Project Approvals), and no new significant environmental effects or a substantial increase in the severity of previously identified significant effects not already addressed by the Project EIR will result from that implementation.*]; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following [*There is no substantial evidence in the light of the whole record revealing any such new information of any kind has been presented. In summary, there is no substantial evidence that the Watson Ranch Lot 8 Design Permit will have significant effects not discussed in the Project EIR, or that previously examined effects will be more severe. No evidence supports that previously infeasible mitigation measures or alternatives would now be feasible and substantially reduce significant effects, nor that different measures or alternatives would do so. No such mitigation measures or alternatives have been proposed or rejected by the Project applicant.]*

Because there is no substantial evidence in the record to support any of the findings set forth in CEQA Guidelines section 15162, as a matter of law, no additional CEQA work can be required by the City relating to the City's consideration and approval of the Watson Ranch Lot 7 Design Permit.

Second, similar to CEQA Guidelines section 15162, CEQA Guidelines section 15163 provides that a public agency may choose to prepare a "Supplement" to an EIR - rather than a "Subsequent" EIR - only if (1) any of the findings described in Section 15162 (above) would require the preparation of a Subsequent EIR, yet (2) only minor additions or changes would be necessary to make the Project EIR adequately apply to the changed situation. As stated above, because there is no substantial evidence in the record to support any of the findings set forth in CEQA Guidelines section 15162, then, as a matter of law, no finding can be made under CEQA Guidelines section 15163. Therefore, no additional CEQA work for the Watson Ranch Lot 7 Design Permit can be required by the City.

Third, and lastly, under the Development Agreement, "to the extent permitted or required by CEQA, City shall use . . . existing environmental assessments, declarations, reports and studies as adequately addressing the environmental impacts of the Project and its Subsequent Approvals without requiring new or supplemental environmental documentation." Development Agreement § 2.04(k). Because CEQA prohibits the City from requiring additional CEQA compliance work for the Watson Ranch Lot 8 Design Permit approval, for the reasons discussed above, the Development Agreement likewise enforces that CEQA requirement and prohibits additional "new or supplemental environmental documentation." Development Agreement § 2.04(k).

Therefore, the City finds and determines that the Project EIR provides the appropriate CEQA compliance documentation for the City's consideration and approval of the proposed Watson Ranch Lot 7 Design Permit and Variance.

SECTION 2. WRSP MINOR AMENDMENT FINDINGS

Approval of the Watson Ranch Lot 7 Minor Amendment requires all of the findings be made, pursuant to WRSP Section 9.6.3.3.

A. Changes have occurred in the community since the adoption of the WRSP which warrant approving the proposed amendment.

The project requests an 18.5 feet garage setback in lieu of the 20-foot garage setback as required in the WRSP MDR-16 development standards. The reduction would be 1.5 feet or a difference of 7%. Additionally, the project requests an increase of floor-area-ratio to 0.77 in lieu of 0.70 as required by the WRSP MDR-16 development standard. The FAR increase will be 0.7, or a difference of 10%.

Construction for the WRSP began in 2019. Subdivisions in the MDR-16 zone included the Artisan Subdivision, Harvest, and Promontory subdivisions. While the City cannot account for market trends in real estate, one of the City's goals is to provide a variety of housing. Houses ranged in sizes from 1,580 SF to 3,150 SF between the 3 subdivisions. According to KB Homes, the housing market is ready for homes with slightly shorter garage setbacks and smaller homes, such as the alley loaded homes.

B. The proposed amendment I consistent with the City of American Canyon General Plan.

The Minor Amendment allows the project to provide larger homes with a reduced garage setback and increased FAR. The larger homes will be able to accommodate more bedrooms and maintain a 10' rear yard. The 10% change in the MDR-16 Zone standards is consistent with the General Plan.

C. The proposed amendment will result in a public benefit to neighborhoods within the WRSP Area.

The MDR 16 Zone allows up to 16 dwelling units per acre (DU/AC). Due to the geography of the Watson Ranch Lot 7 site, the applicant is proposing 136 single-family homes, which equate to 12.5 DU/AC. The homes range in size from 1,412 square feet to 2,160 square feet, with three to five bedrooms. Without the minor amendment, it is likely the subdivision may lose units or have a smaller housing product. Stated differently, the amendment will benefit the neighborhoods by enabling the Lot 7 Subdivision to provide larger homes, which is more family friendly.

D. The proposed amendment will not result in any unmitigated impact to adjacent properties.

The minor amendment is limited to homes in the Watson Ranch Lot 7 subdivision. Adjacent properties will not be impacted. Specifically, to the north are wetlands and an open space zone. To the east is Marcus Road and the Harvest subdivision that is under construction. To the south is the Lemos Pointe Apartments and a large detention basin in the southwest. To the west is an active railroad line.

The 10% increased FAR creates a slightly bulkier home, but it does not impact neighbors as the setbacks and height remain unchanged. The reduced garage setback of 1.5' from 20' does not impact neighbors because the remaining driveway area will be at least 18' long, which is equivalent to the length of a standard parking space, which is 9' x 18'. The neighborhood has been designed so that there is no 18.5-foot driveway adjacent to a sidewalk, where there is no possibility that a parked car in the driveway will encroach onto the sidewalk.

E. The proposed amendment will enable the delivery of services and public facilities to the population within the WRSP area.

The proposed minor amendment only affects the garage setback and FAR for homes in the Watson Ranch Lot 7 subdivision. The delivery of services and public facilities will be sufficient and not impacted by the amendment.

SECTION 3. DESIGN PERMIT FINDINGS

Approval of the Watson Ranch Lot 7 Design Permit requires all the following findings be made, pursuant to American Canyon Municipal Code Section 19.41.050:

A. The project complies with all applicable provisions of this title and any applicable approvals granted for the project by any decision-making authority.

The project includes 136 single-family homes, which is a permitted use in the WRSP MDR-16 zone.

B. The project and its design comply with any applicable design guidelines.

The project consists of 2 floor plans and 3 designs: traditional, farmhouse, and ranch. The designs are aligned with the goals of the WRSP MDR-16 zone, which strives to provide a variety of quality residential housing types.

C. The project and its design complies with all applicable general plan policies, and applicable local, regional, and state development policies, and municipal code standards.

The project is required to meet the standards in the WRSP MDR-16 zone, as described in WRSP Table 6.2.2. The table below shows how the homes meet MDR-16 development standards.

	Required	*Proposed*	*Compliance*
Min. width, interior lot	*30'*	*32' +*	*Yes*
Min. width, corner lot	*35'*	*36' +*	*Yes*
Min. depth	*50'*	*68'*	*Yes*
Setback, front yard garage (Applies to Traditional homes)	*20'*	*18.5'*	*Minor Amendment*
Setback, side yard for internal lot	*3'*	*3'*	*Yes*
Setback, side yard for corner lot	*8'*	*8'*	*Yes*
Setback, rear yard	*10'*	*10'*	*Yes*
Setback, garage for rear yard (applies to Alley Loaded homes)	*5'*	*5'*	*Yes*
Max. Height	*35'*	*26'*	*Yes*
Max. FAR	*0.7*	*0.77*	*Minor Amendment*
Max. Lot Coverage	*55%*	*48.6%*	*Yes*

D. The project complies with applicable policies of the Napa County Airport land use compatibility plan.

The project is in the Napa County Airport Land Use Compatibility Plan Zone E, which permits single-family homes.

E. The proposed design provides for adequate and safe on-site vehicular and pedestrian circulation.

Access to the project will be available from the future intersection of Marcus Road and Cartier Street, with the extension for Marcus Road in plan check review. The houses Alley Loaded along Marcus Road will have direct pedestrian access to the street.

SECTION 3: CONDITIONS OF APPROVAL

The Watson Ranch Lot 7 Design Permit and Variance incorporates specific conditions of approval included as Exhibit A, and the adopted Master Conditions of Approval for the AC-1 Portion of Watson Ranch (Resolution No. 2020-106) as Exhibit B to this Resolution.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 24th day of October, 2024, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Brando Cruz, Chair

ATTEST:

_____
Nicolle Hall, Deputy City Clerk

APPROVED AS TO FORM:

_____
William D. Ross, City Attorney

EXHIBITS:
A. Watson Ranch Lot 7 Design Permit Specific Conditions of Approval
B. Architecture Plans for Traditional Homes for Watson Ranch Lot 7
C. Architecture Plans for Alley Loaded Homes for Watson Ranch Lot 7
D. Landscaping Plans
E. Confirmation of Conditions of Approval

Exhibit A

Specific Conditions – Watson Ranch Lot 7 Design Permit

Approvals, Exhibits, and Expiration

Specific Condition	*Developer Obligations*	*Mechanism*	*Implementation*	*Status*
1.	The Watson Ranch Lot 7 Residential Design Guidelines, (on file in the Community Development Department "Design Permit Plans"), are hereby approved. "Design Guidelines" as used in these Specific Conditions shall mean and include all Applicant-submitted materials relating to the Design Guidelines. Development of the subdivision and the individual lots comprising Watson Ranch Lot 7 Design Permit shall be subject to, and in compliance with, the Design Guidelines.	Design Guidelines	Prior to City Issuance of Occupancy Permit	Applicable
2.	The applicant shall defend, indemnify, and hold harmless the City of American Canyon ("City"), its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, consultants, volunteers and agents from and against all claims, actions, including actions to arbitrate or mediate, damages, losses, judgments, liabilities, expenses and other costs, or proceedings against the City, its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, volunteers, or agents to attack, modify, set aside, void, or annul an approval, conditional approval, permit, entitlement, environmental document, environmental clearance, mitigation plan, or any other document or any of the proceedings, acts, or determinations taken, done, or made prior to granting of such approval, conditional approval, permit, entitlement, environmental clearance, environmental document, mitigation plan, or other documents, by the City, including, without limitation, an action against an advisory agency, appeal board, or legislative body within the applicable limitation period. The obligation to defend, indemnify and hold the City harmless shall include the payment of all legal costs and attorney's fees (including a third party award of attorney's fees), arising out of, resulting from, or in connection with the City's act or acts leading up to and including approval of any environmental document or mitigation plan granting approvals to the applicant, incurred on behalf of, or by, the City, its elected and appointed officials, officers, employees, representatives,	Design Guidelines	As Needed	Applicable

	attorneys, boards, commissions, volunteers and agents in connection with the defense of any claim, action, or proceeding challenging the entire or a portion of an approval, conditional approval, permit, entitlement or any other document of any related claim. The obligation to defend, indemnify, and hold the City harmless shall include, but not be limited to, the cost of preparation of any administrative record by the City, staff time, copying costs, court costs, or attorney's fees arising out of a suit or challenge contesting the adequacy of a permit, approval, conditional approval, entitlement, environmental document, mitigation plan, environmental clearance, or any other document or approval related to the applicant's project. The City will promptly notify the applicant of any claim, action, or proceeding and will cooperate fully in the defense. If the City fails to promptly notify the applicant of any claim, action, or proceeding, or the City fails to cooperate fully in the defense, the applicant shall not be responsible to defend, indemnify, or hold harmless the City. In the event a legal challenge to a City permit, approval, conditional approval, environmental document, environmental clearance, mitigation plan, entitlement or any other document, proceeding, determination, or action related to the applicant's project is successful, and an award of attorneys' fees is granted against the City, the applicant shall be responsible to timely pay the full amount of such an award.			
3.	The approval shall become effective on the latter of expiration of the appeal period, ten calendar days following the decision, unless an appeal to the City Council is filed. An appeal may be filed with the Community Development Director by filling out an Appeal Form accompanied by a fee of $795.	City Code	Whether Appeal Brought	Applicable
4.	This approval is also subject to return of the "Applicant Confirmation of Conditions of Approval" form signed by the property owner. Should an appeal period end on a Saturday, Sunday or holiday, the final day for filing an appeal shall be the following Monday, or the next business day following a holiday. If there is no appeal, this approval will be final on November 4, 2024.	City Code	Whether Appeal Brought	Applicable
5.	The applicant is responsible for paying all charges related to the processing of this discretionary case application within 30 days of the issuance of the final	City Code	Appropriate City permit	Applicable

	invoice or prior to the issuance of building permits for this project, whichever occurs first. Failure to pay all charges shall result in delays in the issuance of required permits or the revocation of the approval of this application.			
6.	The date upon which the approval is final shall be considered the day of the imposition of the fees, dedications, reservations and exactions required by these conditions approval for the purposes of protesting the imposition pursuant to California Government Code Section 66020.	City Code	Prior to Building Permit Issuance	Applicable
7.	The expiration period for this Design Permit shall coincide with that of the associated expiration period for the Vesting Tentative Subdivision Map (PL24-0012).	City Code	Project Expiration Period	Applicable
8.	All plans submitted for review and approval by City and all development within the Project shall be in substantial conformance with the approved Design Guidelines. City's Community Development Director or designee may approve minor changes on the plans submitted for the construction permits with a determination that the changes are in substantial compliance with the representation of the project as reviewed by the Planning Commission (and City Council if applicable), that the proposed change will be in compliance with the required development standards, and the change will not materially affect adjacent private or public property.	Design Guidelines	Permits for Development within the area comprising Watson Ranch Lot 8 Subdivision	Applicable; Not Completed
9.	These Specific Conditions for the Design Guidelines shall be attached to plan sets submitted for the building permit master plans, under the title "Design Guidelines Conditions." The conditions shall be printed on the first sheet of each plan set submitted for a building permit pursuant to this Design Permit, under the title 'Design Permit Conditions'. The second sheet may also be used if the first sheet is not of sufficient size to list all of the conditions. The sheet(s) containing the conditions shall be of the same size as those sheets containing the construction drawings; 8-1/2" by 11" sheets are not acceptable.	Design Guidelines	Prior to the issuance of Building Permits	Applicable; Not Completed
10.	Plans submitted for building permits, including all exterior site lighting, building-mounted lighting, lighting within the parking areas, and along walkways shall be consistent with the Design Guidelines. Lighting shall be shielded, and avoid light spillage or glare from the project site, and exterior light fixtures on buildings shall be oriented downward and shall be shielded to return potential light and glare impacts, all as set forth in the Design Guidelines.	Design Guidelines	Prior to the issuance of Building Permits	Applicable; Not Completed

11.	The Master Building Permit Plans for the single-family homes shall show enhanced aesthetic wrapping for all corner lots and lots adjacent to open spaces in compliance with the Watson Ranch Specific Plan. Specifically, this enhanced aesthetic is required for Lot 1, 16, 17, 32, 33, 49, 50, 66, 67, 78, 79, 90, 91, 92, 93, 94, 96, 97, 99, 100, 102, 103, 105, 106, 108, 109, 110, 111, 114, 119, 122, 123, 127, 130, 131, 133, 134, and 136.	WRSP	Prior to Building Permit Issuance	Applicable
12.	Prior to issuance of occupancy permits for each residence, the applicant shall demonstrate that the "good neighbor" wooden fences within the neighborhood are painted or stained to ensure long-term durability and neighborhood aesthetics. The fences shall comply with guidelines in WRSP Section A.7.2.	Design Guidelines	Prior to Certificate of Occupancy	Applicable
13.	Consistent with General Plan Policy H-8.12, the "Yocha Dehe Wintun Nation Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation" shall be implemented in the event any Native American human remains, grave goods, ceremonial items, and items of cultural patrimony are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity. A copy of the "Yocha Dehe Wintun Nation Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation" is included in this Resolution as Exhibit E.	General Plan	Prior to Grading Activities or ground disturbance	Applicable
14.	Final landscape plans that comply with the State of California Water Efficient Landscape regulations are set forth in the Design Guidelines and shall be followed, and all plant materials shall be installed in accordance with the approved Design Guidelines. All tree stakes and ties shall be removed as set forth in the Design Guidelines. All landscape plantings and required irrigation systems shall be maintained as set forth in the Design Guidelines.	Design Guidelines	Prior to issuance of the Certificate of Occupancy	Applicable; Not Completed
15.	Prior to the issuance of the first building permit, the applicant is required to provide a development product mix plan that identifies the design type and color scheme of each home.	Design Guidelines	Prior to the issuance of the first building permit	Applicable; Not Completed
16.	Prior to issuance of a building permit, the applicant shall submit a street name and address plan through an Address Assignment Request application for approval by the Community Development Director and American Canyon Fire Protection District.	Specific Condition	Prior to the issuance of the first building permit.	Applicable; Not Completed

17.	All conditions of approval from the Watson Ranch Lot 7 Tentative Subdivision Map (PL24-0012) remain in effect.	Design Guidelines	Prior to Issuance of Certificate of Occupancy	Applicable; Not completed

Building Division

Specific Condition	***Developer Obligations***	***Mechanism***	***Implementation***	***Status***
18.	According to WRSP Appendix A.2 Sustainability Design Guidelines, Tier 2 Design Guidelines, homes and commercial buildings should be built incorporating the finest building and energy savings techniques. Prior to the first building permit issuance, provide a summary of prospective energy saving features for the residences that go beyond minimum code requirements.	Specific Plan Guidelines	Prior to Building Permit Issuance	Applicable

Watson Ranch Lot 7 Design Permit
Attachment 2.2 Exhibit B: Traditional Homes Architecture



Plan 1A
Traditional

Plan 3B
Ranch

Plan 2C
Farmhouse

Street Scene

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

PLAN:
DATE: 09.20.2024

A.1

868



Typical Site Plan

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

PLAN:
DATE: 09.20.2024

A.2

869



'A' - Traditional



'C' - Farmhouse



'B' - Ranch

ELEVATION LEGEND

1. NOT USED
2. CONCRETE FLAT TILE ROOFING
3. WOOD FASCIA BOARD
4. STUCCO FINISH
5. STUCCO OVER FOAM TRIM
6. STUCCO OVER FOAM CORBELS
7. DECORATIVE STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
8. PRE-FAB WINDOW SYSTEM
9. COMPOSITE ENTRY DOOR
10. METAL ROLL-UP GARAGE DOOR
11. WOOD CORBELS
12. ILLUMINATED ADDRESS SIGN
13. FIBER CEMENT LAP SIDING
14. FIBER CEMENT TRIM
15. COACH LIGHT
16. DECORATIVE BOARD & BATTEN
17. DECORATIVE FOAM SHUTTER
18. WOOD COLUMN
19. STONE VENEER

PLAN 1 - Front Elevations

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

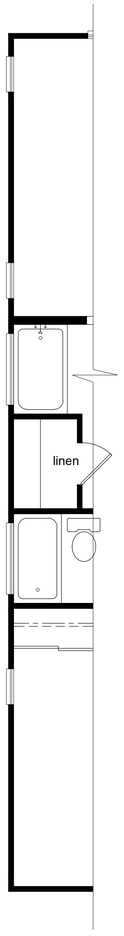
Watson Ranch 7 - SFD

AMERICAN CANYON, CA

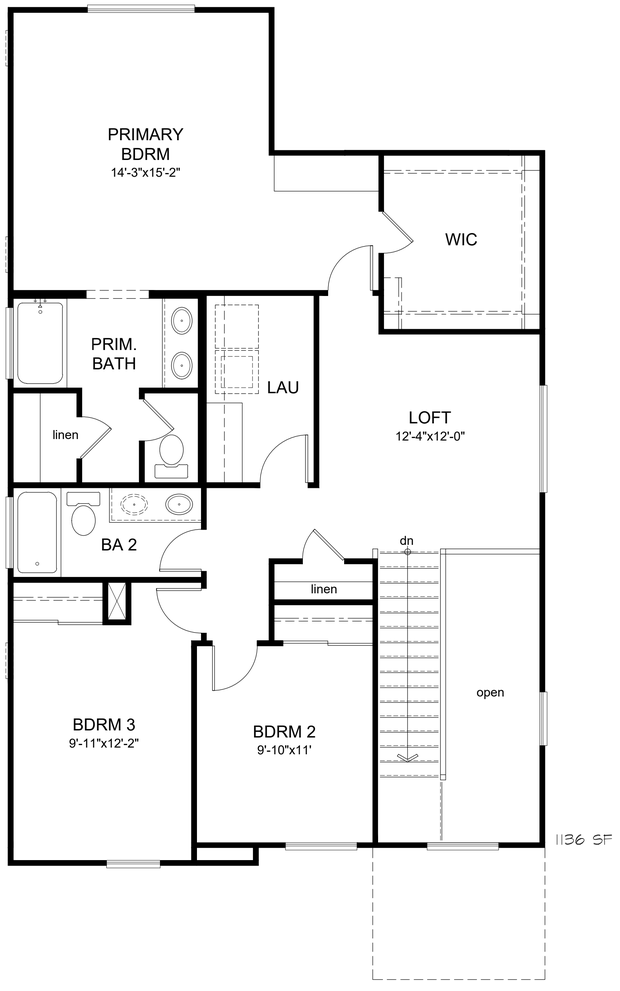
SCALE : 1/4" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

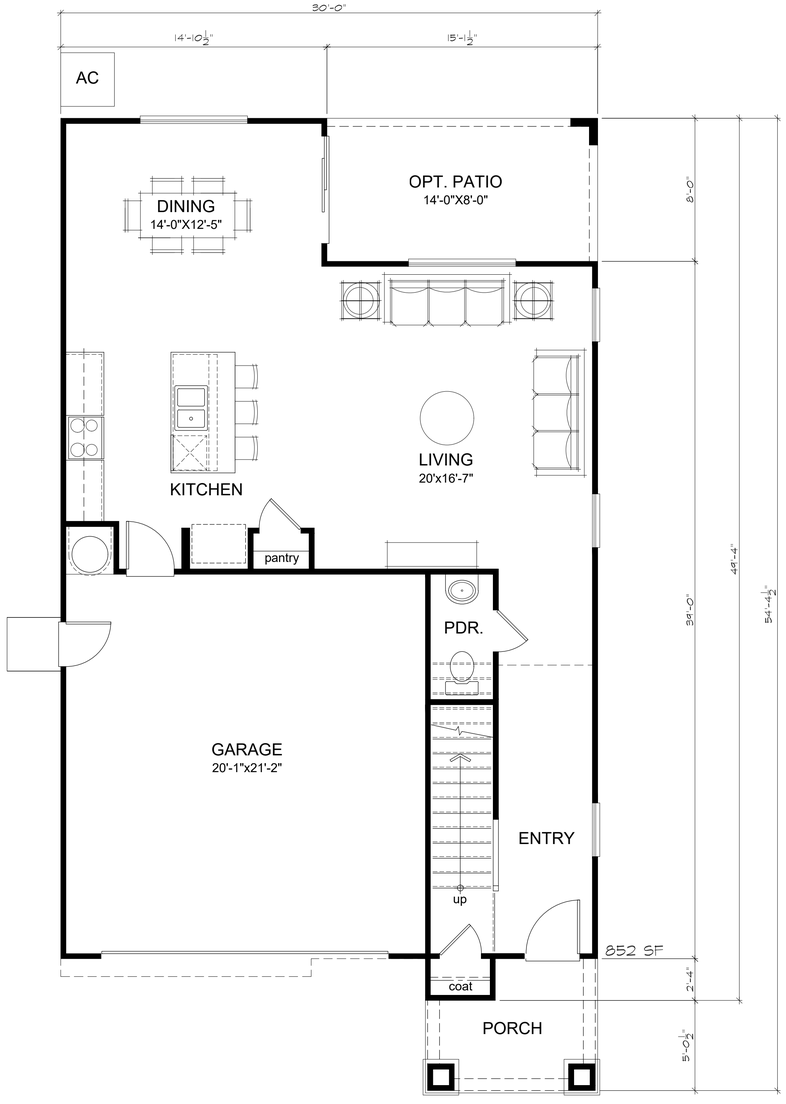
A.3



Enhanced Left Elevation
Partial Second Floor Plan



Second Floor



First Floor

Plan 1A - Floor Plans

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

A.4



Perspective View



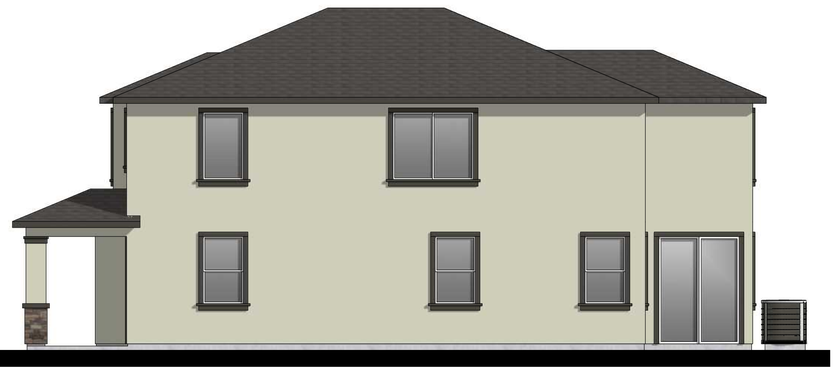
Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘A’ - Traditional

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

A.5

872



Perspective View



Front Elevation

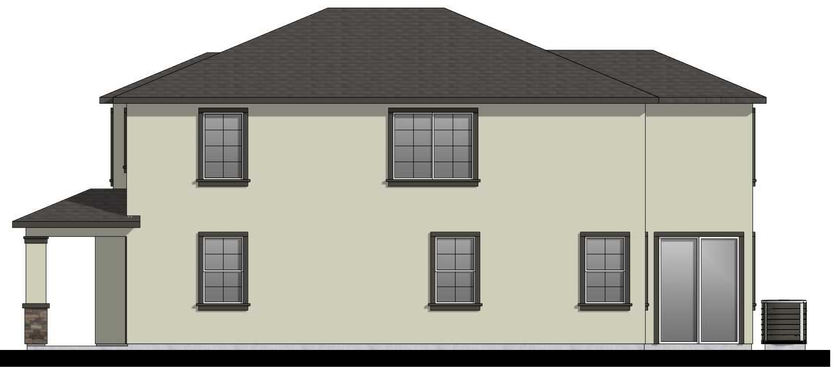
Enhancement:
- Window Grids
- Additional Windows



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘A’ - Traditional - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

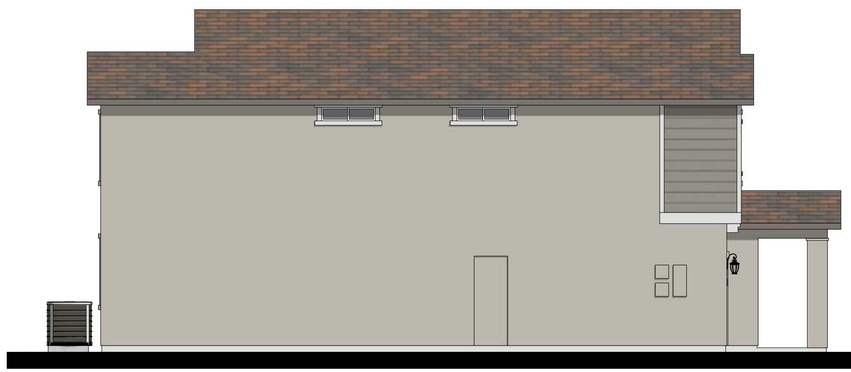
A.6



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘B’ - Ranch

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

A.7



Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional windows and shutters
- Gable end details
- Extended siding



Left Elevation



Rear Elevation



Right Elevation

Plan 1 'B' - Ranch - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

A.8

875



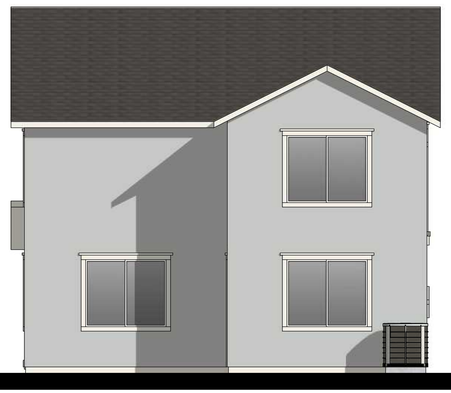
Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘C’ - Farmhouse

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

A.9

876

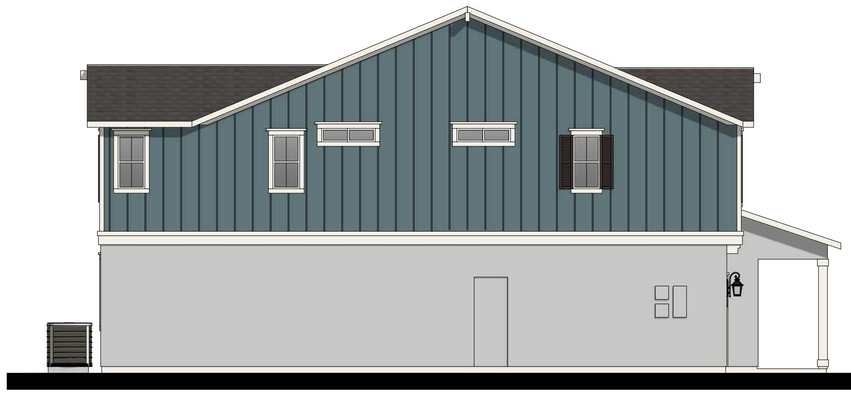


Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional windows and shutters
- Extended board & batten



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘C’ - Farmhouse - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

A.10

877



Rear Elevation



Rear Elevation



Rear Elevation



Right Elevation

‘A’ - Traditional



Right Elevation

‘B’ - Ranch



Right Elevation

‘C’ - Farmhouse

Plan 1 - Optional Covered Patio

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

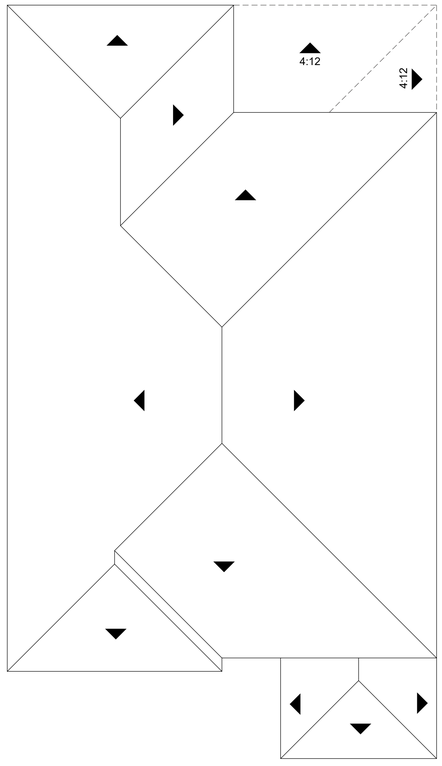
AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

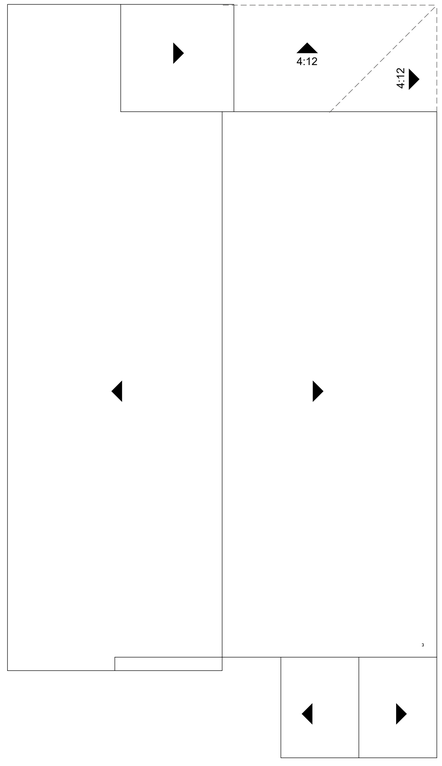
A.11

878



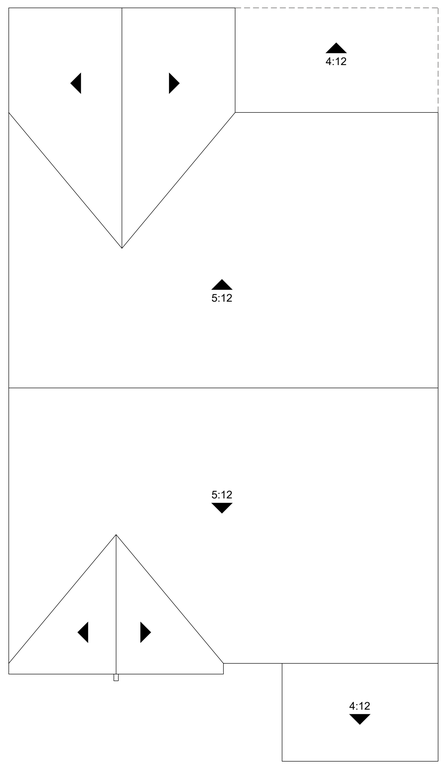
‘A’

Roof Plan
slope 5:12 typ., UNO



‘B’

Roof Plan
slope 5:12 typ., UNO



‘C’

Roof Plan
slope 6:12 typ., UNO

Plan 1 - Roof Plans

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

PLAN: 230.1988
DATE: 09.20.2024

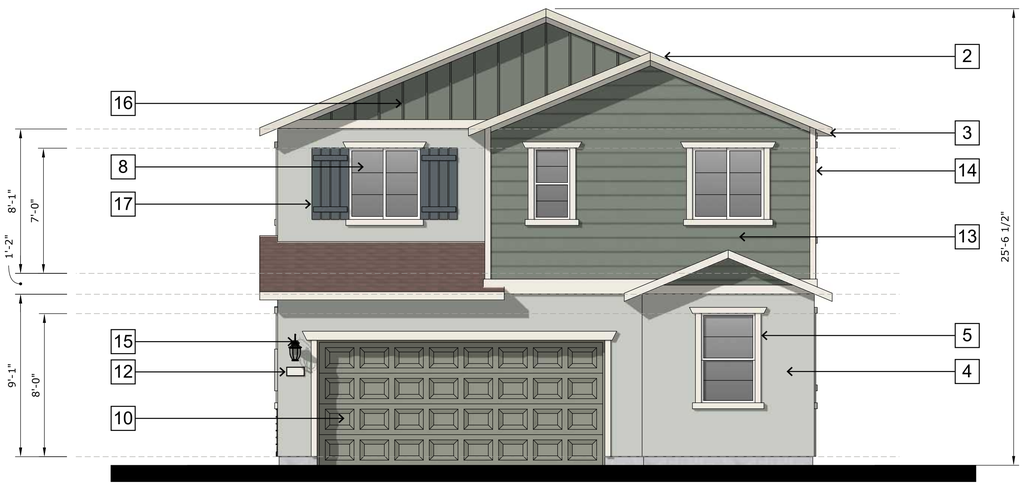
A.12



'A' - Traditional



'C' - Farmhouse



'B' - Ranch

ELEVATION LEGEND

1. NOT USED
2. CONCRETE FLAT TILE ROOFING
3. WOOD FASCIA BOARD
4. STUCCO FINISH
5. STUCCO OVER FOAM TRIM
6. STUCCO OVER FOAM CORBELS
7. DECORATIVE STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
8. PRE-FAB WINDOW SYSTEM
9. COMPOSITE ENTRY DOOR
10. METAL ROLL-UP GARAGE DOOR
11. WOOD CORBELS
12. ILLUMINATED ADDRESS SIGN
13. FIBER CEMENT LAP SIDING
14. FIBER CEMENT TRIM
15. COACH LIGHT
16. DECORATIVE BOARD & BATTEN
17. DECORATIVE FOAM SHUTTER
18. WOOD COLUMN
19. STONE VENEER

PLAN 2 - Front Elevations

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

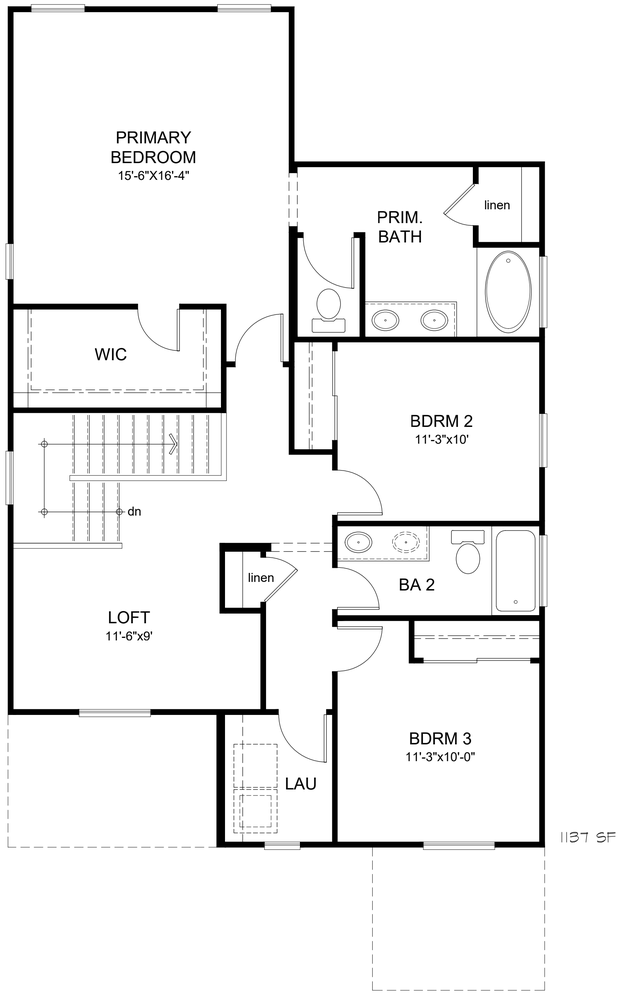
Watson Ranch 7 - SFD

AMERICAN CANYON, CA

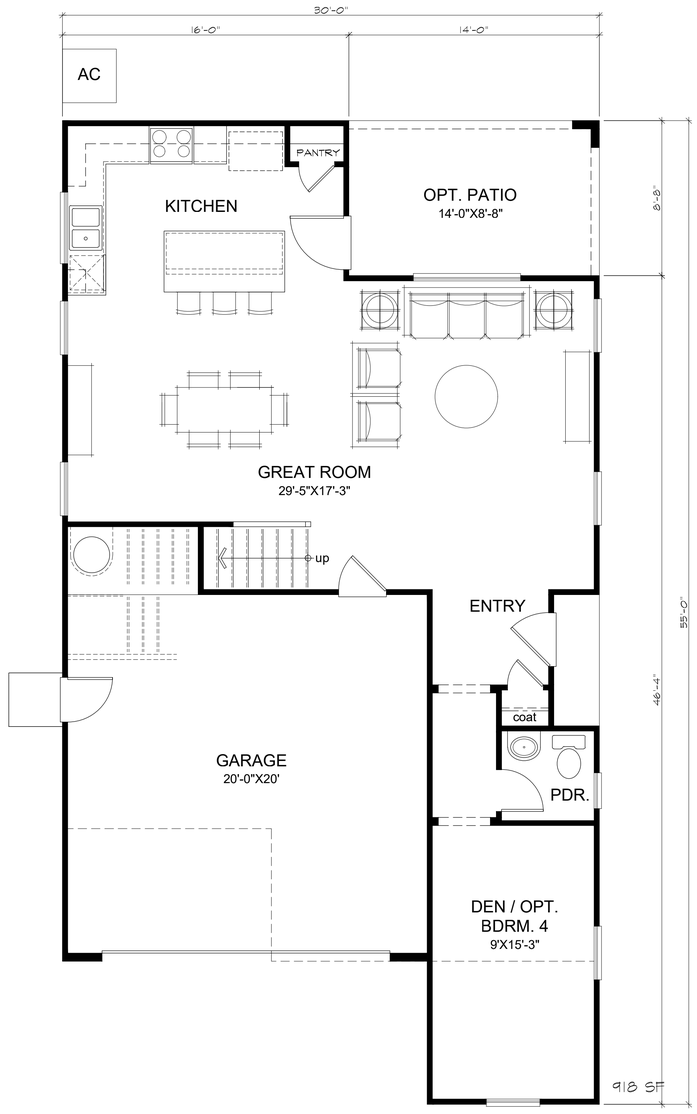
SCALE : 1/4" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

A.13



Second Floor



First Floor

Plan 2A - Floor Plans

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

A.14



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘A’ - Traditional

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

A.15



Perspective View



Front Elevation

Enhancement:
- Window Grids



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘A’ - Traditional - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

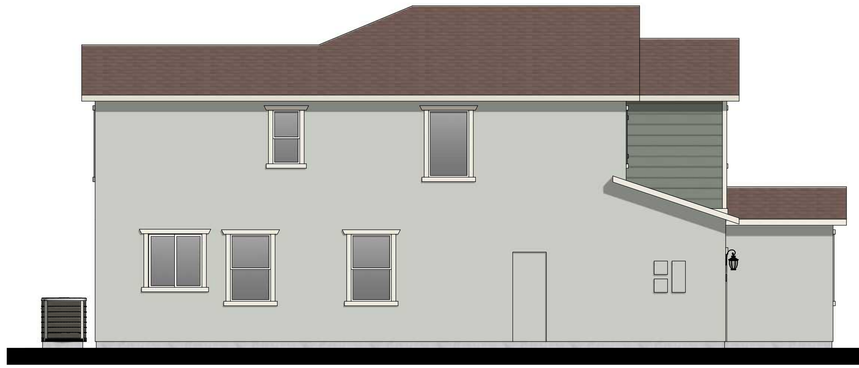
A.16



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘B’ - Ranch

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

A.17



Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional shutters
- Extended siding



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘B’ - Ranch - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

A.18



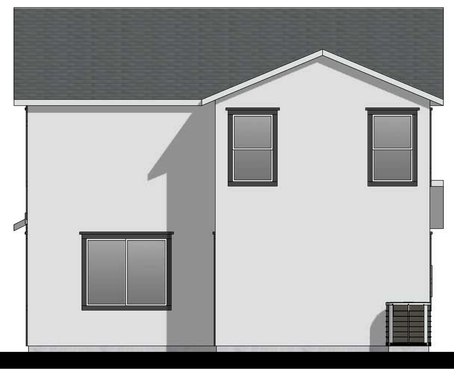
Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘C’ - Farmhouse

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

A.19



Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional shutters
- Extended board & batten



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘C’ - Farmhouse - Enhanced

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Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

A.20



Rear Elevation



Rear Elevation



Rear Elevation



Right Elevation

‘A’ - Traditional



Right Elevation

‘B’ - Ranch



Right Elevation

‘C’ - Farmhouse

Plan 2 - Optional Covered Patio

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707.389.7500

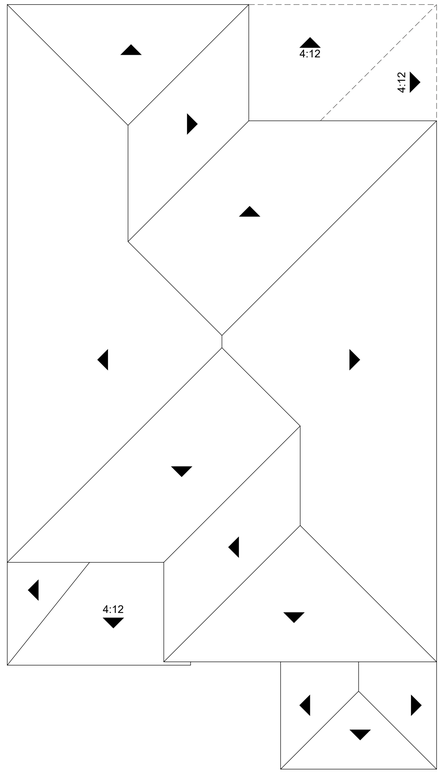
Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

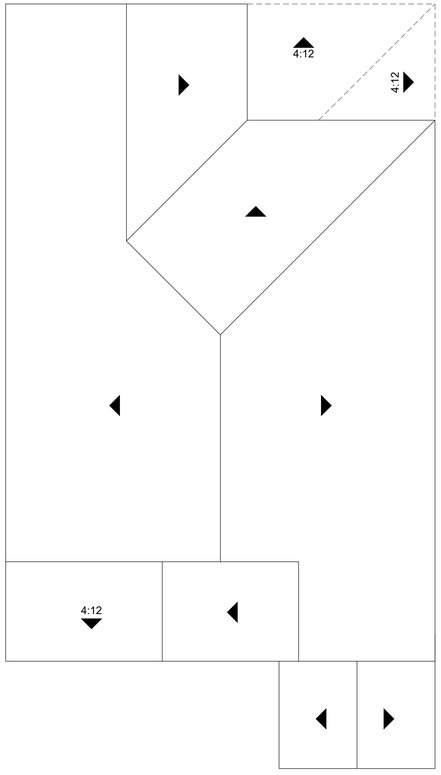
PLAN: 230.2055
DATE: 09.20.2024

A.21



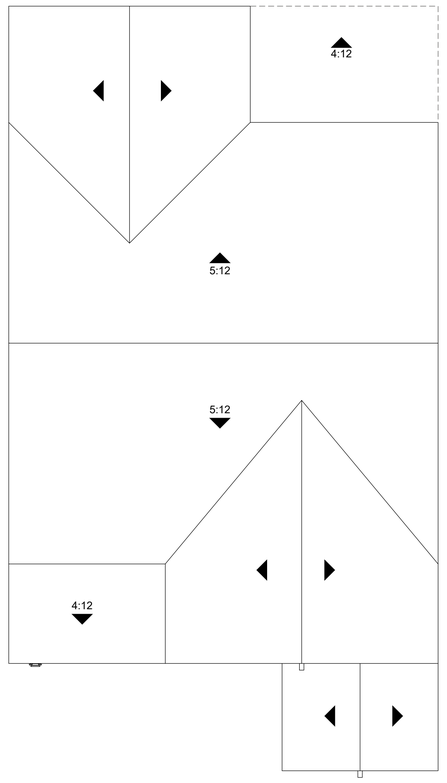
‘A’

Roof Plan
slope 5:12 typ., UNO



‘B’

Roof Plan
slope 5:12 typ., UNO



‘C’

Roof Plan
slope 6:12 typ., UNO

Plan 2 - Roof Plans

KB Home North Bay
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Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

PLAN: 230.2055
DATE: 09.20.2024

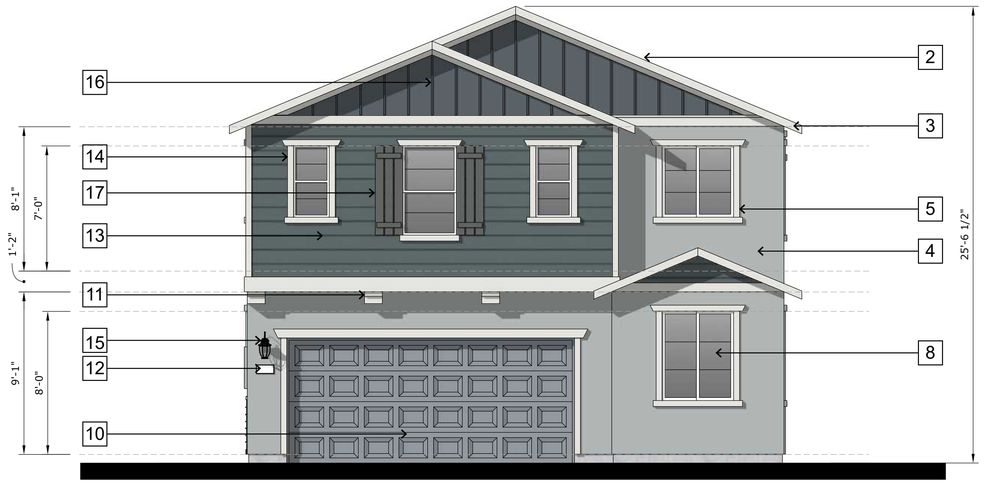
A.22



‘A’ - Traditional



‘C’ - Farmhouse



‘B’ - Ranch

ELEVATION LEGEND

1. NOT USED
2. CONCRETE FLAT TILE ROOFING
3. WOOD FASCIA BOARD
4. STUCCO FINISH
5. STUCCO OVER FOAM TRIM
6. STUCCO OVER FOAM CORBELS
7. DECORATIVE STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
8. PRE-FAB WINDOW SYSTEM
9. COMPOSITE ENTRY DOOR
10. METAL ROLL-UP GARAGE DOOR
11. WOOD CORBELS
12. ILLUMINATED ADDRESS SIGN
13. FIBER CEMENT LAP SIDING
14. FIBER CEMENT TRIM
15. COACH LIGHT
16. DECORATIVE BOARD & BATTEN
17. DECORATIVE FOAM SHUTTER
18. WOOD COLUMN
19. STONE VENEER

PLAN 3A - Front Elevations

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Fairfield, CA 94534
707.389.7500

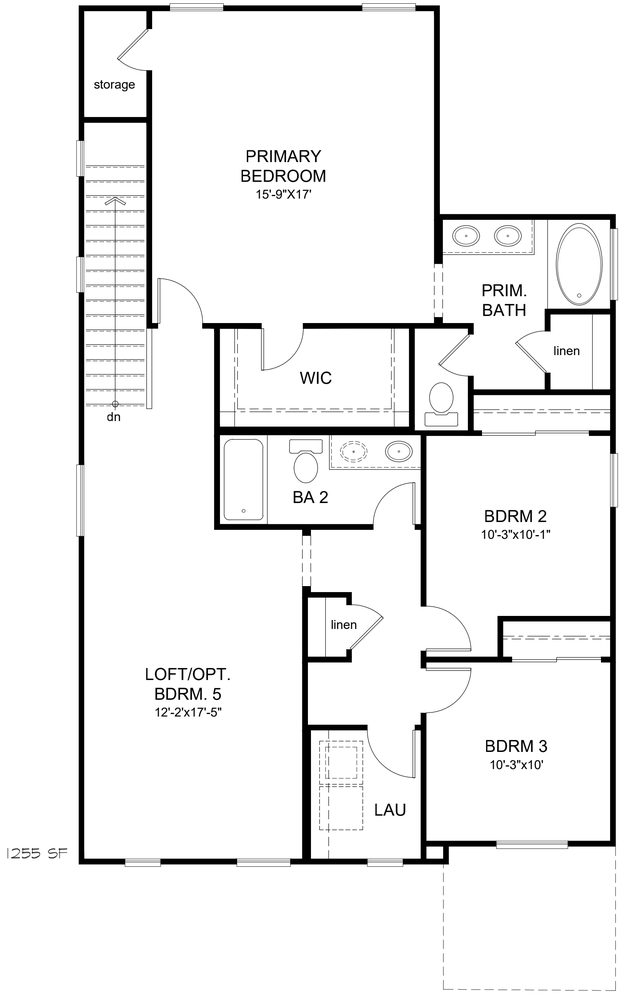
Watson Ranch 7 - SFD

AMERICAN CANYON, CA

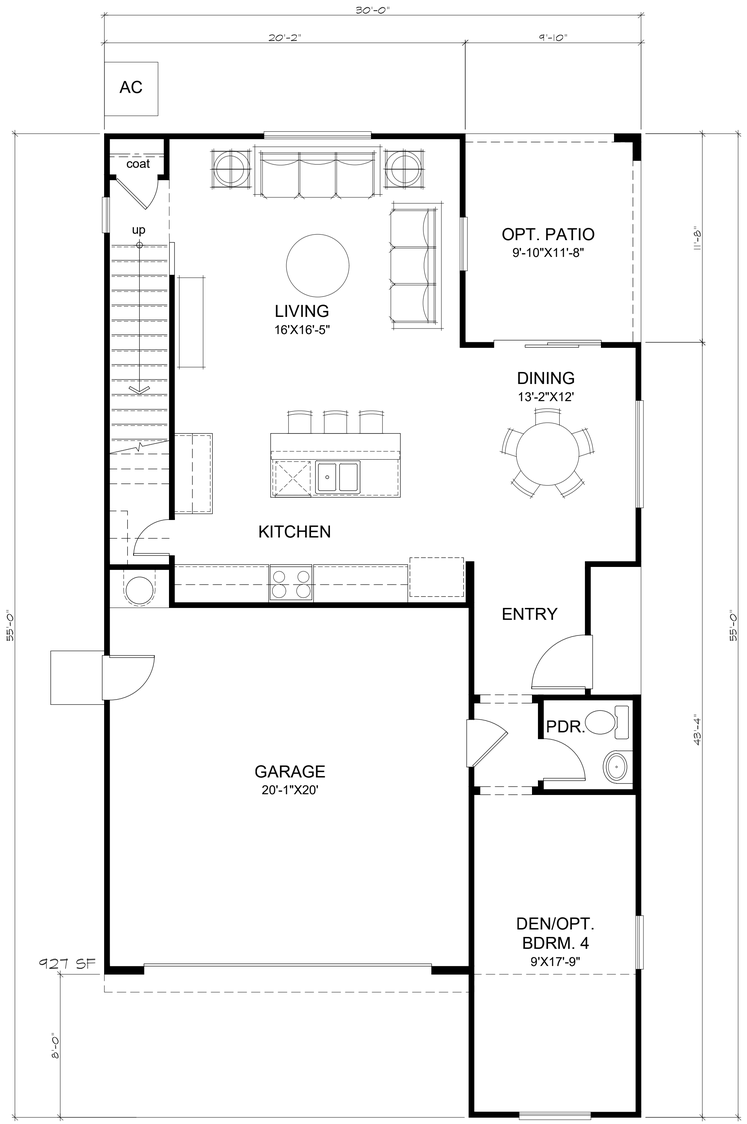
SCALE : 1/4" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.23



Second Floor



First Floor

Plan 3A - Floor Plans

KB Home North Bay
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Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.24



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘A’ - Traditional

KB Home North Bay
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Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.25

892



Perspective View



Front Elevation

Enhancement:
- Window Grids



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘A’ - Traditional - Enhanced

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Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.26

893



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘B’ - Ranch

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.27



Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional shutters
- Gable end details
- Extended siding



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘B’ - Ranch - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.28



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘C’ - Farmhouse

KB Home North Bay
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707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.29



Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional shutters
- Extended board & batten



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘C’ - Farmhouse

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - SFD

AMERICAN CANYON, CA

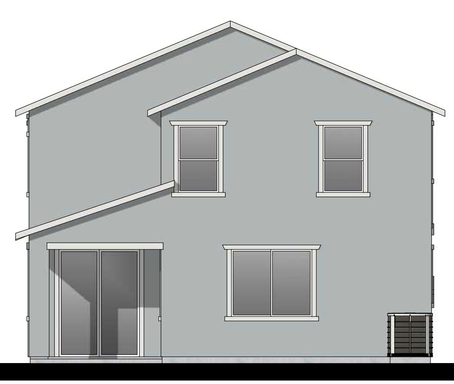
SCALE : 1/4" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.30



Rear Elevation



Rear Elevation



Rear Elevation



Right Elevation

‘A’ - Traditional



Right Elevation

‘B’ - Ranch



Right Elevation

‘C’ - Farmhouse

Plan 3 - Optional Covered Patio

KB Home North Bay
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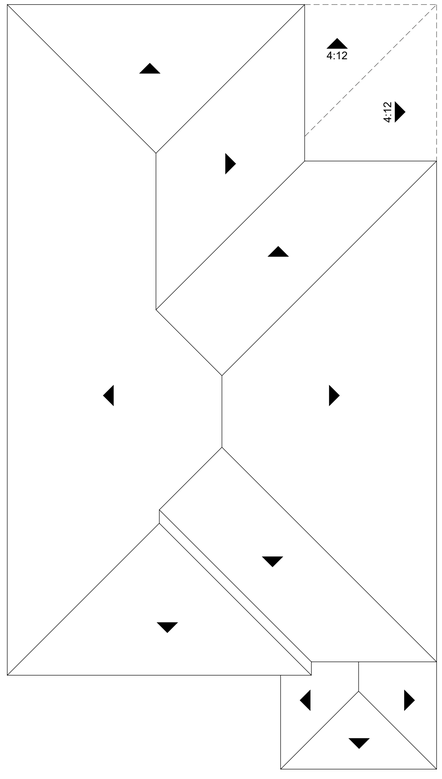
Watson Ranch 7 - SFD

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

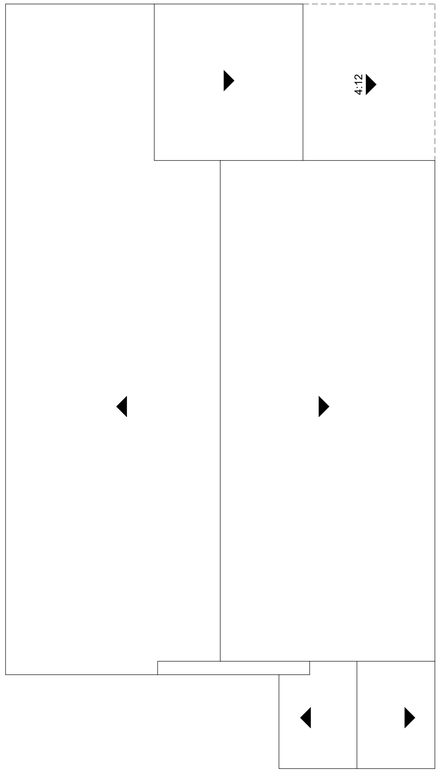
PLAN: 230.2182
DATE: 09.20.2024

A.31



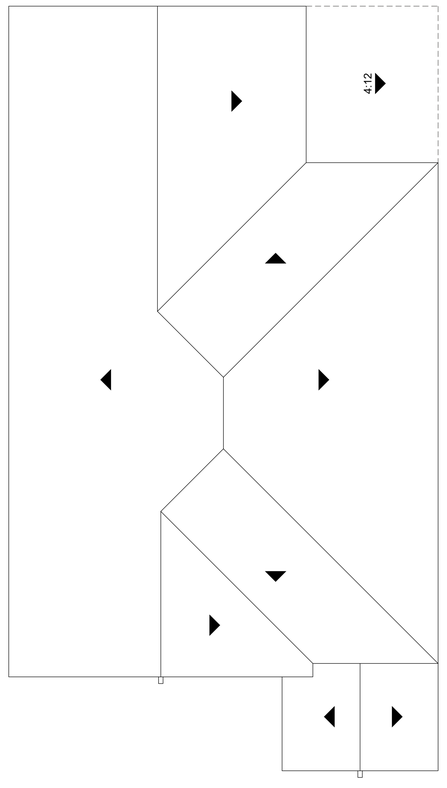
‘A’

Roof Plan
slope 5:12 typ., UNO



‘B’

Roof Plan
slope 5:12 typ., UNO



‘C’

Roof Plan
slope 6:12 typ., UNO

Plan 3 - Roof Plans

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Watson Ranch 7 - SFD

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 230.2182
DATE: 09.20.2024

A.32

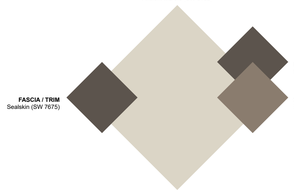
TRADITIONAL ELEVATIONS

SCHEME 1



ROOF
SHAKE Dark Ash
1 FBCF 5139

STUCCO
KB 1241
Ancient Marble (SW 6162)



FRONT ENTRY / SHUTTERS
Sealskin (SW 7675)

FASCIA / TRIM
Sealskin (SW 7675)

GARAGE
Brainstorm Bronze (SW 7033)

STONE (CULTURED STONE)
COUNTRY LEDGESTONE
Grand Mesa

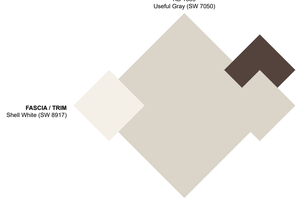


SCHEME 2



ROOF
SHAKE Cedar Blend
1 FBCF 3293

STUCCO
KB 1339
Useful Gray (SW 7050)



FRONT ENTRY / SHUTTERS
Black Bean (SW 6006)

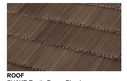
FASCIA / TRIM
Shell White (SW 8917)

GARAGE
Useful Gray (SW 7050)

STONE (CULTURED STONE)
LIMESTONE
Bucks County

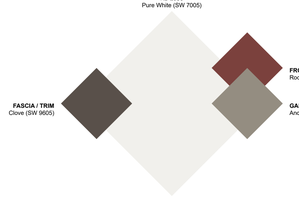


SCHEME 3



ROOF
SHAKE Rustic Brown Blend
1 FBCF 3164

STUCCO
KB 2058
Pure White (SW 7005)



FRONT ENTRY / SHUTTERS
Rookwood Red (SW 2802)

FASCIA / TRIM
Clove (SW 9605)

GARAGE
Anonymous (SW 7046)

STONE (CULTURED STONE)
LIMESTONE
Chardonnay



RANCH ELEVATIONS

SCHEME 4

ROOF
SHAKE Smokey Topaz
1 FBCF 3181

STUCCO
KB 1383
Mindful Gray (SW 7016)

FASCIA
Gauntlet Gray (SW 7019)

FRONT ENTRY / SHUTTERS
Flower Pot (SW 6334)

TRIM
Pearly White (SW 7009)

GARAGE
Rhinestone (SW 7656)

SIDING / BOARD & BATTEN
Dovetail (SW 7018)

SCHEME 5



ROOF
SHAKE Charcoal Brown Blend
1 FBCF 1132

STUCCO
KB 1259
Silver Strand (SW 7057)

FRONT ENTRY / SHUTTERS
Grays Harbor (SW 6236)

FASCIA / TRIM
Shell White (SW 8917)

GARAGE
Cornwall Slate (SW 9131)

SIDING / BOARD & BATTEN
Retreat (SW 6207)

SCHEME 6

ROOF
SHAKE Charcoal Blend
1 FBCF 1430

STUCCO
KB 2092
Online (SW 7072)

FRONT ENTRY / SHUTTERS
Grizzle Gray (SW 7068)

FASCIA / TRIM
Spare White (SW 6203)

GARAGE
Steely Gray (SW 7664)

SIDING / BOARD & BATTEN
Grays Harbor (SW 6236)

FARMHOUSE ELEVATIONS

SCHEME 7

ROOF
SLATE Charcoal Blend
1 FACS 1430

STUCCO
KB 1269
Tinsmith (SW 7657)

FRONT ENTRY / SHUTTERS
Rockweed (SW 2735)

FASCIA / TRIM
White Flour (SW 7102)

GARAGE
Oyster White (SW 7637)

BOARD & BATTEN
Stargazer (SW 9635)

SCHEME 8

ROOF
SLATE Charcoal
1 FACS 1130

STUCCO
KB 1282
Rhinestone (SW 7656)

FASCIA / TRIM AT BOARD & BATTEN / SHUTTERS AT BOARD & BATTEN
Rhinestone (SW 7656

TRIM AT STUCCO / SHUTTERS AT STUCCO
Iron Ore (SW 7069)

FRONT ENTRY / GARAGE
Classic French Gray (SW 0077)

BOARD & BATTEN
Iron Ore (SW 7069)

SCHEME 9

ROOF
SLATE Charcoal Brown Blend
1 FACS 1132

STUCCO
KB 2031
Ivory Lace (SW 7013)

FRONT ENTRY / SHUTTERS
Settlement (SW 9594)

FASCIA / TRIM
Black Fox (SW 7020)

GARAGE
Porpoise (SW 7047)

BOARD & BATTEN
Rosemary (SW 6187)

Color Board

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Watson Ranch 7 - SFD

AMERICAN CANYON, CA

PLAN:
DATE: 09.20.2024

A.33

Watson Ranch Lot 7 Design Permit
Attachment 2.3 Exhibit C: Alley
Loaded Homes Architecture



Plan 1
Farmhouse

Plan 3
Craftsman

Plan 2
Prairie

Street Scene

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Watson Ranch 7 - Alley

AMERICAN CANYON, CA

PLAN:
DATE: 09.20.2024

A.1



Typical Site Plan

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Watson Ranch 7 - Alley

AMERICAN CANYON, CA

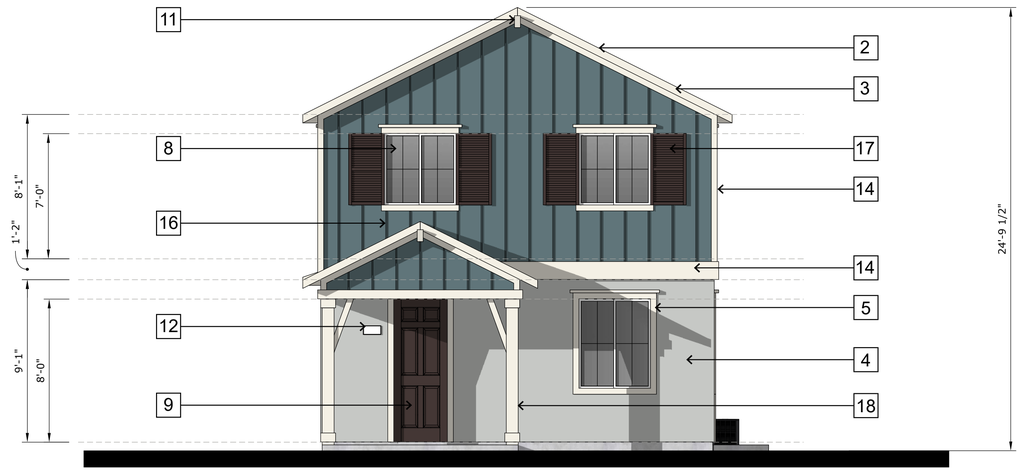
PLAN:
DATE: 09.20.2024

A.2

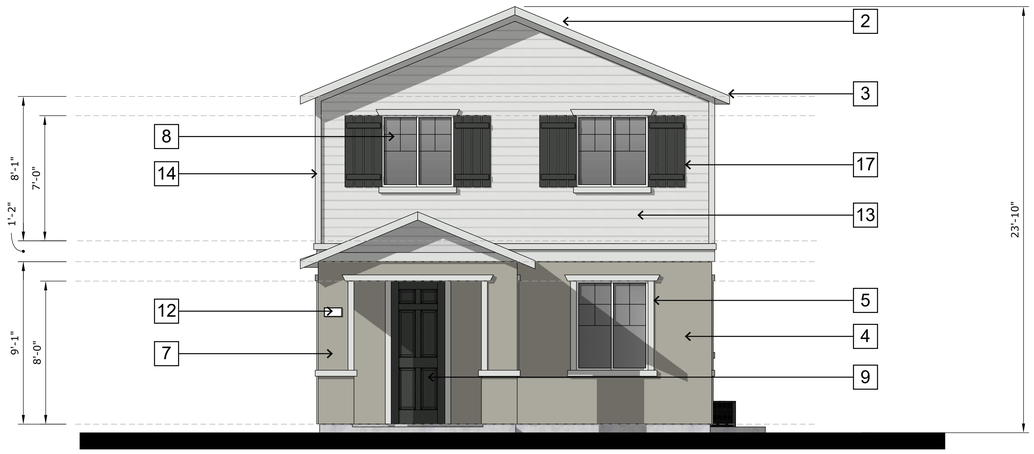
902



'A' - Prairie



'C' - Farmhouse



'B' - Craftsman

ELEVATION LEGEND

1. NOT USED
2. CONCRETE FLAT TILE ROOFING
3. WOOD FASCIA BOARD
4. STUCCO FINISH
5. STUCCO OVER FOAM TRIM
6. STUCCO OVER FOAM CORBELS
7. DECORATIVE STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
8. PRE-FAB WINDOW SYSTEM
9. COMPOSITE ENTRY DOOR
10. METAL ROLL-UP GARAGE DOOR
11. WOOD CORBELS
12. ILLUMINATED ADDRESS SIGN
13. FIBER CEMENT LAP SIDING
14. FIBER CEMENT TRIM
15. COACH LIGHT
16. DECORATIVE BOARD & BATTEN
17. DECORATIVE FOAM SHUTTER
18. WOOD COLUMN

PLAN 1 - Front Elevations

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

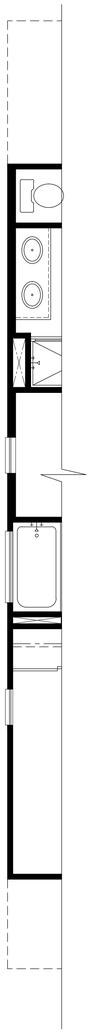
AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

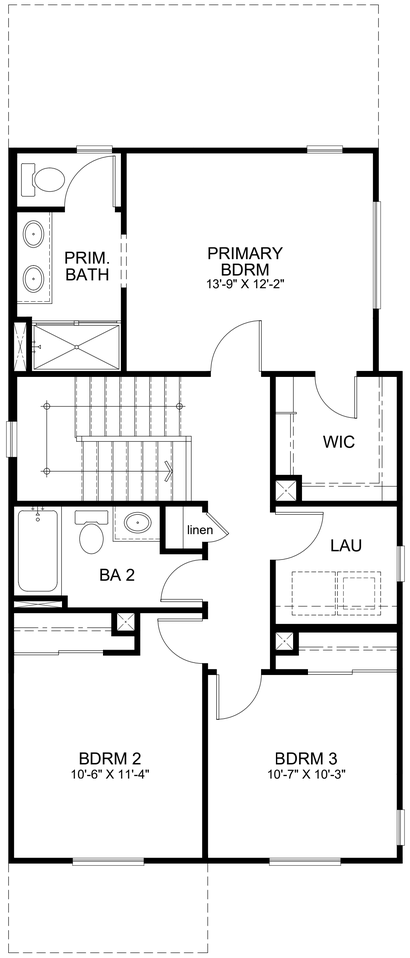
PLAN: 222.1412
DATE: 09.20.2024

A.3

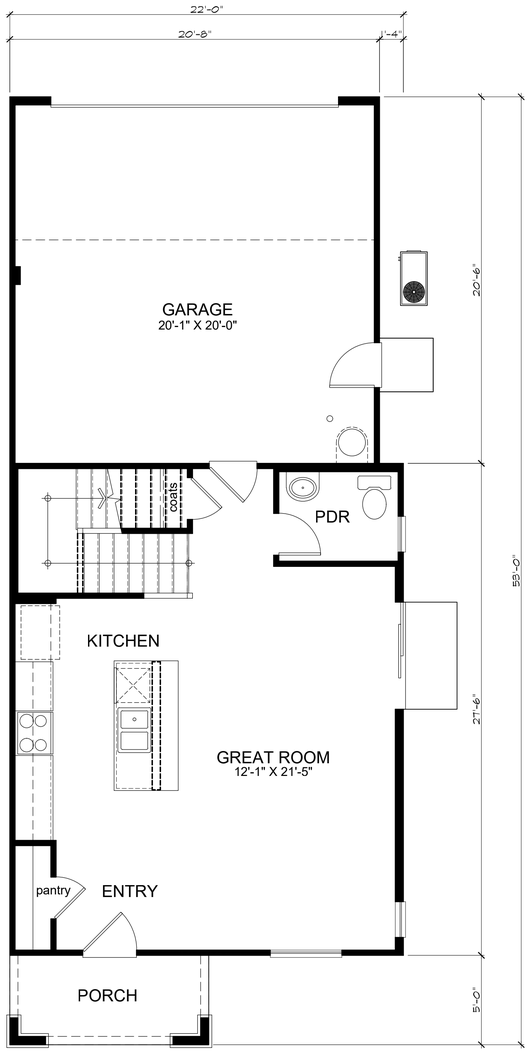
903



Enhanced Left Elevation
Partial Second Floor Plan



Second Floor



First Floor

Plan 1A - Floor Plans

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707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 222.1412
DATE: 09.20.2024

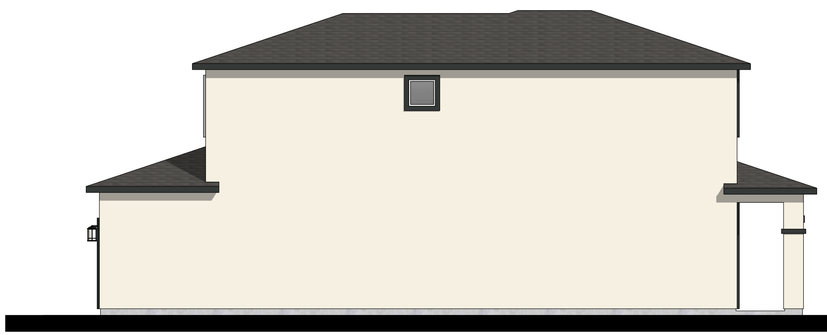
A.4



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘A’ - Prairie

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4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 222.1412
DATE: 09.20.2024

A.5

905

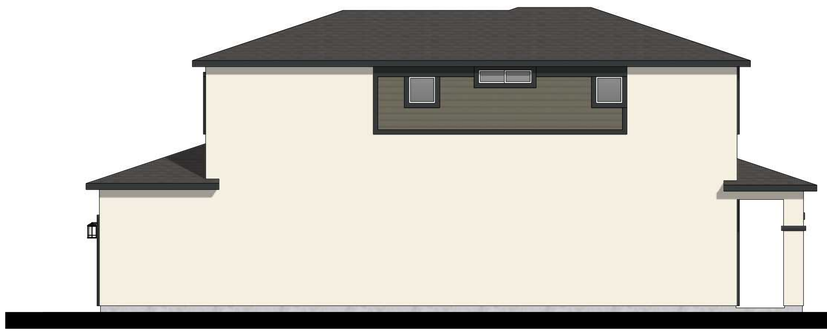


Perspective View



Front Elevation

Enhancement:
- Window Grids
- Additional Windows
- Extended lap siding



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘A’ - Prairie - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
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707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 222.1412
DATE: 09.20.2024

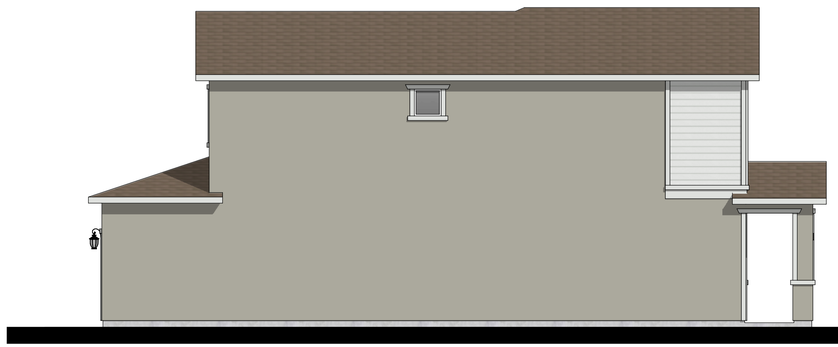
A.6



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘B’ - Craftsman

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 222.1412
DATE: 09.20.2024

A.7

907



Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional windows and shutters
- Extended siding



Left Elevation

Rear Elevation

Right Elevation

Plan 1 'B' - Craftsman - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 222.1412
DATE: 09.20.2024

A.8

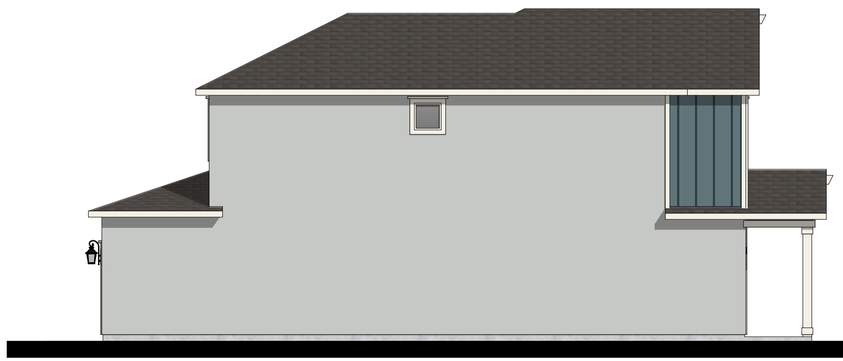
908



Perspective View



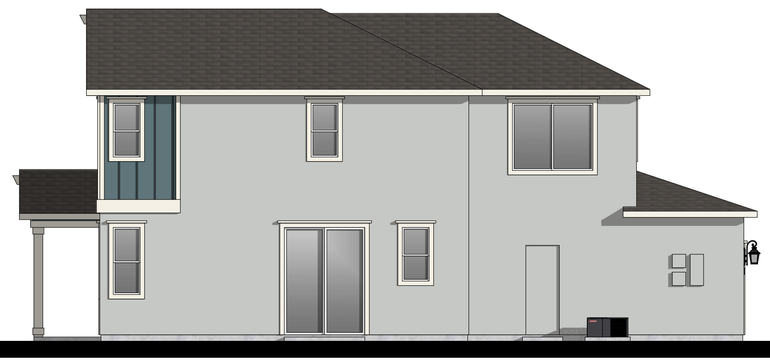
Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘C’ - Farmhouse

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 222.1412
DATE: 09.20.2024

A.9



Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional windows and shutters
- Extended board & batten



Left Elevation



Rear Elevation



Right Elevation

Plan 1 ‘C’ - Farmhouse - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

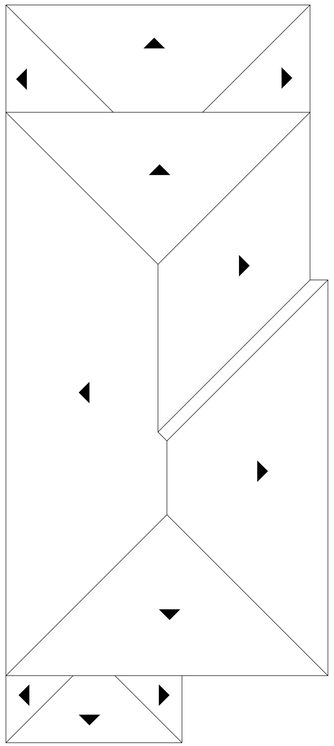
AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 222.1412
DATE: 09.20.2024

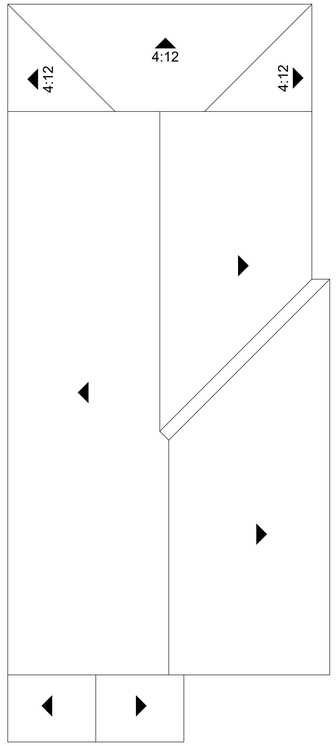
A.10

910



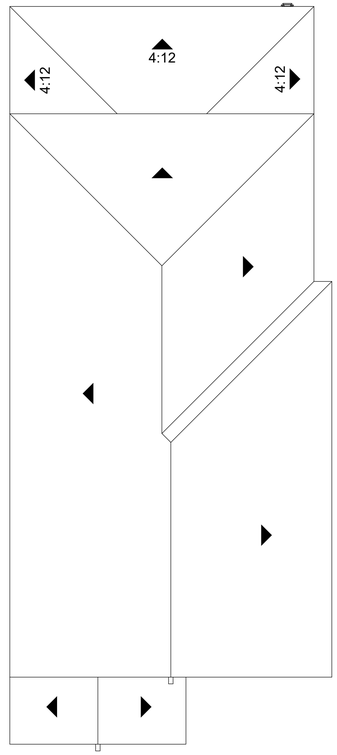
‘A’

Roof Plan
slope 4:12 typ., UNO



‘B’

Roof Plan
slope 5:12 typ., UNO



‘C’

Roof Plan
slope 6:12 typ., UNO

Plan 1 - Roof Plans

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

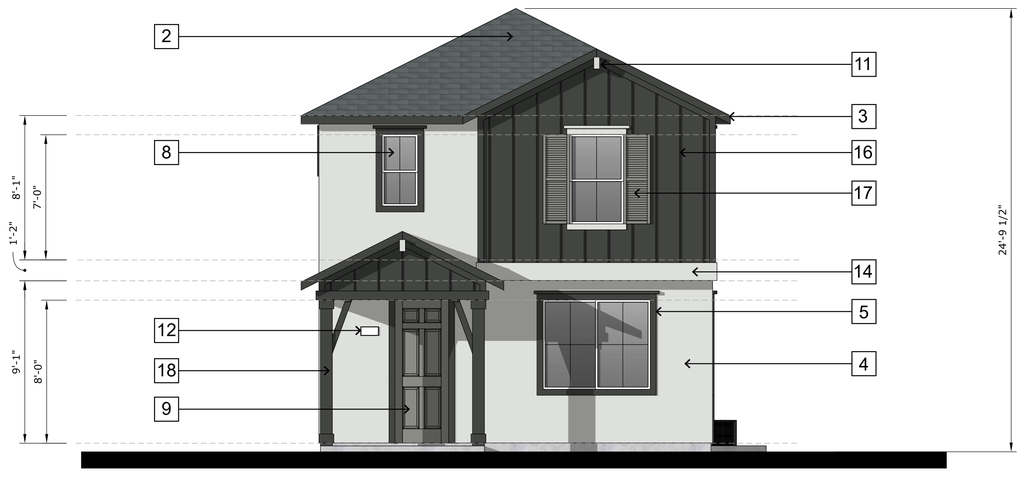
PLAN: 222.1412
DATE: 09.20.2024

A.11

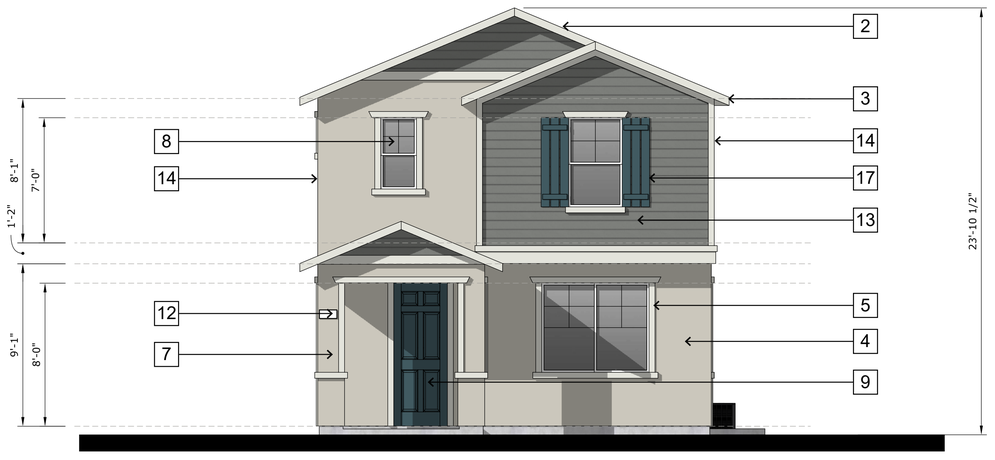
911



'A' - Prairie



'C' - Farmhouse



'B' - Craftsman

ELEVATION LEGEND

1. NOT USED
2. CONCRETE FLAT TILE ROOFING
3. WOOD FASCIA BOARD
4. STUCCO FINISH
5. STUCCO OVER FOAM TRIM
6. STUCCO OVER FOAM CORBELS
7. DECORATIVE STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
8. PRE-FAB WINDOW SYSTEM
9. COMPOSITE ENTRY DOOR
10. METAL ROLL-UP GARAGE DOOR
11. WOOD CORBELS
12. ILLUMINATED ADDRESS SIGN
13. FIBER CEMENT LAP SIDING
14. FIBER CEMENT TRIM
15. COACH LIGHT
16. DECORATIVE BOARD & BATTEN
17. DECORATIVE FOAM SHUTTER
18. WOOD COLUMN

PLAN 2 - Front Elevations

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

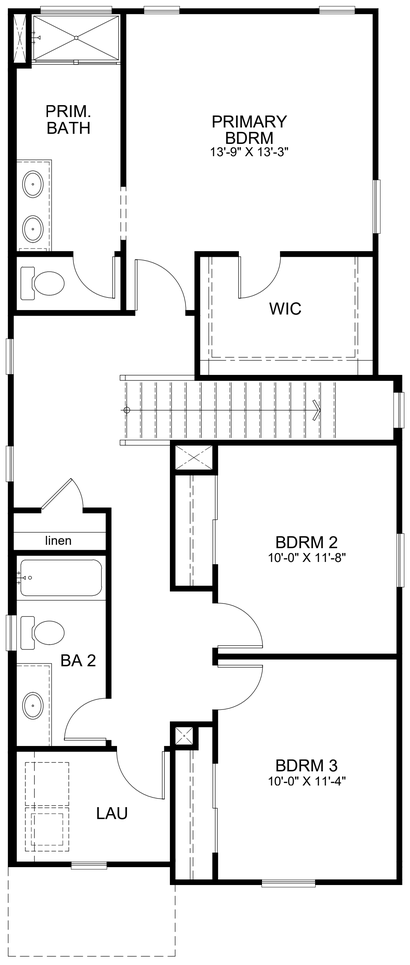
AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

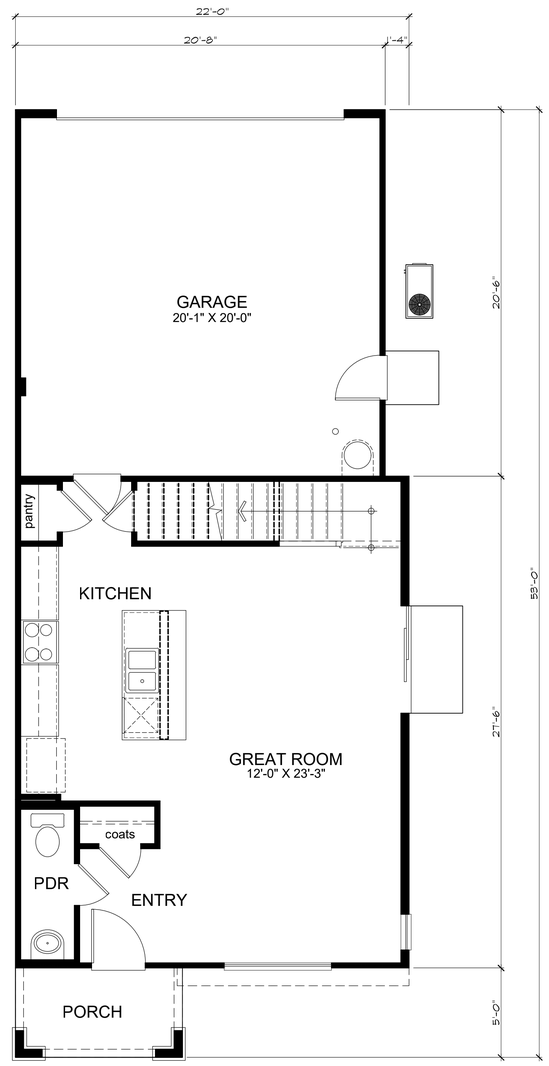
PLAN: 222.1579
DATE: 09.20.2024

A.12

912



Second Floor



First Floor

Plan 2A - Floor Plans

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 222.1579
DATE: 09.20.2024

A.13

913



Perspective View



Front Elevation



Left Elevation

Rear Elevation

Right Elevation

Plan 2 ‘A’ - Prairie

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 222.1579
DATE: 09.20.2024

A.14



Perspective View



Front Elevation

Enhancement:
- Window Grids
- Exteneded lap siding



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘A’ - Prairie - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

PLAN: 222.1579
DATE: 09.20.2024

A.15

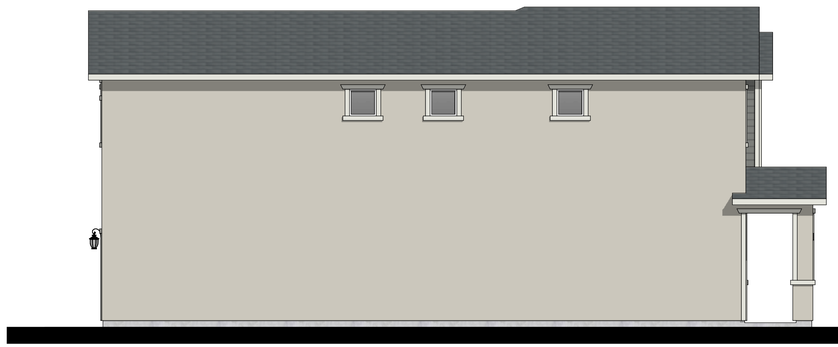
915



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘B’ - Craftsman

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 222.1579
DATE: 09.20.2024

A.16

916

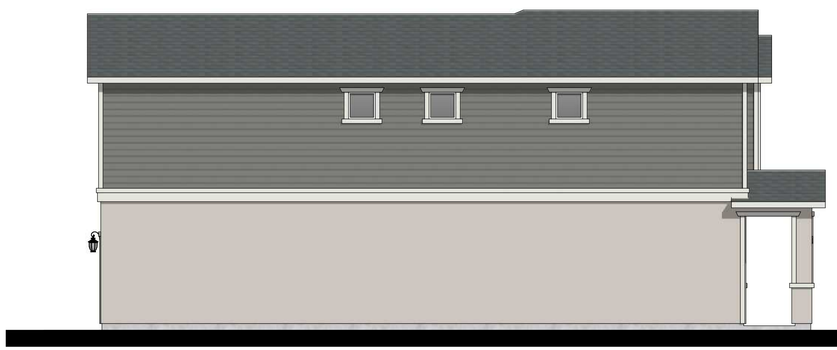


Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional shutters
- Extended siding



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘B’ - Craftsman - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 222.1579
DATE: 09.20.2024

A.17



Perspective View



Front Elevation



Left Elevation

Rear Elevation

Right Elevation

Plan 2 ‘C’ - Farmhouse

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 222.1579
DATE: 09.20.2024

A.18

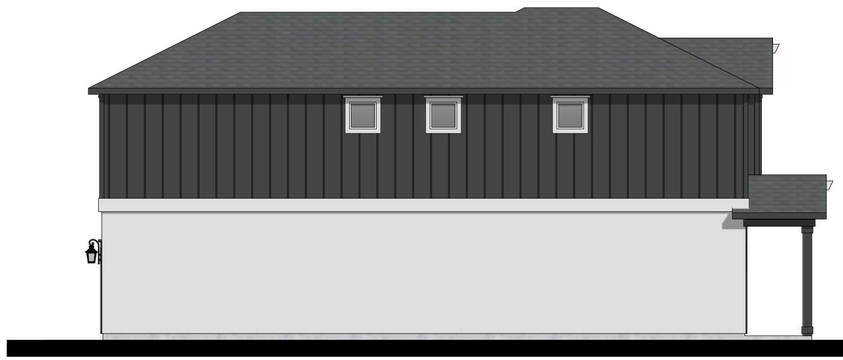


Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional shutters
- Extended board & batten



Left Elevation



Rear Elevation



Right Elevation

Plan 2 ‘C’ - Farmhouse - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

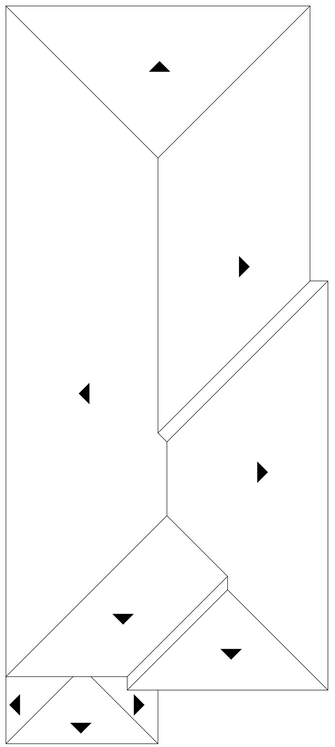
Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

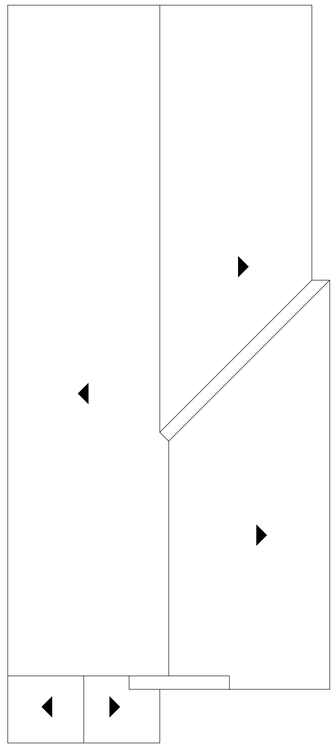
PLAN: 222.1579
DATE: 09.20.2024

A.19



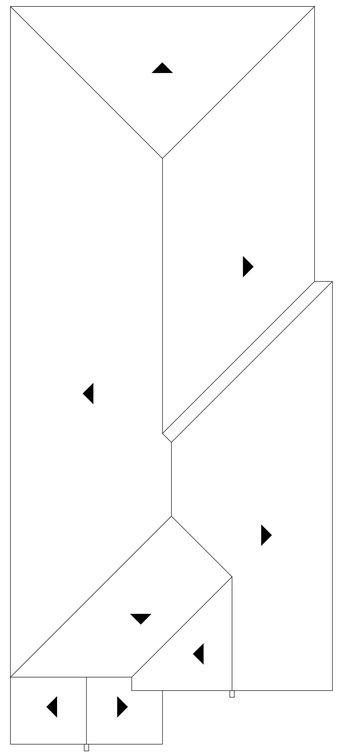
‘A’

Roof Plan
slope 4:12 typ., UNO



‘B’

Roof Plan
slope 5:12 typ., UNO



‘C’

Roof Plan
slope 6:12 typ., UNO

Plan 2 - Roof Plans

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 222.1579
DATE: 09.20.2024

A.20



'A' - Prairie



'C' - Farmhouse



'B' - Craftsman

ELEVATION LEGEND

1. NOT USED
2. CONCRETE FLAT TILE ROOFING
3. WOOD FASCIA BOARD
4. STUCCO FINISH
5. STUCCO OVER FOAM TRIM
6. STUCCO OVER FOAM CORBELS
7. DECORATIVE STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
8. PRE-FAB WINDOW SYSTEM
9. COMPOSITE ENTRY DOOR
10. METAL ROLL-UP GARAGE DOOR
11. WOOD CORBELS
12. ILLUMINATED ADDRESS SIGN
13. FIBER CEMENT LAP SIDING
14. FIBER CEMENT TRIM
15. COACH LIGHT
16. DECORATIVE BOARD & BATTEN
17. DECORATIVE FOAM SHUTTER
18. WOOD COLUMN

PLAN 3 - Front Elevations

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

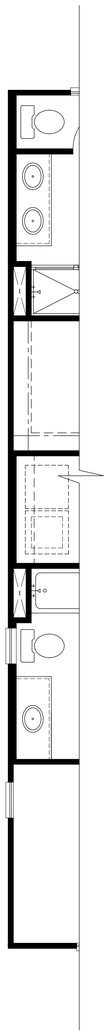
Watson Ranch 7 - Alley

AMERICAN CANYON, CA

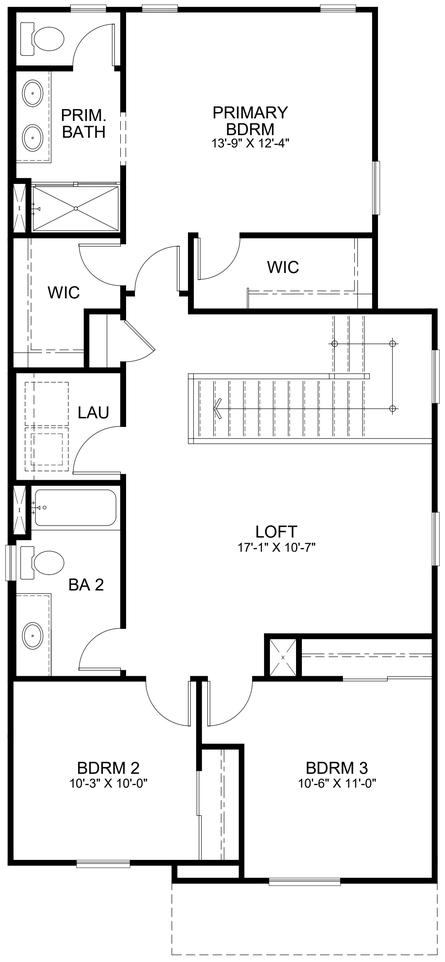
SCALE : 1/4" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

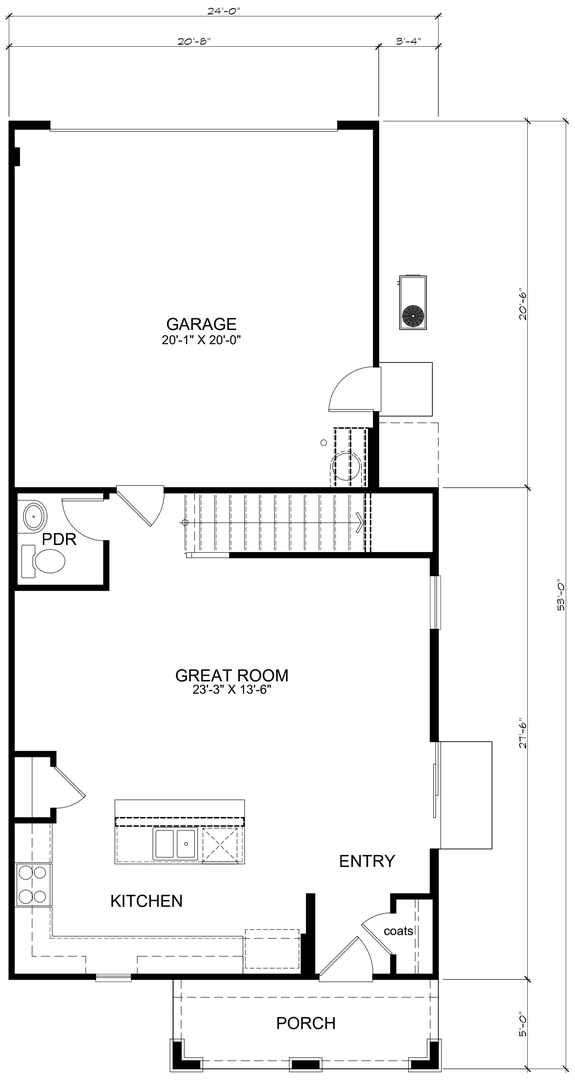
A.21



Enhanced Left Elevation
Partial Second Floor Plan



Second Floor



First Floor

Plan 3A - Floor Plans

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

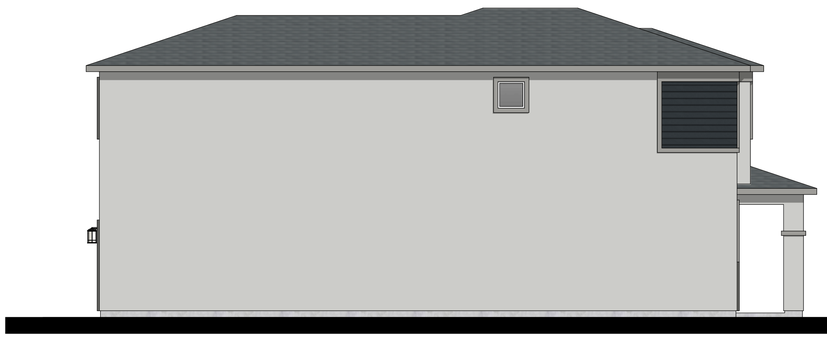
A.22



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘A’ - Prairie

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

A.23



Perspective View



Front Elevation

Enhancement:
- Window Grids
- Additional Windows
- Extended lap siding



Left Elevation

Rear Elevation

Right Elevation

Plan 3 ‘A’ - Prairie - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

SCALE : 3/16" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

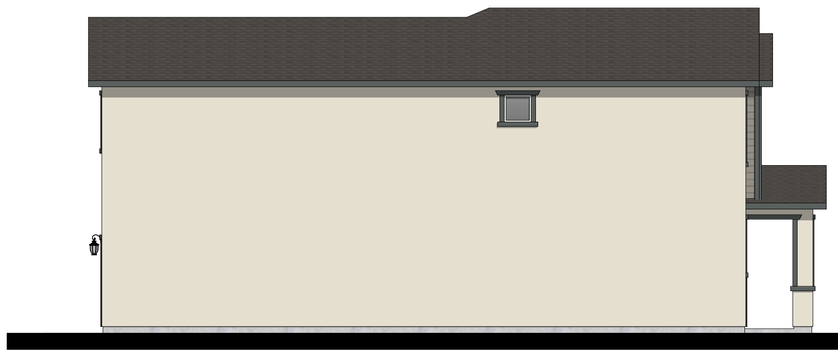
A.24



Perspective View



Front Elevation



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘B’ - Craftsman

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

A.25

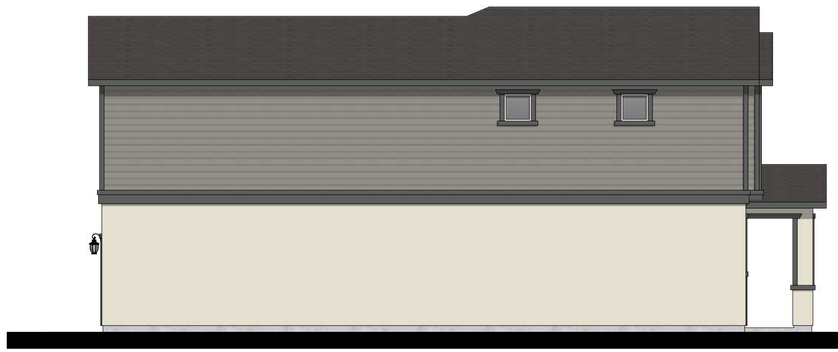


Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional windows and shutters
- Extended siding



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘B’ - Craftsman - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

A.26

926



Perspective View



Front Elevation



Left Elevation

Rear Elevation

Right Elevation

Plan 3 ‘C’ - Farmhouse

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 1/4" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

A.27

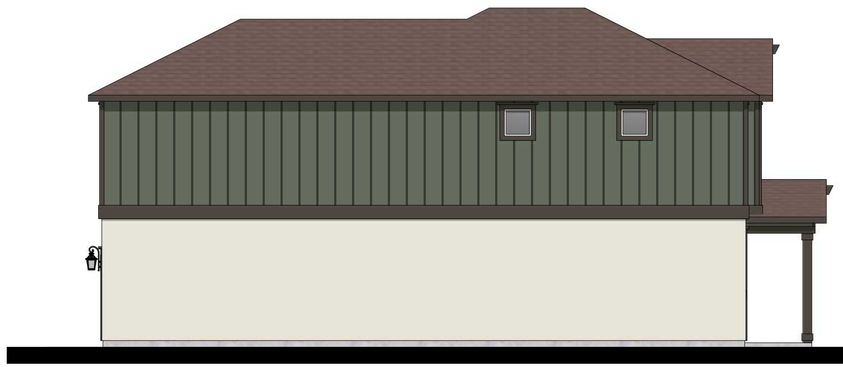


Perspective View



Front Elevation

Enhancement:
- Window grids
- Additional shutters
- Extended board & batten



Left Elevation



Rear Elevation



Right Elevation

Plan 3 ‘C’ - Farmhouse - Enhanced

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

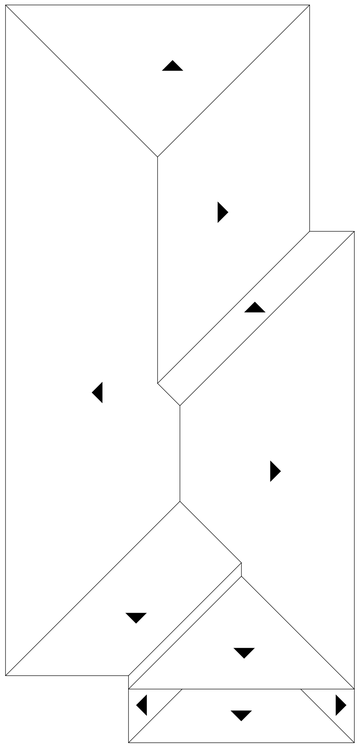
AMERICAN CANYON, CA

SCALE : 1/4" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

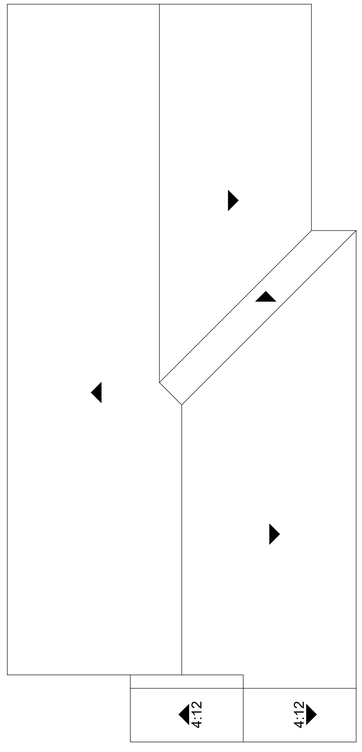
A.28

928



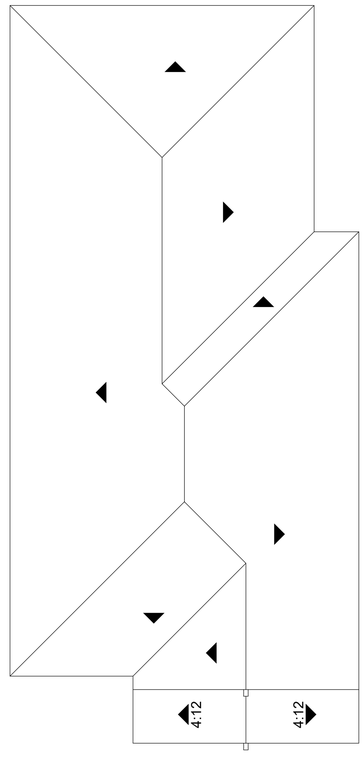
‘A’

Roof Plan
slope 4:12 typ., UNO



‘B’

Roof Plan
slope 5:12 typ., UNO



‘C’

Roof Plan
slope 6:12 typ., UNO

Plan 3 - Roof Plans

KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

0 2 4 8 12
SCALE : 3/16" = 1'-0"

PLAN: 224.1716
DATE: 09.20.2024

A.29

PRAIRIE ELEVATIONS

SCHEME 1



ROOF
SLATE Charcoal Blend
1 FACS 1430

STUCCO
KB 1333
Roman Column (SW 7562)

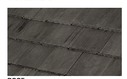
FRONT ENTRY
Roycroft Bronze Green (SW 2846)

FASCIA / TRIM
Greenblack (SW 6994)

GARAGE
Lauriston Stone (SW 9593)

SIDING
Lauriston Stone (SW 9593)

SCHEME 2



ROOF
SLATE Charcoal Blend
1 FACS 1430

STUCCO
KB 1381
Incredible White (SW 7028)

FRONT ENTRY
Outerspace (SW 6251)

FASCIA / TRIM
Westchester Gray (SW 2849)

GARAGE
Westchester Gray (SW 2849)

SIDING
Outerspace (SW 6251)

SCHEME 3



ROOF
SLATE Charcoal
1 FACS 1130

STUCCO
KB 1383
Allegory (SW 9553)

FRONT ENTRY
Burgundy (SW 6300)

FASCIA / TRIM
Bedrock (SW 9563)

GARAGE
Roycroft Pewter (SW 2848)

SIDING
Inkwell (SW 6992)

CRAFTSMAN ELEVATIONS

SCHEME 4



ROOF
SHAKE Charcoal Brown Blend
1 FBCF 1132

STUCCO
KB 2119
Dorian Gray (SW 7017)

FRONT ENTRY / SHUTTERS
Iron Ore (SW 7069)

FASCIA / TRIM / GABLE END
Rhinestone (SW 7656)

GARAGE
Rhinestone (SW 7656)

SIDING
Rhinestone (SW 7656)

SCHEME 5



ROOF
SHAKE Dark Ash
1 FBCF 5139

STUCCO
KB 1294
Alpaca (SW 7022)

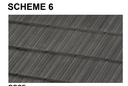
FRONT ENTRY / SHUTTERS
Seaworthy (SW 7620)

FASCIA / TRIM / GABLE END
Ethereal White (SW 6182)

GARAGE
Grizzle Gray (SW 7068)

SIDING
Westchester Gray (SW 2849)

SCHEME 6



ROOF
SHAKE Charcoal Blend
1 FBCF 1430

STUCCO
KB 1321
Moderate White (SW 6140)

FRONT ENTRY / SHUTTERS
Bitter Chocolate (SW 6013)

FASCIA / TRIM
Roycroft Pewter (SW 2848)

GARAGE / GABLE END
Moderate White SW 6140

SIDING
Dovetail (SW 7018)

FARMHOUSE ELEVATIONS

SCHEME 7



ROOF
SLATE Charcoal Blend
1 FACS 1430

STUCCO
KB 1269
Tinsmith (SW 7657)

GABLE END / SIDING
Eventide (SW 9643)

FRONT ENTRY / SHUTTERS
Rockweed (SW 2735)

FASCIA / TRIM
White Flour (SW 7102)

GARAGE
Oyster White (SW 7637)

BOARD & BATTEN
Stargazer (SW 9635)

SCHEME 8



ROOF
SLATE Charcoal
1 FACS 1130

STUCCO
KB 1282
Rhinestone (SW 7656)

FASCIA / TRIM AT BOARD & BATTEN / SHUTTERS AT BOARD & BATTEN
Rhinestone (SW 7656

TRIM AT STUCCO / SHUTTERS AT STUCCO
Iron Ore (SW 7069)

GABLE END / FRONT ENTRY / SIDING / GARAGE
Classic French Gray (SW 0077)

BOARD & BATTEN
Iron Ore (SW 7069)

SCHEME 9



ROOF
SLATE Charcoal Brown Blend
1 FACS 1132

STUCCO
KB 2031
Ivory Lace (SW 7013)

GABLE END / SIDING
White Sesame (SW 9586)

FRONT ENTRY / SHUTTERS
Settlement (SW 9594)

FASCIA / TRIM
Black Fox (SW 7020)

GARAGE
Porpoise (SW 7047)

BOARD & BATTEN
Rosemary (SW 6187)

Color Board

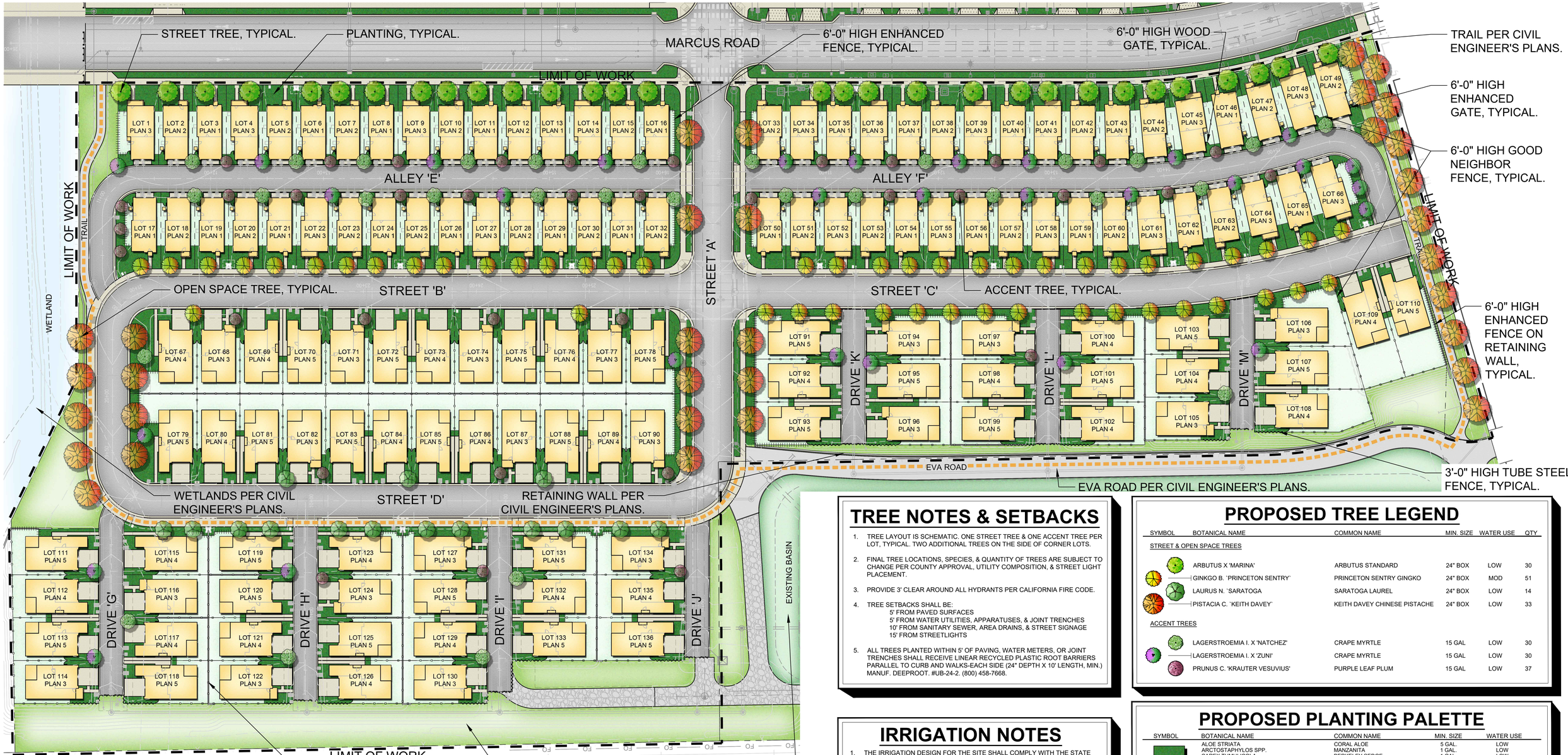
KB Home North Bay
4830 Business Center Drive, Suite 150
Fairfield, CA 94534
707.389.7500

Watson Ranch 7 - Alley

AMERICAN CANYON, CA

PLAN:
DATE: 09.20.2024

A.30



PLANTING NOTES

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4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.

Watson Ranch Lot 7
Design Permit
Attachment 2.4 Exhibit D:
Landscaping Plans

FENCE & WALL LEGEND

- 6' HIGH WOOD GOOD NEIGHBOR FENCE & GATE. SEE DETAILS A & B, SHEET L-6.
- 6' HIGH WOOD ENHANCED FENCE & GATE. SEE DETAILS C & D, SHEET L-6.
- 3' HIGH TUBE STEEL FENCE & GATE. SEE DETAIL E, SHEET L-6.
- 6' GOOD NEIGHBOR FENCE OR 6' ENHANCED FENCE ON RETAINING WALL PER CIVIL ENGINEERS' PLANS.
- RETAINING WALL. LAYOUT & SECTION PER CIVIL ENGINEERS' PLANS.

TREE NOTES & SETBACKS

1. TREE LAYOUT IS SCHEMATIC. ONE STREET TREE & ONE ACCENT TREE PER LOT, TYPICAL. TWO ADDITIONAL TREES ON THE SIDE OF CORNER LOTS.
2. FINAL TREE LOCATIONS, SPECIES, & QUANTITY OF TREES ARE SUBJECT TO CHANGE PER COUNTY APPROVAL, UTILITY COMPOSITION, & STREET LIGHT PLACEMENT.
3. PROVIDE 3' CLEAR AROUND ALL HYDRANTS PER CALIFORNIA FIRE CODE.
4. TREE SETBACKS SHALL BE:
   - 5' FROM PAVED SURFACES
   - 5' FROM WATER UTILITIES, APPARATUSES, & JOINT TRENCHES
   - 10' FROM SANITARY SEWER, AREA DRAINS, & STREET SIGNAGE
   - 15' FROM STREETLIGHTS
5. ALL TREES PLANTED WITHIN 5' OF PAVING, WATER METERS, OR JOINT TRENCHES SHALL RECEIVE LINEAR RECYCLED PLASTIC ROOT BARRIERS PARALLEL TO CURB AND WALKS-EACH SIDE (24" DEPTH X 10' LENGTH, MIN.) MANUF. DEEPROOT. #UB-24-2. (800) 458-7668.

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4. PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.
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PROPOSED TREE LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WATER USE	QTY
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	ARBUTUS X 'MARINA'	ARBUTUS STANDARD	24" BOX	LOW	30
	GINKGO B. `PRINCETON SENTRY`	PRINCETON SENTRY GINGKO	24" BOX	MOD	51
	LAURUS N. `SARATOGA	SARATOGA LAUREL	24" BOX	LOW	14
	PISTACIA C. `KEITH DAVEY`	KEITH DAVEY CHINESE PISTACHE	24" BOX	LOW	33
ACCENT TREES					
	LAGERSTROEMIA I. X 'NATCHEZ'	CRAPE MYRTLE	15 GAL	LOW	30
	LAGERSTROEMIA I. X 'ZUNI'	CRAPE MYRTLE	15 GAL	LOW	30
	PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM	15 GAL	LOW	37

PROPOSED PLANTING PALETTE

SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WATER USE
	ALOE STRIATA	CORAL ALOE	5 GAL	LOW
	ARCTOSTAPHYLOS SPP.	MANZANITA	1 GAL.	LOW
	CAREX TUMULICOLA	BERKELEY SEDGE	1 GAL.	LOW
	CEANOTHUS SPP.	CALIFORNIA LILAC	1 GAL.	LOW
	COPROSMA K. 'VARIEGATA'	VARIEGATED COPROSMA	1 GAL.	LOW
	CUPRESSUS S. 'TINY TOWER'	ITALIAN CYPRESS	15 GAL.	LOW
	DIETES BICOLOR	FORTNIGHT LILY	5 GAL	LOW
	ELYMUS C. 'CANYON PRINCE'	WILD RYE	1 GAL.	LOW
	FESTUCA CALIFORNICA	CALIFORNIA FESCUE	1 GAL.	LOW
	GREVILLEA NOELLII	GREVILLEA	1 GAL.	LOW
	HEMEROCALLIS H. 'ORANGE'	ORANGE DAYLILY	5 GAL.	MOD
	LAVANDULA S. 'OTTO QUAST'	LAVENDER	5 GAL.	LOW
	MUHLENBERGIA CAPILLARIS	PINK-RED MUHLY	1 GAL.	LOW
	MYRTUS C. 'COMPACTA'	DWARF MYRTLE	15 GAL.	LOW
	MYOPORUM PARVIFOLIUM	MYOPORUM	1 GAL.	LOW
	NANDINA DOMESTICA	HEAVENLY BAMBOO	1 GAL.	LOW
	OLEA E.'MONTRA'	LITTLE OLLIE OLIVE	15 GAL.	LOW
	PENNISETUM ORIENTALE	ORIENTAL FOUNTAIN GRASS	1 GAL.	MOD
	PENSTEMON CHA CHA 'HOT PINK'	BEARDTONGUE	5 GAL	LOW
	PENSTEMON SPECTABILIS	BEARDTONGUE	5 GAL.	LOW
	PHORMIUM TENAX SPP.	NEW ZEALAND FLAX	5 GAL.	LOW
	PHLOMIS FRUTICOSA	JERUSALEM SAGE	1 GAL.	LOW
	PRUNUS C. 'COMPACTA'	CAROLINA CHERRY	15 GAL.	LOW
	SALVIA GREGGII SPP.	AUTUMN SAGE	1 GAL.	LOW
	SALVIA LEUCANTHA	MEXICAN BUSH SAGE	1 GAL.	LOW
	SANTOLINA CHAMAECYPARISSUS	LAVENDER COTTON	5 GAL.	LOW
	THYMUS SPP.	THYMUS	1 GAL.	LOW
	RHAMNUS C. 'EVE CASE'	COFFEEBERRY	15 GAL.	LOW
	RHAPHIOLEPIS I. 'PINK LADY'	INDIAN HAWTHORN	1 GAL.	LOW
	ROSMARINUS O. 'HUNTINGTON CARPET'	DWARF ROSEMARY	1 GAL.	LOW
	VERBENA L. 'DE LA MINA'	CEDROS ISLAND VERBENA	1 GAL.	LOW
	WESTRINGIA FRUTICOSA	COAST ROSEMARY	15 GAL.	LOW

KB HOME NORTH BAY
4830 BUSINESS CENTER DRIVE., STE.50
FAIRFIELD, CA 94534

WATSON RANCH

AMERICAN CANYON, CALIFORNIA
PLANNING FILE NO.: PL24-0013

OVERALL SITE PLAN

PRELIMINARY LANDSCAPE PLAN
SEPTEMBER 25, 2024

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558

tel: 707.224.2299
www.vandertoolen.com

0' 20' 40' 80'
SCALE: 1" = 40'-0"
NORTH

L-1
Project No. 02924

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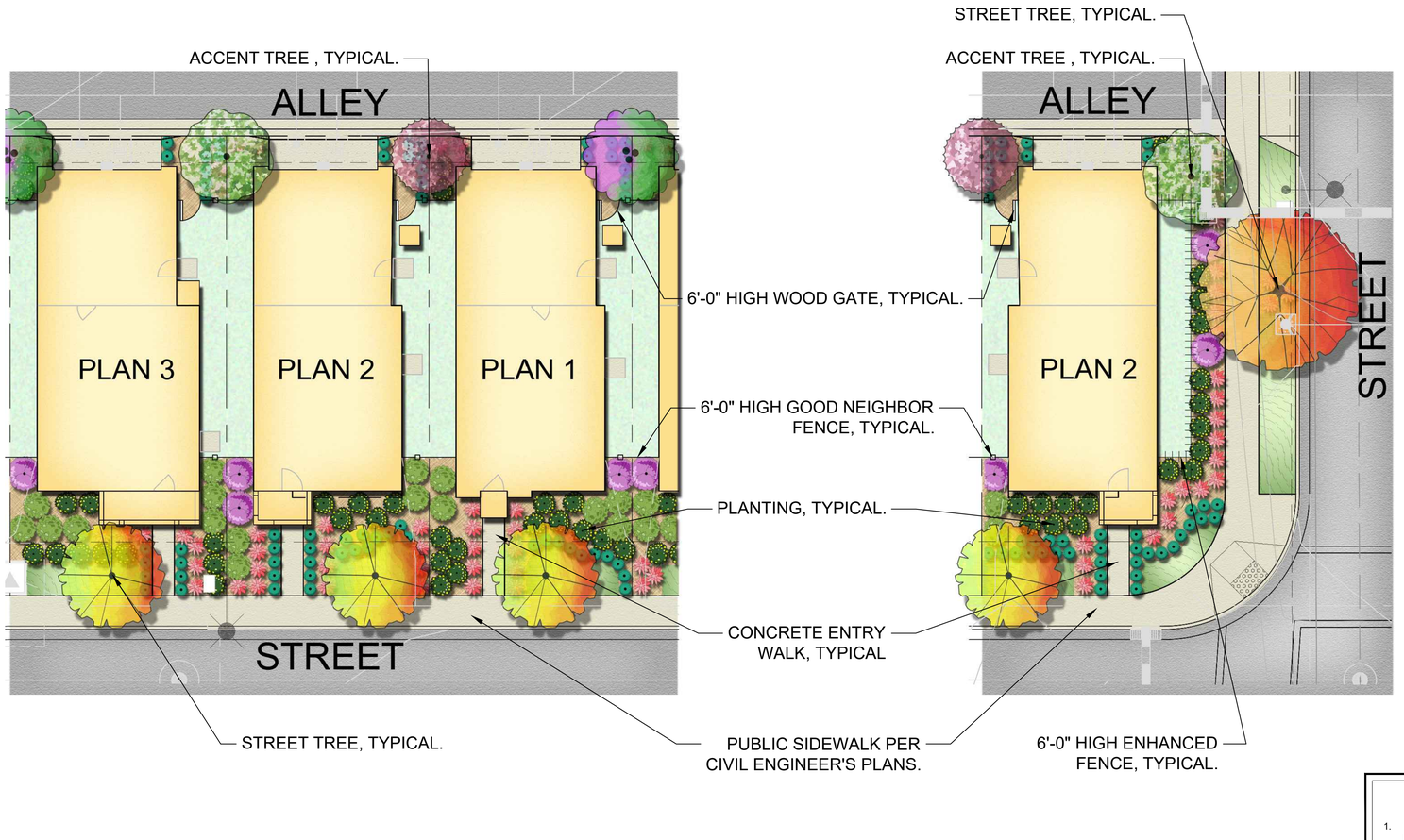

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KB HOME NORTH BAY
4830 BUSINESS CENTER DRIVE., STE.50
FAIRFIELD, CA 94534

WATSON RANCH
AMERICAN CANYON, CALIFORNIA
PLANNING FILE NO.: PL24-0013

TYPICAL LOTS WITH PRIVATE ALLEY ENTRANCE & TYPICAL CORNER
PRELIMINARY LANDSCAPE PLAN
SEPTEMBER 25, 2024

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558

tel: 707.224.2299
www.vandertoolen.com

SCALE: 1" = 10'-0" (0' 5' 10' 20')
NORTH

L-2
Project No. 02924

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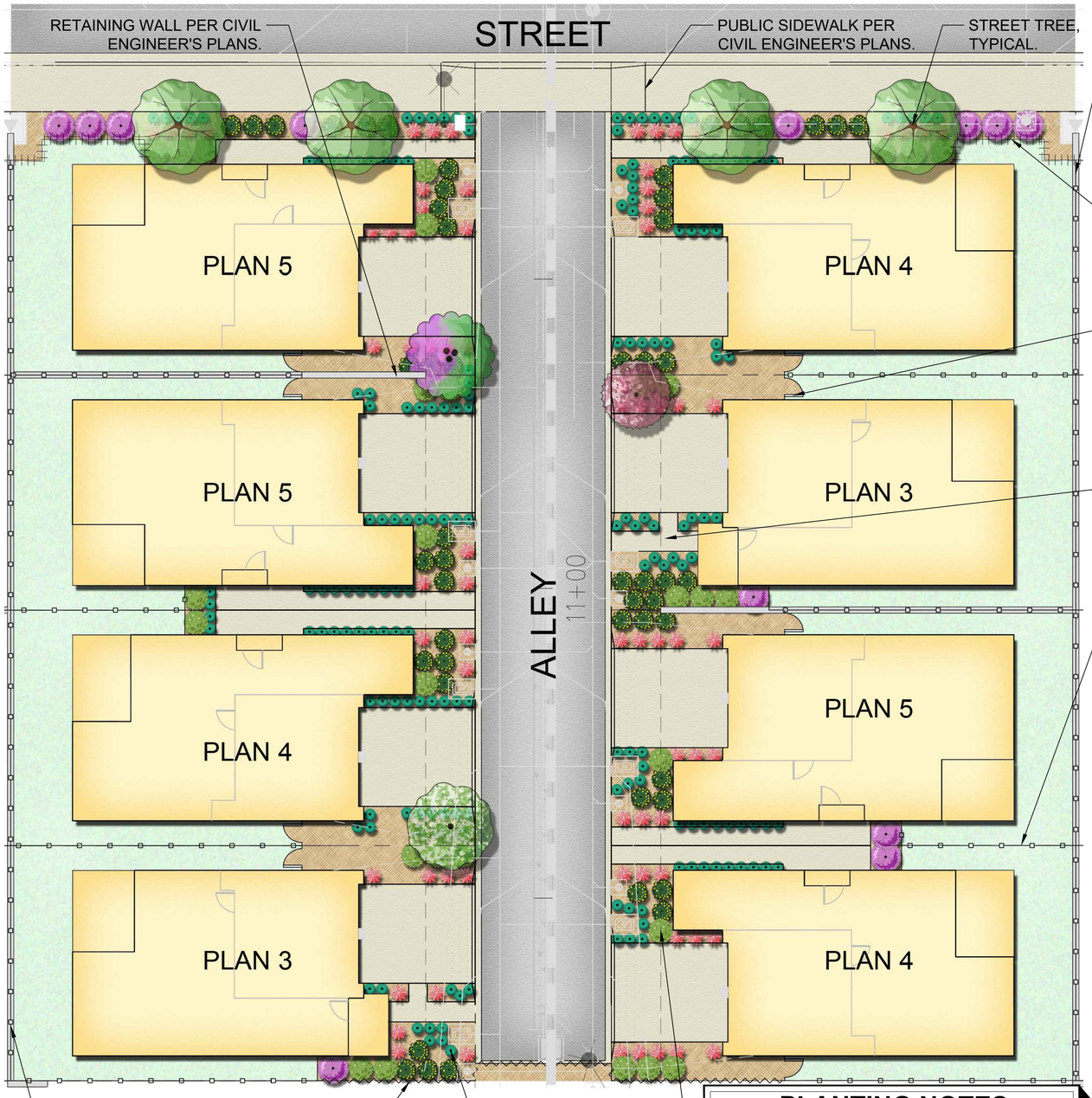

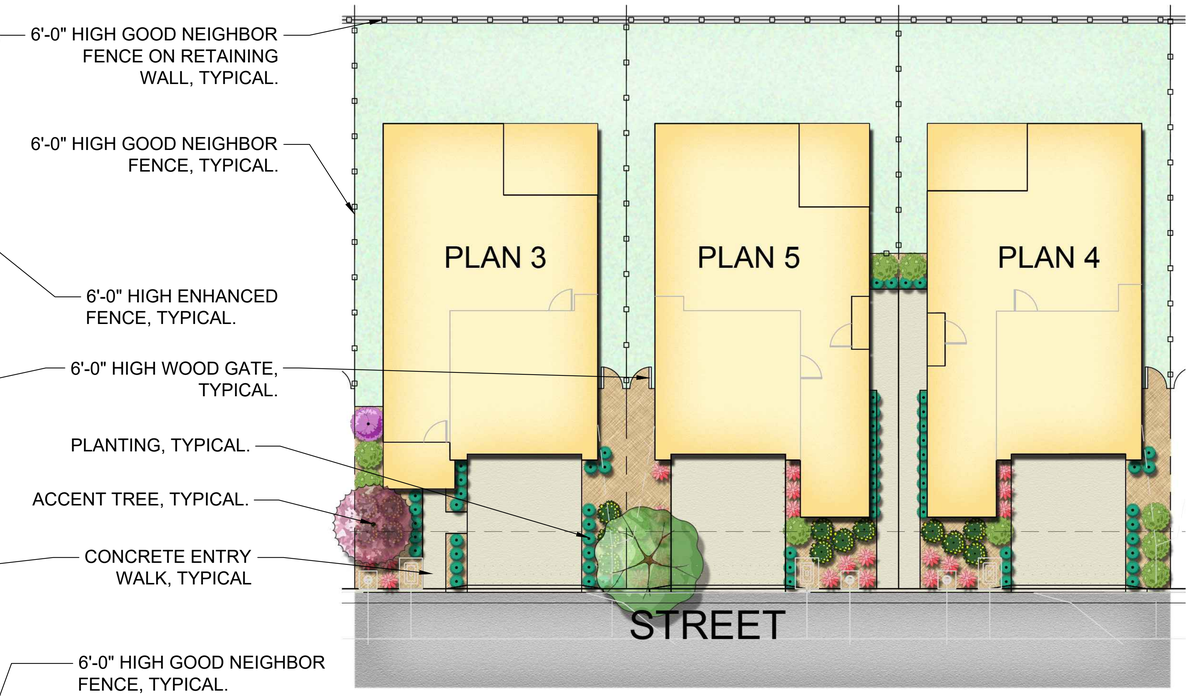

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AMERICAN CANYON, CALIFORNIA

PLANNING FILE NO.: PL24-0013

TYPICAL LOTS WITH PRIVATE ALLEY ENTRANCE / STREET FACING

PRELIMINARY LANDSCAPE PLAN

SEPTEMBER 25, 2024

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558

tel: 707.224.2299
www.vandertoolen.com

SCALE: 1" = 10'-0" (0' 5' 10' 20')

NORTH

L-3

Project No. 02924

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PROPOSED TREE LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WATER USE	QTY
STREET & OPEN SPACE TREES					
	ARBUTUS X 'MARINA'	ARBUTUS STANDARD	24" BOX	LOW	30
	GINKGO B. `PRINCETON SENTRY`	PRINCETON SENTRY GINGKO	24" BOX	MOD	51
	LAURUS N. `SARATOGA	SARATOGA LAUREL	24" BOX	LOW	14
	PISTACIA C. `KEITH DAVEY`	KEITH DAVEY CHINESE PISTACHE	24" BOX	LOW	33
ACCENT TREES					
	LAGERSTROEMIA I. X 'NATCHEZ'	CRAPE MYRTLE	15 GAL	LOW	30
	LAGERSTROEMIA I. X 'ZUNI'	CRAPE MYRTLE	15 GAL	LOW	30
	PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM	15 GAL	LOW	37

PROPOSED PLANTING PALETTE

SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WATER USE
LARGE SHRUBS	ALOE STRIATA	CORAL ALOE	5 GAL.	LOW
	ARCTOSTAPHYLOS SPP.	MANZANITA	1 GAL.	LOW
	CAREX TUMULICOLA	BERKELEY SEDGE	1 GAL.	LOW
	CEANOTHUS SPP.	CALIFORNIA LILAC	1 GAL.	LOW
	COPROSMA K. 'VARIEGATA'	VARIEGATED COPROSMA	1 GAL.	LOW
	CUPRESSUS S. 'TINY TOWER'	ITALIAN CYPRESS	15 GAL.	LOW
	DIETES BICOLOR	FORTNIGHT LILY	5 GAL.	LOW
	ELYMUS C. 'CANYON PRINCE'	WILD RYE	1 GAL.	LOW
	FESTUCA CALIFORNICA	CALIFORNIA FESCUE	1 GAL.	LOW
	GREVILLEA NOELLII	GREVILLEA	1 GAL.	LOW
	HEMEROCALLIS H. 'ORANGE'	ORANGE DAYLILY	5 GAL.	MOD
MEDIUM / SMALL SHRUBS	LAVANDULA S. 'OTTO QUAST'	LAVENDER	5 GAL.	LOW
	MUHLENBERGIA CAPILLARIS	PINK-RED MUHLY	1 GAL.	LOW
	MYRTUS C. 'COMPACTA'	DWARF MYRTLE	15 GAL.	LOW
	MYOPORUM PARVIFOLIUM	MYOPORUM	1 GAL.	LOW
	NANDINA DOMESTICA	HEAVENLY BAMBOO	1 GAL.	LOW
	OLEA E.'MONTRA'	LITTLE OLLIE OLIVE	15 GAL.	LOW
	PENNISETUM ORIENTALE	ORIENTAL FOUNTAIN GRASS	1 GAL.	MOD
ACCENT SHRUBS	PENSTEMON CHA CHA 'HOT PINK'	BEARDTONGUE	5 GAL.	LOW
	PENSTEMON SPECTABILIS	BEARDTONGUE	5 GAL.	LOW
	PHORMIUM TENAX SPP.	NEW ZEALAND FLAX	5 GAL.	LOW
	PHLOMIS FRUTICOSA	JERUSALEM SAGE	1 GAL.	LOW
	PRUNUS C. 'COMPACTA'	CAROLINA CHERRY	15 GAL.	LOW
	SALVIA GREGGII SPP.	AUTUMN SAGE	1 GAL.	LOW
	SALVIA LEUCANTHA	MEXICAN BUSH SAGE	1 GAL.	LOW
	SANTOLINA CHAMAECYPARISSUS	LAVENDER COTTON	5 GAL.	LOW
	THYMUS SPP.	THYMUS	1 GAL.	LOW
GROUNDCOVERS	RHAMNUS C. 'EVE CASE'	COFFEEBERRY	15 GAL.	LOW
	RHAPHIOLEPIS I. 'PINK LADY'	INDIAN HAWTHORN	1 GAL.	LOW
	ROSMARINUS O. 'HUNTINGTON CARPET'	DWARF ROSEMARY	1 GAL.	LOW
	VERBENA L. 'DE LA MINA'	CEDROS ISLAND VERBENA	1 GAL.	LOW
	WESTRINGIA FRUTICOSA	COAST ROSEMARY	15 GAL.	LOW

IRRIGATION NOTES

1. THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE MANDATED MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).
2. THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET/SMART' IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.
3. THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, AND POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS.
4. PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.
5. ALL MWELO DOCUMENTATION INCLUDING IRRIGATION PLANS, WATER USE CALCULATIONS AND CERTIFICATES SHALL BE SUBMITTED WITH THE LANDSCAPE IMPROVEMENT PLANS FOR REVIEW AND APPROVAL.

TREE NOTES & SETBACKS

1. TREE LAYOUT IS SCHEMATIC. ONE STREET TREE & ONE ACCENT TREE PER LOT, TYPICAL. TWO ADDITIONAL TREES ON THE SIDE OF CORNER LOTS.
2. FINAL TREE LOCATIONS, SPECIES, & QUANTITY OF TREES ARE SUBJECT TO CHANGE PER COUNTY APPROVAL, UTILITY COMPOSITION, & STREET LIGHT PLACEMENT.
3. PROVIDE 3' CLEAR AROUND ALL HYDRANTS PER CALIFORNIA FIRE CODE.
4. TREE SETBACKS SHALL BE:
   5' FROM PAVED SURFACES
   5' FROM WATER UTILITIES, APPARATUSES, & JOINT TRENCHES
   10' FROM SANITARY SEWER, AREA DRAINS, & STREET SIGNAGE
   15' FROM STREETLIGHTS
5. ALL TREES PLANTED WITHIN 5' OF PAVING, WATER METERS, OR JOINT TRENCHES SHALL RECEIVE LINEAR RECYCLED PLASTIC ROOT BARRIERS PARALLEL TO CURB AND WALKS-EACH SIDE (24" DEPTH X 10' LENGTH, MIN.) MANUF. DEEPROOT. #UB-24-2. (800) 458-7668.

PLANTING NOTES

1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
2. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
3. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.

KB HOME NORTH BAY
4830 BUSINESS CENTER
DRIVE., STE.50
FAIRFIELD, CA 94534

WATSON RANCH

AMERICAN CANYON, CALIFORNIA
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ATYPICAL LOTS
PRELIMINARY LANDSCAPE PLAN
SEPTEMBER 25, 2024

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TREES



ARBUTUS X `MARINA'
ARBUTUS



GINKGO B.`PRINCETON SENTRY`
PRINCETON SENTRY GINGKO



LAURUS N. `SARATOGA
SARATOGA LAUREL



PISTACIA C. 'KEITH DAVEY'
KEITH DAVEY CHINESE PISTACHE



LAGERSTROEMIA X 'NATCHEZ'
CRAPE MYRTLE



LAGERSTROEMIA x 'ZUNI'
CRAPE MYRTLE



PRUNUS C. 'KRAUTER VESUVIUS'
PURPLE LEAF PLUM

SHRUBS AND GROUNDCOVER



ALOE STRIATA
CORAL ALOE



ARCTOSTAPHYLOS SPP.
HOOKER'S MANZANITA



CAREX TUMULICOLA
BERKELEY SEDGE



CEANOTHUS SPP.
CALIFORNIA LILAC



COPROSMA K. 'VARIEGATA'
VARIEGATED COPROSMA



CUPRESSUS S. 'TINY TOWER'
ITALIAN CYPRESS



DIETES BICOLOR
FORTNIGHT LILY



ELYMUS C. 'CANYON PRINCE'
WILD RYE



FESTUCA CALIFORNICA
CALIFORNIA FESCUE



HEMEROCALLIS H. 'ORANGE'
ORANGE DAYLILY



GREVILLEA NOELLII
GREVILLEA



LAVANDULA S. 'OTTO QUAST'
LAVENDER



MUHLENBERGIA CAPILLARIS
PINK-RED MUHLY



MYRTUS C. 'COMPACTA'
DWARF MYRTLE



MYOPORUM PARVIFOLIUM
MYOPORUM



NANDINA DOMESTICA
HEAVENLY BAMBOO



PENNISETUM ORIENTALE
ORIENTAL FOUNTAIN GRASS



PHLOMIS FRUTICOSA
JERUSALEM SAGE



PENSTEMON CHA CHA 'HOT PINK'
BEARDTONGUE



PENSTEMON SPECTABILIS
BEARDTONGUE



PRUNUS C. 'COMPACTA'
CAROLINA CHERRY



PHORMIUM TENAX SPP.
NEW ZEALAND FLAX



RHAMNUS C. 'EVE CASE'
COFFEEBERRY



RHAPHIOLEPIS I. 'PINK LADY'
INDIAN HAWTHORN



SALVIA GREGGII SPP.
AUTUMN SAGE



SALVIA LEUCANTHA
MEXICAN BUSH SAGE



SANTOLINA CHAMAECYPARISSUS
LAVENDER COTTON



VERBENA L. 'DE LA MINA'
CEDROS ISLAND VERBENA

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WATSON RANCH

AMERICAN CANYON, CALIFORNIA

PLANNING FILE NO.: PL24-0013

PLANT IMAGERY

PRELIMINARY LANDSCAPE PLAN
SEPTEMBER 25, 2024

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L-5

Project No. 02924

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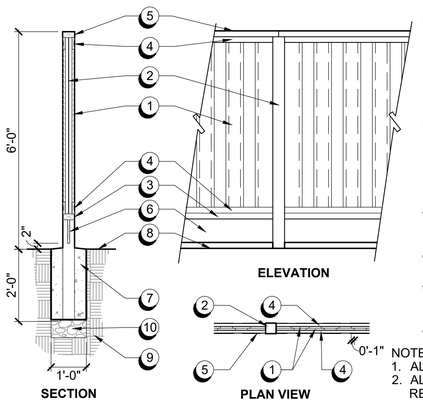
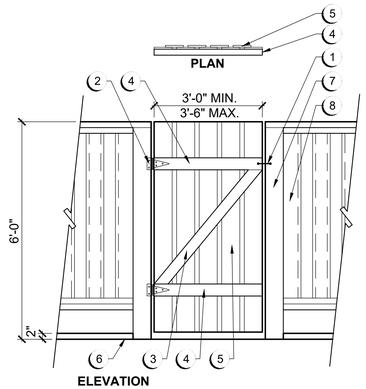


1. 1 X 6 BOARD ON BOARD WITH 1" OVERLAP
2. 4 X 4 PRESSURE TREATED POST AT 8' O.C. TYP.
3. 2 X 4 BOTTOM RAIL
4. 1 X 2 NAILER AT FRONT & BACK
5. 2 X 4 CAP RAIL
6. 1 X 8 KICKBOARD CENTERED AT BOTTOM
7. 12" X 24" CONCRETE FOOTING SLOPED TO DRAIN
8. FINISH GRADE
9. COMPACED SUBGRADE OR ENGINEERED FILL
10. 6" AGG. DRAIN ROCK

NOTES:
1. ALL NAILS SHALL BE HOT DIPPED GALVANIZED.
2. ALL WOOD SHALL BE CONSTRUCTION GRADE REDWOOD OR CEDAR.
3. ALL WOOD SHALL BE SEALED AND STAINED WITH A CLEAR FINISH PRODUCT PER THE WRSP DESIGN GUIDELINES A.7.2.

A 6' GOOD NEIGHBOR FENCE

SCALE: 1/2" = 1'-0 "

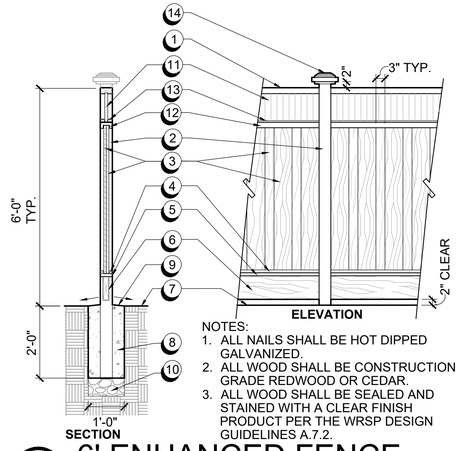


1. GATE LATCH.
2. (2) GATE HINGES.
3. 2 X 4 DIAGONAL BRACE.
4. 2 X 4 HORIZONTAL BRACE.
5. 5/8 X 6 ALTERNATING BOARDS.
6. FINISH GRADE.
7. 6 X 6 PTFD POST.
8. ADJACENT GOOD NEIGHBOR FENCE.

NOTES:
1. ALL NAILS SHALL BE HOT DIPPED GALVANIZED.
2. ALL WOOD SHALL BE CONSTRUCTION GRADE REDWOOD OR CEDAR.
3. CONTRACTOR TO PROVIDE ALT. BID CON. HEART POSTS.
4. GATES WIDER THAN 3'-0" REQUIRE 6 X 6 POST, HINGED SIDE ONLY.
5. ALL WOOD SHALL BE SEALED AND STAINED WITH A CLEAR FINISH PRODUCT PER THE WRSP DESIGN GUIDELINES A.7.2.

B 6' GOOD NEIGHBOR GATE

SCALE: 1/2" = 1'-0 "

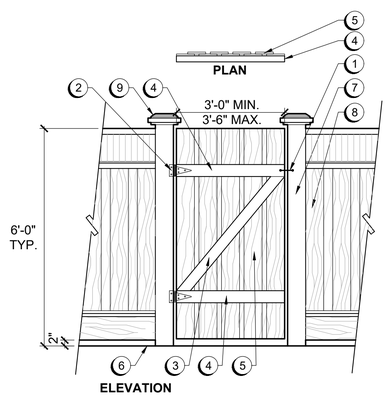


1. 2 x 4 TOP RAIL WITH SINGLE WIDE DADO.
2. 4 x 4 POSTS @ 8' 0.C.
3. 3/4 x 6 FENCE BOARDS, ALTERNATE AND OVERLAP AS SHOWN.
4. 1 x 2 CLEAT.
5. 2 x 4 BOTTOM L RAIL.
6. 2 x 8 KICKBOARD, 2" CLEAR OF FINISH GRADE.
7. FINISH GRADE.
8. CONCRETE FOOTING.
9. SLOPE TOP OF FOOTING.
10. 6" DEEP AGGREGATE DRAIN ROCK.
11. PANEL BOARDS, 1 X 2 EVENLY SPACED.
12. 2 x 4 MIDDLE RAIL WITH DOUBLE WIDE DADO.
13. (2) 1X1 CLEATS.
14. DECORATIVE WOOD CAP AT POST.

NOTES:
1. ALL NAILS SHALL BE HOT DIPPED GALVANIZED.
2. ALL WOOD SHALL BE CONSTRUCTION GRADE REDWOOD OR CEDAR.
3. ALL WOOD SHALL BE SEALED AND STAINED WITH A CLEAR FINISH PRODUCT PER THE WRSP DESIGN GUIDELINES A.7.2.

C 6' ENHANCED FENCE

SCALE: 1/2" = 1'-0 "



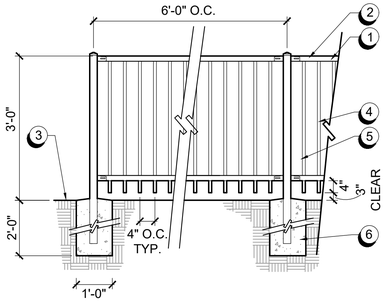
1. GATE LATCH.
2. (2) GATE HINGES.
3. 2 X 4 DIAGONAL BRACE.
4. 2 X 4 HORIZONTAL BRACE.
5. 5/8 X 6 ALTERNATING BOARDS.
6. FINISH GRADE.
7. 6 X 6 PTFD POST.
8. ADJACENT ENHANCED FENCE.
9. DECORATIVE WOOD CAP AT POST.

NOTES:
1. ALL WOOD MEMBERS SHALL BE CONSTRUCTION GRADE REDWOOD OR CEDAR.
2. ALL NAILS SHALL BE HOT DIPPED GALVANIZED.
3. CONTRACTOR TO PROVIDE ALT. BID CON. HEART POSTS.
4. GATES WIDER THAN 3'-0" REQUIRE 6 X 6 POST, HINGED SIDE ONLY.
5. ALL WOOD SHALL BE SEALED AND STAINED WITH A CLEAR FINISH PRODUCT PER THE WRSP DESIGN GUIDELINES A.7.2.

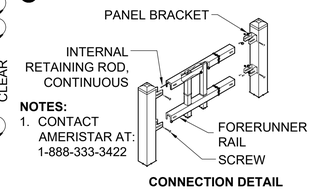
D 6' ENHANCED GATE

SCALE: 1/2" = 1'-0 "

1. AMERISTAR PRE-FAB. TUBE STEEL FENCE OR EQUAL. STYLE TO BE "MONTAGE MAJESTIC 2-RAIL" PANELS AND POST ARE GALV. STEEL WITH "PERMACOAT" FINISH. COLOR TO BE BLACK.
2. "FORERUNNER" CONNECTION SYSTEM INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SEE DETAIL BELOW FOR REFERENCE.



3. FINISH GRADE.
4. 3/4" SQ. 16 GA PICKET.
5. 2 1/2" SQ. 12 GA POST.
6. CONCRETE FOOTING, TYP.



NOTES:
1. CONTACT AMERISTAR AT: 1-888-333-3422

CONNECTION DETAIL

E 3' TUBE STEEL FENCE

SCALE: NTS

KB HOME NORTH BAY
4830 BUSINESS CENTER DRIVE., STE.50
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WATSON RANCH

AMERICAN CANYON, CALIFORNIA

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PROPOSED GATE DETAILS

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YOCHA DEHE
CULTURAL RESOURCES

August 18, 2022

City of American Canyon
Attn: Nicolle Hall, Administrative Technician
4381 Broadway St., Suite 201
American Canyon, CA 94503

RE: American Canyon 6th Cycle Housing Element YD-03152022-04

Dear Ms. Hall:

Thank you for the consultation meeting on, August 08, 2022, regarding the proposed American Canyon 6th Cycle Housing Element. We appreciate you taking the time to discuss the project.

Based on the information provided during our consultation meeting, the Tribe has concerns that the project could impact known cultural resources. Therefore, we request that you incorporate Yocha Dehe Wintun Nation's Treatment Protocol into the mitigation measures for this project. Please submit the updated mitigation measures to the Cultural Resources Department once completed. We respectively decline any comment on the project at this time.

Should you have any questions, please feel free to contact:

CRD Administrative Staff
Yocha Dehe Wintun Nation
Office: (530) 796-3400
Email: THPO@yochadehe-nsn.gov

Please refer to identification number YD – 03152022-04 in any correspondence concerning this project.

Thank you for providing us with this notice and the opportunity to comment.

Sincerely,

DocuSigned by:
5ED632FDB9C34EA...
Tribal Historic Preservation Officer

DocuSign Envelope ID: 0D69CDD2-A513-4BF7-A2E6-01DD9D465223

YOCHA DEHE
CULTURAL RESOURCES

Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation

The purpose of this Protocol is to formalize procedures for the treatment of Native American human remains, grave goods, ceremonial items, and items of cultural patrimony, in the event that any are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity. This Protocol also formalizes procedures for Tribal monitoring during archaeological studies, grading, and ground-disturbing activities.

I. Cultural Affiliation

The Yocha Dehe Wintun Nation ("Tribe") traditionally occupied lands in Yolo, Solano, Lake, Colusa and Napa Counties. The Tribe has designated its Cultural Resources Committee ("Committee") to act on the Tribe's behalf with respect to the provisions of this Protocol. Any human remains which are found in conjunction with Projects on lands culturally-affiliated with the Tribe shall be treated in accordance with Section III of this Protocol. Any other cultural resources shall be treated in accordance with Section IV of this Protocol.

II. Inadvertent Discovery of Native American Human Remains

Whenever Native American human remains are found during the course of a Project, the determination of Most Likely Descendant ("MLD") under California Public Resources Code Section 5097.98 will be made by the Native American Heritage Commission ("NAHC") upon notification to the NAHC of the discovery of said remains at a Project site. If the location of the site and the history and prehistory of the area is culturally-affiliated with the Tribe, the NAHC contacts the Tribe; a Tribal member will be designated by the Tribe to consult with the landowner and/or project proponents.

Should the NAHC determine that a member of an Indian tribe other than Yocha Dehe Wintun Nation is the MLD, and the Tribe is in agreement with this determination, the terms of this Protocol relating to the treatment of such Native American human remains shall not be applicable; however, that situation is very unlikely.

III. Treatment of Native American Remains

In the event that Native American human remains are found during development of a Project and the Tribe or a member of the Tribe is determined to be MLD pursuant to Section II of this Protocol, the following provisions shall apply. The Medical Examiner shall immediately be notified, ground disturbing activities in that location shall cease and the Tribe shall be allowed, pursuant to California Public Resources Code Section 5097.98(a), to (1) inspect the site

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of the discovery and (2) make determinations as to how the human remains and grave goods should be treated and disposed of with appropriate dignity.

The Tribe shall complete its inspection and make its MLD recommendation within forty-eight (48) hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site, or reburial on tribal or other lands that will not be disturbed in the future.

The Tribe may wish to rebury said human remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code Sections 5097.98(a) and (b).

The term "human remains" encompasses more than human bones because the Tribe's traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial burning of Native American human remains, funerary objects, grave goods and animals. Ashes, soils and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact.

IV. Non-Disclosure of Location of Reburials

Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, Cal. Govt. Code § 6250 et seq. The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System ("CHRIS") on a form that is acceptable to the CHRIS center. The Tribe may also suggest that the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property.

V. Treatment of Cultural Resources

Treatment of all cultural items, including ceremonial items and archeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archeological items, which may be found at a Project site should be turned over to the Tribe for appropriate treatment, unless otherwise ordered by a court or agency of competent jurisdiction. The Project Proponent should waive any and all claims to ownership of

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Tribal ceremonial and cultural items, including archeological items, which may be found on a Project site in favor of the Tribe. If any intermediary, (for example, an archaeologist retained by the Project Proponent) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe.

VI. Inadvertent Discoveries

If additional significant sites or sites not identified as significant in a Project environmental review process, but later determined to be significant, are located within a Project impact area, such sites will be subjected to further archeological and cultural significance evaluation by the Project Proponent, the Lead Agency, and the Tribe to determine if additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.

VIII. Work Statement for Tribal Monitors

The description of work for Tribal monitors of the grading and ground disturbing operations at the development site is attached hereto as Addendum I and incorporated herein by reference.

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YOCHA DEHE
CULTURAL RESOURCES

ADDENDUM I

Yocha Dehe Wintun Nation
Tribal Monitors
Description of Work and Treatment Protocol

I. Preferred Treatment

The preferred protocol upon the discovery of Native American human remains is to (1) secure the area, (2) cover any exposed human remains or other cultural items, and (3) avoid further disturbances in the area.

II. Comportment

All parties to the action are strongly advised to treat the remains with appropriate dignity, as provided in Public Resource Code Section 5097.98. We further recommend that all parties to the action treat tribal representatives and the event itself with appropriate respect. For example, jokes and antics pertaining to the remains or other inappropriate behavior are ill advised.

III. Excavation Methods

If, after the Yocha Dehe Tribal representative has been granted access to the site and it is determined that avoidance is not feasible, an examination of the human remains will be conducted to confirm they are human and to determine the position, posture, and orientation of the remains. At this point, we recommend the following procedures:

(A) Tools. All excavation in the vicinity of the human remains will be conducted using fine hand tools and fine brushes to sweep loose dirt free from the exposure.

(B) Extent of Exposure. In order to determine the nature and extent of the grave and its contents, controlled excavation should extend to a full buffer zone around the perimeter of the remains.

(C) Perimeter Balk. To initiate the exposure, a perimeter balk (especially, a shallow trench) should be excavated, representing a reasonable buffer a minimum of 10 cm around the maximum extent of the known skeletal remains, with attention to counter-intuitive discoveries or unanticipated finds relating to this or other remains. The dirt from the perimeter balk should be bucketed, distinctly labeled, and screened for cultural materials.

(D) Exposure Methods. Excavation should then proceed inward from the walls of the balk as well as downward from the surface of the exposure. Loose dirt should be scooped out and brushed off into a dustpan or other collective device. Considerable care should be given to ensure that human remains are not further impacted by the process of excavation.

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(E) Provenience. Buckets, collection bags, notes, and tags should be fully labeled per provenience, and a distinction should be made between samples collected from: (1) **Perimeter Balk** (described above), (2) **Exposure** (dirt removed in exposing the exterior/burial plan and associations, and (3) **Matrix** (dirt from the interstices between bones or associations). Thus, each burial may have three bags, "Burial 1 Perimeter Balk," "Burial 1 Exposure Balk," "Burial 1 Matrix."

Please note the provisions below with respect to handling and conveyance of records and samples.

(F) Records. The following records should be compiled in the field: (1) a detailed scale drawing of the burial, including the provenience of and full for all human remains, associated artifacts, and the configuration of all associated phenomena such as burial pits, evidence for preinterment grave pit burning, soil variability, and intrusive disturbance, (2) complete a formal burial record using the consultants proprietary form or other standard form providing information on site #, unit or other proveniences, level depth, depth and location of the burial from a fixed datum, workers, date(s), artifact list, skeletal inventory, and other pertinent observations, (3) crew chief and worker field notes that may supplement or supercede information contained in the burial recording form, and (4) photographs, including either or standard photography or high-quality (400-500 DPI or 10 MP recommended) digital imaging.

(G) Stipulations for Acquisition and Use of Imagery. Photographs and images may be used only for showing location or configuration of questionable formation or for the position of the skeleton. They are not to be duplicated for publication unless a written release is obtained from the Tribe.

(H) Association. Association between the remains and other cultural materials should be determined in the field in consultation with an authorized Tribal representative, and may be amended per laboratory findings. Records of provenience and sample labels should be adequate to determine association or degree of likelihood of association of human remains and other cultural materials.

(I) Samples. For each burial, all **Perimeter Balk** soil is to be 1/8"-screened. All **Exposure** soil is to be 1/8"-screened, and a minimum of one 5-gallon bucket of excavated but unscreened Exposure soil is to be collected, placed in a plastic garbage bag in the bucket. All **Matrix** soil is to be carefully excavated, screened as appropriate, and then collected in plastic bags placed in 5-gallon buckets.

(J) Human remains are not to be cleaned in the field.

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(K) Blessings. Prior to any physical action related to human remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

IV. Lab Procedures

No laboratory studies are permitted without consultation with the tribe. Lab methods are determined on a project-specific basis in consultation with Yocha Dehe Wintun Nation representatives. The following procedures are recommended:

(A) Responsibility. The primary archaeological consultant will be responsible for insuring that all lab procedures follow stipulations made by the Tribe.

(B) Blessings. Prior to any laboratory activities related to the remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

(C) Physical Proximity of Associations. To the extent possible, all remains, associations, samples, and original records are to be kept together throughout the laboratory process. In particular, **Matrix** dirt is to be kept in buckets and will accompany the remains to the lab. The primary archaeological consultant will be responsible for copying all field records and images, and insuring that the original notes and records accompany the remains throughout the process.

(*E) Additional Lab Finds*. Laboratory study should be done making every effort to identify unanticipated finds or materials missed in the field, such as objects encased in dirt or human remains misidentified as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal representatives are to be contacted immediately.

V. Re-internment without Further Disturbance

No laboratory studies are permitted on human remains and funerary objects. The preferred treatment preference for exhumed Native American human remains is reburial in an area not subject to further disturbance. Any objects associated with remains will be reinterred with the remains.

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YOCHA DEHE
CULTURAL RESOURCES

VI. Curation of Recovered Materials

Should all, or a sample, of any archaeological materials collected during the data recovery activities – with the exception of Human Remains – need to be curated, an inventory and location information of the curation facility shall be given to tribe for our records.

Attachment 2.6 EXHIBIT F
Applicant Confirmation of Conditions of Approval
Watson Ranch Lot 7 Design Permit
(FILE NO. PL24-0013)

As shown by my signature below, I confirm that I understand and agree to abide by the conditions of approval included in the Design Permit Approval dated October 24, 2024.

_____ _____
Applicant's signature Date

_____
Applicant's name

_____ _____
Property Owner's signature Date

_____
Property Owner's name

Please return signed confirmation to the City of American Canyon Community Development Department, 4381 Broadway, Suite 201, American Canyon, CA 94503

Watson Ranch Lot 7 – Location Map



Attachment 1

Watson Ranch Parcel 7

Response to Planning comment #2: Garage Setback

At the request of the City of American Canyon, the following justification is being provided for the Planning Commission to consider permitting 18.5' garage setback in lieu of 20' standard.

- **Parking Standards.** As the typical standard public parking spot is 9' x 18', the proposed driveway space and garage setback still provides adequate parking for the residences while enhancing the other features of the home. To note, the proposed site plan is 18' to the garage exterior wall and 18.5' to the garage door face and driveway length, which is in excess of the City's parking space minimum length of 18'. The 18.5' driveway provided at the project will exceed the City's minimum required parking depth, and functionality of the driveways will not be impacted by the 18.5' garage setback.

- **Site Plan Design.** The neighborhood has been designed such that there is no condition where an 18.5' driveway adjacent to a sidewalk, as such there is no possibility that a parked car in a driveway would encroach onto the sidewalk. Homes are either located off of private alleys or sidewalks have been thoughtfully planned so the functionality of the sidewalks will not be impacted by the 18.5' garage setback.

- **Improved Livability.** An 18' to 18.5' garage setback is typical for small lot single family homes, because it significantly improves the interior livability of the home by allowing adequate space for an eat in dining room and a usable kitchen on the first floor. The setback allows for a livable interior in a small lot home, while also maintaining the required 10' rear yard setback and providing usable private outdoor space in the rear.

- **Roll-up Garage Doors.** The rationale behind the 20' garage setback standard is not applicable to the project. A 20' garage setback was intended to provide an additional 2' of depth to accommodate a 'swing-up' garage door, which is no longer necessary because the project will include 'roll-up' garage doors on each home.

While we hope the City will support this request, if that is not the case, KB would still like to proceed to Planning Commission on October 24, 2024 with the understanding that City Staff may express an area of concern relating to the garage setbacks.

Attachment 2

Watson Ranch Parcel 7

Response to Planning comment #3: FAR

At the request of the City of American Canyon, the following justification is being provided for the Planning Commission to consider permitting an excess of the Floor Area Ratio ("FAR") on a limited number of lots within the project. While the City of American Canyon doesn't have an FAR standard for single family homes, the Watson Ranch Specific Plan denotes a maximum FAR of .7 which is exceeded on ten lots within the project.

- **FAR – Parcel 7 is consistent with and meets the intent of the Specific Plan, and the justification is only for a few lots which slightly exceed the FAR.** As noted in documents previously provided to the City, Parcel 7 meets the FAR requirements on an overall project basis and for all lots individually except for ten lots which slightly exceed the FAR standard by .02 - .07. Of those ten lots, it's worth noting that eight of them only exceed the FAR standard by .02 and two of them exceed the FAR standard by .07. The Master Developer has reviewed the proposed product and site plan and is in support of the project.

- **FAR and Density – FAR could limit the ability to achieve certain allowable densities and restrict housing.** It is worth nothing that when projects (especially single-family projects) approach the higher end of allowed density applying a low FAR standard could limit development by requiring larger minimum lot sizes which further reduces the potential housing supply and increases housing costs. Recent legislation has been enacted to address this issue, including SB 478 which prohibits agencies from imposing floor area ratios below 1.0 on multifamily projects with 3 to 7 units and 1.25 on multifamily projects with 8 to 10 units. While this submittal does not fall under SB 478 which is targeted for smaller infill parcels, it helps underline some of the issues with the utilization with the FAR standard for residential development.

  While not specific to this submittal which is only slightly in excess of FAR for certain lots as noted above, if the Project was designed at the highest level of allowable density, it would not be very challenging, if not impossible, to meet the prescribed FAR of .7. For example, the proposed project has a Net Density of 12.5 Du/Acre. However, if the proposed project was submitted closer to the maximum allowable density of 16 Du/Acre under MDR-16, the FAR would decrease the maximum home size to just over 1000 square feet which makes it very challenging to provide functional single-family homes, especially for families that may require more than two bedrooms.

- **Home Sizing. The Project is already designed to provide more affordable price points by offering smaller homes on smaller lots.** The Project is providing smaller lots to target more affordable while delivering the high-quality design and elevations the Specific Plan requires, with homes starting at just over 1,400 square feet. Reducing the home sizing would reduce the livability of the floorplans and reduce availability for medium to larger families who may need increased bedroom counts, to the detriment of future homeowners and American Canyon residents.

While we hope the City will support this request, if that is not the case, KB would still like to proceed to Planning Commission on October 24 with the understanding that City Staff may suggest an alternative home plan be provided for those FAR affected lots.

Watson Ranch Lot 7 Design Permit
Attachment 5: WRSP Trails Map

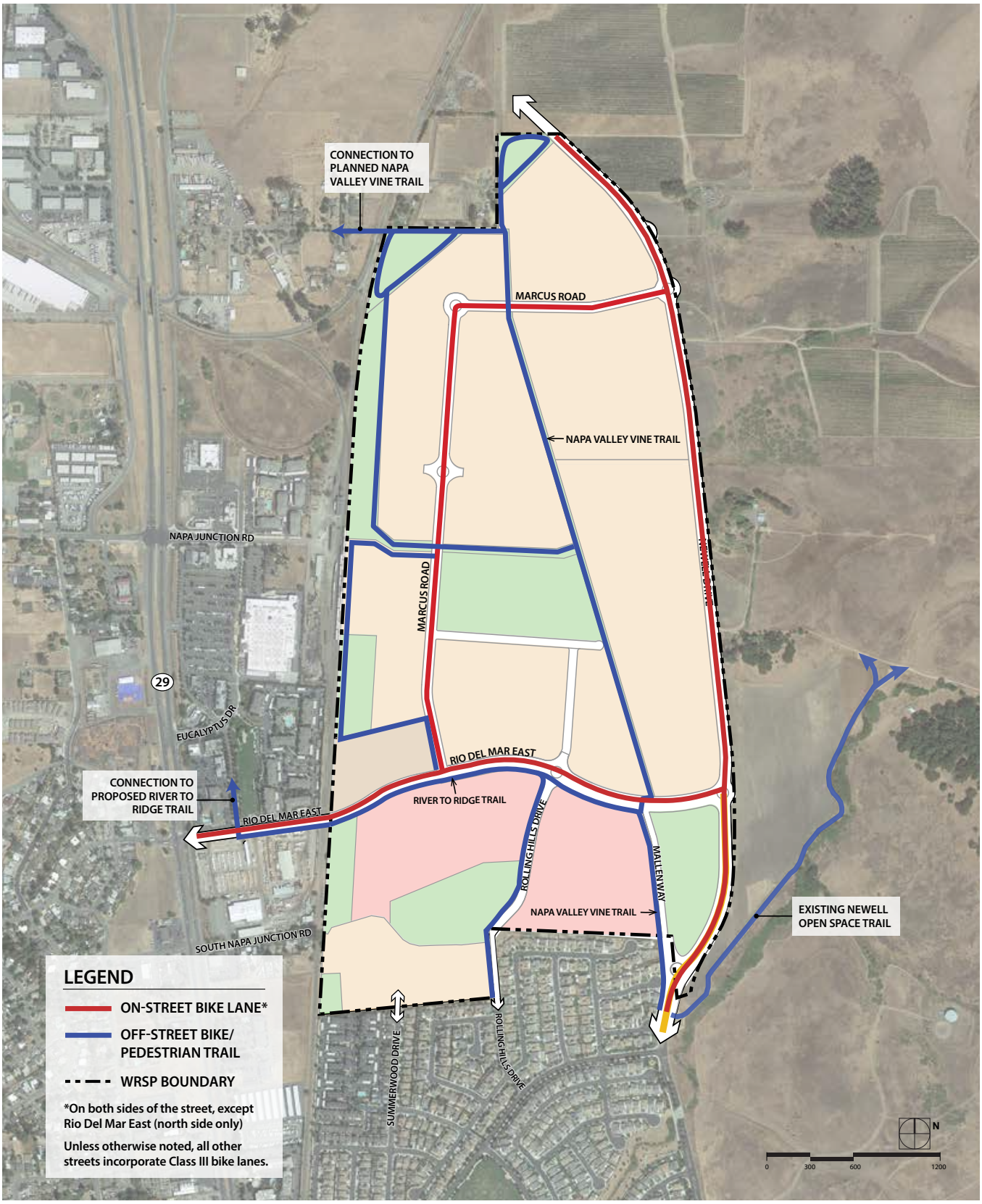
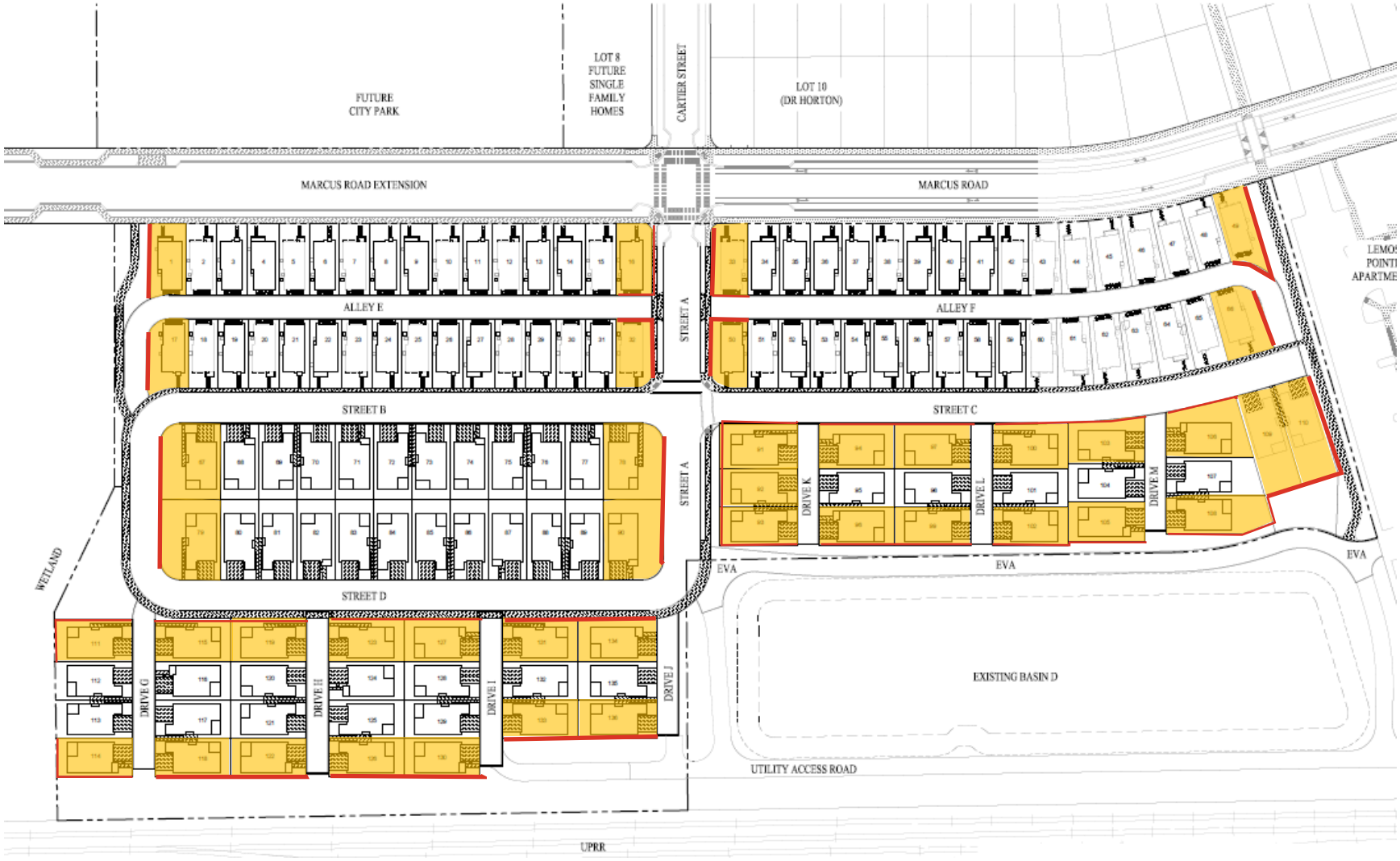


Figure 7.5: Pedestrian and Bicycle Circulation

Watson Ranch Parcel 7 - Enhanced Elevations



Note: Enhanced Elevations on (8) Alley and (33) Traditional lots as specified on elevation sheets. Elevations will be enhanced on public facing sides as marked with red lines.

CITY OF AMERICAN CANYON PLANNING COMMISSION

NOTICE OF PUBLIC HEARING

On **Thursday, October 24, 2024,** at the hour of **6:30 p.m.,** at **4381 Broadway, Suite 201** (in the Council Chambers of the American Canyon City Hall), a public hearing will be held by the Planning Commission of the City of American Canyon to consider the following:

APPLICATION: Consider a Resolution to approve a Design Permit and a Resolution to recommend the City Council approve a Vesting Tentative Subdivision Map for development of 136 single-family detached homes on a 12.86-acre site in the Watson Ranch Specific Plan Medium Density Residential 16 (WRSP MDR16) Zone, APN 059-430-045 (File No. PL24-0012 and PL24-0013)

PROJECT DESCRIPTION: KB Homes proposes to develop the Watson Ranch Lot 7 Subdivision consisting of 136 single-family lots, 4 public streets, 9 private drives, and 6 non-residential parcels. The homes consist of 66 alley loaded plans and 70 traditional plans with front-facing garages. The Alley loaded homes come in three styles: Prairie, Craftsman, and Farmhouse. The traditional plans come in three different styles: Traditional, Farmhouse, and Ranch. The two-story homes range from 1,412 SF to 2,160 SF with three to five bedrooms and include a two-car garage. The project site is west of the Marcus Rd and Cartier Street intersection and accessible by Marcus Rd.

ENVIRONMENTAL REVIEW: The proposed Watson Ranch Lot 7 Design Permit and Subdivision Map were contemplated "Project Approvals" analyzed under the Project FEIR and the Watson Ranch Specific Plan Development Agreement. Under CEQA, the Watson Ranch Specific Plan Project FEIR is a program EIR and is generally assumed to be used at a "development level." See, e.g., CEQA Guidelines § 15168. There is no substantial evidence of changed circumstances under CEQA Guidelines section 15162 requiring further CEQA review as the whole of the approvals sought are contemplated under the Project FEIR analysis.

PROJECT LOCATION: Vacant lot west of Marcus Rd and Cartier Street; APN 059-430-045

APPLICANT: KB Homes

All interested persons are invited to attend the meeting and be heard on this matter. Copies of all documents that relate to the above-described project may be examined at the Community Development Department office prior to the hearing. The meeting will be conducted in person and by teleconference via a Zoom connection where the Planning Commission and staff will participate with both audio and video presence. The meeting will be accessible for all members of the public to attend via the City's website, YouTube, and Cable TV Channel 28 and public comments enabled via email and phone.

Written comments may be submitted to the Community Development Department at https://www.americancanyon.gov/Projects/Development-Projects-Under-Review/Watson-Ranch-Lot-7-KB-Homes-Single-Family-Homes or by mail at 4381 Broadway St, Suite 201, American Canyon, CA 94503, prior to the public hearing.

If you challenge the particular proceedings in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City prior to the public hearing.

Public meetings/events sponsored or conducted by the City of American Canyon are held in accessible sites. Requests for accommodations may be made by calling (707) 647-4577 (voice) or 711 for the California Relay Service or by e-mailing cityclerk@americancanyon.gov at least 72 hours in advance of the event. Copies of documents distributed at the meeting are available in alternative formats upon request.

_____
Nicolle Hall, Deputy City Clerk

Date: TBD, 2024
Publication Date: TBD, 2024

COUNTY ASSESSOR'S PARCEL MAP

JUN 0 1 2023

Tax Area Code
5001
5031
5032

59–43
59–02

1" = 400'

1.	N73°07'11"E	67.00'	19.	N28°51'33"E	47.71'	34.	N77°51'20"E	141.15'
2.	N13°43'43"E	43.13'	20.	N56°13'55"E	233.02'	35.	R=950'	L=27.44'
3.	R=70'	L=66.12'	21.	EAST	92.86'	36.	N08°19'19"W	99.58'
4.	R=1029'	L=66.44'	22.	NORTH	119.46'	37.	R=500'	L=94.55'
5.	N79°58'16"W	40.04'	23.	R=1026'	L=110.79'	38.	N16°52'49"W	166.28'
6.	R=279'	L=165.27'	24.	R=874'	L=313.41'	39.	R=15'	L=17.69'
7.	N43°58'06"E	160.15'	25.	N77°51'20"E	200.36'	40.	R=1264.50'	L=180.38'
8.	R=221'	L=130.91'	26.	N12°08'40"W	20.50'	41.	R=78.00'	L=62.85'
9.	N43°58'06"E	169.91'	27.	R=950'	L=260.84'	42.	R=48.00'	L=35.34'
10.	R=143'	L=37.59'	28.	N82°39'18"W	31.61'	43.	S12°08'40"W	6.39'
11.	N87°30'21"W	7.05'	29.	S16°52'49"E	94.18'			
12.	N05°28'37"W	12.28'	30.	R=14'	L=16.73'			
13.	R=143'	L=72.52'	31.	N04°15'53"E	79.14'			
14.	N05°28'37"W	15.42'	32.	S24°23'58"W	63.16'			
18.	N87°59'52"E	30.13'	33.	R=1000'	L=250.81'			

430–38 & 39 TO PG 48	3–21–22
430–42,43 & 44 LLA	8–12–22
430–21 PTN TO RD	11–30–22
430–19,31 PTN TO RD	11–30–22
430–20 PTN TO RD	11–30–22
430–45 & 46 LLA	12–5–22
REVISION	DATE

NOTE: This Map Was Prepared For Assessment Purposes Only , No Liability Is Assumed For The Accuracy Of The Data Delineated Hereon.

LARGE LOT FINAL MAP WATSON RANCH R.M. BK. 28, PG. 6–13

59–43

COUNTY ASSESSOR'S PARCEL MAP

OCT 0 6 2022

Tax Area Code
5031
5032

59–48

59–43

1"= 100'

954



1.	R=20'	L=31.42'
2.	N86°00'10"W	2.94'
3.	N86°00'10"W	10.90'

NOTE: This Map Was Prepared For Assessment Purposes Only , No Liability Is Assumed For The Accuracy Of The Data Delineated Hereon.

WATSON RANCH LOT 10 – PH. 2 R.M. BK. 29, PG's 10–18

29RM10–18	3–21–22
REVISION	DATE

59–48

COUNTY ASSESSOR'S PARCEL MAP

OCT 0 6 2022
Tax Area Code
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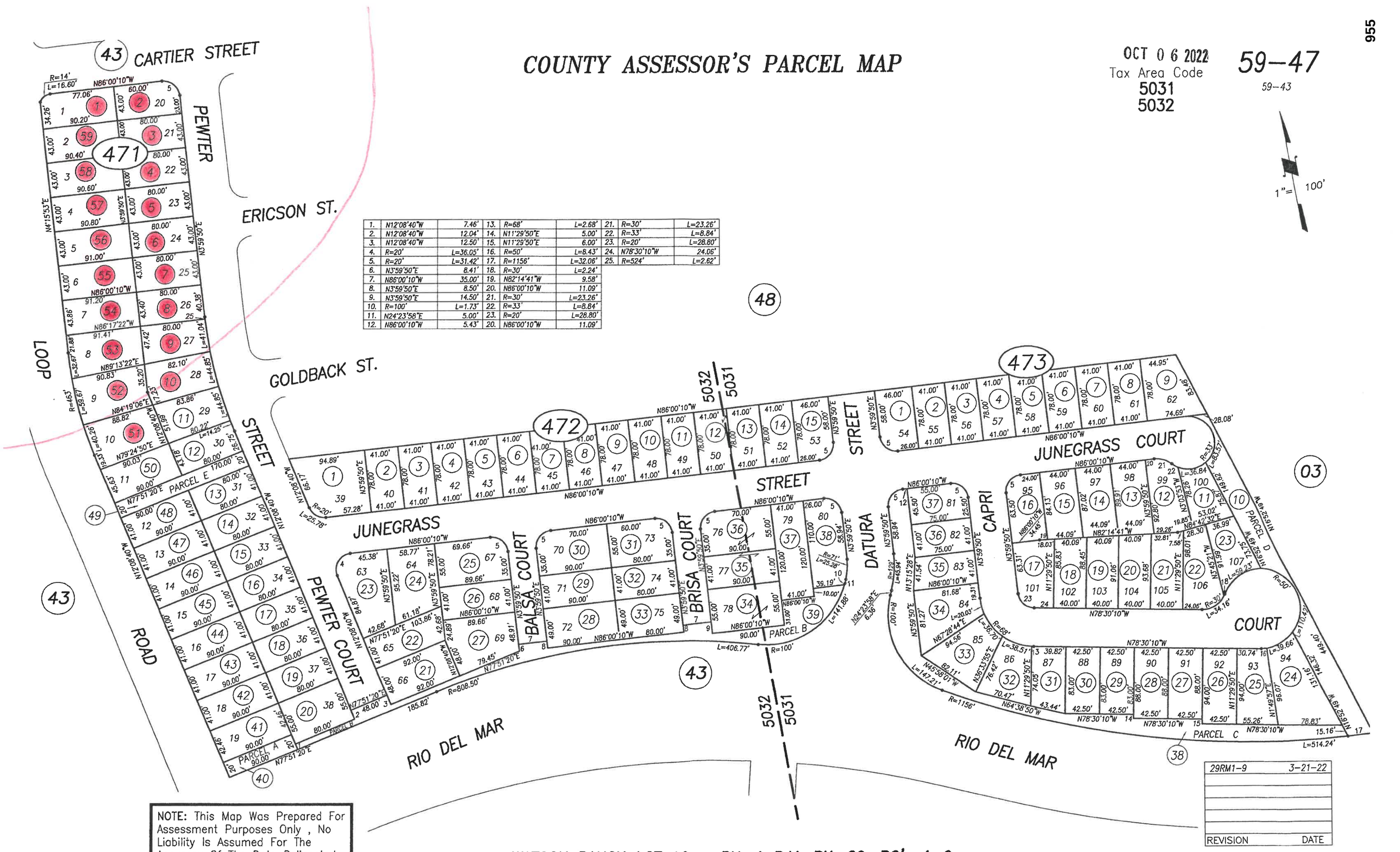
5032

59–47
59–43



1.	N12°08'40"W	7.46'	13.	R=68'	L=2.68'	21.	R=30'	L=23.26'
2.	N12°08'40"W	12.04'	14.	N11°29'50"E	5.00'	22.	R=33'	L=8.84'
3.	N12°08'40"W	12.50'	15.	N11°29'50"E	6.00'	23.	R=20'	L=28.80'
4.	R=20'	L=36.05'	16.	R=50'	L=8.43'	24.	N78°30'10"W	24.06'
5.	R=20'	L=31.42'	17.	R=1156'	L=32.06'	25.	R=524'	L=2.62'
6.	N3°59'50"E	8.41'	18.	R=30'	L=2.24'			
7.	N86°00'10"W	35.00'	19.	N82°14'41"W	9.58'			
8.	N3°59'50"E	8.50'	20.	N86°00'10"W	11.09'			
9.	N3°59'50"E	14.50'	21.	R=30'	L=23.26'			
10.	R=100'	L=1.73'	22.	R=33'	L=8.84'			
11.	N24°23'58"E	5.00'	23.	R=20'	L=28.80'			
12.	N86°00'10"W	5.43'	20.	N86°00'10"W	11.09'			

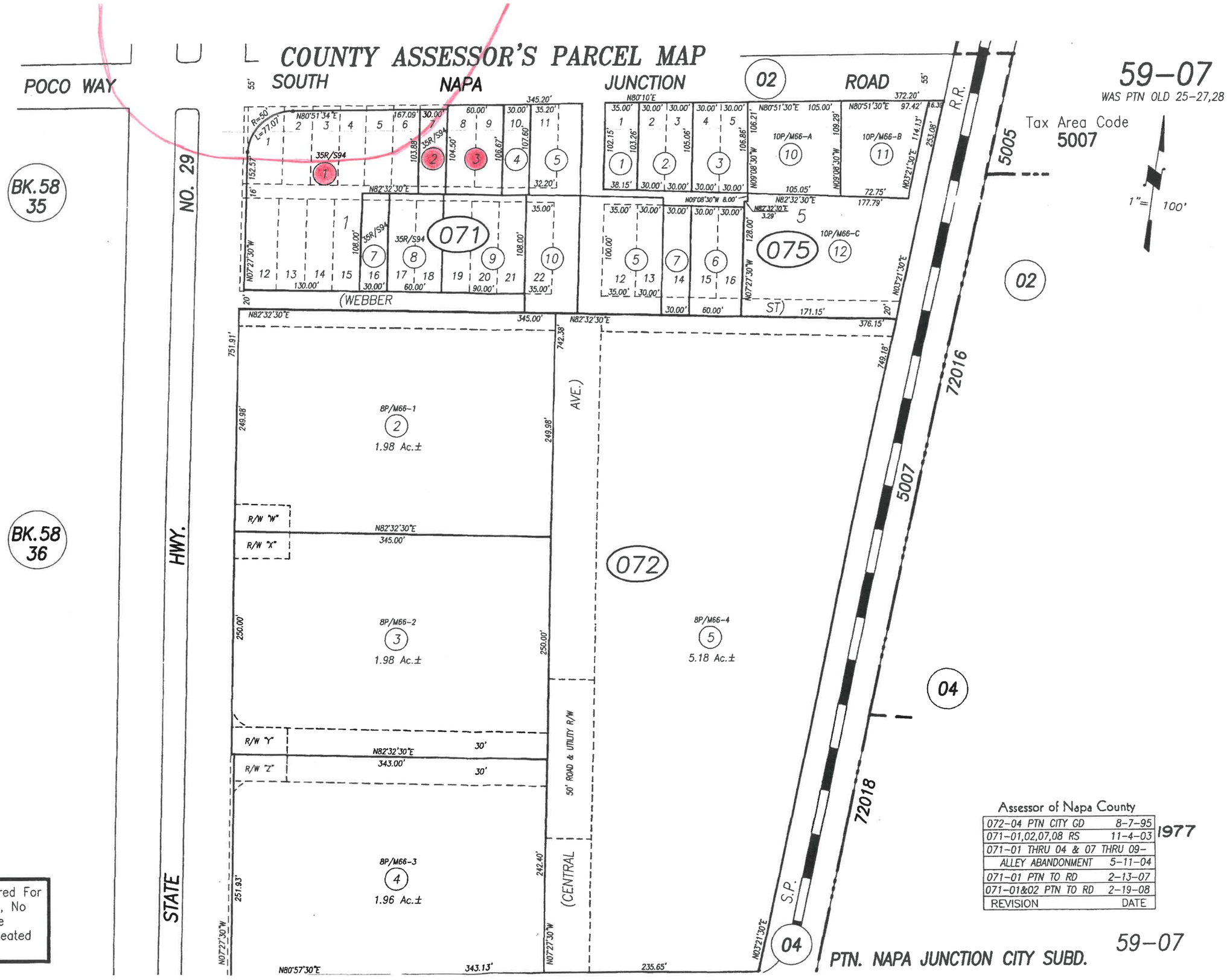
NOTE: This Map Was Prepared For Assessment Purposes Only , No Liability Is Assumed For The Accuracy Of The Data Delineated Hereon.

29RM1–9	3–21–22
REVISION	DATE

WATSON RANCH LOT 10 – PH. 1 R.M. BK. 29, PG's 1–9

59–47

955



NOTE: This Map Was Prepared For Assessment Purposes Only , No Liability Is Assumed For The Accuracy Of The Data Delineated Hereon.

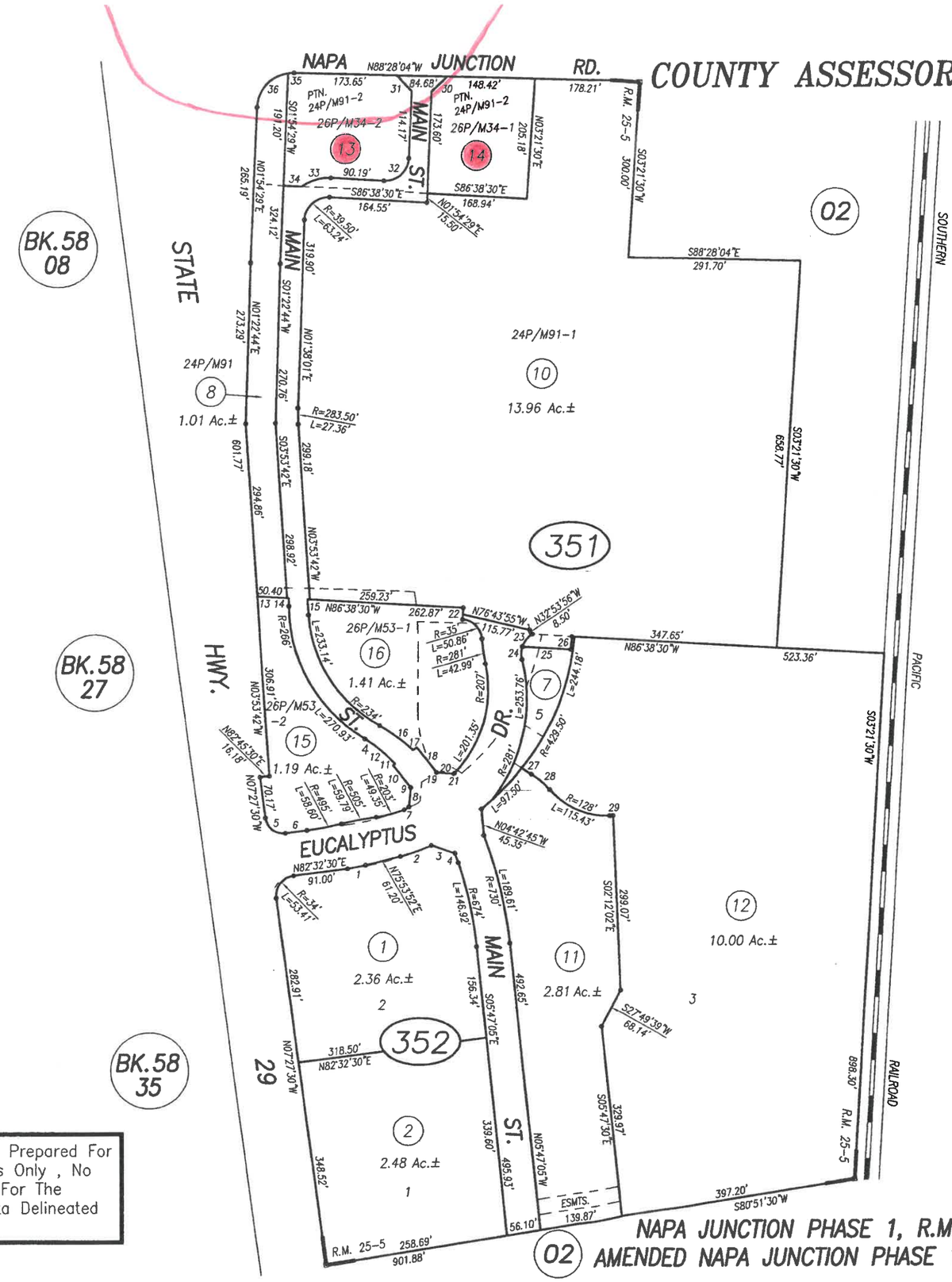
COUNTY ASSESSOR'S PARCEL MAP

MAR 0 2 2010

59-35

Tax Area Code
5001

59-02



1.	R=265'	L=30.73'
2.	R=277'	L=55.10'
3.	S70°57'54"E	41.78'
4.	R=222'	L=16.90'
5.	R=30'	L=47.12'
6.	N82°32'30"E	36.29'
7.	R=25'	L=9.62'
8.	N05°49'38"E	32.63'
9.	R=25'	L=1.22'
10.	N37°42'06"W	47.43'
11.	N57°56'43"E	4.32'
12.	R=234'	L=67.32'
13.	N86°38'30"W	53.31'
14.	R=210'	L=13.66'
15.	N03°53'42"W	28.97'
16.	R=266'	L=70.44'
17.	N44°11'34"E	7.66'
18.	N37°42'06"W	53.98'
19.	R=20'	L=.76'
20.	N85°41'09"W	28.68'
21.	R=20'	L=1.72'
22.	N03°21'30"E	20.00'
23.	R=40'	L=27.50'
24.	R=40'	L=21.97'
25.	N86°38'30"W	80.52'
26.	R=429.50'	L=22.04'
27.	S57°04'13"E	19.09'
28.	R=139'	L=40.12'
29.	N87°47'58"E	5.52'
30.	N46°14'08"E	36.72'
31.	N42°48'06"W	36.99'
32.	R=39.50'	L=63.05'
33.	R=72.50'	L=51.45'
34.	N86°38'30"W	30.96'
35.	R=60'	L=9.65'
36.	R=60'	L=84.20'

REVISION	DATE
25RM5-11	2-17-05
351-8,9,10 PM	11-23-05
351-11 & 12 GD	12-28-06
351-05 PTN TO RD	10-7-08
351-13 & 14 PM	7-20-09
351-15 & 16 PM	12-18-09

NOTE: This Map Was Prepared For Assessment Purposes Only , No Liability Is Assumed For The Accuracy Of The Data Delineated Hereon.

NAPA JUNCTION PHASE 1, R.M. BK. 24, PG's 81-87
AMENDED NAPA JUNCTION PHASE 1, R.M. BK. 25, PG's 5-11

59-35

957

Watson Ranch Lot 7 Project Comments

Watson Ranch Lot 7 Design Permit
Attachment 8: Public Comments

Date* 07/05/2024

Name* Jeff

Company

Email* [redacted]

Phone Number* [redacted]

Please check all that apply*

- [x] I own a home in American Canyon
- [ ] I rent a home in American Canyon
- [ ] I own a business in American Canyon
- [ ] I work in American Canyon
- [ ] None of the above

Address*

Street Address
[redacted]
Address Line 2

City: american canyon
State / Province / Region: California
Postal / Zip Code: 94503
Country: United States

Comments* If comments are being provided through the upload of a document, please indicate so.

The attached project documents are for another development.

File Upload

From: William He
To: [redacted]
Cc: Brent Cooper; Nicolle Hall
Subject: Watson Ranch Lot 7 Project
Date: Friday, July 5, 2024 4:03:39 PM
Attachments: Watson Ranch Lot 7 Project Comments - 07.05.2024.pdf

---

Hi Jeff,

Thank you for commenting on the Watson Ranch Lot 7 project. Staff has fixed the incorrect link to the project page. Please see the project files at this link. If you have any questions or comments, feel free to submit a follow-up comment.

Kind regards,

William He, AICP
Senior Planner, Community Development Department
City of American Canyon | 4381 Broadway Street, Suite 201 | American Canyon, CA 94503
707 647 4337 | whe@cityofamericancanyon.org
www.cityofamericancanyon.org

Watson Ranch Lot 7 Project Comments

Date * 07/15/2024

Name * Greg Rahn

Company

Email * [redacted]

Phone Number * [redacted]

Please check all that apply *

- [x] I own a home in American Canyon
- [ ] I rent a home in American Canyon
- [ ] I own a business in American Canyon
- [ ] I work in American Canyon
- [ ] None of the above

Address *

Street Address

[redacted]

Address Line 2

City: American Canyon

State / Province / Region: CA

Postal / Zip Code: 94503

Country: United States

Comments *

If comments are being provided through the upload of a document, please indicate so.

I was talking with a person who claimed that he was working on the Watson ranch project and he told me that PGE refused to address the aging gas pipeline that is under the site. He said his supervisor said this could be the next San Bruno. This is alarming. What is being done about this gas line?

File Upload

From:	William He
To:	[redacted]; Van Gorder, Mark
Cc:	Brent Cooper; Erica Ahmann Smithies; Edison Bisnar; Nicolle Hall; Marcus, Jerry
Subject:	Fw: Watson Ranch Lot 7 Project Comments
Date:	Tuesday, July 9, 2024 10:19:41 AM
Attachments:	Watson Ranch Lot 7 Project Comments.pdf

Hi Greg,

Thank you for submitting your comment regarding a PG&E pipeline in Watson Ranch. We have forwarded your question to Mark Van Gorder, PG&E correspondent for the North Bay, copied on this e-mail.

Kind regards,

William He, AICP
Senior Planner, Community Development Department
City of American Canyon | 4381 Broadway Street, Suite 201 | American Canyon, CA 94503
707 647 4337 | whe@cityofamericancanyon.org
www.cityofamericancanyon.org

From: Laserfiche Notification <donotreply@laserfiche.com>
Sent: Monday, July 8, 2024 10:29 PM
To: Brent Cooper <bcooper@cityofamericancanyon.org>; William He <whe@cityofamericancanyon.org>; Nicolle Hall <nhall@cityofamericancanyon.org>
Subject: Watson Ranch Lot 7 Project Comments

A comment form has been submitted for the Watson Ranch Specific Plan Amendment Project.

TITLE

SDG 220 Warehouse EIR and CUP

RECOMMENDATION

Adopt a Resolution recommending the City Council of the City of American Canyon (i) certify the Final Environmental Impact Report (SCH #2023100842), and (ii) adopt a Mitigation Monitoring and Reporting Program for the SDG Commerce 220 Distribution Center Project located at 1055 Commerce Court, APN 058-030-069 (File Number PL23-0017); and

Adopt a Resolution recommending the City Council of the City of American Canyon approve the SDG Commerce 220 Distribution Center Conditional Use Permit for development of a 219,834 square foot wine warehouse on a 10.45-acre site located at 1055 Commerce Court, APN 058-030-069 (File number PL23-0017)

CONTACT

William He, AICP, Senior Planner

BACKGROUND & ANALYSIS

Table 1: Site Information

General Plan Designation	Commercial Recreation (CR)
Zoning District	Recreation and Open Space (REC)
Site Size	10.45 acres
Present Use	Vacant Site
Surrounding Zoning and Uses	North: REC / SDG Commerce 217 Distribution Center South: REC / SDG Commerce 330 Distribution Center East: REC / A residence and the Paintball Jungle amongst a eucalyptus grove West: REC / undeveloped eucalyptus grove
Access	Commerce Court by way of Green Island Rd
Commerce Court Setback	Required: 15 feet Provided: 70 feet plus

I. Background

Project Description

SDG Commerce 220, LLC (Applicant) proposes to develop a 219,834 square-foot wine storage and distribution center on the 10.45-acre parcel at 1055 Commerce Ct in the recreation (REC) zone. The warehouse includes 23 truck doors and approximately 4,400 square feet of office space. The building would be one-story and have a maximum height of 35 feet. The site includes 134 passenger vehicle parking spaces, 23 truck parking stalls, and 12 bicycle parking spaces. The project will be supported with approximately 40,800 square feet of landscaping. According to the applicant, the typical hours of operation for wine distribution and storage are 6:00 am to 6:00 pm on Monday through Friday, and 6:00 am to 12:00 am Monday through Friday on peak months. The project would employ approximately 35 full-time employees. A Regional Location map is included as Attachment 0.1. A Vicinity Map is included as Attachment 0.2. Photographs of the site are included as Attachment 0.3. The site plan is available as Attachment 0.4. The warehouse building photosimulation and elevations are available as Attachment 0.5. A list of important Environmental Impact Report milestones is available as Attachment 0.6. The project plans are available as Attachment 2.1.

Project Objectives

The purpose of the Project is to develop land in Recreation Zone to the highest and best use. The objectives of the proposed project are to:

1. Positively contribute to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base.
2. Develop land to its highest and best use.
3. Continue the buildout of the City of American Canyon in accordance with the General Plan.
4. Meet regional demand for wine warehousing by adding to the inventory of this space.
5. Develop nonresidential uses on the project site that are compatible with the City of American Canyon's Water Reclamation Facility and the Napa County Airport.
6. Maximize the efficient use of land by developing an industrial project at the upper end of the allowable Floor Area Ratio range.
7. Complete the buildout of the SDG Commerce development.
8. Protect North Slough by employing stormwater pollution prevention measures during construction and operation.
9. Provide development fees to the American Canyon Fire Protection District to fund the development of a new fire station.

The project includes two entitlements, the EIR and the Conditional Use Permit (CUP). The EIR is the environmental analysis for the 10.45 acres. The CUP consists of the 220,000 square foot warehouse and circulation areas.

History

The project site is part of a previously larger 35.85-acre site. The larger site was subdivided into

three lots (SDG Commerce 217, 220, and 330) through a parcel map in February 2019. The southern parcel (SDG Commerce 330) was developed in 2020. The Northern parcel (SDG Commerce 217) was entitled in 2021 and under construction. The central parcel (SDG Commerce 220) is the project site evaluated in this DEIR.

Existing Conditions

The site at 1055 Commerce Ct has been graded as part of a previous MND. The site consists of a vacant parcel. Access is available from Commerce Court by Green Island Rd from the north. Although the site is undeveloped, there are approximately 0.65-acres of wetlands on site consisting of 0.04 acres of a linear wetland area and 0.02 acres of seasonal wetlands. The wetlands have a 25-foot buffer with fencing. Access to the south is limited to a pedestrian and bike path. There is no vehicle access from the south to Wetlands Edge.

Environmental Impact Report

An Environmental Impact Report (EIR) was prepared for the SDG Commerce 220 Distribution Center (Proposed Project) according to the California Environmental Quality Act (CEQA) (State Clearinghouse No. 2023100842). An EIR is an informational document for the agency decision-makers and the public to understand potential environmental impacts associated with the Proposed Project.

EIR Milestones

The EIR was circulated for public review for 52 days during June 11, 2024 through August 2, 2024. The City, as lead agency, added 7 more days to the required 45-day review period. During the public review period, the Draft EIR, including the technical appendices, is available for review at the City of American Canyon Community Development Department offices and the American Canyon Library. A copy of the Draft EIR is included as Attachment 1.

The City received comments on the Draft EIR. These comments were received and a response to each comment was prepared. Together, the Draft EIR, Final EIR, Mitigation Measures and Reporting Program (MMRP), and all appendixes are available in Attachment 1, Exhibits A, B, C, and D.

II. Analysis of the EIR

EIR Overview

Consistent with the California Environmental Quality Act (CEQA), the City determined the proposed SDG Commerce 220 project has the potential for significant environmental impacts. For this reason, an Environmental Impact Report (EIR) is required to fully describe and analyze those impacts.

FirstCarbon Solutions (FCS) prepared the Draft EIR, Responses to Draft EIR, and MMRP. The Draft EIR provides a project-level analysis for the proposed project. The City of American Canyon is the lead agency for the proposed project and has discretionary authority over the proposed project and project approvals. The Draft EIR was intended to address all public infrastructure improvements and

all future development within the parameters of the proposed project.

Public comment on the Draft EIR was invited for a 52-day period from June 11, 2024, through August 2, 2024. The City, as lead agency, has added seven more days to the required 45-day review period due to a request from CDFW. Throughout the Draft EIR comment period staff received 5 public comments. All public comments were assembled and staff and the EIR consultant prepared a written response to each comment. This document is called the Response to Comments (RTC). The Final EIR is made up of the Draft EIR together with the RTC. The RTC was released on October 11, 2024, at least ten days before the Planning Commission, holds a public hearing on the Final EIR.

1. Environmental Issues Determined not to be Significant

The Draft EIR identfies topical areas that were determined not to be significant. An explanation of the reasons why each area is determined not to be significant is provided in Draft EIR Chapter 4, Effects Found not to be Significant. These topical areas are as follows:

- Agricultural and Forest Resources
- Mineral Resources
- Recreation
- Wildfire

In addition, certain subjects with various topical areas were determined not to be significant. Other potentially significant issues are analyzed in these topical areas; however, the following issues are not analyzed:

- Scenic Vistas
- State Scenic Highways
- Loss of Important Farmland
- Williamson Act Contracts or Agricultural Zoning
- Forest Zoning
- Loss of Forest Land
- Pressures to Convert Surrounding Agricultural Land or Forest Land
- Sensitive Natural Communities or Riparian Habitat
- Conservation Plans
- Septic or Alternative Wastewater Disposal Systems
- Wildfires
- 100-year Flood Hazards
- Levee or Dam Failure
- Seiches, Tsunamis, or Mudflows
- Division of an Established Community
- Loss of Mineral Resources of Statewide or Local Importance
- Growth Inducement
- Displacement or Persons or Housing

- Schools
- Parks
- Other Public Facilities
- Emergency Evacuation
- Wildfire Risks
- Fire Infrastructure
- Post-fire Hazards

2. Project Impacts that are Less than Significant

The Draft EIR indicated that the following topical areas may contain potentially significant environmental issues that will require further analysis in the EIR. Changes to the project and/or feasible mitigation measures lessen the impact to "Less Than Significant". These sections are as follows:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources/Tribal Cultural Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions/Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

2.1 Summary of Mitigation Measures

CEQA Guidelines Section 15126.4(a) requires lead agencies to consider feasible mitigation measures to avoid or substantially reduce a project's significant environmental impacts. The MMRP is available in Attachment 1.14.

3. Significant Unavoidable Adverse Impacts

The proposed project would result in the following significant unavoidable impacts:

- Inconsistency with CEQA Guidelines Section 15064.3, subdivision (b): The proposed project's Vehicle Miles Traveled (VMT) was evaluated in accordance with the City's adopted VMT policy. For the project's VMT impact to be less than significant, the VMT per employee would need to be reduced by at least 19 percent below current levels. However, according to the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health

and Equity (CAPCOA Handbook), a reduction in VMT of 15 percent is generally considered the maximum feasible mitigation for suburban environments such as that of the proposed project. If this level of trip reduction could be achieved, that would mitigate most of the project's VMT impact, although not to a level that would be less than significant (19 percent); however, given the lack of transit services within an acceptable walking distance of the proposed project, achieving this level of mitigation is considered infeasible. Even with implementation of a TDM Plan as required by MM TRANS-2, the impact would remain significant and unavoidable.

- Cumulative Transportation: Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project's location and lack of access to high-quality transit. MM TRANS-2 would reduce project-related VMT but not to a level below significance. As such, the proposed project would also have a cumulatively considerable contribution on VMT.

4. Summary of Project Alternatives

According to CEQA, an EIR must describe a reasonable range of alternatives to a proposed project that could feasibly attain most of the basic project objectives, and would avoid or substantially lessen any of the proposed project's significant effects. Additionally, a "No Project" alternative must be analyzed (Section 15126.6 of the CEQA Guidelines). Listed below are the Project Alternatives for this Draft EIR:

- Alternative 1: No Project Alternative The project site would remain undeveloped for the foreseeable future and no development would occur.
- Alternative 2: Reduced Density Alternative A 164,875-square-foot wine warehouse would be developed on the project site, which represents a 25 percent reduction in square footage.

According to the Draft EIR, the *No Project Alternative* would avoid the proposed significant and unavoidable impacts of the project and would avoid any potential impacts related to all environmental topical areas. However, this alternative would not advance any of the project objectives, including those related to facilitating the development of land to its highest and best use; positively contributing to the local economy; and meeting regional demand for wine warehouse uses.

The *Reduced Density Alternative* would lessen the severity of, but would not avoid, the significant and unavoidable transportation impacts associated with the proposed project. According to FCS, the proposed Project would generate 372 net daily trips and the reduced density alternative would generate 279, which equates to a reduction in 93 trips. The reduction of net daily trips results in a 4% reduction of VMT, which would still not meet the required 19% reduction of VMT to consider the transportation impact insignificant.

5. Areas of Controversy and Potentially Controversial Issues

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on October 27, 2023. The NOP describing the original concept for the proposed project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period extending from October 27, 2023, through November 27, 2023. The NOP public comments and responses are available in the Draft EIR Appendix A, in Attachment 1. The NOP identified the potential for significant impacts on the environment related to the following topical areas:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

5.1 Disagreement Among Experts

This Draft EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of American Canyon is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information to allow the public and decision-makers to make an informed judgment about the environmental consequences of the proposed project.

5.2 Potentially Controversial Issues

Below is a list of potentially controversial issues that may be raised during the public review and hearing process of this Draft EIR:

- Health effects on communities from diesel emissions
- Traffic and Circulation
- Land Use Compatibility
- Impacts on wetlands
- Climate change

It is also possible that evidence will be presented during the 45-day, in this case 52-day, statutory Draft EIR public review period that may create disagreement. Decision-makers would consider this evidence during the public hearing process.

6. AB 98 State Warehouse Legislation

Beginning January 1, 2026, Assembly Bill 98 would prescribe various statewide warehouse design and build standards for any proposed new or expanded logistics use developments, as specified, including, among other things, standards for building design and location, parking, truck loading bays, landscaping buffers, entry gates, and signage. The bill would except from those design and build standards certain existing logistics use developments, proposed expansions of a logistics use development, and property currently in a local entitlement process to become a logistics use, under prescribed conditions. The bill would require a facility operator, prior to the issuance of a certificate of occupancy, to establish and submit for approval by a city, county, or city and county a truck routing plan to and from the state highway system based on the latest truck route map of the city, county, or city and county, as prescribed. The bill would require a facility operator to enforce the plan.

SDG Commerce 220 is exempt per the referenced State Law. Further, the legislation indicates that projects that are approved before January 1, 2025, will be exempt from AB 98. However, if "no development activity" occurs within five years of approval of all entitlements, the exemption expires.

7. EIR Conclusion

The SDG Commerce 220 Project Draft EIR identified environmental topic areas that had no significant impacts, impacts that are less than significant with mitigation measures, unavoidable impacts, and project alternatives. With the Planning Commission's review and approval, staff and FCS will begin working on a Statement of Findings, which will be presented to the City Council for consideration.

III. Analysis of the Conditional Use Permit

Project Description

SDG Commerce 220, LLC (Applicant) proposes to develop a 219,834 square-foot wine storage and distribution center on the 10.45-acre parcel at 1055 Commerce Ct in the recreation (REC) zone. The warehouse includes 23 truck doors and approximately 4,400 square feet of office space. The

building would be one-story and have a maximum height of 35 feet.

1. Zoning Standards Table

The following table shows the REC development standards (ACMC Section 19.15.030) and how the SDG Commerce 220 Project meets the standards.

Table 2: REC Zone Development Standards

	Required	Provided	Compliance
Min. Size	10 acres	10.17 acres	Yes
Site Coverage	50%	49.6%	Yes
Building Height	35 ft.	35 ft.	Yes
Front Setback (from local streets)	15 ft.	71 ft.	Yes
Side setback	35 ft.	63 ft.	Yes
Rear setback	35 ft.	156 ft.	Yes

2. Architecture

The building architecture meets the design and development principles described in the General Plan (Policy 1.22.4 and 1.22). The warehouse includes detailing around windows, building corners, metal awnings, and large windows at the entrance. The building will be designed with earth-tone colors and comprised of concrete tilt wall panels, with a load-bearing structural frame with parapet roofs. The building includes various recessed panels and canopies around offices and corners of the buildings to provide sufficient modulation.

The parapet wall panels vary in height from 33’ to 37’ high. The parapet will fully screen rooftop equipment. Additionally, a condition of approval requires adequate rooftop equipment screening verified at the time of building permit issuance and occupancy.

3. Lighting and Landscaping

Exterior lighting for the proposed project will include lighting on the building and on parking lot poles on the north side of the property. Parking lot lighting will be consistent with that which is required by the City of American Canyon. The lights will be “shoebox” fixtures, with a height of 30 feet, dimmable LED fixtures which are designed to direct the light towards the ground and reduce glare to surrounding properties. A photometric study has been prepared to analyze the light pole spacing to maximize light coverage and minimize excessive light spillage off-site.

The site will be well landscaped, including trees in the north, west, and east setback areas, the parking areas, and around the wetland areas. The tree species include Crape Myrtle, Sweet Bay, London Plane, and California Sycamore. The trees will be supported by shrubs, grasses, and groundcover. The site includes clearly marked pedestrian routes leading to the office suites. There is no landscaping in the south because it will be a circulation area between SDG Commerce 220 Project (1055 Commerce Ct) and the SDG Commerce 330 Project (1005 Commerce Ct).

4. Parking and Bicycle Parking

The site includes 134 passenger vehicle parking spaces, 23 truck parking stalls, and 12 bicycle parking spaces. Of the 134 passenger vehicles, 5 will provide electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE, and 19 EV capable stalls. The 12 bicycle parking consists of six bicycle lockers that will accommodate 2 bikes each.

5. Site Specific Issues

5.1 Access

Access to the site is available from Commerce Court via Green Island Road. Because the main building is placed lower than the elevation at Commerce Court, an ADA accessible ramp is designed to accommodate wheelchair users. This feature was also included in the SDG Commerce 217 project. Vehicle access to the south is not available, so the neighborhoods south of Commerce Court will not be impacted by vehicle traffic. Instead, a pedestrian/ bicycle path is installed that connects Wetlands Edge Road through Commerce Court and leads up to Green Island Road.

5.2. Sustainability Features

The proposed project would incorporate a variety of sustainable materials and construction practices including:

- Natural Cooling. The building would be insulated and refrigerated at approximately 58 degrees Fahrenheit, making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of automatic intake louvers and fans, which would allow cool night air to be utilized.
- Bicycle Lockers. According to ACMC Section19.14.090, this project would require five bicycle parking spaces. The project would provide six long-term bicycle lockers, where each would accommodate up to four bicycles, for a total of 12 bicycle parking spaces. The lockers would be located adjacent to each office area. Short-term bicycle parking would also be similarly located.
- EV Charging. According to the CBC Cal Green Standards (Title 24, Part 11, Chapter 5.106.5.3.1), the project would require 17 EV capable spaces. The project would provide five electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE stall, and 19 EV capable stalls.
- Solar PV. Solar would be installed on the building rooftop and produce an estimated 235,000 (kWh) per year. The intent of the solar PV system is to supplement the power consumed by items such as exterior lighting, parking lot lights, interior warehouse lighting and a portion of the building's refrigeration system.
- Stormwater Prevention. A stormwater pollution prevention plan to minimize contamination, erosion, and dust pollution during construction. All stormwater runoff from impervious surfaces (roofs and paving) will be routed through a specially designed water quality detention and treatment basin. Additionally, on-site detention will be provided to meet the City of American Canyon standards.

- Light pollution reduction. The development will include light standards that point their lights downward to reduce light pollution.
- Recycled water for irrigation. The project will use recycled water for landscaping irrigation to reduce the use of potable water.

5.3 Napa County Airport Land Use Compatibility Plan

The project is located in the Napa County Airport Land Use Compatibility Plan (ALUCP) Zone D. According to the plan, new warehouse development is required to record an avigation and hazard easement deed. The property owner completed the recordation for all three parcels of 1075, 1055, and 1005 Commerce Court on July 26, 2019.

6. CUP Conclusion

The SDG Commerce 220 Distribution CUP project complies with the design standards outlined in the REC Zone. The winery use class is a permitted use with CUP in the REC zone. The project provides sustainability features that reduce GHG emissions. Additionally, the project completed a Draft EIR that identifies mitigation measures for the project. The mitigation measures have been added as conditions of approval.

IV. Public Outreach:

Project outreach occurred between August 21, 2023, and October 23, 2024. A copy of the public notification addresses and map is included in Attachment 3. Specific events are outlined below:

Aug. 21, 2023 – Project Posted on website
Aug. 23, 2023 – Project Information Announcement to GovDelivery Recipients (4,150+/-)
Aug. 23, 2023 – Neighborhood letters to introduce the project sent within 500 feet
Oct. 27, 2023 – Notice of Preparation (NOP) issued, 30-day review period begins
Oct. 27, 2023 – GovDelivery Notice of NOP sent to email subscribers list (4,150+/-)
Nov. 17, 2023 – NOP Scoping Meeting held at City Hall and virtually by Zoom.
Nov. 27, 2023 – NOP review period closed.
Jun. 6, 2024 – DEIR with NOA (Notice of Availability) submitted to CEQA.net
Jun. 10, 2024 – DEIR NOA posted and DEIR printed copy made available at City Hall (4381 Broadway St), the American Canyon Library (300 Crawford Way), and the Active Adults Center (2185 Elliot Dr).
Jun. 10, 2024 – DEIR NOA sent to property owners within 500 feet
Jun. 11, 2024 – GovDelivery Notice of DEIR NOA sent to email subscribers list (4,150 +/-)
Jun. 11, 2024 – DEIR Review period begins.
Jun. 24, 2024 – Applicant installed a physical public sign on site.
Jul. 15, 2024 – Revised DEIR NOA sent to property owners within 500 feet.
Jul. 16, 2024 – GovDelivery Notice of Revised DEIR NOA sent to email subscribers list (4,150 +/-)
Jul. 19, 2024 – Staff report published and GovDelivery Notice of public review workshop sent to e-mail subscribers list (4,150 +/-)
Oct. 9, 2024 - FEIR posted and FEIR printed copy made available at City Hall (4381 Broadway St), the

American Canyon Library (300 Crawford Way), and the Active Adults Center (2185 Elliot Dr).
Oct. 10, 2024 – Planning Commission public notice sent to property owners within 500 feet.
Oct. 11, 2024 – GovDelivery Notice of EIR and CUP Planning Commission Meeting sent to email subscribers list (4,150 +/-).
Oct. 11, 2024 – Public Notice of Planning Commission Meeting Posted on Bulletin Board at City Hall and at Public Safety Building.
Oct. 12, 2024 – Public Notice of Planning Commission Meeting published in newspaper.
Oct. 18, 2024 – Staff report published and GovDelivery Notice of public review workshop sent to e-mail subscribers list (4,150 +/-)
Oct. 23, 2024 – GovDelivery Notice Reminder of Planning Commission meeting sent to email subscribers list (4,150 +/-)
Oct. 24, 2024 – Planning Commission Meeting

The public comments to the October 24, 2024 Planning Commission meeting are included as Attachment 4.

FISCAL IMPACT

The SDG Commerce 220 EIR and CUP project required a developer deposit for review and processing, so there is no fiscal impact for staff time.

ENVIRONMENTAL REVIEW

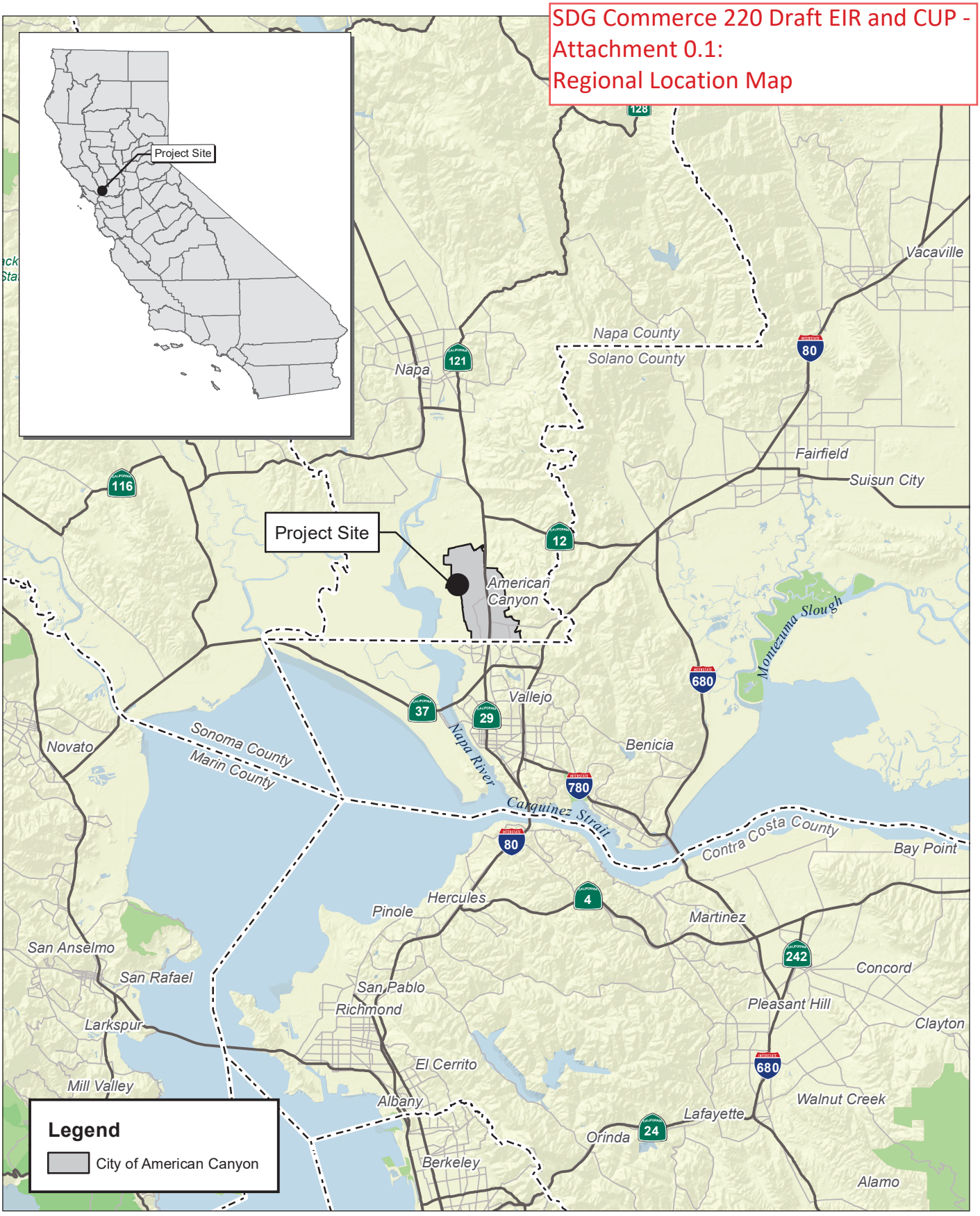
Consistent with the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) was prepared for the proposed SDG Commerce 220 Distribution Center project to fully describe and
analyze environmental impacts.

ATTACHMENTS:

0.1 Regional Location Map
0.2 Project Location Map
0.3 Site Photographs
0.4 Site Plans
0.5 Warehouse Photosim and Elevations
0.6 Important EIR Milestones
1.0 SDG Commerce 220 EIR - PC Resolution
1.01 Exhibit A Draft EIR.pdf
1.02 Exhibit B Draft EIR: Appendix A - Notice of Preparation
1.03 Exhibit B Draft EIR: Appendix B - AQ, GHG Supporting Information
1.04 Exhibit B Draft EIR: Appendix C - Biological Resources Supporting Information
1.05 Exhibit B Draft EIR: Appendix D - Cultural Resources Supporting Information
1.06 Exhibit B Draft EIR: Appendix E - Geotechnical Report
1.07 Exhibit B Draft EIR: Appendix F - Phase I ESA

1.08 Exhibit B Draft EIR: Appendix G - Hydrology Report
1.09 Exhibit B Draft EIR: Appendix H - Noise Supporting Information
1.10 Exhibit B Draft EIR: Appendix I - Transportation Supporting Information
1.11 Exhibit B Draft EIR: Appendix J - Docs Incorporated by Reference
1.12 Exhibit C Final EIR
1.13 Exhibit C Final EIR Appendix A - Swainson Hawk Mitigation Support
1.14 Exhibit D MMRP
2.0 SDG Commerce 220 CUP - PC Resolution
2.1 Exhibit A CUP Project Plans
2.2 Exhibit B - Confirmation of Conditions of Approval
3.0 Public Notice Package
4.0 Public Comments

SDG Commerce 220 Draft EIR and CUP - Attachment 0.1:
Regional Location Map



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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5 2.5 0 5
Miles

Exhibit 2-1
Regional Location Map

56390001 • 03/2023 | 2-1_regional.mxd



Source: Bing Aerial Imagery.

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1,000 500 0 1,000 Feet

Exhibit 2-2
Local Vicinity Map

56390001 • 12/2023 | 2-2_local_vicinity.mxd



View of southern portion of project site. Note existing soils stockpiles.



View of northern portion of project site.



View of project frontage with Commerce Court.

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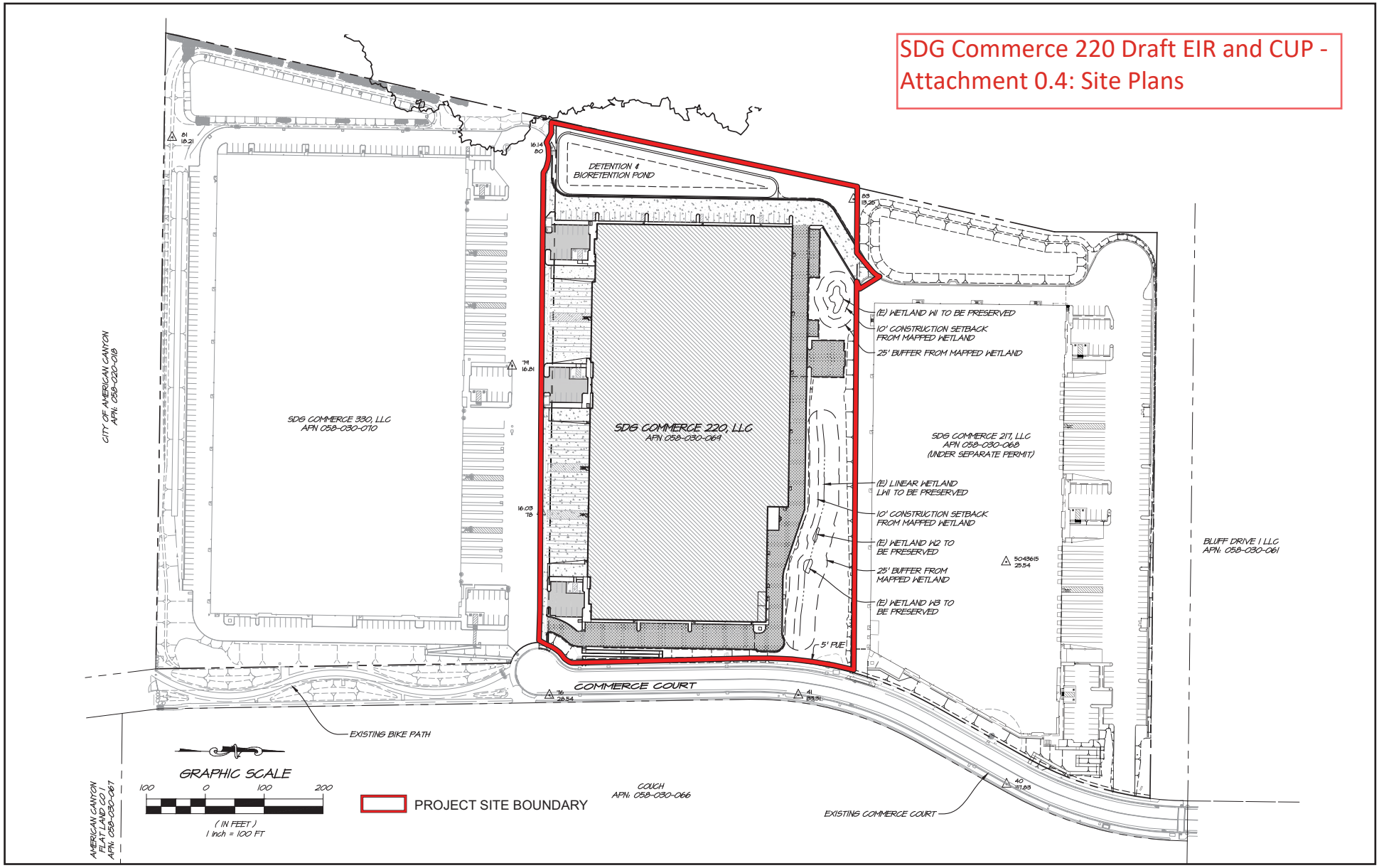
Exhibit 2-3
Site Photographs

SDG Commerce 220 Draft EIR and CUP - Attachment 0.4: Site Plans



Source: RSA+ Consulting Civil Engineers + Surveyors. 07/21/2023.

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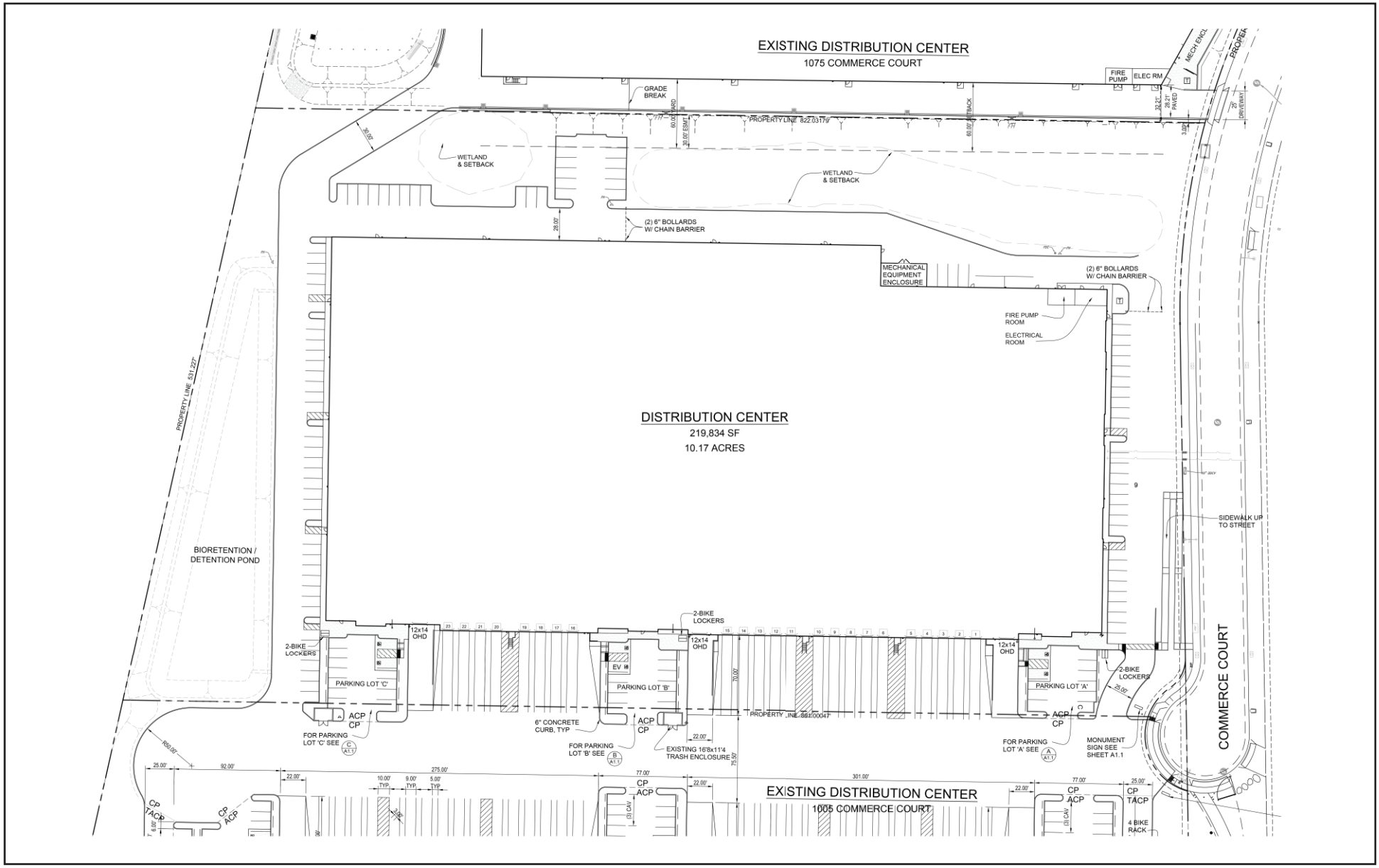
Exhibit 2-4a
Site Plan



Source: Ward Architects, Inc. 08/01/2023.

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Exhibit 2-4b
Site Plan

SDG Commerce 220 Draft EIR and CUP - Attachment 0.5: Photosim



View of project rendering looking northwest from southeast corner.

Source: Stravinsky Development Group.

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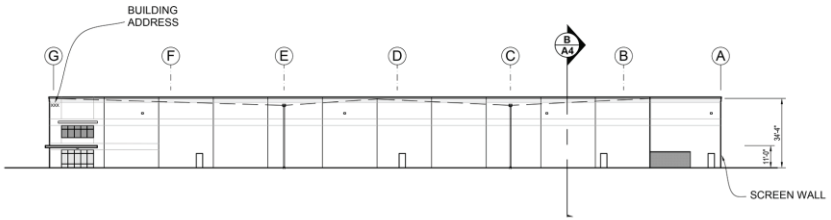
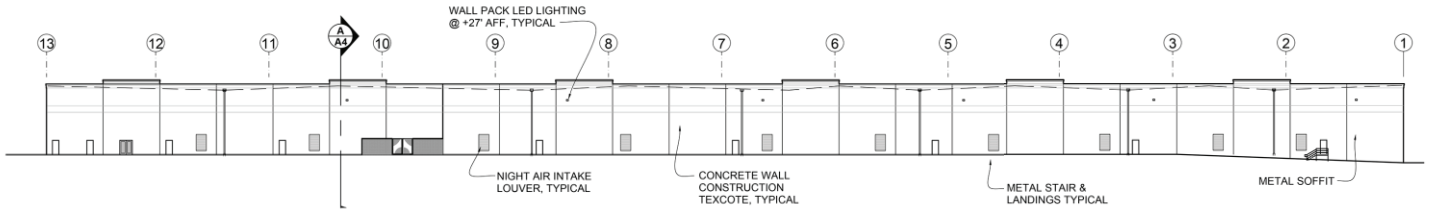
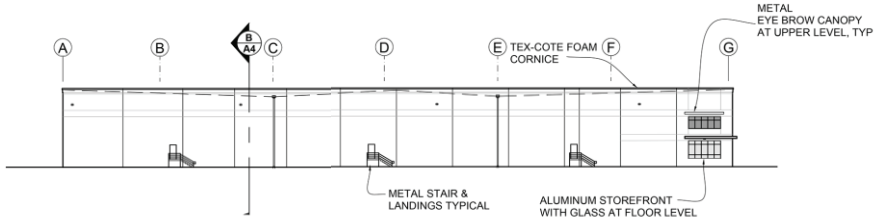
Exhibit 2-5
Conceptual Illustration



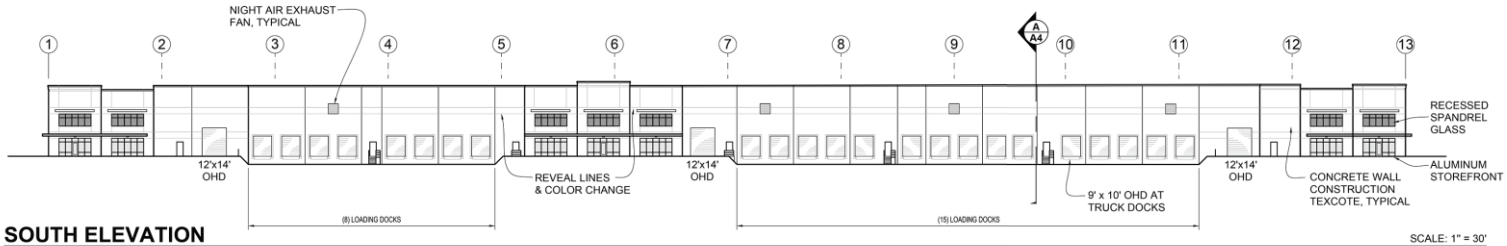
EAST ELEVATION SCALE: 1" = 30'



NORTH ELEVATION SCALE: 1" = 30'



WEST ELEVATION SCALE: 1" = 30'



SOUTH ELEVATION SCALE: 1" = 30'

Source: Industrial and Commercial Contractors, LP. Ward Architects, Inc. 01/25/2023.

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Exhibit 3.1-1
Conceptual Building Elevations

Attachment 0.6

SDG Commerce 220 Distribution Center - Important EIR Milestones

Milestone	Purpose	Term	Date(s)
Notice of Preparation	Solicit Agency guidance on the EIR scope	30 Days	10/27/2023– 11/27/2023
Notice of Preparation Scoping Meeting	Solicit feedback from Planning Commission and Community	N/A	11/17/2023
Notice of Availability	Public Review of the Draft EIR	52 Days	6/11/2024 – 8/2/2024
Draft EIR Workshop	Solicit feedback from Planning Commission and Community	N/A	7/30/2024
Prepare Draft Final EIR	Address responses and make corrections to Draft EIR	N/A	8/3/2024 – 10/10/2024
Response to EIR Comments	Written response to EIR comments	10 Days before EIR Certification	10/11/2024
Planning Commission Hearing	Obtain public input and receive Planning Commission recommendation to City Council	N/A	10/24/2024
City Council Hearing	Obtain public input, consider Planning Commission recommendation, decide EIR approval, Design Permit and Tentative Parcel Map	N/A	11/19/2024* (Anticipated)
Notice of Determination	Documents City Council's CEQA decision to certify the EIR	30 Days	11/20/2024 to 12/20/2024* (Anticipated)

PC RESOLUTION NO. 2024-XX

A RESOLUTION RECOMMENDING THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON (i) CERTIFY THE FINAL ENVIRONMENTAL IMPACT REPORT (SCH #2023100842), AND (ii) ADOPT A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE SDG COMMERCE 220 DISTRIBUTION CENTER PROJECT LOCATED AT 1055 COMMERCE COURT, APN 058-030-069 (FILE NUMBER PL23-0017)

WHEREAS, on August 3, 2023, SDG Commerce 220, LLC (Applicant) submitted a Conditional Use Permit (CUP) for development of a 220,000 square feet wine distribution warehouse at 1055 Commerce Ct; and

WHEREAS, the objectives of the SDG Commerce 220 Distribution Center are to:

1. Positively contribute to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base;
2. Develop land to its highest and best use;
3. Continue the buildout of the City of American Canyon in accordance with the General Plan;
4. Meet original demand for wine warehousing by adding the inventory of this space;
5. Develop nonresidential uses on the project site that are compatible with the City of American Canyon's Water Reclamation Facility and the Napa County Airport;
6. Maximize the efficient use of land by developing an industrial project at the upper end of the allowable Floor Area Ratio range;
7. Complete the buildout of the SDG Commerce development;
8. Protect the North Slough by employing stormwater pollution prevention measures during construction and operation;
9. Provide development fees to the American Canyon fire Protection District to fund the development of a new fire station; and

WHERAS, for purposes of the California Environmental Quality Act (Public Resources Code, Sections 21000 et seq.) and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), ("CEQA") the City is the lead agency for the Project; and

WHEREAS, the City originally released the Draft Environmental Impact Report (EIR) for public comment for a 52-day review period to commence on June 11, 2024, and to end at 5:00 PM August 2, 2024; and

WHEREAS, on July 30, 2024, the Planning Commission conducted a publicly-noticed workshop to discuss the SDG Commerce 220 Distribution Center Draft EIR; and

WHEREAS, CEQA Guidelines section 15090 requires that, prior to approving a proposed project for which a final EIR has been prepared, a lead agency's decision making body must certify that: (1) the final EIR has been completed in compliance with CEQA; (2) the final EIR was presented to the decision-making body of the lead agency, and the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and (3) the final EIR reflects the lead agency's independent judgment and analysis; and

WHEREAS, prior to approving a project that requires the adoption of feasible mitigation measures to substantially lessen or avoid significant environmental effects, a lead agency's decision-making body is required by Public Resources Code section 21081.6, subdivision (a), to adopt a mitigation monitoring and reporting program to ensure that the mitigation measures adopted by the lead agency are carried out; and

WHEREAS, on October 24, 2024, the Planning Commission conducted a duly-noticed public hearing to evaluate the SDG Commerce 220 Distribution Center Project and Final EIR and determined that based on all of the evidence presented, including, but not limited to, written and oral testimony given at meetings, it is appropriate to recommend that the City Council certify the Final EIR as adequate to address environmental impacts associated with the SDG Commerce 220 Distribution Project, and adopt the Mitigation Monitoring and Reporting Program (MMRP).

NOW, THEREFORE, BE IT RESOLVED that the foregoing recitals are true and correct and are included herein by reference as findings.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission recommends that the City Council makes the three findings necessary to certify that the Final EIR reflects the independent judgement and analysis of the City and thoroughly as adequate to addresses the potentially significant environmental impacts associated with implementation of the SDG Commerce 220 Distribution Center Project. The Final EIR consists of the Draft EIR (Exhibit A to this Resolution) and Appendices (Exhibit B to this Resolution), and the Final EIR, which includes a list of persons, organizations, and agencies that provided comments on the Draft EIR, responses to the comments received regarding the Draft EIR, and errata or revisions to the Draft EIR (Exhibit C to this Resolution).

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Planning Commission recommends that City Council adopt the Mitigation Monitoring and Reporting Plan for the SDG Commerce 220 Distribution Center Project (Exhibit E to this Resolution).

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 24th day of October, 2024, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Brando Cruz, Chair

ATTEST:

_____

APPROVED AS TO FORM:

_____

Nicolle Hall, Deputy City Clerk **William D. Ross, City Attorney**

EXHIBITS:
A. Draft EIR
B. Draft EIR Appendices
C. Final EIR
D. MMRP

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DRAFT
Environmental Impact Report
SDG Commerce 220 Distribution Center Project
City of American Canyon, Napa County, California

State Clearinghouse Number 2023100842

Prepared for:
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
707.647.4337

Contact: William He, Senior Planner

Prepared by:
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Janna Waligorski, Senior Project Manager

Date: June 5, 2024

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACF	Advanced Clean Fleet
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACP	Alternative Compliance Plan
ACT	American Canyon Transit
ACTM	Airborne Toxics Control Measure
ADA	Americans with Disabilities Act
ADMRT	Air Dispersion Modeling and Risk Tool
ADT	Average Daily Traffic
AFY	acre-feet per year
AIA	Airport Influence Area
AICUZ	Air Installation Compatibility Use Zone
AJD	Approved Jurisdictional Determination
ALUC	Airport Land Use Commission
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measures
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BART	Bay Area Rapid Transit
BASMAA	Bay Area Stormwater Management Agencies Association
BAU	business-as-usual
BCDC	Bay Conservation and Development Commission
BCF	billion cubic feet

BCF/year	billion cubic feet per year
BERD	Built Environment Resource Directory
BMP	Best Management Practice
BRA	Biological Resources Assessment
BSMAA	Bay Area Stormwater Management Agencies Association
BTU	British thermal units
BVOC	biogenic volatile organic compound
C&D	Construction and Demolition
C^2ES	Center for Climate and Energy Solution
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Health and Safety Administration
CalDAG	California Disabled Accessibility Guidebook
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CASQA	California Stormwater Quality Association
CBC	California Building Standards Code
CBSC	California Building Standards Commission
CCA	community choice aggregations
CCAA	California Clean Air Act
CCCC	California Climate Change Center
CCR	California Code of Regulations
CCTS	Central California Taxonomic System
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CEA	California Earthquake Authority
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations

CH_4	methane
CHL	California Historical Landmarks
CHMIRS	California Hazardous Material Incident Report System
CHRIS	California Historical Resources Information System
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
COC	constituents of concern
CPF	cancer potency factor
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Commission
CRA	Cultural Resources Assessment
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBH	diameter at breast height
DMM	Demand Management Measure
DOE	United States Department of Energy
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
du	dwelling unit
du/acre	dwelling unit per acre
DWR	California Department of Water Resources
EIA	Energy Information Administration
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007
EMFAC	Emission Factors mobile source emissions model
EPA	United States Environmental Protection Agency
ERF	Emergency Response Framework
ESPS	Engineering Standards Plans and Specifications
EV	electric vehicle

EVSE	electric vehicle supply equipment
FAA	Federal Aviation Administration
FAR	floor area ratio
FCS	FirstCarbon Solutions
FCWCD	Flood Control and Water Conservation District
FEMA	Federal Emergency Management Agency
FGC	Fish and Game Code
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
GHG	greenhouse gas
gpm	gallons per minute
GPS	Global Positioning System
GWh	gigawatt-hours
GWh/y	gigawatt-hours per year
GWP	global warming potential
HAP	Hazardous Air Pollutants
HARP	Hotspots Analysis and Reporting Program
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbon
HHD	heavy heavy-duty
HHDT	heavy heavy-duty truck
HI	hazard index
HOV/HOT	High Occupancy Vehicle/High Occupancy Toll
hp	horsepower
HRA	Health Risk Assessment
HRI	California Historic Resources Inventory
HSWA	Hazardous and Solid Waste Act
HVAC	heating, ventilation, and air conditioning
IAQ	Indoor Air Quality
IPaC	Information for Planning and Consultation
IPCC	United Nations Intergovernmental Panel on Climate Change
ISO	Insurance Services Office
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
ITP	Incidental Take Permit
kW	kilowatts
LCFS	Low Carbon Fuel Standard

LDA	light-duty automobile
L_{dn}	day/night average sound level
LED	light-emitting diode
L_{eq}	equivalent sound level
LEV	Low Emission Vehicle
LID	Low Impact Development
LOS	Level of Service
LPG	liquified petroleum gas
LSE	load-serving entities
LSI	Large Spark Ignition
LTS	Level of Traffic Stress
M&A	Monk & Associates
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MCV	Manual of California Vegetation
MDV	medium-duty vehicle
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed Individual Worker
mgd	million gallons per day
MHDT	medium heavy-duty truck
MM	Mitigation Measure
MMBTU	Million Metric British Thermal Unit
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MPO	Metropolitan Planning Organization
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
MW	megawatt
MXD	mixed-use development
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCTPA	Napa County Transportation and Planning Agency
NEHRP	National Earthquake Hazards Reduction Program
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association

NHM	Natural History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOAA Fisheries	National Marine Fisheries Service
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NVTA	Napa Valley Transportation Authority
NVWMA	Napa-Vallejo Waste Management Authority
NWIC	Northwest Information Center
O_3	ozone
OAL	Office of Administrative Law
OEHHA	California Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
ONAC	Federal Office of Noise Abatement and Control
OPR	California Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PERP	Portable Equipment Registration Program
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
Phase I ESA	Phase I Environmental Site Assessment
PJD	Preliminary Jurisdictional Determination
PM_{10}	particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter, including dust, 2.5 micrometers or less in diameter
PM	particulate matter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PVC	polyvinyl chloride
Recology	Integrated Resource Recovery Company

RecycleSmart	Central Contra Costa County Solid Waste Authority
REL	Reference Exposure Level
RMP	Risk Management Plan
rms	root mean square
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFPUC	San Francisco Public Utilities Commission
SIP	State Implementation Plan
SNAP	Significant New Alternatives Policy
SO_2	sulfur dioxide
SOI	Sphere of Influence
SORE	Small Off-Road Engine
South Coast AQMD	South Coast Air Quality Management District
SR	State Route
State Water Board	California State Water Resources Control Board
SWIS	Solid Waste Information System
SWMP	Storm Water Management Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TCM	transportation control measures
TDM	Transportation Demand Management
TDS	total dissolved solids
TDV	Time Dependent Valuation
TEA-21	Transportation Equity Act for the 21st Century
Tg	teragram
therms/y	therms per year
TIA	Traffic Impact Analysis
TIS	Traffic Impact Study
TISG	Transportation Impact Study Guide
TMA	Transportation Management Association
TMDL	Total Maximum Daily Load
TNC	Transportation Network Company
TOD	Transit Oriented Development

TRU	Transport Refrigeration Unit
UBC	Uniform Building Code
UCERF3	Third Uniform California Earthquake Rupture Forecast
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
V/C	volume to capacity ratio
Valley Air District	San Joaquin Valley Air Pollution Control District
VDECS	Verified Diesel Emission Control Strategies
VMT	Vehicle Miles Traveled
VOC	volatile organic compounds
WAF	worker adjustment factor
WATERS	Watershed Assessment, Tracking, and Environmental Results System
WDR	Waste Discharge Requirements
WQMP	Water Quality Management Plan
WRF	Water Reclamation Facility
WSA	Water Supply Assessment
WSS	Web Soil Survey
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant
ZEV	Zero-Emission Vehicle

EXECUTIVE SUMMARY

Purpose

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the SDG Commerce 220 Project (State Clearinghouse No. 2023100842). This document is prepared in conformance with CEQA (Public Resources Code [PRC] § 21000, *et seq*.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et se*q.).

The purpose of this Draft EIR is to inform decision-makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential environmental effects that may result from implementation of the proposed project. This Draft EIR describes potential impacts relating to a wide variety of environmental issues and methods by which these impacts can be mitigated or avoided.

Project Summary

Project Location

The project site is located at 1055 Commerce Court in the City of American Canyon, in Napa County, California. The project site consists of Assessor's Parcel Number (APN) 058-030-069 (10.17 acres) plus small additional improvement areas (consisting primarily of parking lot improvements and connections to adjoining land uses) for a total of 10.45 acres. The rectangular project site is bounded by a eucalyptus grove and North Slough (west), a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 currently under construction (north), Commerce Court beyond which is a paintball recreation area (east), and a wine distribution warehouse known as SDG Commerce 330 (south). The project site is located on the *Cuttings Wharf, California*, United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 4 North, Range 4 West, Section 14 (Latitude 38° 11' 22" North; Longitude 122° 16' 19" West).

Project Description

The applicant, SDG Commerce 220, LLC proposes to develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. The warehouse would provide 23 truck doors and approximately 4,400 square feet of office space. It would have perimeter concrete tilt wall panels with varying parapet heights and accent spandrel glass/metal canopy features around offices and corners of the building. The average roof height would be approximately 35 feet; portions of the building exterior walls would have various heights to provide architectural relief. The building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized.

Project Objectives

The objectives of the proposed project are to:

1. Positively contribute to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base.
2. Develop land to its highest and best use.
3. Continue the buildout of the City of American Canyon in accordance with the General Plan.
4. Meet regional demand for wine warehousing by adding to the inventory of this space.
5. Develop nonresidential uses on the project site that are compatible with the City of American Canyon's Water Reclamation Facility and the Napa County Airport.
6. Maximize the efficient use of land by developing an industrial project at the upper end of the allowable Floor Area Ratio range.
7. Complete the buildout of the SDG Commerce development.
8. Protect North Slough by employing stormwater pollution prevention measures during construction and operation.
9. Provide development fees to the American Canyon Fire Protection District to fund the development of a new fire station.

Significant Unavoidable Adverse Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Inconsistency with CEQA Guidelines Section 15064.3, subdivision (b):** The proposed project's Vehicle Miles Traveled (VMT) was evaluated in accordance with the City's adopted VMT policy. For the project's VMT impact to be less than significant, the VMT per employee would need to be reduced by at least 19 percent below current levels. However, according to the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA Handbook), a reduction in the VMT of 15 percent is generally considered the maximum feasible mitigation for suburban environments such as that of the proposed project. If this level of trip reduction could be achieved, that would mitigate most of the project's VMT impact, although not to a level that would be less than significant (19 percent); however, given the lack of transit services within an acceptable walking distance of the proposed project, achieving this level of mitigation is considered infeasible. Even with implementation of a TDM Plan as required by MM TRANS-2, the impact would remain significant and unavoidable.
- **Cumulative Transportation:** Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project's location and lack of access to high-quality transit. MM TRANS-2 would reduce project-related VMT but not to a level below significance. As such, the proposed project would also have a cumulatively considerable contribution on VMT.

Summary of Project Alternatives

Below is a summary of the alternatives to the proposed project considered in Section 5, Alternatives to the proposed project.

No Project Alternative

The project site would remain undeveloped for the foreseeable future and no development would occur.

Reduced Density Alternative

A 164,875-square-foot wine warehouse would be developed on the project site, which represents a 25 percent reduction in square footage.

Areas of Controversy

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on October 27, 2023. The NOP describing the original concept for the proposed project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period extending from October 27, 2023 through November 27, 2023. The NOP identified the potential for significant impacts on the environment related to the following topical areas:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

Disagreement Among Experts

This Draft EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of American Canyon is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information

to allow the public and decision-makers to make an informed judgment about the environmental consequences of the proposed project.

Potentially Controversial Issues

Below is a list of potentially controversial issues that may be raised during the public review and hearing process of this Draft EIR:

- Health effects on communities from diesel emissions
- Traffic and Circulation
- Land Use Compatibility
- Impacts on wetlands
- Climate change

It is also possible that evidence will be presented during the 45-day, statutory Draft EIR public review period that may create disagreement. Decision-makers would consider this evidence during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, the decision-makers are not obligated to select the most environmentally preferable viewpoint. Decision-makers are vested with the ability to choose whatever viewpoint is preferable and need not resolve a dispute among experts. In their proceedings, decision-makers must consider comments received concerning the adequacy of the Draft EIR and address any objections raised in these comments. However, decision-makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the Draft EIR, and can certify the Final EIR without needing to resolve disagreements among experts.

Public Review of the Draft EIR

Upon completion of the Draft EIR, the City of American Canyon filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (PRC § 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the following locations:

American Canyon City Hall
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Hours: Monday-Friday: 8:00 a.m. to 5:00 p.m.
Saturday–Sunday: Closed

Active Adults Center
2185 Elliot Drive
American Canyon, CA 94503
Hours: Monday - Friday 9:00 a.m. to 2:00 p.m.
Saturday–Sunday: Closed

American Canyon Library
300 Crawford Way
Hours: Monday, Tuesday, and Thursday–Saturday: 10:00 a.m. to 6:00 p.m.
Wednesday: 12:00 p.m. to 8:00 p.m.
Sunday: Closed

The Draft EIR is also available for review at the following website: https://www.cityofamericancanyon.org/government/community-development/development-projects

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR may be submitted electronically at this website link: https://cityofamcan.org/SDG220.

Hardcopy written comments on this Draft EIR should be addressed to:

SDG Commerce 220 Project
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised during the comment period will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the City of American Canyon on the proposed project, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the proposed project.

Executive Summary Matrix

Table ES-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this EIR. Table ES-1 is included in the EIR as required by CEQA Guidelines Section 15123(b)(1).

Table ES-1: Executive Summary Matrix

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.1—Aesthetics, Light, and Glare		
Impact AES-1: The proposed project, located in a non-urbanized area, would not substantially degrade the existing visual character or the quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly-accessible vantage point.)	No mitigation is necessary.	Less than significant impact.
Impact AES-2: The proposed project may create a new source of substantial light or glare which could adversely affect day or nighttime views in the area.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.2—Air Quality		
Impact AIR-1: The proposed project could conflict with or obstruct implementation of the applicable air quality plan.	**MM AIR-1: Implement BAAQMD Best Management Practices to Control Dust During Construction** The following dust control measures, as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the proposed project and implemented during construction: • All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least two times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard. • All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. the use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. idling times shall be minimized either by shutting equipment off when not in use or reducing	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	the maximum idling time to 5 minutes, as required by the California airborne toxics control measure (ACTM) Title 13, Section 2485 of California Code of Regulations. clear signage regarding idling restrictions shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. all equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. the construction contractor shall take corrective action within 48 hours. the BAAQMD's and the City's phone numbers shall also be visible to ensure compliance with applicable regulations.	
Impact AIR-2: The proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.	Implement MM AIR-1.	Less than significant impact with mitigation incorporated.
Impact AIR-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.	No mitigation is necessary.	Less than significant impact.
Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.3—Biological Resources		
Impact BIO-1: The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.	**MM BIO-1a: Pre-construction Surveys for Swainson's Hawk** Prior to ground disturbance that occurs during the nesting season for Swainson's hawk (generally March 20 to July 20), a qualified Biologist shall conduct Swainson's hawk nesting surveys within a 0.5-mile radius of the project site to determine whether nests are occupied. Occupancy shall be determined through observation of all accessible areas, including from	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) on and near the project site. The qualified Biologist shall follow the survey protocol outlined in the California Department of Fish and Wildlife (CDFW) *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, which recommends surveys according to the following survey periods: **I. January–March 20:** Conduct one survey total. **II. March 20–April 5:** Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset. **III. April 5–April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset. **IV. April 21–June 10:** Initiating surveys are not recommended. Monitoring of known nest sites only. **V. June 10–July 30:** (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset. Pre-construction surveys shall be completed for at least the two survey periods immediately prior to a project's initiation. **MM BIO-1b: Swainson's Hawk Avoidance and Minimization and Construction Monitoring** Following the implementation of MM BIO-1a, if nests are located and determined to be occupied, minimization measures must be implemented, and construction monitoring conducted as follows: 1. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson's hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment. 2. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern.	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	3. No tree containing an active Swainson's hawk nest shall be removed. **MM BIO-1c: Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found)** A qualified Biologist shall conduct a habitat assessment for wintering burrowing owl, and surveys if habitat is present. The qualified Biologist shall follow the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation habitat assessment and survey methodology prior to project activities occurring during the burrowing owl wintering season from September 1 to January 31. The habitat assessment and surveys shall encompass a sufficient buffer zone to detect owls nearby that may be impacted, which shall be a minimum of 1,640 feet unless otherwise approved in writing by the CDFW. Surveys shall include four nonbreeding season surveys spread evenly throughout the nonbreeding season pursuant to the CDFW 2012 Staff Report. Time lapses between surveys or project activities shall trigger subsequent surveys, as determined by a qualified Biologist, including but not limited to a final survey within 24 hours prior to ground disturbance and before construction equipment mobilizes to the project area. The qualified Biologist shall have a minimum of 2 years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections. Detected burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan shall be subject to CDFW review. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a "take" avoidance, minimization, or mitigation measure; therefore, off-site habitat compensation shall be included in the eviction plan. Habitat compensation acreages shall be approved by CDFW, as the amount depends on-site-specific conditions and must be completed before project construction unless otherwise approved in writing by CDFW. Habitat compensation shall also include placement of a conservation easement and preparation and implementation of a long-term management plan prior to project construction.	

	MM BIO-1d: Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found). 1. If the proposed project requires vegetation to be removed during the nesting season (February 1 to August 31), pre-construction surveys shall be conducted no more than 7 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present within the project site and buffer area as appropriate. 2. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s). 3. The qualified Biologist shall monitor the active nest during construction activities and modify the protection zone accordingly to prevent project-related nest disturbance, until the young have fledged. **MM BIO-1e: Roosting Bat Pre-construction Survey and Avoidance** A qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) within 250 feet of project construction activities (where accessible). If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	space to prevent recolonization. Grading shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). **MM BIO-1f: Protection of Western Pond Turtles** A qualified Biologist (i.e., a Biologist with at least 2 years of experience conducting surveys for western pond turtle detections) shall submit a wildlife exclusion fencing plan to the California Department of Fish and Wildlife (CDFW) for review and approval prior to starting construction. Exclusion fencing shall be installed along the western perimeter of the project site to prevent the species from traveling from North Slough onto the project site during construction. A qualified Biologist shall survey the project site and adjacent habitat within 72 hours of the start of project activities to determine whether western pond turtle or their nests are present and guide the installation of the exclusion fence. If western pond turtles are discovered, a qualified Biologist with experience handling and relocating the species shall move the species to the nearest suitable habitat outside of the project area and exclusion fencing. If western pond turtle nests are found, CDFW shall be notified prior to starting project activities, and the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fence until eggs hatch and young turtles disperse to the adjacent North Slough. In addition, if nest(s) are located during surveys, moth balls (naphthalene) shall be sprinkled around the vicinity of the nest (no closer than 5 feet) to mask human scent and discourage predators. Grading within the nest site's 50-foot buffer area shall be delayed until the young leave the nest as determined by a qualified Biologist. If the CDFW allows translocation of any nestling pond turtles this shall be completed by a qualified Biologist under the direction of the CDFW. **MM BIO-1g: Protection of Overwintering Monarch Butterfly** Activities such as vegetation removal, grading, or initial ground-disturbing activities shall be conducted between November 1 and July 31 (outside of the overwintering season) to the extent feasible. If such activities must be	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	initiated during the overwintering season (August 1 through October 31), a pre-construction overwintering survey shall be conducted by a qualified Biologist no more than 7 days prior to vegetation removal, grading, or initial ground disturbance. The survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any colonies that could potentially be affected either directly or indirectly by project activities. If no colonies are present, then project activities can commence as scheduled. If a colony is present, project construction shall cease immediately to avoid all direct and indirect impacts and report the presence of the colony to the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and follow all recommendations provided by USFWS and CDFW.	
Impact BIO-2: The proposed project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.	No mitigation required.	Less than significant impact.
Impact BIO-3: The proposed project could have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Implementation of MM BIO-1a through MM BIO-1e.	Less than significant impact with mitigation incorporated.
Impact BIO-4: The proposed project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.	No mitigation required.	Less thank significant.
Cumulative Impact	Implementation of MM BIO-1a through MM BIO-1g.	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.4—Cultural Resources and Tribal Cultural Resources		
Impact CUL-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	**MM CUL-1a:** All construction personnel directly involved with project-related ground disturbance shall attend a "tailgate" Worker Environmental Awareness Program (WEAP) training for archaeological resources. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. **MM CUL-1b:** An Archaeological Monitor reporting to the qualified Archaeologist, shall be present during the clearing, grading, and trenching phases of the proposed project to check for the inadvertent discovery of archaeological resources or human remains. Over the course of the proposed project, should the Archaeologist determine that the probability of inadvertent discovery is low, they may make a recommendation to the lead agency that monitoring be reduced to regular periodic or "spot-check" monitoring, or that monitoring may cease altogether. **MM CUL-1c:** If buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the lead agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the Master Plan area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA Guidelines. If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be	Less than significant Impact with mitigation incorporated

Impacts	Mitigation Measures	Level of Significance After Mitigation
	identified by the monitor and recommended to the lead agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the lead agency where they would be afforded long-term preservation to allow future scientific study.	
Impact CUL-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	Implementation of MM CUL-1a, MM CUL-1b, and MM CUL-1c.	Less than significant impact with mitigation incorporated.
Impact CUL-3: The proposed project could disturb human remains, including those interred outside of formal cemeteries.	**MM CUL-3:** In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: • The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains: • When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.	
Impact CUL-4: The proposed project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.	MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.	Less than significant impact with mitigation incorporated.
Impact CUL-5: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource.	MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.	Less than significant impact with mitigation incorporated.
Cumulative Impact	MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.	Less than significant impact with mitigation incorporated.
Section 3.5—Energy		
Impact ENER-1: The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
energy resources, during project construction or operation.		
Impact ENER-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.6—Geology and Soils		
Impact GEO-1: The proposed project may expose people or structures to potential substantial adverse effects associated with seismic hazards.	**MM GEO-1:** Prior to the issuance of the building permit, recommendations from the Geotechnical Engineering Investigation prepared by Krazan & Associates (Environmental Impact Report [EIR] Appendix E) shall be incorporated into all project plans and applicable construction-related permits and submitted to the City of American Canyon for review and approval.	Less than significant impact with mitigation incorporated.
Impact GEO-2: The proposed project may result in substantial soil erosion or the loss of topsoil.	**MM HYD-1:** Prior to the issuance of grading permits or building permits (whichever occurs first), the project applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) by preparing a Storm Water Pollution Prevention Plan (SWPPP) and submitting it, along with a Notice of Intent (NOI), to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The City of American Canyon shall confirm that the applicant has prepared a SWPPP and obtained coverage under the General Permit prior to issuance of grading or building permits. The SWPPP shall identify a practical sequence for Best Management Practice (BMP) implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall address both the project site and adjacent parcel where soil stockpiles would be removed and the borrow pit would be created to provide fill for the project site. The SWPPP shall include but not be limited to the following elements: • Temporary erosion control measures shall be employed for disturbed areas.	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	• No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months. disturbed areas shall be covered with soil stabilizers, mulch, fiber rolls, or temporary vegetation. • Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures. drop inlets shall be lined with filter fabric/geotextile. • Discharge from the stormwater system shall be diffused in such a way as to mimic existing overland flow conditions. • The construction contractor shall prepare standard operating procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. this may include locating construction-related equipment and processes that contain or generate pollutants in a secure way, away from storm drains, gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities. • BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure. • In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance as an interim erosion control measure throughout the wet season. Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a SWPPP in accordance with the requirements of the Statewide General Permit. The SWPPP shall be implemented during construction.	
Impact GEO-3: The proposed project would not be located on a geologic unit or soil that would become unstable as a result of the project, and potentially result	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.		
Impact GEO-4: The proposed project may create substantial risks to life or property as a result of expansive soil conditions on the project site.	Implement Mitigation Measure GEO-1.	Less than significant impact with mitigation incorporated.
Impact GEO-5: The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**MM GEO-5:** Although extremely unlikely, should any significant paleontological resources (e.g., bones, teeth, well-preserved plant elements) be unearthed by the construction crew, their activities shall be diverted at least 15 feet from the find until a professional Paleontologist has assessed it and, if deemed significant, salvaged in a timely manner. Collected fossils shall be deposited in an appropriate repository, such as the University of California Museum of Paleontology (UCMP), where they shall be properly curated and made available for future research.	Less than significant impact with mitigation incorporated.
Cumulative Impact	Implement Mitigation Measure GEO-1, MM HYD-1, and MM GEO-5.	Less than significant impact with mitigation incorporated.
Section 3.7—Greenhouse Gas Emissions		
Impact GHG-1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	No mitigation is necessary.	Less than significant impact.
Impact GHG-2: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.8—Hazards and Hazardous Materials		
Impact HAZ-1: Buildout of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and would not create a significant hazard to the public or the environment	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.		
Impact HAZ-2: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-3: The proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-4: The proposed project would not create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport.	Less than significant impact.	No mitigation is necessary.
Impact HAZ-5: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than significant impact.	No mitigation is necessary.
Cumulative Impact	Less than significant impact.	No mitigation is necessary.
Section 3.09—Hydrology and Water Quality		
Impact HYD-1: The proposed project could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	**MM HYD-1:** Prior to the issuance of grading permits or building permits (whichever occurs first), the project applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) by preparing a Storm Water Pollution Prevention Plan (SWPPP) and submitting it, along with a Notice of Intent (NOI), to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The City of American Canyon shall confirm that the applicant has prepared a SWPPP and obtained coverage under the General Permit prior to issuance of grading or building permits. The SWPPP shall identify a	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	practical sequence for Best Management Practice (BMP) implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall address both the project site and adjacent parcel where soil stockpiles would be removed and the borrow pit would be created to provide fill for the project site. The SWPPP shall include but not be limited to the following elements: • Temporary erosion control measures shall be employed for disturbed areas. • No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months. • Disturbed areas shall be covered with soil stabilizers, mulch, fiber rolls, or temporary vegetation. • Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures. drop inlets shall be lined with filter fabric/geotextile. • Discharge from the stormwater system shall be diffused in such a way as to mimic existing overland flow conditions. • The construction contractor shall prepare standard operating procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. this may include locating construction-related equipment and processes that contain or generate pollutants in a secure way, away from storm drains, gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities. • BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure. • In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance as an interim erosion control measure throughout the wet season.	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a SWPPP in accordance with the requirements of the Statewide General Permit. The SWPPP shall be implemented during construction.	
Impact HYD-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	No mitigation is necessary.	Less than significant impact.
Impact HYD-3: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	Implementation of MM HYD-1	Less than significant impact with mitigation incorporated.
Section 3.10—Land Use and Planning		
Impact LU-1: The proposed project would not conflict with the applicable provisions of the City of American Canyon General Plan.	No mitigation is necessary.	Less than significant impact.
Impact LU-2: The proposed project would not conflict with the applicable provisions of the American Canyon Municipal Code.	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact LU-3: The proposed project would not conflict with the applicable provisions of the Napa County Airport Land Use Compatibility Plan.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.11—Noise		
Impact NOI-1: The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	No mitigation is necessary.	Less than significant impact.
Impact NOI-2: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.	No mitigation is necessary.	Less than significant impact.
Impact NOI-3: The proposed project would not expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.12—Public Services		
Impact PUB-1: The proposed project would not result in a need for new or expanded fire protection facilities that may have physical impacts on the environment.	No mitigation is necessary.	Less than significant impact.
Impact PUB-2: The proposed project would not result in a need for new or expanded police protection facilities that may have physical impacts on the environment.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.13—Transportation and Traffic		
Impact TRANS-1: The proposed project would not conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.	No mitigation is required.	Less than significant impact.
Impact TRANS-2: The proposed project would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	**MM TRANS-2: Transportation Demand Management Program** The proposed project shall develop a Transportation Demand Management (TDM) program to encourage employees to choose non-personal vehicle modes of transportation for commuting. This includes a commute trip reduction marketing initiative, through which the employer would disseminate information about available transportation options. Strategies would include encouraging ride sharing among project employees and linking them to resources to find rideshare partners working nearby, such as through the Napa Valley Transportation Authority (NVTA) V-Commute program or the regional 511.org program. Marketing materials can also inform employees of resources such as the Guaranteed Ride Home Program, which provides free rides home in emergency situations for employees using non-personal vehicle transportation modes.	Significant and unavoidable impact.
Impact TRANS-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	No mitigation is required.	Less than significant impact.
Impact TRANS-4: The proposed project would not result in inadequate emergency access.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Implementation of MM TRANS-2	Significant and unavoidable impact.
Section 3.14—Utilities		
Impact UTIL-1: The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
relocation of which could cause significant environmental effects.		
Impact UTIL-2: The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	No mitigation is necessary.	Less than significant impact.
Impact UTIL-3: The proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	No mitigation is necessary.	Less than significant impact.
Impact UTIL-4: The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.

CHAPTER 1: INTRODUCTION

1.1 - Overview of the CEQA Process

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the SDG Commerce 220 Project (State Clearinghouse No. 2023100842). This document is prepared in conformance with CEQA (California Public Resources Code [PRC], § 21000, *et seq*.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et seq*.). This Draft EIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the proposed project.

1.1.1 - Overview

The proposed project consists of the development of a 219,834-square-foot wine warehouse on the 10.45-acre project site. Chapter 2, Project Description provides a complete description of the proposed project.

1.1.2 - Purpose and Authority

This Draft EIR provides a project-level analysis of the environmental effects of the SDG Commerce 220 Project. The environmental impacts of the proposed project are analyzed in the EIR to the degree of specificity appropriate, in accordance with CEQA Guidelines Section 15146. This document addresses the potentially significant adverse environmental impacts that may be associated with the planning, construction, or operation of the project. It also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these impacts.

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft EIR and include:

- Table of Contents
- Introduction
- Executive Summary
- Project Description
- Environmental Setting, Significant Environmental Impacts, and Mitigation Measures
- Cumulative Impacts
- Significant Unavoidable Adverse Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts
- Effects Found not to be Significant
- Areas of Known Controversy

1.1.3 - Lead Agency Determination

The City of American Canyon is designated as the lead agency for the proposed project. CEQA Guidelines Section 15367 defines the lead agency as ". . . the public agency, which has the principal responsibility for carrying out or approving a project." Other public agencies may use this Draft EIR in the decision-making or permit process and consider the information in this Draft EIR along with other information that may be presented during the CEQA process.

This Draft EIR was prepared by FirstCarbon Solutions (FCS), an environmental consultant. Prior to public review, it was extensively reviewed and evaluated by the City of American Canyon. This Draft EIR reflects the independent judgment and analysis of the City of American Canyon as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel are provided in Chapter 7 of this Draft EIR.

1.2 - Scope of the Draft EIR

This Draft EIR addresses the potential environmental effects of the proposed project. The City of American Canyon issued a Notice of Preparation (NOP) for the proposed project on October 27, 2023, which circulated between October 27, 2023, and November 27, 2023, for the statutory 30-day public review period. The scope of this Draft EIR includes the potential environmental impacts identified in the NOP and issues raised by agencies and the public in response to the NOP. The NOP is contained in Appendix A of this Draft EIR.

Seven comment letters were received in response to the NOP. They are listed in Table 1-1 and provided in Appendix A of this Draft EIR.

Table 1-1: NOP Comment Letter Summary

Affiliation	Signatory(ies)	Date
Public Agencies		
Caltrans	Yunsheng Luo	November 27, 2023
CDFW	Erin Chappell	November 17, 2023
Department of Justice	Christie Vosburg	November 7, 2023
NAHC	Cameron Vela	October 31, 2023
Private Parties		
—	Yvonne Baginski	November 21, 2023
—	Jeannette Goyetche	November 21, 2023
—	Jerry Hoffman	November 25, 2023

Notes:
Caltrans = California Department of Transportation
CDFW = California Department of Fish and Wildlife
NAHC = Native American Heritage Commission
Source: Compiled by FirstCarbon Solutions (FCS). 2023.

1.2.1 - Environmental Issues Determined not to be Significant

The NOP identified topical areas that were determined not to be significant. An explanation of why each area is determined not to be significant is provided in Chapter 4, Effects Found not to be Significant. These topical areas are as follows:

- Agricultural and Forest Resources
- Mineral Resources
- Recreation
- Wildfire

In addition, certain subjects within various topical areas were determined not to be significant. Other potentially significant issues are analyzed in these topical areas; however, the following issues are not analyzed:

- Scenic Vistas
- State Scenic Highways
- Loss of Important Farmland
- Williamson Act Contracts or Agricultural Zoning
- Forest Zoning
- Loss of Forest Land
- Pressures to Convert Surrounding Agricultural Land or Forest Land
- Sensitive Natural Communities or Riparian Habitat
- Conservation Plans
- Septic or Alternative Wastewater Disposal Systems
- Wildfires
- 100-year Flood Hazards
- Levee or Dam Failure
- Seiches, Tsunamis, or Mudflows
- Division of an Established Community
- Loss of Mineral Resources of Statewide or Local Importance
- Growth Inducement
- Displacement or Persons or Housing
- Schools
- Parks
- Other Public Facilities
- Emergency Evacuation

An explanation of why each issue is determined not to be significant is provided in Chapter 4, Effects Found not to be Significant.

1.2.2 - Potentially Significant Environmental Issues

The NOP indicated that the following topical areas may contain potentially significant environmental issues that will require further analysis in the EIR. These sections are as follows:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources/Tribal Cultural Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions/Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

1.3 - Organization of the EIR

This Draft EIR is organized into the following main sections:

- **Chapter ES: Executive Summary.** This chapter includes a summary of the proposed project and alternatives addressed in the Draft EIR. A brief description of the areas of controversy and issues to be resolved and a table that summarizes the impacts, mitigation measures, and level of significance after mitigation are also included in this section.
- **Chapter 1: Introduction.** This chapter provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.
- **Chapter 2: Project Description.** This chapter includes a detailed description of the proposed project, including its location, site, and project characteristics. It also includes a discussion of the project objectives, intended uses of the Draft EIR, responsible agencies, and approvals that are needed for the proposed project.
- **Chapter 3: Environmental Impact Analysis.** This chapter analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The specific environmental topics that are addressed within Chapter 3 are as follows:
  - Section 3.1—Aesthetics, Light, and Glare: Addresses the potential visual impacts of the proposed project and the overall increase in illumination produced by the proposed project.
  - Section 3.2—Air Quality: Addresses potential air quality impacts associated with project implementation and emissions of criteria pollutants. In addition, the section also evaluates project emissions of toxic air contaminants.

- Section 3.3—Biological Resources: Addresses potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on listed, proposed, and candidate threatened and endangered species.
- Section 3.4—Cultural Resources and Tribal Cultural Resources: Addresses potential impacts on historical resources, archaeological resources, paleontological resources, and burial sites. Additionally addresses potential project impacts related to tribal cultural resources.
- Section 3.5—Energy: Address the potential impacts related to energy that could result from implementation of the proposed project.
- Section 3.6—Geology, Soils, and Seismicity: Addresses the potential impacts the proposed project may have on soils and assesses the effects of project development in relation to geologic and seismic conditions.
- Section 3.7—Greenhouse Gas Emissions: Addresses potential project emissions of greenhouse gases.
- Section 3.8—Hazards and Hazardous Materials: Addresses potential for presence of hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.
- Section 3.9—Hydrology and Water Quality: Addresses the potential impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
- Section 3.10—Land Use: Addresses consistency with the City of American Canyon General Plan, American Canyon Municipal Code, and Napa County Airport Land Use Compatibility Plan.
- Section 3.11—Noise: Addresses potential noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
- Section 3.12—Public Services: Addresses potential impacts upon public services, including fire protection, law enforcement, schools, parks, and recreational facilities.
- Section 3.13—Transportation: Addresses potential impacts related to the local and regional roadway system and public transportation, bicycle, and pedestrian access.
- Section 3.14—Utilities and Services Systems: Addresses potential impacts related to service providers, including fire protection, law enforcement, water supply, wastewater, solid waste, and energy providers.

- **Chapter 4: Effects Found not to be Significant.** This chapter contains analysis of the topical sections and CEQA Appendix G checklist questions not addressed in Chapter 3.
- **Chapter 5: Other CEQA Considerations.** This chapter provides a summary of significant unavoidable environmental impacts and growth-inducing impacts.
- **Chapter 6: Alternatives to the Proposed Project.** This chapter compares the impacts of the proposed project with three land use project alternatives: No Project Alternative and Reduced Project Alternative. An environmentally superior alternative has been identified. In addition, alternatives initially considered but rejected from further consideration are discussed.
- **Chapter 7: Persons and Organizations Consulted/List of Preparers.** This chapter contains a full list of persons and organizations that were consulted during the preparation of this Draft

EIR. This chapter also contains a full list of the authors who assisted in the preparation of the Draft EIR, by name and affiliation.

- **Appendices.** The Draft EIR appendices includes all notices and other procedural documents pertinent to the Draft EIR as well as all technical material prepared to support the analysis.

1.4 - Documents Incorporated by Reference

As permitted by CEQA Guidelines Section 15150, this Draft EIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents, which have been incorporated by reference, has been briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and the Draft EIR has also been described. The documents and other sources that have been used in the preparation of this Draft EIR include but are not limited to:

- City of American Canyon General Plan
- American Canyon Municipal Code
- Napa County Airport Land Use Compatibility Plan
- City of American Canyon Urban Water Management Plan

In accordance with CEQA Guidelines Section 15150(b), the General Plan, the referenced documents and other sources used in the preparation of the Draft EIR are available for review at the American Canyon City Hall at the address shown in Section 1.6 below.

1.5 - Documents Prepared for the Proposed Project

The following technical studies and analyses were prepared for the proposed project:

- Biological Resources Assessment, prepared by FirstCarbon Solutions (Appendix C)
- Geotechnical Engineering Investigation, prepared by Krazan & Associates (Appendix E)
- Phase I Environmental Site Assessment, prepared by Cameron-Cole (Appendix F)
- Hydrology Report, prepared by RSA$^+$ (Appendix G)
- Hydraulic Calculations, prepared by RSA$^+$ (Appendix G)
- Stormwater Control Plan, prepared by RSA$^+$ (Appendix G)

1.6 - Review of the Draft EIR

Upon completion of the Draft EIR, the City of American Canyon filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (PRC § 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the following locations:

City of American Canyon City Hall
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Hours:
Monday–Friday: 8:00 a.m. to 5:00 p.m.
Saturday–Sunday: Closed

Active Adults Center
2185 Elliot Drive
American Canyon, CA 94503
Hours: Monday - Friday 9:00 a.m. to 2:00 p.m.
Saturday–Sunday: Closed

American Canyon Library
300 Crawford Way
American Canyon, CA 94503
Hours: Monday, Tuesday, and Thursday–Saturday: 10:00 a.m. to 6:00 p.m.
Wednesday: 12:00 p.m. to 8:00 p.m.
Sunday: Closed

The Draft EIR is also available for review at the following website: https://www.cityofamericancanyon.org/government/community-development/development-projects

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR may be submitted electronically at this website link: https://cityofamcan.org/SDG220.

Hardcopy written comments on this Draft EIR should be addressed to:

SDG Commerce 220 Project
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the American Canyon Planning Commission on the proposed project. Following a recommendation by the Planning Commission, the City Council will consider certifying the Final EIR at a regularly scheduled Council meeting. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the proposed project.

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CHAPTER 2: PROJECT DESCRIPTION

This Draft Environmental Impact Report (Draft EIR) analyzes the potential environmental effects of the proposed SDG Commerce 220 Distribution Center Project (proposed project) in the City of American Canyon.

2.1 - Project Location and Setting

2.1.1 - Location

The project site is located at 1055 Commerce Court in the City of American Canyon, in Napa County, California; refer to Exhibit 2-1. The project site consists of Assessor's Parcel Number (APN) 058-030-069 (10.17 acres) plus small additional improvement areas (consisting primarily of parking lot improvements and connections to adjoining land uses) for a total of 10.45 acres. The rectangular project site is bounded by a eucalyptus grove and North Slough (west), a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 currently under construction (north), Commerce Court beyond which is a paintball recreation area (east), and a wine distribution warehouse known as SDG Commerce 330 (south); refer to Exhibit 2-2. The project site is located on the *Cuttings Wharf, California*, United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 4 North, Range 4 West, Section 14 (Latitude 38° 11' 22" North; Longitude 122° 16' 19" West).

2.1.2 - Existing Land Use Activities

The project site contains undeveloped land. The project site gently slopes from east to west and is approximately 13 to 25 feet above mean sea level. A linear wetland and three isolated wetlands are located within the northern portion of the property. The southern portion of the project site contains several soil stockpiles that are intended for use at the SDG Commerce 217 property. A young eucalyptus tree is located near Commerce Court. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk. Exhibit 2-3 provides photographs of the project site.

2.1.3 - Surrounding Land Uses

North

A wine distribution warehouse known as SDG Commerce 217 is being constructed to the north of the project site at the time of this writing. This parcel totals 10.39 acres. The area further to the north consists of multiple industrial warehouses and other industrial type land uses.

East

Commerce Court, a two-lane undivided roadway, forms the eastern boundary of the project site. A 68-foot-wide City Public Access and Utility easement is located within Commerce Court with underground sewer, water, reclaimed water, sewer force main and underground power. A eucalyptus grove is located east of Commerce Court. A residence, dirt/gravel roads, and various accessory structures are located throughout this eucalyptus grove as well as Paint Jungle, a paintball recreation area.

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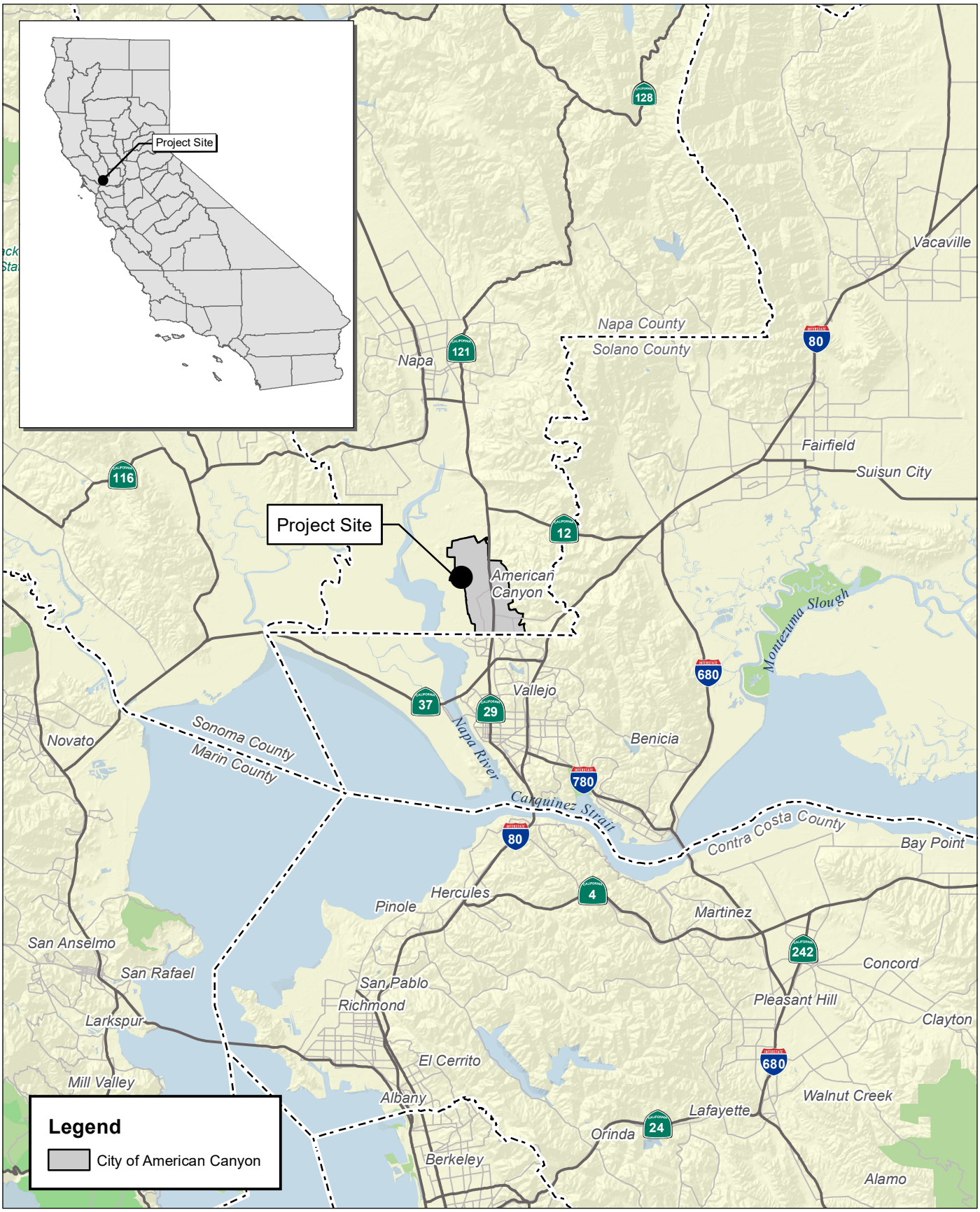

Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

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Exhibit 2-1
Regional Location Map

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Source: Bing Aerial Imagery.

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1,000 500 0 1,000 Feet

Exhibit 2-2
Local Vicinity Map

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View of southern portion of project site. Note existing soils stockpiles.



View of northern portion of project site.



View of project frontage with Commerce Court.

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Exhibit 2-3
Site Photographs

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South

A wine distribution warehouse known as SDG Commerce 330 is located south of the project site. This parcel totals 15.24 acres. The area further to the south consists of an equestrian center (SpiritHorse Therapeutic Riding Center), the American Canyon 4-H Service Club, and the Napa Junction Magnet Elementary School.

West

An 11.23-acre parcel containing a eucalyptus grove and North Slough are located west of the project site. The American Canyon Water Reclamation Facility is located west of North Slough. Further west is the Napa River and associated wetlands.

2.1.4 - Land Use Designations

The project site is designated Commercial Recreation (CR) by the City of American Canyon General Plan and zoned Recreation (REC). A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zoning district.

The project site is within Compatibility Zone D (Common Traffic Pattern) of the Napa County Airport's Land Use Compatibility Plan.

2.2 - Project History

The project site is part of what was previously a larger 35.85-acre site (Exhibit 2-4a). The site was subdivided into three lots (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330) via a tentative parcel map in February 2019. The southern parcel (SDG Commerce 330) was developed in 2020. The northern parcel (SDG Commerce 217) was entitled in 2021 and at the time of this writing is currently being developed. The central parcel (SDG Commerce 220) is the project site evaluated in this Draft EIR. Exhibit 2-2 shows the relationship of the three parcels to each other. The following narrative provides background on the entire 35.85-acre site.

Aerial photography dating to 1937 indicates that the entire site was occupied by a planted crop of trees; between then and the late 1950s, a eucalyptus grove was planted. From the 1950s until 2001 the site remained relatively unchanged. From 2001 until circa 2012, the northwest corner of the site was used as a paintball field (Sherwood Forest Paintball Area) with the eucalyptus trees remaining in place.

In 2004, a warehouse was built to the north of the site (as shown in Exhibit 2-2), and its development also included construction of Commerce Court cul-de-sac road improvements which terminated at the northeast corner of the SDG Commerce 217 site. Also in 2004, the City of American Canyon installed underground utilities and an access road through the middle of the eucalyptus grove adjacent to the east side of this site. This work also included installation of a sanitary sewer force main that crosses the northern portion of the site (i.e., the 217 SDG Commerce parcel). In 2012 the entire 35.85-acre site was cleared and grubbed of eucalyptus trees and shrubs.

2.3 - Project Characteristics

2.3.1 - Project Summary

The applicant, SDG Commerce 220, LLC proposes to develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. The warehouse would provide 23 truck doors and approximately 4,400 square feet of office space. It would have perimeter concrete tilt wall panels with varying parapet heights and accent spandrel glass/metal canopy features around offices and corners of the building. The average roof height would be approximately 35 feet high and portions of the building exterior walls would have various heights to provide architectural relief. The building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized. Table 2-1 summarizes the project characteristics. Exhibit 2-4a depicts the site plan within the greater 35.85-acre site. Exhibit 2-4b provides the project-specific site plan. Exhibit 2-5 provides a conceptual illustration of the proposed project.

Table 2-1: SDG Commerce 220 Project Summary

Acres	Building Square Feet	Floor Area Ratio	Building Height	End Use/Characteristics
10.45[1]	219,834	0.5	35 feet	Wine Distribution Warehouse/23 truck doors

[1] Project site consists of APN 058-030-069 (10.17 acres) plus small additional improvement areas for a total of 10.45 acres.
Source: SDG Commerce 220, LLC. 2022.

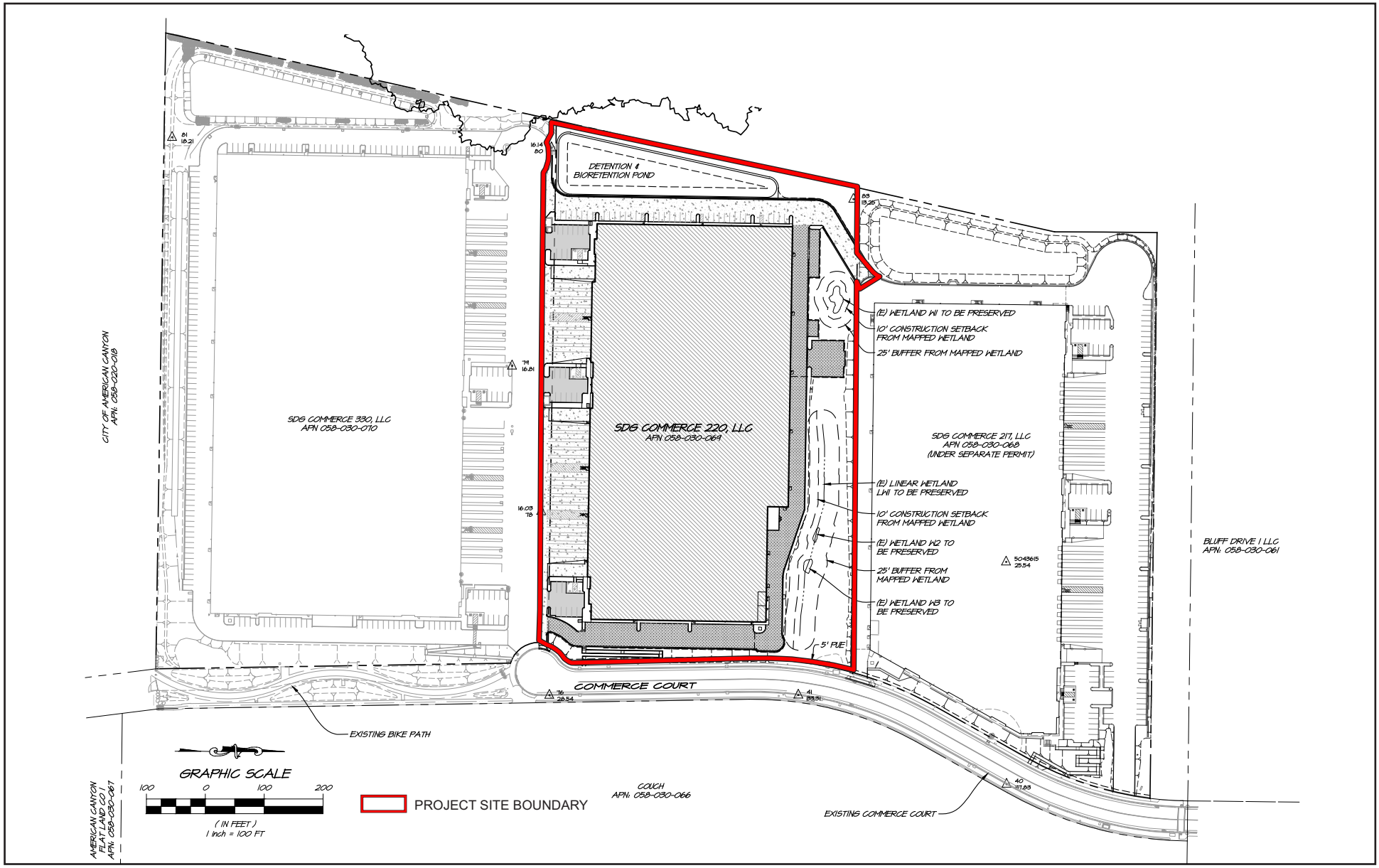
Operation and Employment

The building would be designed to accommodate approximately three tenants. Typical hours of operation for wine distribution and storage are 6:00 a.m. to 6:00 p.m., Monday through Friday and 6:00 a.m. to 12:00 a.m., Monday through Friday during peak seasonal months, typically June through November. It is anticipated that the project would employ approximately 35 full-time employees and 20 part-time employees working in up to three overlapping shifts.

Warehousing and storage of wine and other wine-related industries are not labor intensive, and the proposed uses for the building do not demand frequent client or user trips to the site. It is estimated that the proposed project would generate approximately 2 to 4 client or visitor trips per day, likely during off-peak season and during normal working hours. Forklifts used within the building would be electrically powered.

Site Access, Circulation, and Parking

Vehicular and truck access would be taken from one driveway on Commerce Court that would be shared with the SDG Commerce 330 project. Drive aisles would be provided around the full perimeter of the building to support emergency ingress and egress.



Source: RSA+ Consulting Civil Engineers + Surveyors. 07/21/2023.

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Exhibit 2-4a
Site Plan

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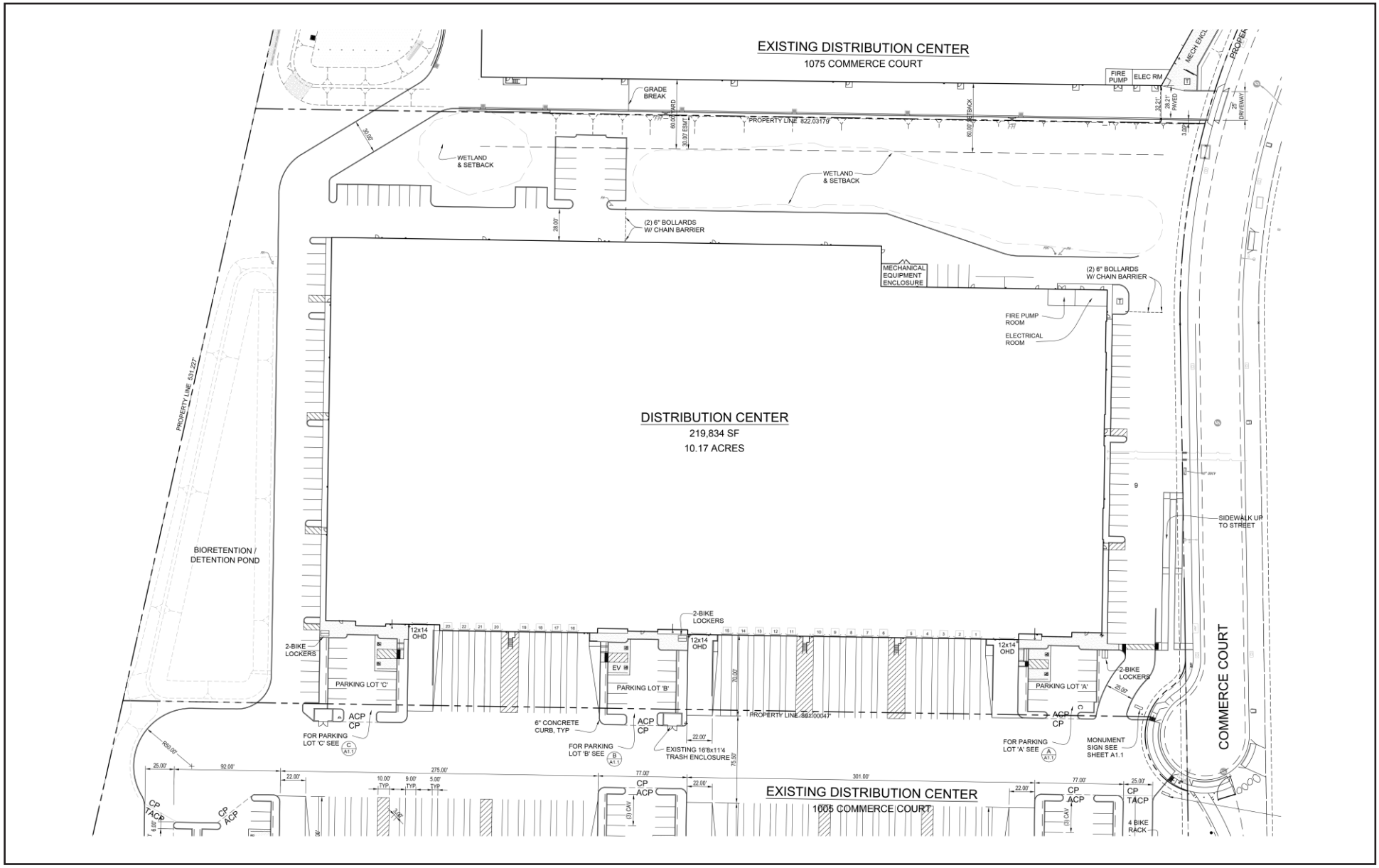

Source: Ward Architects, Inc. 08/01/2023.

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Exhibit 2-4b
Site Plan

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View of project rendering looking northwest from southeast corner.

Source: Stravinsky Development Group.

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Exhibit 2-5
Conceptual Illustration

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A total of 134 car spaces and 23 truck parking stalls would be provided. Of these parking stalls, five would be designated for handicap access and one would be a compact space. There would be five electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE stall, and 19 electric vehicle (EV) capable stalls. Per the 2022 California Green Building Standards Code (CALGreen), nonresidential developments with 101–150 parking spaces must provide at least 17 EV capable spaces and at least four EV capable spaces provided with EVSE (Title 24, Part 11, Chapter 5, Table 5.106.5.3.1). The proposed project would meet these requirements.

Pedestrian circulation throughout the project site would be provided in accordance with the California Disabled Accessibility Guidebook (CalDAG) and Americans with Disabilities Act (ADA) recommendations and standards Short and long-term bicycle parking would be provided in accordance with current CALGreen codes. The proposed project would provide three, long-term bicycle lockers, each of which would accommodate up to four bicycles, for a total of 12 bicycle parking spaces (located adjacent to each office area). Short-term bicycle parking would also be similarly located. The proposed 12 bicycle parking spaces would be five more than required per the City's Zoning Ordinance Chapter 19.14.090 (A), Bicycle Parking Requirements.

Lighting

The proposed project would include exterior lighting on the building and parking lot poles on the north side of the property. Parking lot lighting would be consistent with City of American Canyon municipal code requirements Section 19.21.030(M). The 30-foot-tall lights would be "shoebox" dimmable light-emitting diode (LED) fixtures designed to be dark-sky friendly by directing the light toward the ground to prevent glare to surrounding properties.

Signage

One monument sign is proposed, (approximately 8 feet wide by 5 feet tall) located at the entry to the site from Commerce Court.

Landscaping

Landscaping would be provided around the site perimeter on the east, north and partial west sides and within parking islands throughout (Exhibit 2-6). Mechanical equipment would be placed on the north side of the building behind a 6-foot-high color slatted chain-link fence. The irrigation system would be connected to the City's reclaimed water system, thus eliminating the use of the City's potable water for landscape purposes. In addition, the warehouse would be dual plumbed with recycled water for toilet flushing inside the warehouse building.

Storm Drainage

Stormwater runoff would be directed via an on-site storm drain system into a detention/bioretention pond located on the western side of the site. Roof drainage would be connected to the proposed detention/bioretention pond via the on-site storm drain system surrounding the building by way of down spouts on the exterior of the building, which would be painted to blend-in with the building façade.

Wetland Areas

The two existing, on-site wetland areas would be preserved in place (see Exhibit 2-4b).

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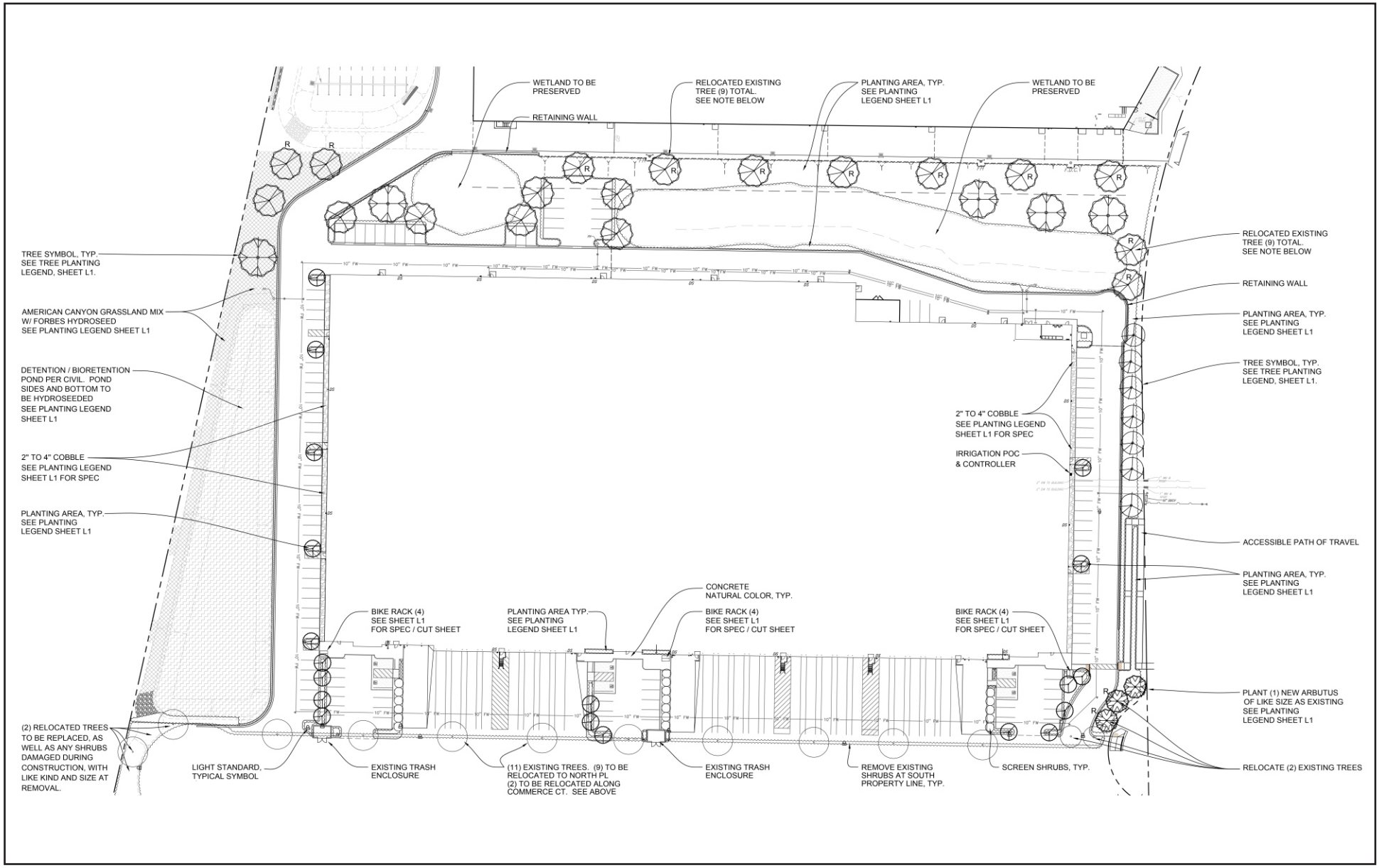

Source: Ward Architects, Inc. 08/01/2023.

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Exhibit 2-6
Landscaping Plan

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Utilities

Water

The City of American Canyon would provide potable and recycled water service to the proposed project. Potable and recycled water infrastructure currently exists within Commerce Court. Service laterals would extend from the Commerce Court water lines to project building.

Wastewater

The City of American Canyon would provide wastewater collection and treatment service to the proposed project. Sewer infrastructure currently exists within Commerce Court. Connection back to the existing City sewer infrastructure in Commerce Court would be made through the existing sanitary sewer system and lift station that was previously designed and constructed on the Commerce 330 site for future shared use with the proposed project.

Electricity

Pacific Gas and Electric Company (PG&E) would deliver electricity to the proposed project. Electric infrastructure currently exists within Commerce Court. Service laterals would extend from the Commerce Court facilities to project buildings. No natural gas would be used. Solar would be installed on the building roof top and would produce an estimated 235,000 kilowatt-hour (kWh) per year. The intent of the solar system is to supplement the power consumed by items such as exterior lighting, parking lot lights, interior warehouse lighting and a portion of the building's refrigeration system.

Telecommunications Services

Telephone service provided by AT&T would be extended from the existing underground infrastructure in the Commerce Court right-of-way to the electrical room located in the northeast corner of the building.

Off-site Improvements

A small portion of the development extends beyond the parcel boundaries to the north and south of the project site in order to provide parking lot and circulation connectivity. The properties to the north and south of the project site are under related ownership as the proposed project and the potential impacts associated with development and site disturbance on those parcels was analyzed in previous California Environmental Quality Act (CEQA) documentation.[1,2]

Construction

Construction would occur in a single phase, lasting approximately 11 months. For this analysis, construction is assumed to start in September 2024. During the construction phase, 12 to 24 workers would be at the site, with a maximum near to 80 and a minimum of one. Construction hours would be from 7:00 a.m. to 6:00 p.m. Monday through Friday. Construction of the concrete building slab,

[1] City of American Canyon. 2021. Commerce 217 Distribution Center Project Initial Study/Mitigated Negative Declaration. Website: https://ceqanet.opr.ca.gov/2020120302/2. Accessed August 16, 2023.
[2] City of American Canyon. 2018. SDG 330 Wine Warehouse Project Initial Study/Mitigated Negative Declaration. Website: https://ceqanet.opr.ca.gov/2018112067. Accessed August 16, 2023.

wall panels and large concrete paving pours would be required to be performed during nighttime hours starting no earlier than 12:00 a.m. Pre-notification of these night pour dates and times would be provided to the City and property owners in the vicinity. Typical construction equipment that would be used at the site would include self-loading dirt scraper, bulldozer, motor grader, compactor, roller, water truck, backhoe, excavator, trencher, drilling auger, front end loader, paving machine, laser screed, concrete finishing trowels, tractor, crane, forklift, generator, man lift, scissor lift, welding machine, and light tower. Less than 1,000 cubic yards of imported soil would be required for grading.

2.4 - Project Objectives

The objectives of the proposed project are to:

1. Positively contribute to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base.
2. Develop land to its highest and best use.
3. Continue the buildout of the City of American Canyon in accordance with the General Plan.
4. Meet regional demand for wine warehousing by adding to the inventory of this space.
5. Develop nonresidential uses on the project site that are compatible with the City of American Canyon's Water Reclamation Facility and the Napa County Airport.
6. Maximize the efficient use of land by developing an industrial project at the upper end of the allowable Floor Area Ratio range.
7. Complete the buildout of the SDG Commerce development.
8. Protect North Slough by employing stormwater pollution prevention measures during construction and operation.
9. Provide development fees to the American Canyon Fire Protection District to fund the development of a new fire station.

2.5 - Intended Uses of this Draft EIR

This Draft EIR is being prepared by the City of American Canyon to assess the potential environmental impacts that may arise in connection with actions related to implementation of the proposed project. Pursuant to CEQA Guidelines Section 15367, the City of American Canyon is the lead agency for the proposed project and has discretionary authority over the proposed project and project approvals. The Draft EIR is intended to address all public infrastructure improvements and all future development proposals that are within the parameters of the proposed project.

2.5.1 - Discretionary and Ministerial Actions

Discretionary approvals and permits are required by the City of American Canyon for implementation of the proposed project. The proposed project would require the following discretionary approvals and actions, including:

- Conditional Use Permit

Subsequent ministerial actions would be required for the implementation of the proposed project including issuance of grading and building permits.

2.5.2 - Responsible and Trustee Agencies

A number of other agencies in addition to the City of American Canyon will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This Draft EIR will provide environmental information to these agencies and other public agencies, which may be required to grant approvals or coordinate with other agencies, as part of project implementation. These agencies may include, but are not limited to, the following:

- United States Army Corps of Engineers (USACE)
- California Department of Fish and Wildlife (CDFW)
- San Francisco Bay Regional Water Quality Board (San Francisco Bay RWQCB)
- County of Napa
- Napa County Airport Land Use Commission (ALUC)
- Napa Valley Unified School District (NVUSD)

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CHAPTER 3: ENVIRONMENTAL IMPACT ANALYSIS

Organization of Issue Areas

This Draft Environmental Impact Report (Draft EIR) provides analysis of impacts for those environmental topics where it was determined in the Notice of Preparation (NOP), or through subsequent analysis, that the proposed project would result in "potentially significant impacts." Sections 3.1 through 3.14 discuss the environmental impacts that may result with approval and implementation of the proposed project.

Issues Addressed in this EIR

The following environmental issues are addressed in Chapter 3:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

Level of Significance

Determining the severity of project impacts is fundamental to achieving the objectives of the California Environmental Quality Act (CEQA). CEQA Guidelines Section 15091 requires that decision makers mitigate, as completely as is feasible, the significant impacts identified in the Draft EIR. If the EIR identifies any significant unmitigated impacts, CEQA Guidelines Section 15093 requires decision makers in approving a project to adopt a statement of overriding considerations that explains why the benefits of the project outweigh the adverse environmental consequences identified in the EIR.

The level of significance for each impact examined in this Draft EIR was determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds were developed using criteria from the CEQA Guidelines and checklist; State, federal, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

Impact Analysis and Mitigation Measure Format

The format adopted in this Draft EIR to present the evaluation of impacts is described and illustrated below.

Summary Heading of Impact

Impact AES-1:	**An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact number identifies the section of the report (AES for Aesthetics, Light, and Glare in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.**

Impact Analysis

A narrative analysis follows the impact statement.

Level of Significance Before Mitigation

This section identifies the level of significance of the impact before any mitigation is proposed.

Mitigation Measures

In some cases, following the impact discussion, reference is made to State and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are set off with a summary heading and described using the format presented below:

MM AES-1 Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact it is associated with (**AES-1** in this example); mitigation measures are numbered sequentially.

Level of Significance After Mitigation

This section identifies the resulting level of significance of the impact following mitigation.

Abbreviations used in the mitigation measure numbering are:

Code	Environmental Issue
AES	Aesthetics, Light, and Glare
AIR	Air Quality
BIO	Biological Resources
CUL	Cultural Resources and Tribal Cultural Resources
ENER	Energy
GEO	Geology, Soils, and Seismicity
GHG	Greenhouse Gas Emissions

Code	Environmental Issue
HAZ	Hazards and Hazardous Materials
HYD	Hydrology and Water Quality
LU	Land Use
NOI	Noise
PUB	Public Services
TRANS	Transportation
UTIL	Utilities and Service Systems

Cumulative Impacts

The discussion of cumulative impacts in this subsection analyzes the cumulative impacts of the proposed project, taken together with other past, present, and reasonably foreseeable future projects producing related impacts. The goal of this analysis is to determine whether the overall long-term impacts of all such projects would be cumulatively significant and to determine whether the project itself would cause a "cumulatively considerable" incremental contribution to any such cumulatively significant impacts. To determine whether the overall long-term impacts of all such projects would be cumulatively significant, the analysis generally considers the following:

- The area in which impacts of the proposed project would be experienced.
- The impacts of the proposed project that are expected in the area.
- Other past, proposed, and reasonably foreseeable projects that have had or are expected to have impacts in the same area.
- The impacts or expected impacts of these other projects.
- The overall impact that can be expected if the individual impacts from each project are allowed to accumulate.

"Cumulative impacts" refers to two or more individual impacts that, when considered together, are considerable, or that compound or increase other environmental impacts (CEQA Guidelines § 15355). Cumulative impacts can result from individually minor but collectively significant impacts taking place over time (40 Code of Federal Regulations [CFR] 1508.7). If the analysis determines that the potential exists for the project, taken together with other past, present, and reasonably foreseeable future projects, to result in a significant or adverse cumulative impact, the analysis then determines whether the project's incremental contribution to any significant cumulative impact is itself significant (i.e., "cumulatively considerable"). The cumulative impact analysis for each individual resource topic is presented in each resource section of this Chapter immediately after the description of the direct project impacts and identified mitigation measures.

The cumulative impact analysis is guided by the requirements of CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact only occurs from impacts caused by the proposed project together with other projects. An EIR should not discuss impacts that do not result from the proposed project.
- When the combined cumulative impact from the increment associated with the proposed project and other projects is not significant, an EIR need only briefly explain why the impact is not significant; detailed explanation is not required.
- An EIR may determine that a project's contribution to a cumulative effect impact would be rendered less than cumulatively considerable if a project is required to implement or fund its fair share of mitigation intended to alleviate the cumulative impact.

The cumulative impact analysis relies on these principles as the basis for determining the significance of the proposed project's cumulative contribution to various impacts.

Table 3-1 lists the relevant cumulative projects considered for the environmental analysis.

Table 3-1: Cumulative Projects

Jurisdiction	Project	Location	Characteristics	Status
City of American Canyon	Giovannoni Logistics Center	Green Island Road/Devlin Road	2.4 million square-foot logistics center	Approved; not constructed
	SDG Commerce 217	1075 Commerce Court	217,294 square-foot wine warehouse	Approved; under construction
	Pacific Gas and Electric Company (PG&E) Napa Regional Center	500 Boone Road	99,503 square-foot maintenance and operations center on 24.5 acres	Approved; under construction
	Green Island Road Widening	Green Island Road between State Route (SR) 29 and a cul-de-sac	Reconstruction of roadway; addition of a two-way left-turn lane, curb, gutter, sidewalks; construction of the Napa Valley Vine Trail	Approved; not constructed
	Napa-Vallejo Waste Management Authority Construction and Demolition Debris Recycling Facility	South Kelly Road/Devlin Road (southwest quadrant)	Enclosed construction and demolition debris recycling facility on 9 acres	Awaiting application
	Napa Airport Corporate Center	South Kelly Road/Devlin Road (southeast quadrant)	300,000 square-foot business park on 35 acres	Approved; not constructed

Jurisdiction	Project	Location	Characteristics	Status
	Watson Ranch Specific Plan	East of Napa Junction	1,253 market rate dwelling units; 186 affordable housing units; 50 live/work units; 93,500-square-feet commercial; 100-room hotel	Approved; under construction
	Broadway District Specific Plan	SR-29 corridor from the southern city limit to Green Island Road	1,200 dwelling units; 840,000 square feet of nonresidential uses within 300 acres	Approved; under Construction
Napa County	Sentinels of Freedom Property	West Napa Logistics; South of Napa County Airport	Two warehouses (224,593 square feet and 217,294 square feet) on 20.56 acres	Awaiting application
	Hess Collection/Laird Family General Plan Amendment and Rezoning	East of SR-29 from S. Kelly Road to Paoli Loop Road	4.5 million square feet industrial project on 279 acres	Application in process
Source: City of American Canyon. 2024.				

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3.1 - Aesthetics, Light, and Glare

3.1.1 - Introduction

This section describes the existing aesthetics, light, and glare setting and potential effects from project implementation on visual resources and the site and its surroundings. Descriptions and analysis in this section are based on-site reconnaissance conducted by FirstCarbon Solutions (FCS), as well as review of the City of American Canyon General Plan.

No public comments pertaining to aesthetics, light, and glare were received in response to the Notice of Preparation (NOP).

3.1.2 - Environmental Setting

Regional Setting

American Canyon is located in southern Napa County between the east bank of the Napa River and the Sulfur Springs Mountains foothills. State Route (SR) 29—known locally as Broadway Street—bisects the City from north to south and serves as the primary commercial corridor. Residential uses are generally located in the southern portion of the City, with commercial and industrial uses located in the northern portion near the Napa County Airport. American Canyon is characterized by a contemporary, low-rise, suburban appearance, with most development having occurred within the last 50 years.

Project Site

The project site contains undeveloped land (Exhibit 2-3). The project site gently slopes downward from east to west and is approximately 13 to 25 feet above mean sea level. A linear wetland and another isolated wetland are located within the northern portion of the property. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk. The southern portion of the project site contains several soil stockpiles that are intended for use at the SDG Commerce 217 property during construction of that site's entitled wine distribution warehouse.

Surrounding Land Uses

West

A Eucalyptus grove and North Slough are located west of the project site. The American Canyon Water Reclamation Facility is located west of North Slough.

North

An undeveloped parcel entitled for a wine distribution warehouse known as SDG Commerce 217 is located north of the project site. This parcel totals 10.39 acres.

East

Commerce Court, a two-lane undivided roadway, forms the eastern boundary of the project site. A Eucalyptus grove is located east of Commerce Court.

South

A wine distribution warehouse known as SDG Commerce 330 is located south of the project site. This parcel totals 15.24 acres. The Napa Junction Magnet Elementary School, Wetlands Edge Park, and residential uses are located to the south and are accessed from Eucalyptus Drive.

Light and Glare

The project site does not currently contain any sources of light and glare. Parking lot lights that employ full cut-off fixtures are present at the adjoining Commerce SDG 330 warehouse. Street lighting is present along Commerce Court.

3.1.3 - Regulatory Framework

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to aesthetics, light, and glare:

Goal 1B Provide for the orderly development of American Canyon that maintains its distinctive character.

Goal 1C Create a pattern and character of land use development that establishes American Canyon as a distinct "place" differentiated from adjacent urban areas, maintains a semi-rural character, and respects the environmental setting.

Objective 1.4 Provide for a pattern of development that (a) establishes distinct neighborhoods, districts, places of community activity and culture and open spaces that are interlinked and promote a cohesive image, (b) locates jobs, commerce, recreation, and other places of community activity within close proximity to all housing units, minimizing the need for vehicular use, (c) achieves a balance of uses to serve both sides of Highway 29, and (d) establishes an overall compact urban form surrounded by open space.

Objective 1.5 Maintain the character and quality of the natural environmental resources of the City and protect the population and development from the adverse impacts of environmental hazards.

Policy 1.22.4 Require that development be designed to achieve a high level of quality and compatibility with existing uses including the consideration of the following:

a. Architectural treatment of all building elevations;
b. Use of extensive landscape along the primary street frontages and parking lots; and

c. Enclosure of storage areas visible from principal highways (including Highway 29) and peripheral residential and commercial districts with decorative screening or other elements.

Policy 1.22.5 Require that industrial areas developed as research and development and office-oriented business parks be designed to convey a unified character by consideration of Policy 1.22.4 and the following:

a. Inclusion of pedestrian walkways, arcades, and/or other visual elements to interconnect individual buildings;
b. Differentiation of building façades by materials, color, architectural details and modulation of building volumes;
c. Incorporation of extensive landscape in parking areas, along building frontages, and other public areas;
d. Use of consistent and well-designed public and informational signage; and
e. Installation of elements that define the key entries to the industrial district.

Municipal Code 19.21.020(M), Lighting

Municipal Code Section 19.21.020(M), Lighting, requires that public parking with three or more vehicle parking spots shall have lighting facilities capable of providing sufficient illumination at every point of the parking area and that a lighting study may be required by the community development director. Further, all parking area illumination, including security lighting, shall be designed to reflect away from adjoining properties and right-of-way.

Municipal Code 19.41, Design Permits

A design permit application must be approved by the community development director or planning commission prior to building construction or alteration, including commercial structures and industrial structures. The purpose of the design permit is to provide for a review process that promotes excellence in site planning and architectural design, consistent with General Plan design policies, encourages the harmonious appearance of buildings and sites, ensures that new and modified uses and development are compatible with existing and potential uses in the surrounding area, and produce an environment of stable, desirable character.

Municipal Code 19.42, Conditional Use Permits

A conditional use permit application shall incorporate concurrent applications, such as a design permit application when applicable. The Planning Commission is the approval authority for a conditional use permit application unless the application is subject to Municipal Code 19.01(C,D), Relationship to other Regulations and Requirements.

Municipal Code 19.01(C,D), Relationship to other Regulations and Requirements

A discretionary application that is subject to a CEQA environmental review that requires a statement of overriding considerations shall be approved by the City Council.

3.1.4 - Methodology

FCS evaluated potential aesthetics, light, and glare impacts through site reconnaissance conducted in November 2022, as well as review of the City of American Canyon General Plan and project plans.

3.1.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether impacts to aesthetics are significant environmental effects. Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista? (Refer to Section 7, Effects Found not to be Significant).

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway? (Refer to Section 7, Effects Found not to be Significant).

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

3.1.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Visual Character

Impact AES-1:	**The proposed project, located in a non-urbanized area, would not substantially degrade the existing visual character or the quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly-accessible vantage point.)**

Impact Analysis

Per Public Resources Code Section 21071, an urbanized area includes an incorporated city that has a population of at least 100,000 persons. The project site is located within the City of American Canyon, which has a population of 21,338 as of January 1, 2023[1] and is therefore not considered an urbanized area. Public views of the site are limited to those as seen from Commerce Court and partially obscured views as seen from portions of Napa Junction Magnet Elementary School.

The project site is undeveloped and slopes gently downward from east to west. Site elevation ranges from 13 to 25 feet above mean sea level. The southern portion of the project site contains a large

[1] California Department of Finance. 2023. Report E-1: Population Estimates for Cities, Counties, and the State, January 1, 2022 and 2023. Website: https://dof.ca.gov/forecasting/demographics/estimates-e1/. Accessed November 6, 2023.

soil mound that is intended for use on the SDG Commerce 217 property during construction of that site's entitled wine distribution warehouse. A linear wetland and another isolated wetland are located within the northern portion of the property. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk.

The project vicinity is characterized by industrial development and eucalyptus groves. The industrial development is primarily warehouses. The project is bounded on the north by the SDG Commerce 217 Wine Storage and Distribution Center currently under construction. To the west is an 11.23-acre parcel which remains unimproved with a eucalyptus tree grove and a wire fence; to the south is the SDG Commerce 330 Distribution Center; to the east is a 68-foot-wide City Public Access and Utility Easement within the Commerce Court Extension; to the east of this easement is a 40-acre parcel that is improved with a mobile home, dirt/gravel roads, and a Paintball Jungle recreational business consisting of various sheds and lean-to structures and wire fences.

The proposed project consists of the development of a 219,834-square foot wine warehouse. The proposed project would have a floor area ratio (FAR) of 0.496 (Exhibit 2-5 and Exhibit 3.1-1).

Construction of the project would temporarily employ construction-related equipment. Because construction is a temporary activity it is not expected to significantly impact visual character or quality of the site and its surroundings.

The proposed warehouse would be similar in appearance to other similar structures in the Green Island Business Park, particularly the adjacent SDG Commerce 330 building to the south and the future SDG Commerce 217 building to the north. The proposed warehouse would employ earth-tone colors and would have perimeter concrete tilt wall panels with varying parapet heights, as well as accent spandrel glass/metal canopy features around corners of the buildings to provide additional modulation. The average roof height of the building would be approximately 35 feet and portions of the building's exterior walls would have varying heights to provide architectural relief. The proposed use would be consistent with the City of American Canyon General Plan land use designation of "Commercial Recreation" and zoning designation of "Recreation" for the project site and would be similar to and compatible with surrounding wine distribution warehouse uses (See Section 3.9, Land Use and Planning for further discussion). Furthermore, approval by the community development director or planning commission of a design permit for the project is required by Municipal Code 19.41.030, which requires, among other things, review of site plans and architectural design, General Plan consistency, and compatibility with existing and potential uses in the surrounding area. Therefore, the proposed project would not substantially degrade the existing visual character or the quality of public views of the site and its surroundings. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

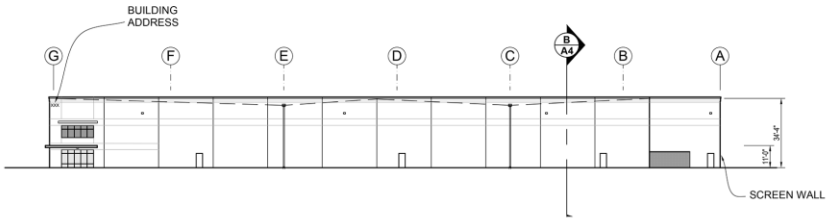
Light and Glare

Impact AES-2: The proposed project would not create a new source of substantial light or glare which could adversely affect day or nighttime views in the area.

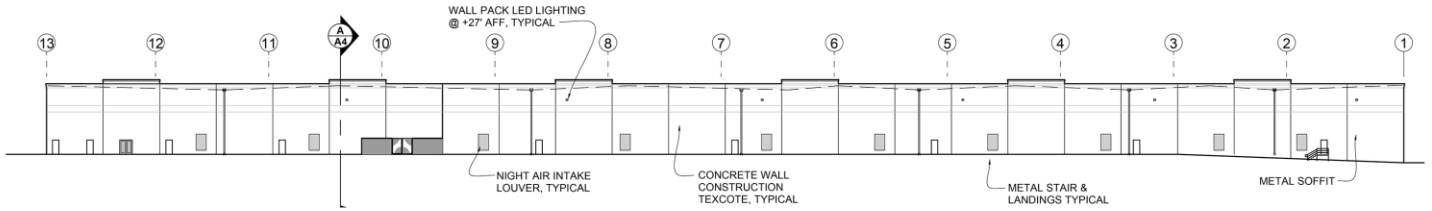
Impact Analysis

The project site does not currently contain any existing sources of light and glare. The adjacent SDG Commerce 330 property contains parking lot lights that employ full cut-off fixtures.

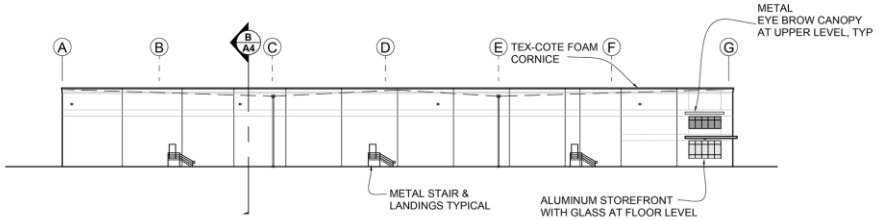
The development of the proposed project would result in the installation of new sources of light and glare on the project site during both construction and operation. Construction lighting would be minimal and temporary; operational exterior lighting would include building mounted light fixtures and pole-mounted light fixtures within parking areas surrounding the building.



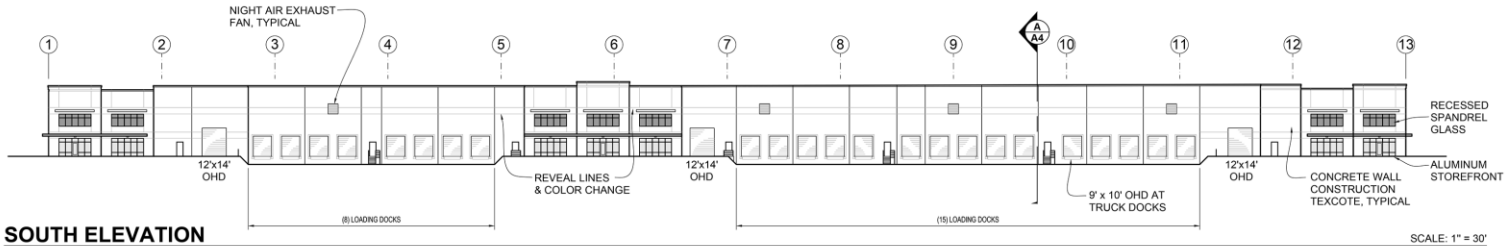
EAST ELEVATION SCALE: 1" = 30'



NORTH ELEVATION SCALE: 1" = 30'



WEST ELEVATION SCALE: 1" = 30'



SOUTH ELEVATION SCALE: 1" = 30'

Source: Industrial and Commercial Contractors, LP. Ward Architects, Inc. 01/25/2023.

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Parking lot lighting would be consistent with requirements of the City of American Canyon Municipal Code 19.21.020(M), including direction of lighting away from adjoining properties and right-of-way. The lights would be "shoebox" fixtures, typically 30 feet in height, which are designed with dimmable light-emitting diode (LED) fixtures that direct light toward the ground to reduce glare to surrounding properties. A photometric study would be prepared to analyze the light pole spacing to maximize light coverage while minimizing excessive light spillage off-site. Illuminated signage may also be employed.

A conditional use permit application submittal and approval would be required per Municipal Code Section 19.05.020. The conditional use permit application would be reviewed per the procedures and general standards outlined in Municipal Code Chapter 19.42, which include consistency with the standards of the General Plan and applicable zoning district as well as compliance with applicable policies of the Napa County Airport Land Use Compatibility Plan. With the compulsory implementation of applicable municipal codes, including, but not limited to design permit approval, impacts related to light and glare would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.1.7 - Cumulative Impacts

The geographic scope of the cumulative aesthetics, light, and glare analysis is the 0.25-mile radius surrounding the project site. This is the area within view of the project site and, therefore, the area most likely to experience cumulative changes in visual character or experience cumulative light and glare impacts.

Several of the projects listed in Table 4-1 are immediately adjacent to or within 0.25 mile of the project site (e.g., SDG Commerce 217).

The project site and the surrounding area have long been planned to accommodate industrial uses and are isolated and separate from the residential areas of the City. The existing surrounding uses are large industrial uses. The City of American Canyon General Plan designates the project site as "Commercial Recreation," and the American Canyon Zoning Ordinance zones the project site as "Recreation." Both land use designations permit the types of end uses envisioned by the proposed project. Other existing, approved, and reasonably foreseeable future developments would similarly be required to comply with applicable land use and zoning.

The project as proposed would be compatible with surrounding industrial uses and would be consistent with the City of American Canyon General Plan land use designation and zoning for the project site. A Design Permit would be required from the City to approve the specific building and site design, including building height. Other past projects, present projects under construction, and reasonably foreseeable projects in the surrounding area would be subject to similar landscaping and design requirements. Therefore, the proposed project, in conjunction with other past, present, and

reasonably foreseeable projects, would not result in cumulatively significant visual character impacts.

The past, present, and reasonably foreseeable developments near the project site have contributed to—and will continue to contribute to—ambient light and glare in the project vicinity. The proposed project would install new sources of light and glare on the project site from exterior building lighting, security lighting, and lights and glare associated with vehicles accessing the project site. Compulsory compliance with Municipal Code lighting and design permit requirements would ensure that light and glare would be minimized to the extent feasible. Other past, present, and reasonably foreseeable future developments in the project vicinity that involve the installation of new exterior lighting fixtures have been and would be required to implement similar standard measures to prevent light spillage. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects in the applicable geographic area, would not have a cumulatively significant impact related to light and glare.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.2 - Air Quality

This section describes existing air quality conditions regionally and locally as well as the relevant regulatory framework. This section also evaluates the possible impacts related to air quality that could result from implementation of the project. Information included in this section is based on project-specific air quality modeling results utilizing California Emissions Estimator Model (CalEEMod) Version 2022.1 and the United States Environmental Protection Agency (EPA) American Meteorological Society Regulatory Model (AERMOD) air dispersion model (Version 22112). Complete modeling output is provided in Appendix B.

The following public comments were received during the Environmental Impact Report (EIR) scoping period related to air quality.

- Requests that the Department of Justice best practices and mitigation measures for warehouses[1] be incorporated into the proposed project.
- Concern regarding the project's diesel truck emissions and associated health impacts.

3.2.1 - Environmental Setting

Regional Geography and Climate

Air quality is affected by the rate and location of pollutant emissions and by climatic conditions that influence the movement and dispersion of pollutants. Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients, along with local and regional topography, influence the relationship between air pollutant emissions and air quality.

The project site is in the San Francisco Bay Area Air Basin (SFBAAB), which consists of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma Counties. SFBAAB covers approximately 5,540 square miles of complex terrain, consisting of coastal mountain ranges, inland valleys, and the San Francisco Bay. The SFBAAB is generally bounded on the west by the Pacific Ocean, on the north by the Coast Ranges, and on the east and south by the Diablo Range.

The climate within the SFBAAB is dominated by a strong, semi-permanent, subtropical high-pressure cell over the northeastern Pacific Ocean. Climate is also affected by the adjacent oceanic heat reservoir's moderating effects. Mild summers and winters, moderate rainfall and humidity, and daytime onshore breezes characterize regional climatic conditions in the San Francisco Bay Area (Bay Area). In summer, when the high-pressure cell is strongest and farthest north, fog forms in the morning and temperatures are mild. In winter, when the high-pressure cell is weakest and farthest south, occasional rainstorms occur.

[1] California Department of Justice. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf. Accessed November 28, 2023.

Winter daytime temperatures in the SFBAAB typically average in the mid-50°F (degrees Fahrenheit), with nighttime temperatures averaging in the low 40°F. Summer daytime temperatures typically average in the 70°F, with nighttime temperatures averaging in the 50°F. Precipitation varies in the region, but in general, annual rainfall is lowest in the coastal plain and inland valley, higher in the foothills, and highest in the mountains.

Air Pollutant Types, Sources, and Effects

Criteria Air Pollutants

Concentrations of criteria air pollutants are used as indicators of air quality conditions. Air pollutants are termed criteria air pollutants if they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. According to the EPA, criteria air pollutants are ozone, particulate matter (PM_{10} and $PM_{2.5}$), nitrogen dioxide (NO_2), carbon monoxide (CO), lead, and sulfur dioxide (SO_2). Table 3.2-1 provides a summary of the types, sources, and effects of criteria air pollutants.

Table 3.2-1: Description of Criteria Pollutants of National and California Concern

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Ozone	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO_X), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_X) are mobile sources (on-road and off-road vehicle exhaust).	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.
Particulate matter (PM_{10}) Particulate matter ($PM_{2.5}$)	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation-related sources are from	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
		vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	
Nitrogen dioxide (NO_2)	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_X (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_X is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and result in particulate matter (PM) related health effects.	NO_X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO_X emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.
Carbon monoxide (CO)	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood-burning, and natural sources.	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.
Sulfur dioxide (SO_2)	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_X) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human caused sources include fossil fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
		below the maximum standards.	
Lead (Pb)	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.

Sources:

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Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations,

painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70 the diameter of a human hair) and thus is a subset of PM with aerodynamic diameters equal to or less than 2.5 microns ($PM_{2.5}$). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.[2]

TACs are different from criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

TACs include both organic and inorganic chemical substances. While DPM is a main source, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. People exposed to toxic air pollutants at sufficient concentrations and durations may have an increased chance of developing cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems.[3]

Air Quality

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features. Atmospheric conditions such as wind speed, wind direction, and air temperature inversions interact with the physical features of the landscape to determine the movement and dispersal of air pollutant emissions and, consequently, their effect on air quality.

Regional Air Quality

The Bay Area Air Quality Management District (BAAQMD) is the regional agency regulating air quality within the nine-county SFBAAB.

Air Pollutant Standards and Attainment Designations

Air pollutant standards have been adopted by the EPA and the California Air Resources Board (ARB) for the following six criteria air pollutants that affect ambient air quality: ozone, NO_2, CO, SO_2, lead, and PM, which is subdivided into two classes based on particle size: PM_{10} and $PM_{2.5}$. These air pollutants are called “criteria air pollutants” because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. California has also established standards for TACs such as visibility-reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride. H_2S is regulated as a nuisance based on its odor detection level. If the standard were based on adverse health effects, it would be set at a much higher level. Vinyl chloride is a TAC

[2] California Air Resources Board (ARB). Inhalable Particulate Matter and Health ($PM_{2.5}$ and PM_{10}). Website: https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health. Accessed November 29, 2023.

[3] United States Environmental Protection Agency (EPA). Health and Environmental Effects of Hazardous Air Pollutants. Website: https://www.epa.gov/haps/health-and-environmental-effects-hazardous-air-pollutants. Accessed November 29, 2023.

and currently regulated as one, but California established a need to regulate it with a health-based "criteria" prior to the establishment of their toxics programs. Table 3.2-2, below, shows the federal and State air quality standards for various components.

Table 3.2-2: Federal and State Air Quality Standards in the SFBAAB

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]
Ozone	1 Hour	0.09 ppm	—
	8 Hour	0.070 ppm	0.070 ppm[f]
Nitrogen dioxide[b] (NO_2)	1 Hour	0.18 ppm	0.100 ppm
	Annual	0.030 ppm	0.053 ppm
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
Sulfur dioxide[c] (SO_2)	1 Hour	0.25 ppm	0.075 ppm
	3 Hour	—	0.5 ppm
	24 Hour	0.04 ppm	0.14 (for certain areas)
	Annual	—	0.030 ppm (for certain areas)
Lead[e]	30-day	1.5 µg/m^3	—
	Quarter	—	1.5 µg/m^3
	Rolling 3-month average	—	0.15 µg/m^3
Particulate matter (PM_{10})	24 Hour	50 µg/m^3	150 µg/m^3
	Mean	20 µg/m^3	—
Particulate matter ($PM_{2.5}$)	24 Hour	—	35 µg/m^3
	Annual	12 µg/m^3	12.0 µg/m^3
Visibility-reducing particles	8 Hour	See note below[d]	
Sulfates	24 Hour	25 µg/m^3	—
Hydrogen sulfide	1 Hour	0.03 ppm	—
Vinyl chloride[e]	24 Hour	0.01 ppm	—

Notes:
µg/m^3 = micrograms per cubic meter
30-day = 30-day average
Annual = Annual Arithmetic Mean
ppm = parts per million (concentration)
Quarter = Calendar quarter

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect public health. All standards listed are primary standards except for 3-hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour nitrogen dioxide national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).

Air Pollutant	Averaging Time	California Standard	Federal Standarda

[c] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 parts per billion (ppb). The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility-reducing particles: In 1989, the ARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the Statewide and Lake Tahoe Air Basin standards, respectively.

[e] The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for implementing control measures at levels below the ambient concentrations specified for these pollutants.

[f] The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard went into effect 60 days after publication the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015, and became effective on December 28, 2015.

Source: California Air Resources Board (ARB). California Ambient Air Quality Standards. Website: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed November 29, 2023.

California Air Resources Board (ARB). National Ambient Air Quality Standards. Website: https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards. Accessed November 29, 2023.

Air quality monitoring stations operated by the ARB and BAAQMD measure ambient air pollutant concentrations in the SFBAAB. In general, the SFBAAB experiences low concentrations of most pollutants compared to federal or State standards.

Both the EPA and ARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. These designations identify the areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. "Attainment" status refers to those regions that are meeting federal and/or State standards for a specified criteria pollutant. "Nonattainment" refers to regions that do not meet federal and/or State standards for a specified criteria pollutant. "Unclassified" refers to regions with insufficient data to determine the region's attainment status for a specified criteria air pollutant. Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the 3-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

Air Pollutant Standards and Attainment Designations

Table 3.2-3 shows the current attainment designations for the SFBAAB. The SFBAAB is designated as nonattainment for the State ozone, PM_{10}, and $PM_{2.5}$ standards and the national ozone and $PM_{2.5}$ standards. Ozone and fine particle pollution, or $PM_{2.5}$, are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily a problem in the summer, and fine particle pollution in the winter.

Table 3.2-3: Attainment Status

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	N/A
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Nonattainment	Nonattainment
Sulfates	Attainment	N/A
Hydrogen Sulfates	Unclassified	N/A
Visibility-reducing Particles	Unclassified	N/A
Lead	N/A	Attainment

Notes:
CO = carbon monoxide
N/A = information not available
NO_2 = nitrogen dioxide
PM_{10} = particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$ = particulate matter including dust, 2.5 micrometers or less in diameter
SO_2 = sulfur dioxide
Source: Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. January 5. Website: http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status. Accessed November 29, 2023.

Local Air Quality

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. The air quality monitoring station closest to the project site is the Vallejo – 304 Tuolumne Street Air Monitoring Station, located approximately six miles south of the project site. All data, with the exception of data on $PM_{2.5,}$ are taken from this monitoring station. $PM_{2.5}$ data are available at and taken from Napa Valley College Air Monitoring Station, located approximately six miles north of the project site.

Table 3.2-4 summarizes the recorded ambient air data at the representative monitoring stations for the years 2020 through 2022, which is the most current data available at the time of this analysis. Monitoring results for CO and SO_2 are not included on the table since no recent monitoring data for Napa County or the SFBAAB was available for these pollutants. Generally, monitoring is not conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 3.2-4: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2020	2021	2022
Ozone	1 Hour	Maximum 1 Hour (ppm)	**0.096**	**0.099**	0.066
		Days > State Standard (0.09 ppm)	**1**	**1**	0

Air Pollutant	Averaging Time	Item	2020	2021	2022
	8 Hour	Maximum 8 Hour (ppm)	**0.078**	**0.072**	0.058
		Days > State Standard (0.07 ppm)	**1**	**1**	0
		Days > National Standard (0.070 ppm)	**1**	**1**	0
NO_2	Annual	Annual Average (ppm)	0.007	ID	0.006
	1 Hour	Maximum 1 Hour (ppm)	0.048	0.041	0.044
		Days > State Standard (0.18 ppm)	0	0	0
Inhalable coarse particles (PM_{10})	Annual	Annual Average (µg/m^3)	18.6	9.9	ID
	24 Hour	Maximum 24 Hour (µg/m^3)	**125**	22.9	ID
		Days > State Standard (50 µg/m^3)	**2**	0	ID
		Days > National Standard (150 µg/m^3)	0	0	ID
Fine particulate matter ($PM_{2.5}$)	Annual	Annual Average (µg/m^3)	12.1	8.8	8.2
	24 Hour	Maximum 24 Hour (µg/m^3)	**152.7**	32	21
		Days > National Standard (35 µg/m^3)	**12**	0	0

Notes:
µg/m^3 = micrograms per cubic meter
Bold = exceedance
ID = insufficient data
National Standard = National Ambient Air Quality Standard
ND = no data
NO_2 = nitrogen dioxide
PM_{10} = particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$ = particulate matter including dust, 2.5 micrometers or less in diameter
ppm = parts per million
State Standard = California Ambient Air Quality Standard (CAAQS)
Source: California Air Resources Board (ARB). 2023. iADAM: Top 4 Summary. Website: https://www.arb.ca.gov/adam/select8/sc8start.php. Accessed November 29, 2023.

Air Pollution Sensitive Receptors

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Residences, schools, day care centers, hospitals, nursing and convalescent homes, and parks are often identified as “sensitive receptors” since their occupants are sensitive to poor air quality. The groups identified with these land uses may have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than that for other land uses. BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, day care centers, hospitals, and senior-care facilities.

Project Vicinity

The closest off-site air pollution sensitive receptors near the project site include:

- A single-family residence approximately 850 feet east of the project site.

- A neighborhood approximately 1,600 feet south of the project site.
- Napa Junction Magnet Elementary School, approximately 1,200 feet south of the project site.

Project Site

The project site is vacant and no sensitive receptors currently exist on the project site.

Existing Air Pollutant Emissions

Project Site Vicinity

The primary sources of air pollutants (both criteria air pollutant and TACs) in the project site vicinity include the various other surrounding industrial properties, building-related energy use, and motor-related vehicle trips associated with the local business uses. The project site shares a driveway with a neighboring industrial warehouse immediately to the south. The project site is located approximately 4,800 feet west of State Route (SR) 29 and approximately 1.57 miles southeast of Napa County Airport. Other activities that result in emissions include space and water heating, landscape maintenance, and any surrounding industrial uses that can store, produce, decommission, or otherwise handle hazardous materials.

Project Site

The project site itself is currently vacant and does not produce any air pollutants.

3.2.2 - Regulatory Framework

Federal

Clean Air Act

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA. These are particulate matter, ground level ozone, CO, sulfur oxides, nitrogen oxides, and lead. The EPA calls these pollutants criteria air pollutants because it regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage are called secondary standards.[4] The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO_2)
- Lead
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Carbon monoxide (CO)
- Sulfur dioxide

[4] United States Environmental Protection Agency (EPA). 2014. Clean Air Act Requirements and History. Website: https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history. Accessed November 29, 2023.

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

The CAA also requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The federal CAA amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies.

EPA Emission Standards for New Off-Road Equipment

Before 1994, there were no standards to limit the amount of emissions from off-road equipment. In 1994, the EPA established emission standards for hydrocarbons, NO_X, CO, and PM to regulate new pieces of off-road equipment. These emission standards came to be known as Tier 1. Since that time, increasingly more stringent Tier 2, Tier 3, and Tier 4 (interim and final) standards were adopted by the EPA, as well as by the ARB. Each adopted emission standard was phased in over time. New engines built in and after 2015 across all horsepower sizes must meet Tier 4 final emission standards. In other words, new manufactured engines cannot exceed the emissions established for Tier 4 final emissions standards.

State

California Air Quality Control Plan (State Implementation Plan)

An SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to the ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms for attaining and maintaining air quality standards.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards. Local air districts and other agencies prepare SIP elements and submit them to the ARB for review and approval. The ARB will then forward SIP revisions to the EPA for approval and publication in the Federal Register. The BAAQMD 2017 Clean Air Plan is the SIP for the SFBAAB. The 2017 Clean Air Plan accommodates growth by projecting the growth in emissions based on different indicators. For example, population forecasts adopted by the Association of Bay Area Governments (ABAG) are used

to forecast population-related emissions. Through the planning process, emissions growth is offset by basin-wide controls on stationary, area, and transportation sources of air pollution.

California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation, and required additional actions beyond the federal mandates. The ARB administers the California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six federal standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the CCAA are more stringent than the federal CAA; therefore, consistency with the CCAA will also demonstrate consistency with the CAA.

Other ARB responsibilities include but are not limited to overseeing local air district compliance with California and federal laws; approving local air quality plans; submitting SIPs to the EPA; monitoring air quality; determining and updating area designations and maps; conducting basic research aimed at providing a better understanding between emissions and public well-being, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

California Health and Safety Code Section 39655 and California Code of Regulations Title 17 Section 93000 (Substances Identified as Toxic Air Contaminants)

The ARB identifies substances as TACs as defined in Health and Safety Code Section 39655 and listed in Title 17, Section 93000 of the California Code of Regulations, "Substances Identified As Toxic Air Contaminants." A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. In general, for those TACs that may cause cancer, there are thresholds set by regulatory agencies below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the State and federal governments have set ambient air quality standards. According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs for the State of California can be attributed to relatively few compounds, the most important of which is DPM from diesel-fueled engines.

California Low Emission Vehicle Program

The ARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 SIP. In 2012,

the ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.[5]

The most recent amendments in 2022, the Advanced Clean Cars II Regulations, apply to light-duty passenger car, truck and SUV emissions starting with the 2026 model year through 2035. It will take augmenting the State's already growing Zero-Emission Vehicle (ZEV) market and robust motor vehicle emission control rules to meet more aggressive tailpipe emissions standards and ramp up to 100 percent ZEVs. By 2035, all new passenger cars, trucks and SUVs sold in California will be zero emissions.

California On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.[6]

The Truck and Bus regulation (California Code of Regulations [CCR] § 2025) and amendments requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. The regulation applies to diesel-fueled trucks and buses with a gross vehicle weight of greater than 14,000 pounds to upgrade to 2010 or newer model year engines.

The California "Omnibus" regulation follows the completion of the Truck and Bus regulation with continued reduction of NO_X and PM emissions from heavy-duty gasoline and diesel on-road vehicles. This regulation updated standards, testing and compliance mechanisms for NO_X and PM emissions from heavy-duty on-road vehicles for model year 2024 through 2031. The rule will be implemented in phases with the standards becoming more stringent in 2027.

The Advanced Clean Truck Regulation and recently approved Advanced Clean Fleets (ACF) regulation are part of a holistic approach to accelerate a large-scale transition of zero-emission medium and heavy-duty vehicles. Together, these regulations will transition California's truck fleet to ZEV by 2045. The regulation has a manufacturer sales requirement; by 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b–3 truck sales, 75 percent of class 4–8 straight truck sales, and 40 percent of truck tractor sales. The rule also has a company and fleet requirement that gathers information about shipments and shuttle services. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

[5] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed November 29, 2023.

[6] California Air Resources Board (ARB). 2013. The California Almanac of Air Quality and Emissions—2013 Edition. Website: http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm. Accessed November 29, 2023.

The Heavy-Duty Inspection and Maintenance regulation was approved on December 9, 2021, with implementation to be phased in starting January 2023.[7] Its goal is to ensure that vehicles' emissions control systems are properly functioning when traveling on California's roadways. Trucks registered in other states would have to comply with the Clean Truck Check (HD I/M) regulation if they drive on California's roadways. HD I/M implements a program combining periodic vehicle testing requirements with other emissions monitoring techniques and expanded enforcement strategies. This will ensure that vehicles in need of emissions-related repairs are identified and will ensure that any needed repairs are performed. When fully implemented, the program will provide significant reductions in smog-forming and carcinogenic toxic air pollution necessary to achieve federal air quality mandates and healthy air in California's communities.

California In-Use Off-Road Diesel Vehicle Regulation

The In-Use Off-Road Diesel-Fueled Fleets (Off-Road Regulation) was enacted to accelerate retirement of older, higher-emitting engines, and increase purchases of newer, cleaner engines. It applies to all off-road, diesel, self-propelled equipment over 25 hp used in California that is not exempted under agricultural or cargo handling equipment provisions. This includes construction equipment such as excavators, loaders, backhoes, cranes, forklifts, oil-drilling rigs, and aircraft towing equipment.

The rule applies to fleets of construction equipment and establishes a 5-minute idling limit for off-road vehicles at construction sites as well as emission limits that become increasingly more stringent each year. These limits may be met by replacing older tier equipment with newer tiers or by installing exhaust retrofits (also known as Verified Diesel Emission Control Strategies [VDECS]). Recent 2022 amendments[8] require the use of R99 or R100 renewable diesel in off-road diesel vehicles at the beginning of 2024. Starting in 2023, older tiers are banned and only Tier 3 or higher engines may be added to any fleet. A recent requirement requires that prime contractors and public works awarding bodies obtain and retain a fleet's valid Certificate of Reported Compliance prior to awarding a contract or hiring a fleet.

Small Off-Road Engine Regulation

Small off-road engines (SORE) are spark-ignition engines with rated power at or below 19 kilowatts (25 horsepower). The SORE regulations require new engines to be certified and labeled to meet emission standards and other requirements. Typical equipment types that use SORE include lawn and garden equipment, portable generators, and pressure washers. Recent amendments to the SORE regulation will require most landscaping equipment to be zero emissions beginning in 2024. Despite their small size, these engines are highly polluting. The volume of smog-forming emissions from this type of equipment has surpassed emissions from light-duty passenger cars and is projected to be nearly twice those of passenger cars by 2031. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-

[7] California Air Resources Board (ARB). 2023. Clean Truck Check (HD I/M). Website: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program. Accessed December 8, 2023.

[8] California Air Resources Board (ARB). 2023. Website: https://ww2.arb.ca.gov/news/carb-approves-amendments-road-regulation-further-reduce-emissions. Accessed November 21, 2023.

emission standards starting in 2028.[9] Engines that use diesel fuel and engines that are used in stationary equipment, including standby generators, are not subject to the SORE regulations.

Large Spark Ignition Regulation

The Large Spark Ignition (LSI) Fleet Rule and Amendments, commonly referred to as the "Forklift Rule" applies to forklifts, sweeper/scrubbers, industrial tow tractors, and airport ground support equipment. It applies to fleets (four or more vehicles) and includes off-road gasoline, propane, liquefied petroleum gas (LPG), compressed natural gas, and electric forklifts ≥25 hp.[10] The regulation sets fleet average emission level requirements that decreases each year to encourage the use of electric vehicle (EV) and low-emissions engines.

Zero-Emission Forklifts

ARB is currently working on a zero-emission forklift regulation[11] that would drive greater deployment of zero-emission forklifts within fleets throughout the State. This regulation, currently in draft format, is one of several near-term actions intended to facilitate further zero-emission equipment penetration in the off-road sector and is scheduled for Board consideration in June 2024.

California Airborne Toxic Control Measures

As of December 2022, the ARB had developed 26 mobile and stationary source Airborne Toxic Control Measures (ATCMs).[12] The following summarizes the ATCMs that are potentially applicable for land use development projects such as logistics, warehouse, residential, mixed use, and retail development. Source and industry-specific requirements apply to industrial projects, gas stations, dry cleaners, and other types of facilities which are significant sources of TACs.

Transport Refrigeration Unit ATCM

Transport Refrigeration Units (TRUs) are refrigeration systems powered by small diesel-fueled engines (typically only 9-36 hp) designed to refrigerate or heat perishable products that are transported in various containers, including truck vans, semi-truck trailers, shipping containers, and railcars. TRUs typically operate at refrigerated warehouses or distribution centers, grocery stores, seaport facilities, intermodal railyards, and other locations that are often near sensitive receptors, and often in overburdened disadvantaged communities. TRUs can be found in different sizes and locations depending on the type of transport carrying the goods. Truck TRUs that are used to refrigerate insulated cargo vans are mounted on the frames of straight trucks, while trailer TRUs that refrigerate insulated trailers are mounted on semitrailers.

The ATCM for In-Use Diesel-Fueled TRUs and TRU Generator Sets and Facilities Where TRUs Operate establishes stringent emission standards to lower DPM emissions from all truck-mounted TRUs that operate in California, regardless of where the vehicle is registered. The regulation applies to

[9] California Air Resources Board (ARB). 2021. Website: https://ww2.arb.ca.gov/news/carb-approves-updated-regulations-requiring-most-new-small-road-engines-be-zero-emission-2024. Accessed November 25, 2023.
[10] California Air Resources Board (ARB). 2023. Large Spark-Ignition Fleet Regulation Overview. Website: https://ww2.arb.ca.gov/sites/default/files/offroadzone/landing/lsi.html. Accessed November 25, 2023.
[11] California Air Resources Board (ARB). 2023. Zero-Emission Forklifts. Website: https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts. Accessed November 16, 2023.
[12] California Air Resources Board (ARB). 2023. Website: https://ww2.arb.ca.gov/resources/documents/airborne-toxic-control-measures. Accessed November 16, 2023.

refrigerated warehouse facilities (20,000 square feet or greater) and has phase-in requirements for conversion to zero-emission technology from 2024–2029. TRU owners shall turnover at least 15 percent of their truck TRU fleet (defined as truck TRUs operating in California) to ZEV technology each year (for 7 years). By 2030, all truck TRUs operating in California will be ZE, eliminating all NO_X and DPM emissions from these sources.

The current TRU ATCM amendments do not apply to trailer-mounted (semi-trailer) TRUs or railcar TRUs. The ARB will assess zero-emission options for trailer TRUs and the remaining TRU categories as part of an additional rulemaking for Board consideration in the 2025 timeframe.[13]

Asbestos ATCM

In July 2001, ARB approved an ATCM for construction, grading, quarrying, and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of Best Management Practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification, and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than 1 acre. These projects require the submittal of a "Dust Mitigation Plan" and approval by the ARB prior to the start of a project.

Asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found near the project site.[14]

[13] California Air Resources Board (ARB). 2023. Website: https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation. Accessed November 25, 2023.

[14] United States Geological Survey (USGS). 2019. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in the Conterminous United States. Website: https://www.usgs.gov/data/reported-historic-asbestos-mines-historic-asbestos-prospects-and-other-natural-occurrences. Accessed November 25, 2023.

Portable Equipment Registration Program ATCM

Owners or operators of portable engines and other types of equipment which meet the qualifications of the ATCM can register their equipment to operate throughout California.[15] Permits issued under the Portable Equipment Registration Program (PERP) must be honored by all air districts throughout California. However, owners and operators of portable engines which meet the qualifications of this ATCM who do not register their equipment under the PERP must obtain individual permits from local air districts.

Non-Vehicular Source ATCMs

The ARB has also adopted ATCM for non-vehicular sources[16] in Title 17, Section 93100. These ATCMs are implemented by local Air Pollution Districts through their local regulations for stationary sources. They include 13 separate ATCM regulations detailed in Section 93101 through 93113 which address a variety of stationary and area sources of toxics emissions. The ATCMs most relevant to land use development include the Asbestos rule (for Construction and Grading Operations described above), the benzene ATCM for retail service stations, the ATCM for stationary compression-ignition engines (e.g., diesel generators and pumps), and the ATCM for DPM from portable engines rated 50 hp and greater.

California Significant New Alternatives Policy

As part of California's effort to reduce emissions of Short-Lived California Climate Pollutants under Senate Bill (SB) 1383, California is required to reduce hydrofluorocarbon (HFC) emissions 40 percent below 2013 levels by 2030. HFCs have a powerful impact on climate as they trap heat in the atmosphere at a rate thousands of times that of carbon dioxide.

The ARB was originally relying on EPA Significant New Alternatives Policy (SNAP) Rules to meet a large portion of HFC emission reductions required by SB 1383. However, on August 8, 2017, in *Mexichem Fluor v. U.S. EPA*, the D.C. District Circuit Court significantly limited the EPA's ability to regulate high global warming potential (GWP) HFCs under the federal SNAP Program Rules.[17] As a result, in 2018, California adopted a new ARB HFC regulation and additional legislation under SB 1013, referred to as the California Cooling Act. The regulation and the Senate Bill together are referred to as California SNAP and cover all end-use specific HFC prohibitions except motor vehicle air conditioning systems. In 2020, the ARB amended the regulation to adopt GWP limits for new refrigeration and air conditioning equipment, which ensures that industry not only shifts away from the highest GWP refrigerants but swiftly transitions to technologies with the lowest GWP that are technologically and commercially feasible. The rule applies to air conditioning systems, household refrigerators and freezers, chillers, retail food facilities, retail refrigeration, cold storage facilities, and even vending machines.

[15] California Air Resources Board (ARB). 2023. Portable Equipment Registration Program. Website: https://ww2.arb.ca.gov/our-work/programs/portable-equipment-registration-program-perp. Accessed November 25, 2023.

[16] California Air Resources Board (ARB). 2023. Air Toxic Control Measures: Mobile and Stationary Sources. Website: https://ww2.arb.ca.gov/resources/documents/airborne-toxic-control-measures. Accessed November 25, 2023.

[17] California Air Resources Board (ARB). 2023. California Significant New Alternatives Policy (SNAP). Website: https://ww2.arb.ca.gov/our-work/programs/california-significant-new-alternatives-policy-snap/about. Accessed November 25, 2023.

New cold storage facilities containing more than 50 pounds of refrigerants are subject to the GWP limit Section 95374(c) Table 3 and to the requirements under Section 95475 (c), which includes exceptions, and labeling and recordkeeping requirements. Cold Storage Warehouses are prohibited from using refrigerants with GWP of 150 or greater as of January 1, 2022.[18]

Verified Diesel Emission Control Strategies

The EPA and the ARB tiered off-road emission standards only apply to new engines, and off-road equipment can last several years. The ARB has developed VDECS, which are devices, systems, or strategies used to achieve the highest level of pollution control from existing off-road vehicles, to help reduce emissions from existing engines. VDECS are designed primarily for the reduction of DPM emissions and have been verified by the ARB. There are three levels of VDECS, the most effective of which is the Level 3 VDECS. Tier 4 engines are not required to install VDECS because they already meet the emissions standards for lower tiered equipment with installed controls.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

TACs in California are primarily regulated through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), also known as the Hot Spots Act. To date, the ARB has identified more than 21 TACs, and has adopted the EPA's list of Hazardous Air Pollutants (HAPs) as TACs.

Regional

BAAQMD California Environmental Quality Act Air Quality Guidelines

The BAAQMD is the primary agency responsible for ensuring that air quality standards (NAAQS and CAAQS) are attained and maintained in the SFBAAB through comprehensive planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The BAAQMD prepares plans to attain ambient air quality standards in the SFBAAB and prepares ozone attainment plans for the national ozone standard, clean air plans for the California standard, and PM plans to fulfill federal air quality planning requirements. The BAAQMD also inspects stationary sources of air pollution; responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the CAA and the CCAA.

In April 2023, BAAQMD updated the California Environmental Quality Act (CEQA) Guidelines that supersede the previous guidance. BAAQMD's CEQA Guidelines for implementation of the thresholds are for informational purposes only, to assist local agencies.

BAAQMD Particulate Matter Plan

To fulfill federal air quality planning requirements, the BAAQMD adopted a $PM_{2.5}$ emissions inventory for the year 2010 at a public hearing on November 7, 2012. The Bay Area Clean Air Plan also included several measures for reducing PM emissions from stationary sources and wood-burning. In 2013, the EPA issued a final rule determining that the Bay Area has attained the 24-hour $PM_{2.5}$

[18] California Air Resources Board (ARB). 2023. Cold Storage. Website: https://ww2.arb.ca.gov/our-work/programs/california-significant-new-alternatives-policy-snap/cold-storage. Accessed November 25, 2023.

NAAQS, suspending federal SIP planning requirements for the SFBAAB.[19] Despite this EPA action, the SFBAAB will continue to be designated as nonattainment for the national 24-hour $PM_{2.5}$ standard until the BAAQMD submits a redesignation request and a maintenance plan to the EPA and the EPA approves the proposed redesignation.

The Air Basin is designated nonattainment for the State PM_{10} and $PM_{2.5}$ standards, but the Air Basin is currently unclassified for the federal PM_{10} standard and nonattainment for federal $PM_{2.5}$ standards. The EPA lowered the 24-hour $PM_{2.5}$ standard from 65 µg/m^3 to 35 µg/m^3 in 2006 and designated the Air Basin as nonattainment for the new $PM_{2.5}$ standard effective December 14, 2009.

BAAQMD believes that it would be premature to submit a redesignation request and $PM_{2.5}$ maintenance plan at this time. Therefore, BAAQMD will prepare a "clean data" SIP to address the required elements, including:

- An emission inventory for primary $PM_{2.5}$, as well as precursors to secondary PM formation; and
- Amendments to the BAAQMD's New Source Review regulation to address $PM_{2.5}$.

The Air Basin will continue to be designated as nonattainment for the 24-hour $PM_{2.5}$ NAAQS until the Air District elects to submit, and the EPA approves, a redesignation request and maintenance plan. At this time, BAAQMD does not have an applicable SIP with which the proposed project would be required to comply. However, development facilitated by the proposed project would be subject to the Bay Area Clean Air Plan, in addition to regulations set forth by BAAQMD.

BAAQMD 2017 Clean Air Plan

In May 2017, the BAAQMD adopted the final Bay Area 2017 Clean Air Plan. The BAAQMD prepared the 2017 Clean Air Plan in cooperation with the Metropolitan Transportation Commission (MTC) and ABAG. The goals of the 2017 Clean Air Plan are to reduce regional air pollutants and climate pollutants to improve the health of Bay Area residents for the next decades. The 2017 Clean Air Plan aims to lead the region into a post-carbon economy, continue progress toward attaining all State and federal air quality standards, and eliminate health risk disparities from air pollution exposure in Bay Area communities. The Plan includes 85 distinct control measures to help the region reduce air pollutants and has a long-term strategic vision that forecasts what a clean air Bay Area will look like in the year 2050. The 2017 Clean Air Plan envisions a future whereby the year 2050:

- Buildings will be energy efficient—heated, cooled and powered by renewable energy.
- Transportation will be a combination of EVs, both shared and privately owned, and autonomous public transit fleets, with a large share of trips by bicycling, walking, and transit.

[19] United States Environmental Protection Agency (EPA). 2013. Determination of Attainment for the San Francisco Bay Area Nonattainment Area for the 2006 Fine Particle Standard; California; Determination Regarding Applicability of Clean Air Act Requirements. January 9. Website: https://www.govinfo.gov/content/pkg/FR-2013-01-09/pdf/2013-00170.pdf. Accessed November 25, 2023.

- The Bay Area will be powered by clean, renewable electricity and will be a leading incubator and producer of clean energy technologies leading the world in the carbon-efficiency of our products.
- Bay Area residents will have developed a low carbon lifestyle by driving electric vehicles, living in zero-net-energy homes, eating low carbon foods, and purchasing goods and services with low carbon content.
- Waste will be greatly reduced, waste products will be re-used or recycled, and all organic waste will be composted and put to productive use.

The focus of control measures includes aggressively targeting the largest source of GHG, ozone pollutants, and PM emissions: transportation. This includes more incentives for electric vehicle infrastructure, off-road electrification projects such as Caltrain and shore power at ports, and reducing emissions from trucks, school buses, marine vessels, locomotives, and off-road equipment. Additionally, the BAAQMD will continue to work with regional and local governments to reduce Vehicle Miles Traveled (VMT) through the further funding of rideshare, bike and shuttle programs.

BAAQMD Regulations

Regulation 2, Rule 1 (Permits–General Requirements)

The BAAQMD regulates new sources of air pollution and the modification and operation of existing sources through the issuance of authorities to construct and permits to operate. Regulation 2, Rule 1 provides an orderly procedure with which the project would be required to comply to receive authorities to construct or permits to operate from the BAAQMD for new sources of air pollutants, as applicable.

Regulation 2, Rule 5 (New Source Review Permitting)

The BAAQMD regulates backup emergency generators, fire pumps, and other sources of TACs through its New Source Review (Regulation 2, Rule 5) permitting process.[20] Although emergency generators are intended for use only during periods of power outages, monthly testing of each generator is required; however, the BAAQMD limits testing to no more than 50 hours per year. Each emergency generator installed is assumed to meet a minimum of Tier 2 emission standards (before control measures). As part of the permitting process, the BAAQMD limits the excess cancer risk from any facility to no more than 10 per 1 million population for any permits that are applied for within a 2-year period and would require any source that would result in an excess cancer risk greater than 1 per 1 million to install Best Available Control Technology (BACT) for Toxics.

Regulation 6, Rule 1 (Particulate Matter–General Requirements)

The BAAQMD regulates PM emissions through Regulation 6 by means of establishing limitations on emission rates, emissions concentrations, and emission visibility and opacity. Regulation 6, Rule 1 provides existing standards for PM emissions that could result during project construction or operation that the project would be required to comply with, as applicable, such as the prohibition

[20] Bay Area Air Quality Management District (BAAQMD). 2016. New Source Review Permitting Guidance. Website: http://www.baaqmd.gov/permits/permitting-manuals/nsr-permitting-guidance. Accessed November 25, 2023.

of emissions from any source for a period or aggregate periods of more than 3 minutes in any hour which are equal to or greater than 20 percent opacity.

Regulation 6, Rule 6, (Particulate Matter–Prohibition of Trackout)

One rule by which the BAAQMD regulates PM includes Regulation 6, Rule 6, which prohibits PM trackout during project construction and operation. Regulation 6, Rule 6 requires the prevention or timely cleanup of trackout of solid materials onto paved public roads outside the boundaries of large bulk material sites, large construction sites, and large disturbed surface sites such as landfills.

Regulation 8, Rule 3 (Architectural Coatings)

This rule governs the manufacture, distribution, and sale of architectural coatings and limits the reactive organic gases (ROG) content in paints and paint solvents. Although this rule does not directly apply to the proposed project, it does dictate the ROG content of paint available for use during the construction.

Regulation 8, Rule 15 (Emulsified and Liquid Asphalts)

Although this rule does not directly apply to the proposed project, it does dictate the reactive organic gases content of asphalt available for use during construction through regulating the sale and use of asphalt and limits the ROG content in asphalt.

Regulation 9, Rule 8 (Inorganic Gaseous Pollutants–Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines)

Under Regulation 9, Rule 8, the BAAQMD regulates the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower. As such, any proposed stationary source equipment (e.g., backup generators, fire pumps) which would be greater than 50 horsepower would require a BAAQMD permit under Regulation 9, Rule 8 to operate.

Regulation 11, Rule 2 (Hazardous Pollutants–Asbestos Demolition, Renovation, and Manufacturing)

Under Regulation 11, Rule 2, the BAAQMD regulates emissions of asbestos to the atmosphere during demolition, renovation, milling, and manufacturing and establishes appropriate waste disposal procedures. Any of these activities which pose the potential to generate emissions of airborne asbestos are required to comply with the appropriate provisions of this regulation.

Regulation 1, Rule 301 (Odorous Emissions)

The BAAQMD is responsible for investigating and controlling odor complaints in the Bay Area. The agency enforces odor control by helping the public to document a public nuisance. Upon receipt of a complaint, the BAAQMD sends an investigator to interview the complainant and to locate the odor source if possible. The BAAQMD typically brings a public nuisance court action when there are a substantial number of confirmed odor events within a 24-hour period. An odor source with five or more confirmed complaints per year, averaged over 3 years, is considered to have a substantial effect on receptors.

Several BAAQMD regulations and rules apply to odorous emissions. Regulation 1, Rule 301 is the nuisance provision that states that sources cannot emit air contaminants that cause nuisance to

several people. Regulation 7 specifies limits for the discharge of odorous substances where the BAAQMD receives complaints from 10 or more complainants within a 90-day period. Among other things, Regulation 7 precludes discharge of an odorous substance that causes the ambient air at or beyond the property line to be odorous after dilution with four parts of odor-free air and specifies maximum limits on the emission of certain odorous compounds.

Lastly, the BAAQMD enforces the PERP ATCM on behalf of the ARB. Under the PERP, owners or operators of portable engines and other types of equipment which meet the qualifications of the ATCM can register their equipment to operate throughout California. However, owners and operators of portable engines which meet the qualifications of this ATCM who do not register their equipment under the PERP must obtain individual permits from local air districts. Permits issued under the PERP must be honored by all air districts throughout California.

Plan Bay Area

The Regional Transportation Plan and Sustainable Community Strategy (RTP/SCS) for the San Francisco Bay Area, named Plan Bay Area 2050 was jointly produced and adopted by the MTC and ABAG.[21] On October 2021, the MTC approved Plan Bay Area 2050. Plan Bay Area includes integrated land use and transportation strategies for the region and was developed through OneBayArea, a joint initiative between ABAG, BAAQMD, MTC, and the San Francisco Bay Conservation and Development Commission. Plan Bay Area is also considered the ABAG/MTC Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In accordance with SB 743, Plan Bay Area included elements designed to encourage the type of land use development to meet three primary objectives. First, Roadway Level of Service (LOS) could not be considered an environmental impact under CEQA. Second, it introduced changes to VMT per capita as a determinant of environmental impact. Third, the use of VMT as an environmental impact in CEQA is considered a mechanism for achieving State and regional GHG reduction goals. As a regional land use plan, Plan Bay Area aims to reduce per capita GHG emissions through the promotion of more compact, mixed-use residential and commercial neighborhoods located near transit.

Local

City of American Canyon General Plan

The City of American Canyon adopted its General Plan in 1994, which contains objectives and policies that help address air quality and reduce the community's vulnerability to air pollution. The following objectives and policies from the City's General Plan are relevant to air quality and apply to the proposed project:[22]

Goal 8F Reduce consumption of nonrenewable energy sources and support the development and utilization of new energy sources.

Objective 8.22 Minimize transportation-related energy consumption.

[21] Association of Bay Area Government (ABAG). 2021. Plan Bay Area 2050. Website: https://www.planbayarea.org/finalplan2050. Accessed November 28, 2023.

[22] City of American Canyon. 2020. General Plan. Website: https://www.cityofamericancanyon.org/government/community-development/planning-zoning/general-plan-update. Accessed November 25, 2023.

Policy 8.22.1 Encourage the development of mixed use, pedestrian friendly employment/residential centers that help minimize vehicle trips in American Canyon and contribute to a reduction in energy consumption.

Policy 8.22.3 Require that Development Plans provide for linkages between bicycle and pedestrian circulation systems and transit and employment centers, in accordance with established areawide plans.

Policy 8.22.4 Maintain a system of traffic signals and controls that minimizes waiting time and vehicle speed changes through routes.

Policy 8.22.5 Require that Development Plans provide for High-Occupancy Vehicles (HOV) and public transportation, where feasible, through the provision of appropriate transit areas and park-and-ride locations along public transportation routes.

Objective 8.23 Reduce Energy consumption in buildings.

Policy 8.23.1 Require that developers employ energy-efficient subdivision and site planning methods as well as building design. Measures to be considered include building orientation and shading, landscaping, building reflectance, use of active and passive solar heating and hot water system, etc. In establishing these energy related design requirements, the City shall balance energy-efficient design with good planning principles.

Objective 1.37 Consider initiatives to reduce direct and indirect greenhouse gas (GHG) emissions from transportation sources, and from new, renovated, and existing development in the City.

Policy 1.37.6 Reduce vehicle engine idling in American Canyon by educating the broader community (i.e., businesses, commuters, residents) on the greenhouse gas impacts caused by engine idling, and implementing feasible commercial vehicle regulations.

City of American Canyon Municipal Code

19.01.061, Industrial Use Greenhouse Gas Standards (Ordinance No. 2024-014)

A. Every Industrial Use Land Use Proposal for which the City of American Canyon is the Lead Agency shall use the following threshold to evaluate the significance of greenhouse gas (GHG) impact under the California Environmental Quality Act (CEQA):

1) **TIER 1.** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

2) **Tier 2.** Consider whether the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, *etc.* If not, move to Tier 3.

3) **Tier 3.** Consider whether the project includes, at a minimum, the following project design elements:

i. Buildings

1. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
2. The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b}(3) and Section 15126.2(b) of the State CEQA Guidelines.

ii. Transportation

1. The project will achieve a reduction in project-generated vehicle miles traveled ("VMT") below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent).
2. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. If the project does not include the above project design elements, the Project has a significant GHG impact. If it does include the above project design elements, move to Tier 4.

4) **Tier 4.** Consider whether the project generates GHG emissions in excess of the South Coast Air Quality Management District's 10,000 MT CO2e per year screening threshold for industrial uses and stationary projects. If so, the project has a significant GHG impact.

Chapter 19.09, Industrial Commerce Centers Sustainability Standards (Ordinance No. 2024-013)

Chapter 19.09 of the Municipal Code is applicable to all warehousing, logistics and distribution facilities throughout the City for which an NOP is issued after March 1, 2024 under the implementing Guidelines of the CEQA. The NOP for the proposed project was issued on October 27, 2023. As such, the proposed project is not subject to Chapter 19.09 of the Municipal Code (Ordinance No. 2024-013). However, for informational purposes, the extent to which the project complies is addressed in Section 3.7.7.

A warehousing, logistics or distribution facility means facilities used for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials and excludes bulk storage of materials, which are flammable, explosive, or create hazardous or commonly recognized offensive conditions) before their distribution to retail locations or other warehouses. The facilities are generally greater than 200,000 square feet in size, with a land coverage ratio of approximately 50 to 80 percent, and a dock-high loading door ratio of approximately 1:5,000-8,000 square feet. They are characterized by dock high loading doors, could be on opposing sides of the building (cross dock facility); significant movement and storage of products, materials, or

equipment; truck activities frequently outside of the peak hour of the adjacent street system; and freeway access, including:

- Freight yards/forwarding terminals;
- Warehousing distribution/high cube distribution centers;
- Moving agencies;
- Parcel delivery terminals;
- Railroad freight stations;
- Shipping/receiving yards; and
- Truck terminals.

The following sections shall supersede any existing requirements in the Municipal Code and Specific Plans:

1. On-site motorized operational equipment, including but not limited to forklifts, yard trucks, and pallet jacks, shall be ZE (zero emission). This includes electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors.
2. All outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and landscaping equipment) shall be zero-emission vehicles. Each building shall include the necessary charging stations or other necessary infrastructure for zero-emission cargo handling equipment.
3. Prior to issuance of a business license, the City shall ensure rooftop solar panels are installed and can be operated in such a manner that they will supply 100% of the power needed to operate all non-refrigerated portions of the facility including the parking areas.
4. Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide chilled, cooled, or freezer warehouse space, a conduit shall be installed during construction of the building shell from the electrical room to 100% of the loading dock doors that have potential to serve the refrigerated space. When tenant improvement building permits are issued for any refrigerated warehouse space, electric plug-in units shall be installed at every dock door servicing the refrigerated space to allow transport refrigeration units (TRUs) to plug in. Truck operators with TRUs shall be required to utilize electric plug-in units when at loading docks.
5. All generators, and all diesel-fueled off-road construction equipment greater than 75 horsepower, will be zero-emissions or equipped with CARB Tier IV-compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. After either (1) the completion of grading or, (2) the completion of an electrical hookup at the site, whichever is first, require all generators and all diesel-fueled off-road construction equipment, to be zero-emissions or equipped with CARB Tier IV-compliant

engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by the City in the event that the applicant documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment.

6. Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle charging stations on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) electric vehicle charging stations for 25% of the employee parking spaces required.
7. Install HVAC and/or HEPA air filtration systems in all warehouse facilities.

3.2.3 - Methodology

Model Selection and Guidance

Regional air pollutant emissions are composed of those on-site construction and operational emissions generated from all facets of the proposed project. Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors represent the emission rate of a pollutant over a given time or activity, for example, grams of NO_X per vehicle mile traveled or grams of NO_X per horsepower hour of equipment operation. The activity factor is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, the amount of fuel consumed in a given amount of time, or VMT per day. The ARB has published emission factors for on-road mobile vehicles/trucks in the Emission Factor (EMFAC) mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the levels of activity and outputs the emissions for the various pieces of equipment.

The current version of the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.21, was released on May 27, 2022, as part of a coordinated development effort between the California Air Pollution Control Officers Association (CAPCOA) and the California Air Districts. Regional construction and operational emissions reported in this analysis were modeled using CalEEMod Version 2022.1.1.21.

Criteria Pollutants Assessed

The following air pollutants are assessed in this analysis:

- Reactive organic gases (ROG)
- Nitrogen oxides (NO_X)
- Carbon monoxide (CO)

- Sulfur oxides (SO_X)
- Particulate matter less than 10 microns in diameter (PM_{10})
- Particulate matter less than 2.5 microns in diameter ($PM_{2.5}$)

Note that the proposed project would emit ozone precursors ROG and NO_X. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

The proposed project would emit ultrafine particles. However, there is currently no standard separate from the $PM_{2.5}$ standards for ultrafine particles and there is no accepted methodology to quantify or assess the significance of such particles.

Modeling Assumptions–Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM_{10}) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM_{10} and $PM_{2.5}$).

Construction activities occurring on the 10.45-acre project site would consist of site preparation, grading, building construction, paving, and architectural coating of the inside and outside of the building. A conceptual construction schedule is provided in Table 3.2-5 that presents the duration for each construction activity. Table 3.2-6 presents the number of assumed construction equipment along with hours of operation per day, horsepower, and load factor. Where project-specific information was not available or unknown, default assumptions were used to complete emissions modeling. The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an engine—the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment.

The anticipated construction schedule, as shown in Table 3.2-5, reflects the construction start date and construction phase durations assumed for the purposes of this environmental analysis. Based on applicant-provided information, construction would start September 2024 and would take approximately 11 months. The construction schedule used in the analysis represents a “worst-case” analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and compliance with more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required by State CEQA Guidelines.

Table 3.2-5: Construction Schedule

Construction Activity	Conceptual Construction Schedule		Working Days per Week	Working Days
	Start Date	End Date		
Site Preparation	9/2/2024	9/13/2024	5	10
Grading	9/14/2024	10/11/2024	5	20
Building Construction	10/12/2024	7/18/2025	5	200
Paving	7/19/2025	8/15/2025	5	20
Architectural Coating	7/19/2025	8/15/2025	5	20
Source: CalEEMod Output (Appendix B).				

A summary of the on-site, off-road construction equipment usage assumptions used to estimate emissions is presented in Table 3.2-6.

Table 3.2-6: Project Construction Equipment Assumptions

Phase Name	Equipment Type	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Bulldozers	3	8	367	0.4
	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Excavators	2	8	158	0.38
	Graders	1	8	148	0.41
	Rubber Tired Bulldozers	1	8	367	0.4
	Scrapers	2	8	423	0.48
	Tractors/Loaders/Backhoes	2	8	84	0.37
Building Construction	Cranes	1	7	367	0.29
	Forklifts	3	8	82	0.2
	Generator Sets	1	8	14	0.74
	Tractors/Loaders/Backhoes	3	7	84	0.37
	Welders	1	8	46	0.45
Paving	Pavers	2	8	81	0.42
	Paving Equipment	2	8	89	0.36
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	6	37	0.48
Source: CalEEMod Output (Appendix B).					

A summary of the construction-related vehicle trips is shown in Table 3.2-7. Based on applicant-provided information, grading would require approximately 1,000 cubic yards (cy) of import soil.[23] CalEEMod default values for trip lengths and vehicle fleets were used. Note that the total number of off-site construction vehicle trips would not necessarily occur on the same day since construction activities would vary each day during the construction period.

Table 3.2-7: Construction Off-site Trips

Construction Activity	Worker (Trips per day)	Vendor (Trips per day)	Haul (Total Trips)
Site Preparation	18	0	0
Grading	20	0	31
Building Construction	141	55	0
Paving	15	0	4
Architectural Coating	28	0	0
Source: CalEEMod Output (Appendix A).			

Fugitive Dust

During grading activities, fugitive dust can be generated from the movement of dirt on the project site. CalEEMod estimates dust from bulldozers moving dirt around, from graders or other construction equipment leveling the land, and from loading or unloading dirt into haul trucks. Every project within the BAAQMD's jurisdiction is required to comply with the requirements of BAAQMD Regulation 6 and BMPs to reduce emissions of fugitive dust. As shown in Appendix B, the BMPs are accounted for in CalEEMod through selection of the appropriate measures in CalEEMod ("water unpaved roads twice daily" and "limit vehicle speeds on unpaved roads to 25 miles per hour [mph]"). Development of the proposed project would include design features which would reduce fugitive dust compared to default values.

Modeling Assumptions–Operation

The major sources of operational emissions that would occur over the long-term operations of the proposed project are summarized below.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the motor vehicles that would travel to and from and within the project site. The regional emissions from the proposed project's mobile sources were estimated using CalEEMod and the daily trips estimated by the traffic consultant for the proposed project. The proposed project would generate passenger vehicle trips from employees and visitors traveling to and from the project site; additionally, the proposed project

[23] At the time of analysis, the amount of soil import was assumed to be 5,000 cubic yards. Therefore, a conservative analysis is presented here since it evaluated a higher amount of soil import and associated haul trips.

would also be served with daily truck deliveries. The number of vehicle trips that the proposed project would generate is presented in Table 3.2-8.

Table 3.2-8: Vehicle Trip Generation During Operations (Daily)

Vehicle Type	Daily Vehicle Trips
Passenger Cars	244
Trucks	128
Total Project Trips	372
Source: W-Trans. 2023. 1055 Commerce Court Memorandum of Assumptions. April. (Appendix I)	

As shown in Table 3.2-8, trips from passenger cars would account for 244 of the 372 total daily trips generated by the proposed project, while trucks would account for 128 of the total daily trips generated by the proposed project.

Industrial land use projects, including warehouse projects, can be expected to have longer than average truck trip lengths compared to the default trip length in CalEEMod (5.0 miles to 12.8 miles for Napa County). To estimate mobile source emissions from trucks during project operations, a one-way truck trip length of 35.6 miles was assumed based on a study of industrial warehouse travel behavior in American Canyon.[24] The truck trips are assigned to "refrigerated warehouse-no rail" land use and passenger vehicle trips are assigned to a "user defined industrial" land use so that different trip lengths can be assigned to the truck and passenger vehicle trips. The CalEEMod model output can be found in Appendix B.

Table 3.2-9 shows the adjusted fleet mixes applied in the operational portion of each CalEEMod run. The fleet mix for the operational passenger-vehicles-only CalEEMod run used the light-duty automobile (LDA), light-duty one-axle truck (LDT1), light-duty two-axle truck (LDT2), and medium-duty vehicle (MDV) classes to represent a reasonable assumption that employees would use light-duty vehicles, medium-duty vehicles, and pickup trucks as their personal vehicles. The trucks are modeled as a combination of medium heavy and heavy heavy-duty (HHD) categories based on the previously mentioned industrial warehouse travel study.[25]

Table 3.2-9: Vehicle Type Classification

CalEEMod Run	Classification	Fleet Mix Applied in Modeling
Passenger Vehicles (employee trips)	LDA	51.6%
	LDT1	5.6%
	LDT2	24.9%
	MDV	17.9%

[24] Fehr and Peers. 2022. American Canyon Industrial Warehouse Travel Behavior Data. June.
[25] Fehr and Peers. 2022. American Canyon Industrial Warehouse Travel Behavior Data. June.

CalEEMod Run	Classification	Fleet Mix Applied in Modeling
	Passenger Vehicle Mix Total	100%
Trucks	HHD	85.1%
	MHD	14.9%
	Heavy-Duty Truck Mix Total	100%

Notes:
HHD = heavy heavy-duty
LDA = light-duty automobile
LDT1 = light-duty one-axle truck
MHD = medium heavy-duty
MDV = medium-duty vehicle
Source: Appendix B.

The proposed warehouse is designed to accommodate wine storage. However, no TRU would be used while trucks are on-site. Based on similar uses nearby, most inbound trailers would not have TRUs as they would only be hauling directly from the winery. Outbound long-haul trailers would not be running the refrigeration units while at the loading dock as they would initially be loaded. No trucks would be at the loading dock longer than 30 minutes. These assumptions are input into the modeling accordingly.

Other Emission Sources

Area Sources

In addition to typical mobile- and energy-source emissions, long-term operational emissions also include area source emissions. Area source emissions include occasional architectural coating activities for repainting and maintenance of the warehouse building associated with the proposed project. CalEEMod assumes that repainting occurs at a rate of 10 percent of the buildings per year. Therefore, on average, it is assumed that the building would be fully repainted every 10 years.

Other area source emissions include consumer products that involve solvents that emit VOCs during use. CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products associated with parking uses. Electric forklifts would be used during project operation. Lastly, CalEEMod default emission factors for landscape maintenance equipment were used in this analysis.

Water/Wastewater

GHG emissions from this sector are associated with the embodied energy used to supply treat and distribute water, and then treat wastewater and fugitive GHG emissions from wastewater treatment. Indoor water consumption is based on applicant-provided information.

Energy

As discussed in the project description, the proposed project would not include natural gas plumbing or appliances. Emissions from this sector are principally from use of electricity for space and water

heating at the proposed buildings. The estimated energy consumption is based on consumption rate of the adjacent use[26] and extrapolated by project square footage.[27]

Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant.

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project site. For solid waste disposal, CalEEMod calculates GHG emissions generated as solid waste generated by the proposed project decomposes in a landfill. For electricity-related emissions, CalEEMod contains default electricity intensity factors for various utilities throughout California. Pacific Gas and Electric Company (PG&E) 2021 intensity factors[28] were used for the facility operations starting with the 2025 buildout year conservatively assuming the base plan.

Refrigerants

During operation, there may be leakages of refrigerants (hydrofluorocarbons) from air conditioners and any refrigeration systems. Hydrofluorocarbons are typically used for refrigerants, which are long-lived GHGs. The type of refrigerant may vary depending on regulations in place at the time and emissions are based on leakage rates and other variables. CalEEMod defaults were used for these estimates. This presents a conservative estimate as recent GHG regulations are phasing in refrigerants with lower GWP.

Vegetation

The project site is currently undeveloped and contains small areas of wetland and some vegetation. Therefore, there is currently some carbon sequestration occurring on-site. The project applicant proposes to plant trees and integrate landscaping into the proposed design, which would provide carbon sequestration. However, the number of trees to be planted is unknown and data are insufficient to accurately determine the impact that the existing landscaping has on carbon sequestration. For this analysis, it was assumed that the loss and addition of carbon sequestration that are due to the proposed project would be balanced; therefore, emissions due to carbon sequestration were not included.

[26] City of American Canyon. Final Initial Study for SDG Commerce 217 Distribution Center Project (PL20-0008).

[27] The proposed project would take advantage of cool night air and would include solar improvements, which would result in some reduction in energy use. These features were not quantified as to represent a conservative analysis.

[28] California Energy Commission. 2023. Power Source Disclosure Program: Annual Power Content Labels for 2021. Website: https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure/power-content-label/annual-power-content-2. Accessed December 10, 2023.

Dispersion Modeling

An air dispersion model is a mathematical formulation used to estimate air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the AERMOD Version 22112. Specifically, the AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from project construction PM_{10} exhaust emissions. The AERMOD model provides a refined methodology for estimating localized construction and operational impacts by utilizing long-term, measured representative meteorological data for the project site and representative construction and operational schedules.

Terrain elevations were obtained for the project site using United Stated Geology Survey (USGS) 1/3 arc-second Digital Elevation Models (DEMs) DEMS processed by the EPA Terrain Preprocessor (AERMAP) model, the AERMOD terrain data pre-processor. The rural dispersion option was used to describe air dispersion in the local vicinity of the project. The air dispersion model assessment utilized 5 years (2013-2017) of BAAQMD-preprocessed meteorological data for the Napa County Airport Station (KAPC 23155) which is located approximately 1.8 miles north of the project site.

The AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from project construction PM_{10} exhaust and on-road diesel truck exhaust. Receptors within the AERMOD model were placed at locations up to 1,500 meters from the project site in a nested risk-grid with a spacing of 25 meters up to 250 meters and then receptors of 100 meters spacing up to 1,000 meters from the project site. Discrete residential receptors were placed on residences in the neighborhood to the southeast as well as the single closest residence located 850 feet to the east of the project site. All receptors were placed conservatively at ground level.

Air Dispersion Modeling Assumptions–Construction

Each construction emission source to be evaluated requires geometrical and emission release specifications for use in the air dispersion model. The emission source configurations applied in this assessment are shown in Table 3.2-10.

The on-site construction area sources were assumed to cover the entire project site. Emissions from the on-site construction exhaust sources were assumed to be emitted at 5 meters above ground to account for the top of equipment exhaust stacks where emissions are released to the atmosphere and the increase in emission height due to its heated exhaust. The off-site (on-road) construction vehicle emissions were represented in the AERMOD model as line volume sources with a release height of 11.2 feet (3.4 meters) for diesel vehicles.

Table 3.2-10: Summary of Construction Diesel Emission Source Configurations

Emission Source Type	Configuration	Relevant Assumptions
Off-Road Construction Equipment	Area Source (Sitewide)	• Area Source of height 5 meters to account for plume rise from exhaust. • Emission factors: CalEEMod

Emission Source Type	Configuration	Relevant Assumptions
Heavy-Duty Haul Truck Traffic	Line Volume Sources	• Truck travel was estimated for project-generated off-site travel extending on Commerce Boulevard within 1,000 feet of the project site • Emission factors: CalEEMod (EMFAC2021)
Source: Appendix B.		

The construction emissions were assumed to be distributed over the project area with a working schedule of up to 8 hours per day and five days per week. Emissions were adjusted by a factor of 4.2 in AERMOD "Variable Emission" Option to convert 8-hour, 5 day per week construction emissions for use with a 24 hours per day, 365 days per year averaging period.

Health Risk Assessment

The primary TAC of concern for the proposed project would be diesel exhaust, characterized by the emissions of DPM as a surrogate, emitted both during construction and operation. The emissions of potential DPM associated with construction activities would be transient, temporary, and occur in varying locations within the project site. The exposure assessment for construction is limited to emissions over the time that construction is expected to occur (i.e., less than 1 year).

Exhaust emissions of DPM (as PM_{10} exhaust) were obtained from the CalEEMod Version 2022.1 for the unmitigated emissions construction scenarios utilized for the criteria pollutant analysis (Appendix A). DPM emissions to be evaluated include on-site diesel exhaust from construction equipment and from diesel vendor and haul trucks along Commerce Boulevard. Air dispersion modeling (described above) was utilized to determine the concentration of DPM at different locations off-site from the proposed project. Receptors included off-site workers, residents and identified school receptors within the area of impact.

The concentration output files from AERMOD were postprocessed in the Hotspots Analysis and Reporting Program (HARP) Air Dispersion Modeling and Risk Tool (ADMRT) to determine the concentration of DPM at off-site receptors for the modeled emission scenarios. The HARP ADMRT program uses the concentrations, along with equations from the Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments,[29] to estimate the project's cancer and non-cancer chronic health risks. For DPM, the only exposure pathway is inhalation, and the HARP ADMRT tool evaluates exposure from this single pathway.[30] The risk assessment was carried out using recommend ARB/CAPCOA Risk Management Policy assumptions.

[29] Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines–Guidance Manal for Preparation of Health Risk Assessments. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed November 28, 2023.

[30] California Air Resources Board (ARB) and California Air Pollution Control Officers Association (CAPCOA). 2015. Risk Management Guidance for Stationary Sources of Air Toxics. Website: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/rma/rmgssat.pdf. Accessed November 13, 2023.

The Health Risk Assessment (HRA) evaluates cancer and chronic hazard risks for construction at the Maximally Exposed Individual Resident (MEIR), Maximally Exposed Individual Worker (MEIW), and at other sensitive receptors of interest, such as schools.

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual would develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). Cancer risk is expressed in terms of risk per million exposed individuals. A risk level of 10 in a million implies a likelihood (or risk) that up to 10 persons out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these TACs.

The health risks associated with the exposure to these concentrations are then calculated for each individual receptor based on dose and response parameters. Factors such as an individual's age and body weight and breathing rate determine the dose. Individuals also have varying responses due to a number of factors, with children being more susceptible to health effects due to development. OEHHAs Risk assessment procedures were modified in 2015[31] to account for early childhood health effects and age sensitivity factors are applied to the cancer health risk values. An age sensitivity factor of 10 is applied for infants with exposure starting in the third trimester until age 2. Children from ages 2 to 16 are assumed to be 3 times more sensitive than adults. No adjustments are made for adult exposure for ages greater than 16. OEHHA Health Risk assessment protocols specify HRAs for residential exposure should start with exposure starting at third trimester and this approach is used for both the Construction and Operational HRA for the proposed project.

The analysis utilized the Risk Management Guidance for evaluating an individual receptor based on a 30-year residential exposure over a 70-year averaging period.[32] Specifically, the policy recommends using the 95th percentile breathing rate for age groups less than 2 years old and the 80th percentile breathing rate for age groups that are greater than or equal to 2 years old. The construction exposure period is less than two years and as per OEHHA guidance, exposure was evaluated starting in the third trimester and conservatively evaluated exposure for ages less than 2 years based on the 95th percentile breathing rate.

Residential Cancer Risk

Residents less than 16 years of age are assumed to be exposed continuously 24 hours per day, 7 days per week and represent the maximally exposed sensitive receptor. The Construction HRA considers exposure starting in third trimester of pregnancy for 11 months.

[31] Office of Environmental Health Hazard Assessment (OEHHA). 2015. Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed November 15, 2023.

[32] California Air Resources Board (ARB). 2015. Risk Management Guidance for Stationary Sources of Air Toxics. May. Website: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/rma/rma_guidancedraft052715.pdf. Accessed December 8, 2023.

Off-site Worker Cancer Risk

Workers are assumed to have exposure 8 hours per day, 250 days per year and therefore experience a lower dose than residents at the same location. In addition, workers are assumed to be 16 years of age or older and age sensitivity factors are not applied to the risk values. Worker inhalation rates are specified to account for moderate activity. Finally, because AERMOD calculates a concentration based on a 365 day per year, 24-hour averages, receptors such as workers may experience higher than estimated coincident exposures when the source emits only when the receptor is present. One of the methods to address the higher exposure is to apply a worker adjustment factor (WAF) in HARP2 to align the worker hours with the times when the source is emitting. It should be noted that this method can be applied for adjusting the cancer risk for workers or students but not for residents. The WAF is estimated by first adjusting for the hours that a source is emitted and then making a corresponding adjustment accounting for the hours when a receptor would be present at the site: A worker adjustment factor of 4.2 is used in this analysis to properly evaluate the risks to off-site workers. The factor adjusts the AERMOD 24 -hour, 7 day a week average to the concentrations coincident with the 5-day, 8-hour week construction schedule when DPM is emitted.

School Cancer Risk

Similarly, students would be present less than 24 hours per day and utilizing exposure times of less than 24 hours. AERMOD long-term concentrations may underestimate student risk. The use of the residential cancer risk to evaluate maximum risk at student locations would provide a conservative estimate since it would assume students are exposed to the entirety of the source emissions. It would also encompass all student age ranges since the exposure for residential risk starts at the third trimester of pregnancy.

Estimation of Chronic Non-Cancer Hazards

An evaluation of potential non-cancer effects of chronic chemical exposures was also conducted.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the Reference Exposure Level (REL). The HI assumes that chronic exposures to TACs adversely affect a specific organ or organ system (toxicological endpoint) of the body. For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. For compounds affecting the same toxicological endpoint, this ratio is added together. Where the total equals or exceeds 1, a health hazard is presumed to exist.

To quantify non-carcinogenic impacts, the chronic HI is derived by using the annual average concentration of TAC as derived from the air dispersion model ($\mu g/m^3$). This value is then compared to the REL above which a significant impact is assumed to occur ($\mu g/m^3$).

OEHHA has defined a REL for Diesel Exhaust of 5 $\mu g/m^3$. The principal toxicological endpoint assumed in this assessment was the respiratory system via the inhalation exposure pathway. DPM does not have any identified short-term or acute RELs.

Estimation of Acute Non-Cancer Hazards

The project's non-cancer acute health risks were not estimated because OEHHA has not established an acute REL for DPM and there are no acute non-cancer risk values associated with DPM.

3.2.4 - Thresholds of Significance

Appendix G to the State CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts to air quality are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. On the subject of air quality, Appendix G states that, "[w]here available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations." As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G and input from relevant air districts. The City has chosen to do so for this project.

Additional guidance on the significance of air quality impacts is found in State CEQA Guidelines Section 15065, subdivision (a)(4), which provides that a lead agency shall find that a project may have a significant effect on the environment if "the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly." According to the California Supreme Court, this "mandatory finding of significance" applies to potential effects on public health from environmental impacts such as those associated with air pollutant emissions from projects. (*California Business Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 386-392.)

In light of the foregoing, the proposed project would have a significant effect related to air quality if the project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations (and thereby possibly cause substantial adverse effects on human beings, directly or indirectly); or

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Significance Criteria

The preceding thresholds of significance are stated in general terms. It is therefore desirable to formulate additional, more precise thresholds based on guidance from the BAAQMD, as is encouraged in Appendix G to the State CEQA Guidelines. As explained earlier, BAAQMD's 2022 CEQA Air Quality Guidelines were prepared to assist in evaluating air quality impacts of projects and plans

proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air quality impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and GHGs. The analysis below was prepared using these BAAQMD CEQA Guidelines.

Regional Significance Criteria

Table 3.2-11: shows the BAAQMD's criteria for regional significance for project construction and operations.

Table 3.2-11: BAAQMD Regional (Mass Emissions) Air Pollutant Significance Thresholds

Pollutant	Construction Phase	Operational Phase	
	Average DailyEmissions (pounds/day)	Average DailyEmissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (Exhaust)	82	15
$PM_{2.5}$	54 (Exhaust)	54	10
PM_{10} and $PM_{2.5}$ Fugitive Dust	Best Management Practices	None	None

Notes:
NO_X = oxides of nitrogen
PM_{10} = particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$ = particulate matter, including dust, 2.5 micrometers or less in diameter
ROG = reactive organic gas
Source: Bay Area Air Quality Management District (BAAQMD). 2022. April. California Environmental Quality Act Air Quality Guidelines.

In developing the above significance thresholds, the BAAQMD considers the emission levels for which a project's individual emissions would be cumulatively considerable. If a project were to exceed the emission thresholds in Table 3.2-11:, that project's emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with PM include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would further contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions thresholds shown in Table 3.2-11:, it is speculative to determine how exceeding regional thresholds would affect the number of days the region is in nonattainment—as mass emissions are not linearly correlated with concentrations of emissions—or how many additional individuals in the Air Basin would be affected by the health effects cited above.

In *Sierra Club v. County of Fresno (Friant Ranch, LP)* (2018) 6 Cal.5th 502, 510, 517-522*,* the California Supreme Court held generally that an EIR should "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." A possible example of such a connection would be to calculate a project's "impact on the days of nonattainment per year" (*Id*. at pp. 521). But the court recognized that there might be scientific limitations on an agency's ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies (*Id*. at pp. 520-521). Thus, the court acknowledged that another option for an agency preparing an EIR might be "to explain why it was not feasible to provide an analysis that connected the air quality effects to human health consequences" (*Id*. at p. 522).

For Napa County where the project is located, the BAAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of emissions in the Air Basin. At present, the BAAQMD has not provided any methodology to assist local governments in reasonably and accurately assessing the specific connection between mass emissions of ozone precursors (e.g., ROG and NO_X) and other pollutants of concern on a regional basis and any specific effects on public health or regional air quality concentrations that might result from such mass emissions. The City has therefore concluded that it is not feasible to predict how mass emissions of pollutants of regional concern from the proposed project could lead to specific public health consequences, changes in pollutant concentrations, or changes in the number of days for which the SFBAAB will be in nonattainment for regional pollutants.

Ozone concentrations, for instance, depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. To achieve the health-based standards established by the EPA, the air districts prepare air quality management plans that detail regional programs to attain the Ambient Air Quality Standards (AAQS). However, if a project within the BAAQMD exceeds the regional significance thresholds, the proposed project could contribute to an increase in health effects in the basin until the attainment standards are met in the Air Basin.

On the other hand, it is technically feasible to predict with reasonable accuracy the potential localized health consequences of localized pollutants such as TACs and $PM_{2.5}$. As discussed below, a HRA has been prepared that addresses the potential for additional incidences of cancer resulting from both the construction-related emissions and the operational emissions of the proposed project.

Consistency with Air Quality Plan

The applicable air quality plan is BAAQMD's 2017 Bay Area Clean Air Plan, which identifies measures to:

- Reduce emissions and reduce ambient concentrations of air pollutants;

- Safeguard public health by reducing exposure to the air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and
- Reduce GHG emissions to protect the climate.

A project would be determined to conflict with or obstruct implementation of an applicable air quality plan if it would result in substantial new regional emissions not foreseen in the air quality planning process.

Local CO Hotspots

Congested intersections have the potential to create elevated concentrations of CO, referred to as CO hotspots. The significance criteria for CO hotspots are based on the CAAQS for CO, which is 9.0 ppm (8-hour average) and 20.0 ppm (1-hour average). However, with the turnover of older vehicles, the introduction of cleaner fuels, and implementation of control technology, the SFBAAB is in attainment of the CAAQS and NAAQS, and CO concentrations in the SFBAAB have steadily declined. Because CO concentrations have improved, the BAAQMD does not require a CO hotspot analysis if all the following criteria are met:

- The project is consistent with an applicable congestion management program established by the County Congestion Management Agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans; and
- The project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersection to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).[33]

Community Risk and Hazards

The BAAQMD's significance thresholds for local community risk and hazard impacts apply to both the siting of a new source and to the siting of a new receptor. Local community risk and hazard impacts are associated with TACs and $PM_{2.5}$ because emissions of these pollutants can have significant health impacts at the local level.

- The proposed project would generate TACs and $PM_{2.5}$ during construction activities that could elevate concentrations of air pollutants at the nearby school and residential sensitive receptors. The thresholds for construction-related local community risk and hazard impacts are the same as for project operations. Construction-related TAC and $PM_{2.5}$ impacts should be

[33] Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?rev=ac551d35a52d479dad475e7d4c57afa6&sc_lang=en. Accessed November 29, 2023.

addressed on a case-by-case basis, considering each project's specific construction-related characteristics and proximity to off-site receptors, as applicable.[34]

- The proposed project involves the construction of new warehouse facilities and would be a source of operational TACs and $PM_{2.5}$ from trucking activity. The BAAQMD thresholds related to siting new sources of TACs and $PM_{2.5}$ near existing or planned sensitive receptors are applicable.

Since the City of American Canyon does not have a qualified risk reduction plan, a site-specific analysis of TACs and $PM_{2.5}$ impacts on sensitive receptors was conducted. The thresholds identified below are applied to the proposed project's construction and operational phases.

Community Risk and Hazards: Project

Project-level emissions of TACs or $PM_{2.5}$ from individual sources that exceed any of the thresholds listed below are considered a potentially significant community health risk:

- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute)HI greater than 1.0 would be a significant cumulatively considerable contribution.
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$) annual average $PM_{2.5}$ from a single source would be a significant cumulatively considerable contribution.

Community Risk and Hazards: Cumulative

Cumulative sources represent the combined total risk values of each of the individual sources within the 1,000-foot evaluation zone. A project would have a cumulatively considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source or location of a receptor, plus the contribution from the proposed project, meets any of these conditions:

- Has excess cancer risk levels of more than 100 in one million or a chronic non-cancer HI (from all local sources) greater than 10.0.
- Exceeds 0.8 $\mu g/m^3$ annual average $PM_{2.5}$.

In February 2015, the California Office of Environmental Health Hazard Assessment (OEHHA) adopted additional HRA guidance that includes several efforts to be more protective of children's health. These updated procedures include age sensitivity factors to account for the higher sensitivity of infants and young children to cancer-causing chemicals, and age-specific breathing rates.[35]

[34] Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed November 29, 2023.

[35] California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed November 23, 2023.

Odors

The BAAQMD thresholds for odors are qualitative based on BAAQMD Regulation 7, Odorous Substances. This rule places general limitations on odorous substances and specific emission limitations on certain odorous compounds. Odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health, or safety of any such persons or the public; or which causes, or has a natural tendency to cause, injury, or damage to business or property. Under BAAQMD Rule 1-301, the BAAQMD has established odor screening thresholds for land uses that have the potential to generate substantial odor complaints, including wastewater treatment plants, landfills or transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants. Table 3.2-12 shows the screening distances for various land uses that are considered to have objectionable odors.[36]

Table 3.2-12: BAAQMD Odor Screening-level Distances Thresholds

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Metal Smelting Plants	2 miles
Source: Bay Area Air Quality Management District (BAAQMD). 2022.	

[36] Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed June 2, 2023.

3.2.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Consistency with Air Quality Management Plan

Impact AIR-1:	**The proposed project could conflict with or obstruct implementation of the applicable air quality plan.**

Impact Analysis

The BAAQMD is responsible for reducing emissions from area, stationary, and mobile sources in the SFBAAB to achieve National and California AAQS. The BAAQMD 2017 Clean Air Plan is a regional and multiagency effort to reduce air pollution in the Air Basin. A consistency determination with the Air Quality Management Plan (AQMP) plays an important role in local agency project review by linking local planning and individual projects to the 2017 Clean Air Plan. It fulfills the CEQA goal of informing decision-makers of the proposed project's environmental effects under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the 2017 Clean Air Plan.

The BAAQMD compiles the regional emissions inventory for the SFBAAB. In part, the regional population, housing, and employment projections developed by the ABAG are based on cities' general plan land use designations. These projections form the foundation for the emissions inventory of the 2017 Clean Air Plan. These demographic trends are incorporated into Plan Bay Area, compiled by ABAG and the MTC, to determine priority transportation projects and VMT in the Bay Area. Projects consistent with the local general plan are considered consistent with the regional air quality plan.

The proposed project would build a 219,834-square-foot warehouse on approximately 10.45 acres. As previously described, demographic trends such as employment and population growth were estimated in ABAG's Plan Bay Area 2040 based on local general plan land use patterns, which the BAAQMD utilized in part to inform the emissions inventory and projections contained in the 2017 Clean Air Plan.

The project site is designated Commercial Recreation (CR) by the City of American Canyon General Plan and zoned Recreation (REC). A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zoning district.

It is unclear whether ABAG's projections account for the possible conditional uses allowed under certain land use designations. As such, the proposed project would not automatically be considered consistent with employment and VMT growth projections identified in local plans, upon which applicable ambient Air Quality Plans (AQPs) are based. Therefore, further analysis is needed to determine whether the proposed project would conflict with or obstruct implementation of the applicable air quality plan.

With respect to local air quality plans, the City has adopted Ordinance No. 2024-014 which establishes thresholds to evaluate the significance of GHG impact for industrial land use projects. The industrial project is analyzed against four tiers (whether the project is exempt, whether the project would be consistent with a qualified adopted GHG reduction plan, whether the project incorporates the necessary design elements, and whether the project meets a numeric GHG emissions threshold) to determine its GHG impact significance. As discussed in Section 3.7, Greenhouse Gas Emissions, the proposed project would meet Tier 4 of the City's GHG threshold and therefore would not conflict with the City's GHG threshold.

The analysis below evaluates whether the proposed project would conflict with the Clean Air Plan based on the project's emissions inventory and incorporation of relevant clean air measures contained in the Clean Air Plan.

As noted in Impact AIR-2 below, project-generated emissions would not exceed BAAQMD's project-level significance thresholds and impacts would be less than significant.

Table 3.2-13 identifies the project-applicable control measures in the 2017 Clean Air Plan required by BAAQMD to reduce emissions for a wide range of stationary and mobile sources and the project's consistency analysis with these control measures. As shown in Table 3.2-13, the proposed project would not conflict with the control measures of the 2017 Clean Air Plan.

Table 3.2-13: Consistency With 2017 Clean Air Plan Control Measures

Type	Measure Number/Title	Consistency Analysis
Stationary Source Control Measure	**SS18: Basin-Wide Combustion Strategy.** Stabilize and then reduce emissions of GHGs, criteria air pollutant and toxic emissions from stationary combustion sources throughout the Air District by first establishing carbon intensity caps on major GHG sources, and then adopting new rules to (1) reduce fuel use on a source-type by source-type basis, and (2) evaluate alternatives to decarbonize abatement devices. **SS21: New Source Review for Air Toxics.** Propose revisions to Air District Rule 2-5, New Source Review of Toxic Air Contaminants, based on OEHHA's 2015 Health Risk Assessment Guidelines and ARB/CAPCOA's 2015 Risk Management Guidance. Revise the Air District's Health Risk Assessment trigger levels for each toxic air contaminant using the 2015 Guidelines and most recent health effects values.	**Consistent**. Stationary sources are regulated directly by the BAAQMD, which routinely adopts/revises rules or regulations to implement the Stationary Source (SS) control measures to reduce stationary source emissions. Therefore, any new stationary sources associated with the proposed project would be required to comply with BAAQMD's regulations. Based on the proposed warehousing use for the project site, it is not anticipated that the proposed project would result in any new major stationary source emissions. Additionally, in the event stationary equipment is installed on-site, it is anticipated that the equipment would be small-quantity emitters and would require review by BAAQMD for permitted sources of air which would ensure consistency with the 2017 Clean Air Plan.
	SS 36: PM from Trackout.	**Consistent with mitigation.** BAAQMD's recommended mitigation measures for

Type	Measure Number/Title	Consistency Analysis
	Develop new Air District rule to prevent mud/dirt and other solid trackout from construction, landfills, quarries and other bulk material sites.	construction fugitive dust control, incorporated as MM AIR-1 for this project, would be implemented to reduce fugitive dust and trackout during project construction. In addition, mud and dirt that may be tracked out onto the nearby public roads during construction activities shall be removed promptly by the contractor based on BAAQMD's requirements.
	SS 37: PM from Asphalt Operations. Develop an Air District rule to require abatement/control of blue smoke emissions related to asphalt delivery to roadway paving projects.	**Consistent.** Asphalt application during the construction of the proposed project would be subject to BAAQMD Regulation 8, Rule 15-Emulsified and Liquid Asphalts.
Transportation Control Measures	**TR 2: Trip Reduction Programs.** Implement the regional Commuter Benefits Program (Rule 14-1) that requires employers with 50 or more Bay Area employees to provide commuter benefits. Encourage trip reduction policies and programs in local plans, e.g., general and specific plans while providing grants to support trip reduction efforts. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to adopt transit benefits ordinances in order to reduce transit costs to employees, and to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips. Fund various employer-based trip reduction programs.	**Consistent**. Transportation (TR) control measures are strategies to reduce vehicle trips, vehicle use, VMT, vehicle idling, and traffic congestion to reduce motor vehicle emissions. Although most of the TR control measures are implemented at the regional level—that is, by MTC or California Department of Transportation (Caltrans)—the 2017 Clean Air Plan relies on local communities to assist with the implementation of some measures. The proposed project would also be subject to the Bay Area's Commuter Benefits Program, which requires all employers in BAAQMD's jurisdiction that have 50 or more full-time employees to offer commuter benefits to their employees. Therefore, the proposed project is consistent with this measure. In addition, MM TRANS-2 requires the project applicant to develop and implement a Transportation Demand Management (TDM) program to encourage employees to choose non-personal vehicle models of transportation for commuting. MM TRANS-2 would further support the measure's trip reduction goals.
	TR 9: Bicycle and Pedestrian Access and Facilities. Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific	**Consistent**. The proposed project would provide pedestrian circulation throughout the project site in accordance with California Disabled

Type	Measure Number/Title	Consistency Analysis
	plans, fund bike lanes, routes, paths and bicycle parking facilities.	Accessibility Guidebook (CalDAG) and Americans with Disabilities Act (ADA) recommendations and standards. The proposed project would also provide three bicycle lockers, each of which would accommodate up to four bicycles, for a total of 12 bicycle parking spaces. The proposed 12 bicycle parking spaces would be five more than required per the City's Zoning Ordinance Chapter 19.14.090 (A), Bicycle Parking Requirements.
	TR 19: Medium and Heavy-Duty Trucks. Directly provide, and encourage other organizations to provide, incentives for the purchase of (1) new trucks with engines that exceed ARB's 2010 NO_X emission standards for heavy-duty engines, (2) new hybrid trucks, and (3) new zero-emission trucks. The Air District will work with truck owners, industry, ARB, the California Energy Commission, and others to demonstrate additional battery-electric and hydrogen fuel cell zero-emission trucks.	**Consistent.** The truck fleet used for the proposed project is required to comply with the State's rigorous on-road heavy-duty vehicle programs aimed to transition truck fleets from diesel to Zero-Emission Vehicle (ZEV). Relevant regulations include the "omnibus" regulation, Advanced Clean Truck and Advance Clean Fleets regulations, and TRU Arborne Toxics Control Measure (ACTM), all discussed above in Section 3.2.2-Regulatory Framework.
Energy and Climate Control Measures	**EN1: Decarbonize Electricity Production.** Engage with PG&E, municipal electric utilities and CCAs to maximize the amount of renewable energy contributing to the production of electricity within the Bay Area as well as electricity imported into the region. Work with local governments to implement local renewable energy programs. Engage with stakeholders including dairy farms, forest managers, water treatment facilities, food processors, public works agencies and waste management to increase use of biomass in electricity production. **EN2: Decrease Electricity Demand.** Work with local governments to adopt additional energy efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.	**Consistent**. The Energy and Climate (EN) control measures are intended to reduce energy use as a means of reducing adverse air quality emissions. Solar would be installed on the project's building roof top and would produce an estimated 235,000 kilowatt-hour (kWh) per year.
Buildings Control Measures	**BL2: Decarbonize Buildings.** Explore potential Air District rulemaking options regarding the sale of fossil fuel-based space and water heating systems for both	**Consistent**. The proposed project would not include natural gas plumbing or appliances and is therefore consistent with this measure.

Type	Measure Number/Title	Consistency Analysis
	residential and commercial use. Explore incentives for property owners to replace their furnace, water heater or natural gas powered appliances with zero-carbon alternatives. Update Air District guidance documents to recommend that commercial and multi-family developments install ground source heat pumps and solar hot water heaters.	
Natural and WorkingLands Control Measures	**NW 3–Carbon Sequestration in Wetlands.** Identify federal, State, and regional agencies, and collaborative working groups that the Air District can assist with technical expertise, research or incentive funds to enhance carbon sequestration in wetlands around the Bay Area. Assist agencies and organizations that are working to secure the protection and restoration of wetlands in the San Francisco Bay.	**Consistent**. The control measure focuses on increasing carbon sequestration on wetlands. The proposed project would preserve the on-site wetlands and would include the planting of various ornamental and shade trees throughout the project site. These actions would support the State's working lands and would therefore make the proposed project consistent with this measure.
Waste Management Control Measures	**WA 4–Recycling and Waste Reduction.** Develop model policies to facilitate local adoption of ordinances and programs to reduce the amount of green waste going to landfills.	**Consistent**. The control measure includes strategies to increase waste diversion rates through efforts to reduce, reuse, and recycle. The proposed project would comply with Assembly Bill (AB) 341, which requires mandatory commercial recycling for businesses that generate four cubic yards or more of commercial solid waste per week. Additionally, the proposed project would be required to reduce construction waste by 75 percent and use 30 percent recycled content during the construction of the proposed facility. Therefore, the proposed project would not conflict with these WA control measures.
Water Control Measures	**WR 2–Support Water Conservation.** Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	**Consistent.** The 2017 Clean Air Plan includes measures to reduce water use. The proposed project would include water efficiency measures required under CALGreen. In addition, the proposed project would include water-efficient indoor fixtures consistent with the requirements of CALGreen and water-efficient landscaping outdoors.
Super GHG ControlMeasures	**SL 1–Short-Lived Climate Pollutants.** Reduce methane from landfills and farming activities through various control measures listed under waste and agriculture sectors.	**Consistent**. Super-GHGs include methane, black carbon, and fluorinated gases. These compounds are sometimes referred to as short-lived climate

Type	Measure Number/Title	Consistency Analysis
	Develop a rule to reduce methane emissions from natural gas pipelines and processing operations, and amend regulations to reduce emissions of methane and other organic gases from equipment leaks at oil refineries. Enforce applicable regulations on the servicing of existing air conditioning units in motor vehicles, support the adoption of more stringent regulations by the ARB and/or EPA, and encourage better HFC disposal practices.	pollutants because their lifetime in the atmosphere is generally fairly short. Measures to reduce super-GHGs are addressed on a sector-by-sector basis in the 2017 Clean Air Plan. The proposed project would comply with AB 341, which mandates commercial recycling for businesses that generate four cubic yards or more of commercial solid waste per week, which could contribute to reducing methane by diverting waste from landfills.

Notes:
AG = Agricultural
BL = Buildings
EN = Energy and Climate
FSM = Further Study Measures
NW = Natural and Working Lands
SL = Super GHG (Short-Lived)
SS = Stationary Sources
TR = Transportation
WA = Waste Management
WR = Water Control Measures
Source: Bay Area Air Quality Management District (BAAQMD). 2017, April 19. Final 2017 Clean Air Plan, Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed November 30, 2023.

As shown in Table 3.2-13, the proposed project would not conflict with the relevant clean air measures contained in the Clean Air Plan after mitigation. Nonetheless, the BAAQMD's CEQA Air Quality Guidelines further recommend determining a project's consistency with the 2017 Clean Air Plan, in part, by determining a project's consistency with the regional significance thresholds presented in Table 3.2-11.[37] As discussed under Impact AIR-2, the proposed project's emissions are below BAAQMD's significance thresholds and would be considered less than significant.

The BAAQMD does not have a bright-line emissions threshold for determining potentially significant impacts related to construction fugitive dust. Instead, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project's intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs.

[37] Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed June 2, 2023.

Therefore, Mitigation Measure (MM) AIR-1 would be required to ensure implementation of construction BMPs recommended by the BAAQMD.

Consequently, implementation of MM AIR-1 would sufficiently maintain project construction emissions at less than significant levels. As previously discussed, the BAAQMD's CEQA Air Quality Guidelines recommend determining a project's consistency with the 2017 Clean Air Plan, in part, by determining a project's consistency with the BAAQMD significance thresholds. As discussed under Impact AIR-2, the proposed project would not generate emissions which would exceed the BAAQMD's significance thresholds. Therefore, the proposed project would not conflict with the applicable air quality plan and impacts would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM AIR-1 Implement BAAQMD Best Management Practices to Control Dust During Construction

The following dust control measures, as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the proposed project and implemented during construction:

- All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least two times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard.
- All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes, as required by the California Airborne Toxics Control Measure (ACTM) Title 13, Section 2485 of California Code of Regulations. Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The construction contractor shall take corrective action within 48 hours. The

BAAQMD's and the City's phone numbers shall also be visible to ensure compliance with applicable regulations.

Level of Significance After Mitigation

Le*s*s than significant impact with mitigation incorporated.

Cumulative Criteria Pollutant Emissions Impacts

Impact AIR-2: **The proposed project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.**

Impact Analysis

This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants results from past and present development within the Air Basin, and this regional impact is a cumulative impact. Therefore, new development projects (such as the proposed project) within the Air Basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when evaluated in combination with past, present, and future development projects.

As discussed above, BAAQMD sets emission thresholds for NO_x, PM_{10}, $PM_{2.5}$, CO, and ROG. NO_X emissions are of concern because of potential health impacts from exposure to NO_X emissions during both construction and operation and as a precursor in the formation of airborne ozone. PM_{10} and $PM_{2.5}$ are of concern during construction because of the potential to emit exhaust emissions from the operation of off-road construction equipment and fugitive dust during earth-disturbing activities (construction fugitive dust). CO emissions are of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion and potential health effects. ROG emissions are also important because of their participation in the formation of ground level ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the State CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the proposed project would result in regional emissions that exceed the BAAQMD regional thresholds of significance for construction and operations on a project level. The significance thresholds represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts.

Therefore, a project that would not exceed the BAAQMD thresholds of significance on the project level also would not be considered to result in a cumulatively considerable contribution to these regional air quality impacts. Construction and operational emissions are discussed separately below.

Construction

During construction, fugitive dust would be generated from site grading and other earthmoving activities. The majority of this fugitive dust would remain localized and deposited near the project site; however, fugitive dust's potential impacts exist unless control measures are implemented to reduce this source's emissions. Exhaust emissions would also be generated from the operation of the off-road construction equipment and on-road construction vehicles.

Construction Fugitive Dust

The BAAQMD does not recommend a numerical threshold for fugitive dust PM emissions. Instead, the BAAQMD bases the determination of significance for fugitive dust on the consideration of the control measures to be implemented, referred to as BMPs. If all appropriate emissions control measures are implemented for a project as recommended by the BAAQMD, then fugitive dust emissions during construction are not considered significant. Therefore, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project's intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs. Therefore, MM AIR-1 would be required to ensure implementation of construction BMPs recommended by the BAAQMD irrespective of the emissions reductions achieved by those BMPs. With the incorporation of this mitigation, short-term construction impacts associated with violating an air quality standard or contributing substantially to an existing or projected air quality violation would be less than significant for fugitive dust.

Construction Air Pollutant Emissions: ROG, NO_X, PM_{10}, $PM_{2.5}$

CalEEMod, Version 2022.1, was used to estimate the proposed project's construction emissions. CalEEMod provides a consistent platform for estimating construction and operational emissions from various land use projects and is the model recommended by the BAAQMD for estimating project emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the BAAQMD to assess ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$ construction emissions to determine significance for this impact.

At the time of this analysis, the construction of the proposed project was anticipated to begin in the third quarter of 2024 and be completed 11 months later. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements.

Construction activities such as grading, excavation, and travel on unpaved surfaces would generate dust and lead to elevated concentrations of PM_{10} and $PM_{2.5}$. According to the project site plans and applicant-provided information, an estimated 1,000 cubic yards of soil are anticipated to be imported during site grading activities. The operation of construction equipment results in exhaust

emissions, which include ROG and NO_X. Table 3.2-14 presents construction-period emissions that would result from the development of the proposed project. As shown in Table 3.2-14, construction-related criteria pollutant emissions would not exceed BAAQMD thresholds.

Table 3.2-14: Unmitigated Construction Emissions

Construction Activity	Criteria Pollutant Emissions (Tons)			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Site Preparation (2024)	0.019	0.180	0.008	0.007
Grading (2024)	0.038	0.387	0.016	0.014
Building Construction (2024)	0.053	0.405	0.015	0.014
Building Construction (2025)	0.123	0.930	0.032	0.030
Paving (2025)	0.012	0.079	0.004	0.003
Architectural Coating (2025)	0.277	0.010	0.000	0.000
Total Construction Emissions (Tons)	**0.522**	**1.992**	**0.075**	**0.069**
Average Daily Emissions				
Total Construction Emissions (Pounds)	1,044	3,984	149	137
Average Daily Construction Emissions (Pounds/Day)	**4.2**	**15.9**	**0.60**	**0.55**
BAAQMD Significance Thresholds	54	54	82	54
Significant Impact?	**No**	**No**	**No**	**No**

Notes:
This analysis relies on a 250-day construction schedule, consistent with the construction schedule and modeling results contained in Appendix A.
BAAQMD = Bay Area Air Quality Management District
NOx = nitrogen oxides
PM_{10} = particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$ = particulate matter, including dust, 2.5 micrometers or less in diameter
ROG = reactive organic gases
Source: Appendix A.

Operation

Operational Air Pollutant Emissions: ROG, NO_X, PM_{10}, and $PM_{2.5}$

Operational emissions would include area, energy, and mobile sources. Area sources would include emissions from architectural coatings, consumer products, and landscape equipment. Energy sources include emissions from the combustion of natural gas for water heaters and other heat sources. Mobile sources include exhaust and road dust emissions from the automobiles that would travel to and from the project site. Pollutants of concern include ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Project operations were analyzed at full buildout immediately following the completion of construction in August 2025 as a conservative estimate of operational emissions beginning in the earliest year of full operation. During full operation, the proposed project is expected to generate

1.69 trips per 1,000 square feet or an estimated 372 daily trips.[38] A recent American Canyon industrial warehouse travel collection study[39] was used to apportion the trips between passenger vehicles (244 daily) and medium-duty (19 daily) and heavy-duty truck (109 daily) trips. An average truck trip length of 35.6 miles was also assumed, based on eight existing Napa County industrial warehousing sites in full operation.[40]

Operational emission estimates for the proposed project are contained in Table 3.2-15. For detailed assumptions used to estimate emissions, see Appendix B.

Table 3.2-15: Unmitigated Operational Emissions

Emissions Source	ROG	NO_X	PM_{10} Total	$PM_{2.5}$ Total
	Tons per Year			
Area	1.10	0.01	0.002	0.002
Energy	–	–	–	–
Mobile–Trucks	0.055	3.615	0.772	0.237
Mobile–Passenger Vehicles	0.116	0.095	0.312	0.080
Stationary	–	–	–	–
Total (tons/year)	1.27	3.72	1.09	0.32
Significance Threshold (Tons/Year)	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**
Total Average (pounds/day)[2]	*7.0*	*20.4*	*6.0*	*1.7*
Significance Threshold (Tons/Year)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
[1] Totals may not add up due to rounding. Calculations use unrounded results.
[2] Pounds/day emissions data is derived from tons/year emissions data by converting tons to pounds. 365 working days per year is assumed to estimate average daily emission rates.
lb. = pounds
ND = No Data
NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns in diameter$PM_{2.5}$ = particulate matter 2.5 microns in diameter
ROG = reactive organic gases
Source: CalEEMod Output (see Appendix A).

[38] W-Trans. 2023. 1055 Commerce Court Memorandum of Assumptions. April.
[39] Fehr and Peers, 2022. Memorandum, American Canyon Industrial Warehouse Travel Behavior Data, from Joe Livaich, Buzz Oates Construction, Inc., June 16, 2023.
[40] Ibid.

Table 3.2-15 indicates that the proposed project would result in operational-related criteria air pollutants or ozone precursors below the BAAQMD's thresholds of significance for all criteria pollutants.

Operational Carbon Monoxide Hotspot

The CO emissions from traffic generated by the proposed project are a concern at the local level. Congested intersections can result in high, localized concentrations of CO.

The BAAQMD recommends a screening analysis to determine whether a project has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is necessary. The proposed project would result in a less than significant impact to air quality for local CO if all the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans; and
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

SR-29, located approximately 4,800 feet east of the project site, would experience the most traffic volume as compared to other roadways in the vicinity. The segment of SR-29 near the project site has a peak-hour traffic volume of 2,900 vehicle trips as of 2021.[41,42] Therefore, the proposed project would not result in any nearby intersection having peak-hour traffic volumes exceeding 44,000 vehicles per hour.

Nonetheless, CO hotspots can occur when a transportation facility's design or orientation prevents the adequate dispersion of CO emissions from vehicles, resulting in the accumulation of local CO concentrations. The design or orientation of a transportation facility that may prevent the dispersion of CO emissions include tunnels, parking garages, bridge underpasses, natural or urban canyons, below-grade roadways, or other features where vertical or horizontal atmospheric mixing is substantially limited. Adjacent roadways that would receive new vehicle trips generated by the proposed project do not include roadway segments where vertical or horizontal atmospheric mixing is substantially limited.

Finally, the proposed project would not conflict with a program, plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities. As discussed in

[41] California Department of Transportation (Caltrans). 2021. Traffic Volumes for All Vehicles on CA State Highways. Website: https://dot.ca.gov/programs/traffic-operations/census. Accessed November 30, 2023.
[42] Postmile of the nearest SR-29 segment is obtained from Caltrans Postmile Services. Website: https://postmile.dot.ca.gov/PMQT/PostmileQueryTool.html?. Accessed November 20, 2023.

Section 3.13, Transportation, General Plan Policy 4.6 indicates that industrial uses should be located in the City's north industrial area to minimize the impacts of truck traffic on residential neighborhoods. The proposed project is located adjacent to similar warehouse projects, and with the redesign of Commerce Court as a cul-de-sac, the roadway connection to the residential neighborhood to south of the project is not available, and truck traffic would be required to access the site via Green Island Road. As the proposed project would minimize truck traffic impacts on residential neighborhoods, the proposed project would not conflict with this policy.

Therefore, based on the above criteria, the proposed project would not exceed the CO screening criteria and would have a less than significant impact related to CO.

The proposed project would generate criteria pollutant and ozone precursor emissions during construction and operation; however, as previously indicated, emissions would be below BAAQMD thresholds and therefore would have less than significant effects in this respect.

The proposed project would generate construction fugitive dust. The BAAQMD does not have a bright-line emissions threshold for determining potentially significant impacts related to construction fugitive dust. Instead, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project's intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs. Therefore, MM AIR-1, discussed above, would be required to ensure implementation of construction BMPs recommended by the BAAQMD irrespective of the emissions reductions achieved by those BMPs.

Consequently, implementation of MM AIR-1 would sufficiently reduce project construction emissions to less than significant levels.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM AIR-1.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

Sensitive Receptors Exposure to Pollutant Concentrations

Impact AIR-3:	**The proposed project would not expose sensitive receptors to substantial pollutant concentrations.**

Impact Analysis

The proposed project could expose sensitive receptors to elevated pollutant concentrations if it causes or contributes significantly to elevated pollutant concentration levels. As described in Section 3.2.1,

Environmental Setting, beneath Table 3.2-4, the closest sensitive receptors include a single-family residence located approximately 850 feet east of the project site, Napa Junction Magnet Elementary School located approximately 1,200 feet south of the project site, and a neighborhood located approximately 1,600 feet south of the project site. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects. As the proposed project would constitute the development of 219,834 square feet of industrial warehouse space and the operation of heavy-duty trucking fleets, a construction and operational HRA was prepared for the proposed project and is contained in Appendix B. The results of the HRA are summarized below.

Construction

Table 3.2-16 presents a summary of the results of the HRA prepared for the proposed project during project construction. The HRA analyzes the proposed project's construction emissions over a period of 11 months consistent with the BAAQMD's Health Risk Assessment Guidelines.[43] The HRA also analyzes the proposed project's impacts at the maximally impacted receptor, which is a residence, the closest off-site worker receptor and the school receptor exposure at the Napa Junction Magnet Elementary School.

As shown in Table 3.2-16, health risks resulting from the construction of the proposed project were found to be less than the BAAQMD's project-level significance thresholds.

Table 3.2-16: Summary of Construction Health Risks at the Maximum Impacted Receptor

Impact Scenario	UTM E	UTM N	Cancer Risk[1] (risk per million)	Chronic Non-Cancer Hazard Index[2]	TAC Concentration[3] (µg/m³)
Residential MIR Impact	563979	4226674	0.8	0.001	0.0044
Worker MIR Impact	563625	4226775	1.0	0.019	0.0925
School MIR Impact	563877	4226209	0.2	0.002	0.00112
Thresholds of Significance			**10**	**1**	**0.3**
Exceeds Individual Source Threshold?			**No**	**No**	**No**

Notes:
DPM = diesel particulate matter
MIR = Maximally Impacted Sensitive Receptor
REL = Reference Exposure Level
TAC = toxic air contaminants
µg/m³ = micrograms per cubic meter
[1] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the DPM REL of 5 µg/m³.
[3] TAC concentration taken from AERMOD is always at the MIR identified from the project air dispersion models. The school MIR was identified as the Napa Junction Elementary School.
Emissions Source: Appendix B.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed November 30, 2023.

[43] Bay Area Air Quality Management District (BAAQMD). 2016. BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines. December. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en. Accessed September 16, 2023.

Community Health Risk Assessment

A community HRA was conducted for construction in accordance with BAAQMD recommendations. The cumulative health risk values were determined by adding the health risk values from refined modeling of the proposed project construction to the screening-level health risk values from each individual stationary and mobile source within a 1,000-foot radius of the site. The HRA revealed that the main sources of health risks come from existing sources (i.e., roadways) rather than the proposed project. The analysis results presented in the HRA, contained in Appendix B, are shown in Table 3.2-17. As shown therein, health risks to nearby sensitive receptors would not exceed the BAAQMD community health risk significance thresholds. As the proposed project did not result in an exceedance of project-level BAAQMD significance thresholds, the proposed project would not result in a potentially significant impact and the proposed project's impacts would not be cumulatively considerable. Therefore, this impact would be less than significant.

Table 3.2-17: Summary of Construction Health Risks at the Maximum Impacted Receptor

Source	Source Type	Distance from MIR[1] (feet)	Cancer Risk (per million)	Chronic HI	$PM_{2.5}$ Concentration ($\mu g/m^3$)
Project					
Residential MIR	Diesel Construction Equipment, Trucking Fleets, and Passenger Vehicles	—	0.8	0.001	0.0044
Roadways		—	1.19	0.003	0.025
Cumulative Health Risks					
Cumulative Maximum with Project DPM Emissions			**2**	**0.004**	**0.029**
BAAQMD's Cumulative Thresholds of Significance			**100**	**10**	**0.8**
Threshold Exceedance?			**No**	**No**	**No**

Notes:
BAAQMD = Bay Area Air Quality Management District
DPM = diesel particulate matter
HI = health index
MIR = Maximally Impacted Sensitive Receptor
ND = No Data
$PM_{2.5}$ = particulate matter, including dust, 2.5 micrometers or less in diameter
$\mu g/m^3$ = micrograms per cubic meter
[1] The residential MIR located at 563979 UTM E 4226674 UTM N was identified as the primary MIR here as it would experience the greatest health impact between residential and school receptors.
[2] Assumes emissions remain constant with time. Values represent the greatest identified among all MIRs presented in this analysis, including the two previously identified residences and the previously identified school.
Source: Appendix A.

Toxic Air Contaminant Operational Analysis

For project operation, potential TAC emissions would be from the exhaust of the trucks entering, exiting, and idling on the site. Diesel exhaust particulate emissions from on-road heavy-duty trucks are substantially less than those from off-road construction equipment and are dispersed over a larger linear roadway path. Projects with the potential for health risk from DPM are those with high level of truck traffic or sites where trucks with TRUs (small diesel engines used to run refrigeration devices on trucks) idle for a significant amount of time. The ARB's Air Quality and Land Use Handbook provides guidance on levels of activity that could result in a potential impact:[44]

> *Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units [TRUs] per day, or where TRU unit operations exceed 300 hours per week).*

The traffic analysis estimates the daily HHD truck trips accessing the project site would be 128 trips, which is 64 HHD trucks per day. Since these project HHD truck trips are less than the 100-truck advisory threshold in the Air Quality and Land Use Handbook, an operational HRA is not necessary and therefore not analyzed in this study. As previously discussed, no TRUs would be operated while on-site. Therefore, risks due to DPM from this level of truck traffic would be less than significant.

Best Management Practices for Warehouses

The California Attorney General published a list of best practices for warehouse development that aim to reduce air quality emissions and health risks to sensitive receptors.[45] The ARB Concept Paper for the Freight Handbook also provides best practices for warehouse projects.[46] The design of the proposed project considered and is consistent with many of these best practices.

The proposed project includes the following design features and best management strategies, to minimize and reduce air quality and health risk impacts:

- As discussed in Chapter 2, Project Description, the proposed project would provide adequate amounts of on-site parking to prevent trucks and other vehicles from parking or idling on public streets and to reduce demand for off-site truck yards.
- As shown in Exhibit 2-4a, facility entry and exit points from the public street were placed away from sensitive receptors south and east of the project.
- Rooftop Solar Photovoltaic system with Battery Storage would be provided as required by Title 24 Part 6 Section 140.10(a).
- Heat pump for space Conditioning in Single-Zoned Office Spaces would be provided as required by Title 24 Part 6 Section 140.4(a).2.

[44] California Air Resources Board (ARB). Air Quality and Land Use Handbook: A Community Health Perspective. 2005. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf. Accessed November 16, 2023.

[45] California Office of the Attorney General. 2022. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf. Accessed November 14, 2023.

[46] California Air Resources Board (ARB). 2020. California Sustainable Freight Initiative: Concept Paper for the Freight Handbook. Website: https://ww2.arb.ca.gov/resources/documents/concept-paper-freight-handbook. Accessed November 14, 2023.

- The proposed project would provide electrical Infrastructure ready to support future ZEV medium heavy-duty trucks (MHDT) and heavy heavy-duty trucks (HHDT), as required by California Building Standards Code (CBC) 5.106.5.4.1 Electric vehicle charging readiness requirements for warehouses with planned off-street loading spaces.
- Water-efficient landscaping would be provided in accordance with Municipal Code Chapter 16.14 Water-Efficient Landscaping.
- Low-flow water fixtures would be provided per CALGreen Building Code Section 4.303.1.
- Energy-efficient light-emitting diode (LED) lighting would be provided per the California Energy Code.
- The proposed project would use compliant low-GWP refrigerants per ARB HFC regulation.

As shown above, the proposed project incorporates many best practices for warehouse development. It is worth noting that one of the best practices is to site warehouse facilities at least 1,000 feet from the nearest sensitive receptors. Although the proposed project is within 1,000 feet of residential uses, the above health risk impact analysis demonstrates that the proposed project would not have significant impacts on the nearest receptors.

Carbon Monoxide Hotspot

As discussed in Impact AIR-2, the proposed project would not generate sufficient vehicle traffic during project operation to substantiate creating a CO hotspot. Therefore, this impact would be less than significant with regard to exposing sensitive receptors to substantial concentrations of CO emissions. As such, the proposed project would result in less than significant impacts related to exposing sensitive receptors to substantial pollutant concentrations.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Objectionable Odors Exposure

Impact AIR-4:	**The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**

Impact Analysis

Construction

During construction activities, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment. It is anticipated that by the time such emissions reach any sensitive receptor sites, they would be diluted to well below any air quality or odor concern level. Therefore, construction odor impacts would be less than significant.

Operation

The proposed project would construct and operate a wine storage warehouse and distribution center. Operation of this type of project would likely not generate objectionable odors that may affect a substantial number of nearby receptors. The types of uses that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities.

Minor sources of odors that would be generated by the proposed project, such as exhaust from mobile sources, are not typically associated with numerous odor complaints, but are known to have temporary and less concentrated odors. The nearest sensitive receptor is a single-family residence located approximately 850 feet east of the project site. Because of distance from this sensitive receptor, operation of the proposed project would not have an impact related to odors.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.2.6 - Cumulative Impacts

The geographic scope of the cumulative air quality analysis is the SFBAAB, which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the Air Basin represents the area most likely to be impacted by air emissions. The BAAQMD CEQA Guidelines cumulative significance criteria are used in the cumulative analysis of air quality.

In developing thresholds of significance for air pollutants, BAAQMD established numerical thresholds for determining when a project's individual contributions would be cumulatively considerable. If a project does not exceed the identified significance thresholds, its emissions would not be cumulatively considerable, resulting in less than significant air quality impacts to the region's existing air quality conditions.

Criteria Pollutants

By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within an air basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the project) within the SFBAAB would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited but cumulatively considerable when taken in combination with past, present, and future

development projects. All new development that would result in an increase in air pollutant emissions above those assumed in regional AQPs would contribute to cumulative air quality impacts.

The cumulative analysis focuses on whether the proposed project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the State CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that a project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether a project would result in regional emissions that exceed the BAAQMD regional thresholds of significance. Projects, such as the proposed project, that generate emissions below the significance thresholds would be considered consistent with regional air quality planning efforts and would not generate cumulatively considerable emissions. Therefore, the proposed project would not have a cumulative impact related to construction or operation criteria pollutants.

Toxic Air Contaminants

Construction and Operational Emissions at the Site and Maximum Impacted Receptor

As discussed previously, localized risks are primarily associated with exposure to TAC emissions. Operation of the proposed project would not contribute to significant operational TAC emissions. Potential cumulative sources of TAC emissions could occur during construction or operation impacting the nearby Maximally Impacted Sensitive Receptor. Sensitive receptors could be impacted by new stationary sources in the vicinity of the site (e.g., dry cleaners, diesel backup generators, and gasoline stations) or by the construction or operation of other developments. Any proposed new stationary source of TAC emissions would be subject to BAAQMD permit requirements, which involves New Source Review for air toxics and an evaluation of health risks.[47] Freeways, major roadways and railroads are also significant sources of TAC emissions of diesel particulate; however, land use and zoning restrictions preclude these from becoming new significant sources of TAC exposure in the project area and they do not figure into cumulative considerations. The final potential sources of TACs for a cumulative risk would be diesel exhaust exposure from off-road sources such as construction equipment from other land use development. New construction from other development projects are a potential additional source of TAC emissions and risk to sensitive receptors; however, the CEQA process and current BAAQMD thresholds for cumulative community risk would consider these impacts. In these cases, sensitive receptors for other cumulative projects would be considered in their environmental planning analysis under BAAQMD risk thresholds. This would ensure that there are no significant impacts to these sensitive receptors and risks would be less than significant.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

[47] Bay Area Air Quality Management District (BAAQMD). 2023. Regulation 2 Rule 2: New Source Review. Website: https://www.baaqmd.gov/rules-and-compliance/rules/reg-2-rule-2-new-source-review. Accessed November 17, 2023.

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3.3 - Biological Resources

3.3.1 - Introduction

This section describes the existing biological setting and potential effects from implementation of the proposed project on the project site and the surrounding area. This section also identifies mitigation measures to reduce these potential effects to less than significant levels where applicable. Descriptions and analysis in this section are based, in part, on a Biological Resources Assessment (BRA) prepared by First Carbon Solutions (FCS), including field and focused surveys. Additional information used for analysis includes wildlife and floristic rare plant surveys, conducted by Pinecrest Research Corporation (Pinecrest); Jurisdictional Determination Reverification and previous field surveys, conducted by Monk & Associates (M&A); and analyses completed for the adjacent Commerce 217 project. All supporting documents are contained in Appendix C of this Draft EIR. Within Appendix C are three subfolders: Appendix C.1 contains the Commerce Court 220 BRA; Appendix C.2 contains Commerce Court 217 supporting documents; and Appendix C.3 contains Commerce Court 220 supporting documents.

The following public comments pertaining to biological resources were received in response to the Notic of Preparation (NOP):

- The Draft EIR should evaluate environmental impacts given that the project site has already been cleared of vegetation and graded.
- The Draft EIR should evaluate the ability of animals to utilize the wetland and provide recommendations.
- The Draft EIR should ensure that the wetland is monitored and protected.
- The Draft EIR should evaluate the effect of lighting and noise from the warehouses on birds and wildlife.
- The Draft EIR must evaluate impacts on California Endangered Species Act (CESA) species in order to receive an Incidental Take Permit (ITP).
- The Draft EIR must evaluate impacts on nesting birds pursuant to the Migratory Bird Treaty Act.
- The Draft EIR should provide sufficient information regarding the environmental setting or “baseline” for habitats of special-status plant, fish, and wildlife species located and potentially located within the project site.
- The Draft EIR should describe aquatic habitats, such as wetlands, as well as any sensitive natural communities occurring on or adjacent to the project site.
- The Draft EIR should describe City regulations regarding wetland set back distances.
- The Draft EIR should include habitat descriptions and the potential for species occurrences from multiple sources, such as aerial imagery, historical and recent survey data, field reconnaissance, scientific literature, databases from relevant agencies, etc.

- The Draft EIR should include surveys for special-status species and rare plants and recommended protocols.
- The Draft EIR should describe direct and indirect impacts related to the loss or modification of breeding, nesting, dispersal and foraging habitat as well as the obstruction of movement corridors.
- The Draft EIR should describe direct and indirect impacts related to permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic, etc.
- The Draft EIR should describe cumulative impacts to biological resources.

3.3.2 - Project History

The project site is a portion of a larger, 35.85-acre site that was subsequently subdivided into three lots in February 2021 (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330). The southern parcel (SDG Commerce 330) was developed in 2020. The northern parcel (SDG Commerce 217) was entitled in 2021 and at the time of this writing is currently being developed. The central parcel (SDG Commerce 220) is the project site evaluated in this analysis.

While the BRA site boundary includes a total of 10.17 acres, project site boundaries were subsequently increased to 10.45 acres to include adjacent, off-site improvement areas. However, field surveys for the BRA and additional supporting studies did include the entire 10.45-acre project site, as these areas were located within original survey buffer areas. Please see Section 2.0 (Project Description) for further details regarding project site boundaries.

It should be noted that as part of the SDG Commerce 217 development (located directly north of the project site), much of the SDG Commerce 220 project site was graded between May 29 and July 2, 2023, to procure existing, stockpiled soil for use as clean fill material for the SDG Commerce 217 site (Appendix C.2: *BRA for SDG 217 ISMND*). As a part of the SDG Commerce 217 project, M&A authored an *Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site* in September 2020 which analyzed grading impacts (Appendix C.2: *Addendum to Biological Constraints*). Additionally, an approved grading plan was issued by the City of American Canyon in March 2023 (Appendix C.2: *Borrow Site Grading Plan*).

3.3.3 - Environmental Setting

The project site is located in the City of American Canyon, which is part of the greater north San Francisco Bay Area (Exhibit 2-1). The project site is located within the *Cuttings Wharf, California,* United States Geological Survey (USGS) 7.5-Minute Topographic Quadrangle Map.

The project area is generally located in the northern portion of the City of American Canyon, where commercial development is the dominant land use. The project site is bordered by a eucalyptus grove and North Slough beyond which is the Napa River (west), a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 (north), Commerce Court, beyond which is a

paintball recreation area (east), and a wine distribution warehouse known as SDG Commerce 330 (south); refer to Exhibit 2-2.

Soils, Typography, and Hydrology

The project area experiences a Mediterranean climate characterized by warm, dry summers and cool, wet winters. The project area typically exhibits annual low/high temperatures between 40-80°F (degrees Fahrenheit) and an annual average rainfall of approximately 20 inches.

Soil survey information for the project site was obtained from the National Resources Conservation Service (NRCS) Web Soil Survey.[1] The NRCS Web Soil Survey (WSS) depicts one soil type within the project site (Exhibit 3.3-1); Haire clay loam (148), 2 to 9 percent slopes. Haire Clay Loam is characterized as alluvium, derived from sedimentary rock. These soils are moderately well drained and non-saline to very slightly saline.

The 10.45-acre project site is currently undeveloped land. A linear wetland (LW1) and three isolated wetlands (W1, W2, and W3) are located within the northern portion of the property. The location and extent of each wetland is shown on Exhibit 3.3-2, *Vegetation Communities and Land Cover Types*. The project site is relatively flat with elevations ranging from 13 to 25 feet above sea level. The ground is undulating due to past land use disturbances including eucalyptus tree removal in 2012. The site slopes gently to the west toward the North Slough and the Napa River.

In 2023, M&A reverified a 0.023 acre of seasonal wetlands and 0.042 acre of linear wetlands within the delineation survey area (Exhibit 3.3-2). These wetlands have surface hydrologic connectivity to North Slough, which flows to the Napa River to the west. The Napa River is a traditional navigable water.

Vegetation Communities and Land Cover Types

Vegetation communities are assemblages of plant species growing in an area of similar biological and environmental factors. The following section describes the vegetation communities and land cover types present in the project area. The location and extent of each vegetation community is shown on Exhibit 3.3-2.

Non-native Annual Grassland–Avena spp.–Bromus spp. Herbaceous Semi-Natural Alliance

This vegetation type is typically described by being dominated by non-native annual grasses and annual or perennial forbs from dense to sparse cover with less than 10 percent tree or shrub cover. With a few exceptions, the plants are dead through the summer and fall dry season, persisting as seeds. This community usually occurs below 3,000 feet and is the most common herbaceous vegetation type of the region. This vegetation type is classified by the Manual of California Vegetation (MCV) as *Avena spp.–Bromus spp.* Herbaceous Semi-Natural Alliance, which has broad membership rules, but is dominated by a non-native annual grass species. The herb layer in this alliance is generally less than 1.2 meters and vegetation cover ranges from open to continuous.

[1] United States Department of Agriculture. 2023. National Resources Conservation Service Web Soil Survey. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed September 27, 2023.



Source: Bing Aerial Imagery. USDA Soils Data Mart, County of American Canyon.

FIRSTCARBON SOLUTIONS™

140 70 0 140
Feet

Exhibit 3.3-1
Soils Map

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Source: Bing Aerial Imagery. Monk & Associates Environmental Consultants, 08/2023.

FIRSTCARBON SOLUTIONS™

200 100 0 200 Feet

Exhibit 3.3-2
Vegetation Communities and Land Cover Types

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Trees and shrubs may be present at low cover. This community is found on various substrates including foothills, waste spaces, rangelands, and openings in woods.

The vast majority of the project site is generally considered non-native annual grassland, with a species composition that trends strongly toward ruderal. Individual scattered shrubs (including coyote brush [*Baccharis pilularis*]) and eucalyptus saplings and resprouts are not considered their own vegetation type due to small patch size, but rather a component of the grassland matrix (see membership rules, below).

The most predominant grass species within the project site included wild oats (*Avena sp*), canary-grass (*Phalaris aquatica)*, medusahead (*Taeniatherum caput-medusae*), and wall barley (*Hordeum murinum*), but equally dominant are ruderal species including mustard (*Hirschfeldia incana)*, stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*).

As previously noted, large areas of this vegetation type were graded between May 29 and July 2, 2023 (see Appendix C.2: *Borrow Site Grading Plan*; and *Addendum to Biological Constraints*). The grading did not encroach into the wetlands features or associated wetland buffer areas. The grading effectively eliminated the non-native grassland throughout much of the site.

Seasonal Wetland

Seasonal wetland habitat is present on the project site (Exhibit 3.3-2), reflecting current conditions. Over the past 12 years, the United States Army Corps of Engineers (USACE) has twice verified its jurisdiction via delineations, as explained below.

In 2011, the USACE confirmed 0.049-acre of wetlands and 0.004-acre of "other waters" adjacent to the former gravel road on the eastern edge of the project site. On December 6, 2011, the USACE confirmed the extent of its jurisdiction on the project site (USACE File Number 2011-00322N). This determination expired on January 31, 2017, so M&A conducted a reverification wetland delineation of the project site on November 16, 2016. The map was field confirmed by the USACE on May 18, 2017, and an approved jurisdictional determination (AJD) was issued on May 16, 2018. It should be noted that the 2018 AJD included one isolated wetland that is no longer part of the project site.

In 2023, M&A reverified and mapped 0.023 acre of seasonal wetlands (W1-W3) and 0.042 acre of linear wetlands (LW1) within the project site. On August 30, 2023, the USACE issued a Preliminary Jurisdictional Determination (PJD) (Appendix C.3: *Preliminary Jurisdictional Determination Map, SDG Commerce 220 Project Site*).

Vegetation observed within the seasonal wetlands included non-native and native species. Non-native species included spiny-fruit buttercup (*Ranunculus muricatus;* facultative wetland [FACW]) and Italian ryegrass (*Festuca perennis;* facultative [FAC]). Native species included creeping spikerush (*Eleocharis macrostachya;* obligate wetland species [OBL]), brown-headed rush (*Juncus*

phaeocephalus; FACW) and spreading rush (*Juncus patens;* FACW). Mapped wetlands on the project site remain inundated and/or saturated seasonally for sufficient duration to satisfy wetland hydrology criteria. Hydrological indicators in the mapped wetlands include the presence of oxidized rhizosphere (a "primary" hydrological indicator) as well as biotic crust. Soil matrix colors in the wetland area identified in the field were noted as 10YR 3/2 with redoximorphic features. Soil matrix colors in areas mapped as non-hydric soils were noted as 10YR 3/3 and 10YR 3/2, with insufficient redoximorphic features. These wetland features were not impacted during the grading that occurred within upland portions of the project site between May 29 and July 2, 2023.

Developed

While not a natural habitat type, urban/developed areas typically consist of buildings, hardscape such as asphalt or concrete, and other human-caused structures. Such areas typically provide little habitat value to most wildlife species. On-site, this landcover type can be found within the southeastern corner in the form of a construction trailer, a staging area, and a paved road that allows access into the site via Commerce Boulevard. The paved road runs half the length of the southern border of the project site (Exhibit 3.3-2).

Sensitive Natural Communities

The California Department of Fish and Wildlife (CDFW) maintains a list of natural communities that classifies vegetation types found within the State of California and ranks them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.[2] Wetlands and riparian habitats are also typically considered sensitive natural communities and are addressed below.

Seasonal Wetland Community

Vegetation observed within the seasonal wetlands included non-native and native species. As indicated in subsection 3.3.3, Seasonal Wetland, non-native species included spiny-fruit buttercup (*Ranunculus muricatus*) and Italian ryegrass (*Festuca perennis*). Native species included creeping spikerush (*Eleocharis macrostachya*), brown-headed rush (*Juncus phaeocephalus*) and spreading rush (*Juncus patens*). Naturally occurring seasonal wetland vegetation communities can be considered sensitive natural communities. However, due to the nature of these wetlands, presence of non-native species, and lack of special-status plant species, the seasonal wetlands on-site would not be considered a sensitive natural community. Additionally, the proposed project would avoid all wetland features through the implementation of a wetland buffer avoidance area (Exhibit 3.3-4).

Common Wildlife

The vegetation community and land cover types discussed above provide habitat for numerous wildlife species. Wildlife activity during the 2023 field surveys consisted primarily of avian species, including Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), lesser goldfinch (*Spinus psaltria*), yellow-rumped warbler (*Setophaga coronate*), turkey vulture (*Cathartes aura*), red-shouldered hawk (*Buteo lineatus*), and California towhee (*Melozone crissalis*). Additionally, Botta's pocket gopher (*Thomomys*

[2] California Department of Fish and Wildlife (CDFW). 2023. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed August 21, 2023.

bottae) burrows, black-tailed jackrabbit (Lepus californicus), and Columbian black-tailed deer (*Odocoileus hemionus ssp. columbianus*) were observed. Notably, no signs of current or past presence of California ground squirrel (*Otospermophilus beecheyi*) burrows were observed on-site during the 2023 surveys.

In general, FCS and Pinecrest field surveys found that the conditions related to wildlife habitat are consistent with the results presented in the March 2020 M&A BRA which lists the following common wildlife species as observed on or near the project site: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe, American crow, mourning dove (*Zenaida macroura*), black-tailed jackrabbit, California meadow vole (*Microtus californicus*), Botta's pocket gopher, and mule deer (*Odocoileus hemionus*), among others, all of which have been observed on the project site. Red-shouldered hawk, tree swallows (*Tachycineta bicolor*), Nuttall's woodpecker (*Picoides nuttallii*), and northern flicker (*Colaptes auratus*), among others, likely nest in the eucalyptus trees that surround the project site. Chestnut-backed chickadee (*Poecile rufescens*), brown creeper (*Certhia americana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), spotted towhee (Pipilo maculatus), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), Bullock's oriole (*Icterus bullockii*) and western gray squirrel (*Sciurus griseus*) were also observed in the immediate project vicinity.

Wildlife use is expected to have decreased since M&A's surveys because these surveys were conducted prior the construction of the warehouse to the south (SDG Commerce 330) and before the current construction began on the warehouse to the north (SDG Commerce 217). A comprehensive list of wildlife and plant species observed by FCS and Pinecrest can be found in Appendix C.3: *220 Commerce Animal Survey Report*, and *220 Commerce Plant Survey Report*.

Special-status Species

Special-status species include those species listed by the federal and state governments as endangered, threatened, or rare or candidate species for these lists. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 as amended, the California Native Plant Protection Act of 1977, and the California Endangered Species Act of 1970. The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the "rare" or "endangered" criteria defined in Title 14, California Code of Regulations Section 15380. Special-status species also include those species listed by the CDFW as Species of Concern which face extirpation in California if current population and habitat trends continue, those identified as Fully Protected in the California Fish and Game Code (a designation that provides additional protection to those animals that are rare or face possible extinction), and bird species designated as Bird Species of Conservation Concern by the United States Fish and Wildlife Service (USFWS). These State and federal Species of Concern must be evaluated in the context of evaluation under CEQA. Under Title 14, California Code of Regulations Section 15380, mentioned above, many Biologists and the lead agencies for whom they work evaluate impacts to plant species on California Native Plant Society (CNPS) Lists 1 and 2. Special-status species included in CEQA review also include bat species that have been designated with conservation priority by the Western Bat Working Group.

The CDFW maintains records for the distribution and known occurrences of special-status species and sensitive habitats in the California Natural Diversity Database (CNDDB). The CNDDB is organized into map areas based on 7.5-minute topographic quadrangle maps produced by the United States Geologic Survey (USGS). All known occurrences of special-status species are mapped onto quadrangle maps maintained by the CNDDB. The database gives further detailed information on each occurrence, including specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat.

Special-status Plant Species

The CNDDB and CNPS list 45 special-status or sensitive plant species that have been recorded within the *Cuttings Wharf, California,* USGS Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix C: Database Searches]).[3,4,5] The CNDDB occurrences within the vicinity of the project site are shown on Exhibit 3.3-3. A list of all plant species recorded on-site during the protocol-level floristic surveys is included in Appendix C.3: *220 Commerce Plant Survey Report*. No rare or special-status plant species were observed during the appropriately timed protocol-level floristic surveys and are therefore determined to be absent from the site.

Special-Status Wildlife Species

The CNDDB identifies 43 federal and State-listed threatened and/or endangered wildlife species and State Species of Special Concern that have been recorded within the *Cuttings Wharf, California,* USGS Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix C: Database Searches]).[6,7] The CNDDB occurrences within the vicinity of the project site are shown on Exhibit 3.3-3. Thirty-five of these species are unlikely to occur on-site, as discussed in the *Special-status Wildlife Species Habitat Value Evaluation Table* (Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix B: Special-Status Species Tables, Table 2]).

The remaining eight species (and functional groups like nesting birds and roosting bats that include special-status species) could have at least theoretical potential to occur on-site, perhaps as vagrant, dispersing, or foraging individuals, and are therefore discussed in more detail below.

[3] United States Geological Survey (USGS). 2023. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed September 14, 2023.

[4] California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed September 14, 2023.

[5] California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed September 14, 2023.

[6] California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed September 14, 2023.

[7] California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed September 14, 2023.

CNDDB version 08/2023. Please Note:
The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area.

Legend

- Project Site

CNDDB

Symbology

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)
- Aquatic Comm. (specific)
- Aquatic Comm. (non-specific)
- Aquatic Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's (Commercial only)

Source: Bing Street Imagery. California Natural Diversity Database (CNDDB), August 2023.

FIRSTCARBON SOLUTIONS™

8 4 0 8 Miles

Exhibit 3.3-3
CNDDB Special-Status Species Occurrences

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Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands. It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall.

Foraging habitats include grasslands, alfalfa fields, fallow fields, beet, tomato, and other low growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded. Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole. Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. During the nesting season Swainson's hawk usually forage within 2 miles of the nest.

Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially, therefore it can occupy habitats with few or no perches except the nest tree. Swainson's hawks are regular summer visitors and breeders throughout the western states. In the fall months, most Swainson's hawks migrate to Argentina before returning to the United States to breed in the late spring (typically April). For decades, Argentina farmers were spraying insecticides over habitats that included gregarious night roosts of the Swainson's hawk, killing many thousands of these hawks. This practice was halted in the last 10 years and the Swainson's hawk population appears to be dramatically responding in California. While in the 1970s through 1990s there were only two relatively small populations of Swainson's hawks that remained resident in California year-round in the Davis area and in the Sacramento River Delta, resident and migrant populations of the Swainson's hawks are now dramatically expanding their nesting distribution in California since insecticide use over Argentinian wintering grounds was halted. For example, Swainson's hawks were never recorded nesting in the Napa County area until relatively recently.[8]

The closest known record for nesting Swainson's hawk is 1.5 miles north of the project site (CNDDB Occurrence No. 2839). No individual Swainson's hawk or nests have been observed on the project site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. However, the eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, there is the possibility that Swainson's hawks could nest near this project site in future years.

Western Burrowing Owl

The western burrowing owl (*Athene cunicularia*) is a California Species of Special Concern. Its nest, eggs, and young are also protected under California Fish and Game Code (FGC §§ 3503, 3503.5, and 3800). The burrowing owl is also protected from direct take under the MBTA (50 Code of Federal Regulations [CFR] 10.13).

Burrowing owl occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species utilizes, modifies, and nests in burrows

[8] Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.

created by other species, most notably the California ground squirrel. They may also on occasion dig their own burrows or use human-caused objects such as concrete culverts or rip-rap piles for cover.

The closest CNDDB record within the last 10 years was documented 2.7 miles north of the project site (CNDDB Occurrence No. 935). No evidence of burrowing owl activity was observed during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site, or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Furthermore, no California ground squirrel burrows were observed, and no other burrows, dens, or human-caused objects were observed that would provide suitable nesting habitat for burrowing owl. However, it cannot be ruled out entirely that a vagrant burrowing owl may visit the site under unlikely circumstances before the start of construction.

Northern Harrier

The northern harrier (*Circus hudsonius*) is a California Species of Special Concern. This raptor is protected under California Fish and Game Code Section 3503.5 that protects nesting raptors and their eggs/young and is also protected from direct take under the MBTA (50 CFR 10.13). Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators such as coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), and various snake species.[9]

The closest CNDDB record was documented 2.8 miles west of the project site (CNDDB Occurrence No. 29). No individual northern harriers or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Northern harriers have the potential to nest in the open ruderal habitats on-site that provide marginal nesting habitat for this species. However, it should be noted that due to the recent grading on the project site large areas of this vegetation type were graded between May 29 and July 2, 2023 (see Appendix C.2: Borrow Site Grading Plan; and Addendum to Biological Constraints). The grading effectively eliminated the non-native grassland throughout much of the site. Although there is the possibility that northern harriers could nest on or near this project site in the future, site conditions due to recent grading would reduce the potential for northern harrier to occur on-site.

Golden Eagle

The golden eagle is a migratory California resident that resides in rolling foothills, mountain areas, sage-juniper flats, and deserts from sea level to 11,500 feet (3,833 meters). It feeds mostly on lagomorphs and rodents, and occasionally other mammals, birds, reptiles, and some carrion. The golden eagle hunts in open terrain including grasslands, deserts, savannas, and early successional stages of forest and shrub habitats. It is known to hunt in pairs and pirate food from other predators. This species nests in large trees in open areas on cliffs. The breeding season for the golden eagle ranges from January through August, with a peak in March through July.

[9] Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.

The closest CNDDB record was documented 4.5 miles southeast of the project site (CNDDB Occurrence No. 40). No individual golden eagles or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Regardless, the eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, it cannot be ruled out that golden eagles could nest near this project site in the future.

White-tailed Kite

The white-tailed kite (*Elanus leucurus*) is a whitish falcon-shaped raptor. This sensitive bird is designated by CDFW as a Fully Protected Species (FGC § 3511). Fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Nesting white-tailed kite habitat consists mainly of oak and sycamore woodlands, but the birds also use mature willows. White-tailed kite nests have been documented in a variety of tree species, including oak (*Quercus sp*.), cottonwood (*Populus sp*.), willow (*Salix sp*.), California sycamore (*Platanus racemosa*), and elder (*Acer sp.).*[10] Nests are placed near the top of dense oak, willow, or other tree stand approximately 20-100 feet above ground.[11] Nest trees have a dense canopy or are within a dense group of trees, such as riparian forest or oak woodland. Adjacent to their nesting woodland must be open foraging grasslands, where the birds can find their small mammal prey.[12]

White-tail kites forage in undisturbed, open grasslands, meadows, emergent wetlands, farmlands, crops, pastures, and other cultivated habitats. The white-tailed kite preys mostly on voles, but also takes other small, diurnal mammals, and occasionally birds, insects, reptiles, and amphibians.

The closest CNDDB record was documented 5.3 miles north of the project site (CNDDB Occurrence No. 181). Several white-tailed kite individuals were observed foraging over the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site and the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. This species was observed on the following dates during 2023 surveys: March 20, April 4, April 5, April 6, April 7, April 24, April 28, and July 2. These individuals were observed to be continually harassed by several crows who were observed loitering around the eucalyptus grove. After continued interactions with the crows, white-tailed kite individuals flew off to the southwest out of sight and the location of their nest could not be determined.

The eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, it cannot be ruled out that white-tailed kite could nest within relevant disturbance distance.

[10] Science Applications International Corporation (SAIC). 2007. Draft Ecological Baseline Report for the Butte Regional Habitat Conservation Plan/Natural Community Conservation Plan. Prepared for the Butte County Association of Governments. May 2007.
[11] California Department of Fish and Wildlife (CDFW). 1988. California's Wildlife, Volume II: Birds. State of California Resources Agency. Sacramento, California.
[12] Gallagher, Sylvia. 1997. Atlas of Breeding Birds, Orange County, California. Sea and Sage Audubon Press, Irvine, CA.

Protected Nesting Birds (Including All Special-status Bird Species)

In addition to the specific special-status bird species discussed in more detail above, the active nests of most resident and migratory (game and non-game) birds (including the nests of additional special-status bird on-site) are protected by the MBTA and/or Fish and Game Code; and are therefore categorized as "special-status" wildlife functional group during this time. While a juvenile, red-shouldered hawk was observed perched off-site within a large eucalyptus tree to the north of the SDG Commerce 217 site during the 2023 surveys, no active nests were observed.

The project site is adjacent to eucalyptus groves which provide nesting opportunities for different taxa of birds, and the site itself contains the potential for ground nesters. Although the site has been significantly disturbed in the past, the grassland on-site may provide marginal foraging opportunities to support nesting and rearing habitat. Therefore, it cannot be ruled out that protected bird nests are present on or within the disturbance distance of the project site during the nesting season (typically considered to last from February 1 to August 31 for most species).

Bats (Including Special-status Bats)

The project site is adjacent to eucalyptus groves which offer potentially viable roosting habitat for bat species. There is a CNDDB recorded presence of bat species 5.2 miles northwest of the project site (CNDDB Occurrence No. 44). Bats could potentially use cavities in trees to roost and forage over the grassland and shrubland. Of the special-status bat species that have potential to occur in the region, the pallid bat (*Antrozous pallidus*) would be more likely to roost in natural features, such as the adjacent eucalyptus grove rather than artificial structures.

Roosts are used during the daytime to seek refuge; at night between foraging excursions to rest, digest prey, seek refuge from predators or poor weather conditions, or for social purposes; and in winter for hibernation. Adult females and their young use some particularly secure roosts as maternity roosts. The number of bats occupying a given roost can vary from a solitary individual to a large colony, depending on the species. Roosting sites are very sensitive to human disturbance, especially when bats are hibernating or rearing young.

At dusk, bats leave their roosts to forage for insects in nearby ponds or riparian habitats. Bats generally prey on insect species that are locally abundant near water bodies. Ecotone areas (areas of transition between habitats) are also used as foraging areas. The grassland habitat of the project site and eucalyptus grove adjacent has foraging and roosting potential for bat species. Therefore, it cannot be ruled out that bat roosts are within disturbance distance of the project site.

Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) is a California Species of Special Concern. This species feeds on aquatic plant material (including pond lilies), beetles, fishes, frogs, and a variety of invertebrate species. Pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Turtles slip from basking sites to underwater retreats at the approach of humans or potential predators. In colder areas, this species hibernates underwater in bottom mud.

The closest CNDDB record was documented 0.4 mile northeast of the project site (CNDDB Occurrence No. 552). No western pond turtle individuals or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. While there are seasonal wetland features present on-site, there are no ponds or streams on-site that would be suitable for foraging or breeding. It cannot be ruled out entirely that a vagrant western pond turtle may be present on-site under unlikely circumstances before start of construction and could potentially be impacted by the project.

Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is listed as Candidate under the Endangered Species Act, and wintering roosts are protected under the Fish and Game Code.

Preferred monarch habitat is filled with diverse nectar sources which support monarchs and native bees. Native milkweeds (*Asclepias* spp.) and other nectar sources provide monarchs with breeding habitat, resting, and refueling stops during migration, and food at overwintering sites.

Overwintering habitats consist of tree groves that typically occur within 1.5 miles of the Pacific coastline, or within the San Francisco Bay Area, where the proximity to large water bodies moderate temperature fluctuations. Overwintering begins in September or October. Suitable grove conditions include temperatures above freezing, high humidity, dappled sunlight, access to water and nectar, and protection from high winds and storms. Monarchs will select the native Monterey pine, Monterey cypress, western sycamore, and other native tree species when they are available, but will also utilize non-native eucalyptus species if other optimal habitat conditions are met. During breeding season in the late spring and summer, female monarch butterflies will lay their eggs on the underside of young leaves or flower buds of milkweeds. Caterpillars then hatch within 3-5 days and begin to feed on milkweed leaves that provide energy and protective toxic compounds that protect the caterpillars from predation. Within a month, the caterpillars will grow, produce a chrysalis, and emerge as fully formed adult butterflies.

While no milkweed has been recorded on-site as confirmed through protocol-level rare plant surveys, see Appendix C.3: *220 Commerce Plant Survey Report.* The project site is bounded by dense stands of eucalyptus trees, potentially suitable for overwintering monarchs. Overwintering colonies have been documented on Mare Island, approximately 7 miles to the south. For these reasons, the presence of overwintering monarchs within disturbance distance cannot be ruled out.

State or Federally Protected Waters and Wetlands

There are four wetlands features present within the project site as shown on Exhibit 3.3-2, and in Appendix C.3: *Preliminary Jurisdictional Determination Map, SDG Commerce 220 Project Site*.[13] The USACE issued a PJD on August 30, 2023, which includes 0.023 acre of seasonal wetlands and 0.042 acre of linear wetlands mapped within the project site. These wetlands have surface hydrologic connectivity to North Slough, which flows to the Napa River. The Napa River is a traditional navigable

[13] Monk & Associates (M&A). 2023. Request for Reverification of Jurisdictional Determination and a PJD SDG Commerce 220 Project Site; USACE File Number: 2011-00322N American Canyon, California. May 31, 2023.

water. Consequently, the seasonal wetlands identified within the project site would likely be subject to USACE and Regional Water Quality Control Board (RWQCB) jurisdiction.

Wildlife Movement Corridors and Nursery Sites

A wildlife corridor is an area of habitat connecting wildlife populations that can be separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, development, or human disturbance. Wildlife corridors allow an exchange of individuals between populations, which may help prevent the negative effects of inbreeding and reduced genetic diversity (via genetic drift) that often occur within isolated populations. The project site and adjacent areas are not identified by CDFW (The Critical Linkages: Bay Area and Beyond project; BIOS 6)[14] as critical linkages. CDFW describes critical linkages as essential to maintain or restore functional connectivity among wildlands for all species or ecological processes of interest in the California Bay Area. Critical linkages are a vital adaptation strategy to conserve biodiversity during climate change.

The project site has been subject to decades of varying degrees of anthropogenic disturbances. More recently, adjacent developments include the construction of SDG Commerce 330 to the south and the current construction of SDG Commerce 217 to the north. Dense industrial developments are located north of the project site while a school and single-family residences are found to the south. Therefore, non-volant wildlife movement through the site is limited, and the site does not connect habitats suitable for sustainable wildlife populations. Wildlife may utilize the off-site eucalyptus grove and aquatic habitats (e.g., North Slough and Napa River) to the west for dispersal; however, the proposed project would be set back from the eucalyptus grove and aquatic habitats.

There are no native wildlife nursery sites present within the project site.

3.3.4 - Regulatory Framework

Federal

Clean Water Act–Section 404

The USACE administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States.

As of the preparation of this report on October 26, 2023, the final "Revised Definition of Waters of the United States" rule was published in the Federal Register on January 18, 2023, and took effect on March 20, 2023. However, the final rule is not currently operative in certain states and for certain parties due to litigation. Moreover, the United States Environmental Protection Agency (EPA) and USACE (hereafter known as the agencies) are in receipt of the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. On August 29, 2023, the U.S. EPA and Department of the Army issued a final rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published on January 18, 2023. This final rule conforms the definition of "waters of the United States" to the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. In light of this decision, the agencies will interpret the

[14] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 6): The Critical Linkages: Bay Area & Beyond project. Website: https://map.dfg.ca.gov/bios/. Accessed September 14, 2023.

phrase "waters of the United States" consistent with the Supreme Court's decision in *Sackett*.[15] As a result of ongoing litigation, the agencies are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice.

Therefore, since the agencies are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice, our analysis follows 40 Code of Federal Regulations 230.3(s) in effect under the pre-2015 regulatory regime, which defines "waters of the United States" as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
2. All interstate waters including interstate wetlands.
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
   a) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
   b) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
   c) Which are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under this definition.
5. Tributaries of waters identified in paragraphs(s) (1) through (4) of this section.
6. The territorial sea.
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs(s) (1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 Code of Federal Regulations 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Clean Water Act–National Pollution Discharge Elimination System Requirements

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments established a framework for regulating municipal, industrial, and construction-related stormwater discharges under the NPDES Program. On November 16, 1990, the EPA published final regulations that establish stormwater permit application requirements for specified categories of industries. The regulations

[15] United States Environmental Protection Agency (EPA). 2023. Website: https://www.epa.gov/wotus/current-implementation-waters-united-states. Accessed September 14, 2023.

provide that discharges of stormwater from construction projects that encompass one or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES permit.

The State Water Board has developed a general construction stormwater permit to implement the requirements for the federal NPDES permit. The permit requires submittal of a Notice of Intent (NOI) to comply, fees, and the implementation of a Storm Water Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) that would prevent construction pollutants from entering stormwater and keep products of erosion from migrating off-site into downstream receiving waters. The Construction General Permit includes post-construction requirements that include no increase in overall site runoff or the concentration of drainage pollutants and requires implementation of Low Impact Development (LID) design features. The Construction General Permit is implemented and enforced by California's nine RWQCBs.

The RWQCBs have also adopted requirements for NPDES stormwater permits for medium and large municipalities, and the State Water Board has adopted a General Permit for the discharge of stormwater from small municipal storm sewer systems. This General Permit requires projects to develop and implement a post-construction Storm Water Management Plan (SWMP) to reduce the discharge of pollutants to the maximum extent practicable.

Federal Endangered Species Act

The United States Congress passed the Endangered Species Act in 1973 to protect those species that are endangered or threatened with extinction. The Endangered Species Act is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The Endangered Species Act establishes an official listing process for plants and animals considered in danger of extinction, requires development of specific plans of action for the recovery of listed species, and restricts activities perceived to harm or kill listed species or affect critical habitat (16 USC 1532 and 1536).

The Endangered Species Act prohibits the "take" of endangered or threatened wildlife species. "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct (16 USC 1532). Taking can result in civil or criminal penalties. Federal regulation 50 Code of Federal Regulations 17.3 further defines the term "harm" in the take definition to mean any act that actually kills or injures a federally listed species, including significant habitat modification or degradation. Therefore, the Endangered Species Act is invoked when the property contains a federally listed threatened or endangered species that may be affected by a permit decision.

In the event that listed species are involved and a USACE permit is required for impacts to jurisdictional waters, the USACE must initiate consultation with the USFWS or the National Marine Fisheries Service (NOAA Fisheries) pursuant to Section 7 of the Endangered Species Act (16 USC 1536; 40 CFR § 402). Section 7 of the Endangered Species Act requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or adversely modify critical habitat (16 USC 1536). In the regulations found at 50 Code of Federal Regulations 402.2, destruction or adverse modification is defined as a "direct or indirect alteration that appreciably

diminishes the value of critical habitat for both the survival and recovery of a listed species." Critical habitat is defined in Endangered Species Act Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features "essential to the conservation of the species" are found and that "may require special management considerations or protection." Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless "essential for the conservation of the species." Critical habitat designations identify, with the best available knowledge, those biological and physical features (primary constituent elements) which provide for the life history processes essential to the conservation of the species.

If formal consultation is required, USFWS or NOAA Fisheries will issue a Biological Opinion stating whether the permit action is likely to jeopardize the continued existence of the listed species, recommending reasonable and prudent measures to ensure the continued existence of the species, establishing terms and conditions under which the proposed project may proceed, and authorizing incidental take of the species.

For discretionary permit actions by non-federal entities, Section 10 of the Endangered Species Act provides a mechanism for obtaining take authorization through submittal and approval of a Habitat Conservation Plan that details species impacts, measures to minimize or mitigate such impacts, and funding mechanisms to implement mitigation requirements.

Migratory Bird Treaty Act

The MBTA implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The regulations governing migratory bird permits are in 50 Code of Federal Regulations Part 13 General Permit Procedures and 50 Code of Federal Regulations Part 21 Migratory Bird Permits. Most bird species within California fall under the provisions of the MBTA. Excluded species include non-native species such as house sparrow, starling, and ring-necked pheasant and native game species such as quail.

On December 22, 2017, the United States Department of Interior's Office of the Solicitor issued Memorandum M-37050, which states an interpretation that the MBTA does not prohibit the accidental or "incidental" taking or killing of migratory birds. In response to the Trump administration's attempted changes to the MBTA, eight states, including California, filed suit in September of 2018, arguing that the new interpretation inappropriately narrows the MBTA and should be vacated. On August 11, 2020, the Southern District of New York ruled in favor of the long-standing interpretation of the MBTA to protect migratory birds, reinstating the historical ban on incidental take. Just days before leaving office, the Trump administration finalized its pullback of MBTA regulations, despite the ruling of the federal court. On his first day in office, President Biden placed Trump's changes to the MBTA on hold, pending further review.

State

CEQA Guidelines

The California Environmental Quality Act (CEQA) requires public agencies to evaluate potential impacts to special-status species and their habitat. The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a Candidate, Sensitive, or Special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally and State-protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

Oak Woodlands Conservation Act

California Senate Bill (SB) 1334, the Oak Woodlands Conservation Act, became law on January 1, 2005, and was added to the CEQA statutes as 21083.4. This statute requires that a county must determine whether or not a project will result in a significant impact on oak woodlands and, if it is determined that a project may result in a significant impact on oak woodlands then the county shall require one or more of the following mitigation measures:

- Conserve oak woodlands through the use of conservation easements.
- Plant an appropriate number of trees, including maintenance of plantings and replacement of failed plantings.
- Contribute funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements.
- Other mitigation measures developed by the county.

Section 401 of the Federal Clean Water Act/Porter-Cologne Water Quality Control Act

As stated in Section 401 of the CWA, "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the

State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the RWQCB.

California Endangered Species Act

The State of California enacted CESA in 1984. The CESA is similar to the Endangered Species Act but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents. CESA generally prohibits the taking of State-listed endangered or threatened plant and wildlife species; however, for projects resulting in impacts to State-listed species, the CDFW may authorize take through issuance of an ITP pursuant to Section 2081 of the California Fish and Game Code. Section 2081 requires preparation of mitigation plans in accordance with published guidelines that require, among other things, measures to fully mitigate impacts to State-listed species. The CDFW exercises authority over mitigation projects involving State-listed species, including those resulting from CEQA mitigation requirements. No authorization of take under Section 2081 is permitted for species listed in State statutes as Fully Protected Species. Where Fully Protected Species are involved, projects must be designed to avoid all take of the species. The CDFW cannot issue an ITP until the CEQA Lead Agency has provided documentation in the form of a Notice of Determination that the proposed project has complied with CEQA.

California Department of Fish and Wildlife–Lake and Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires any person, governmental agency, or public utility proposing any activity that will divert or obstruct the natural flow or change the bed, channel or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify the CDFW of such proposed activity. Based on the information contained in the notification form and a possible field inspection, the CDFW may propose reasonable modifications in the proposed construction as would allow for the protection of fish and wildlife resources. Upon request, the parties may meet to discuss the modifications. If the parties cannot agree and execute a Lake and Streambed Alteration Agreement, then the matter may be referred to arbitration. The CDFW cannot issue a Streambed Alteration Agreement until CEQA compliance has been achieved, usually through the CEQA Lead Agency providing documentation in the form of a Notice of Determination that the Lead Agency has complied with CEQA by preparing a negative declaration or Environmental Impact Report (EIR).

CDFW's regulations implementing the Fish and Game Code define the relevant rivers, streams, and lakes over which the agency has jurisdiction to constitute "all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which have intermittent flows of water" (Title 14 California Code of Regulations [CCR] § 720). The CDFW takes jurisdiction under its Lake and Streambed Alteration Agreement Program for any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. The CDFW does not have a methodology for the identification and delineation of the jurisdictional limits of streams except for the general guidance provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607 California Fish and Game Code*.[9] In making jurisdictional determinations, the CDFW staff typically rely on field observation of physical features that provide evidence of water

flow through a bed and channel such as observed flowing water, sediment deposits and drift deposits and that the stream supports fish or other aquatic life. Riparian habitat is not specifically mentioned in the Fish and Game Code provisions governing Lake and Streambed Alteration Agreement, but the CDFW often asserts jurisdiction over areas within the flood plain of a body of water where the vegetation (grass, sedges, rushes, forbs, shrubs, and trees) is supported by the surface or subsurface flow.

California Department of Fish and Wildlife–Fish and Game Code Section 3503, 3503.5, and 3513.

The State of California also incorporates the protection of non-game birds and birds of prey, including their nests, in Sections 3503, 3503.5, and 3513 of the California Fish and Game Code. Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Fish and Game Code Section 3503.5 makes it unlawful to take or possess birds of prey (hawks, eagles, vultures, owls) or destroy their nests or eggs. In December of 2018, California issued new guidance specifying that State law includes "a prohibition on incidental take of migratory birds, notwithstanding any federal reinterpretation of the Migratory Bird Treaty Act" by the Department of Interior.

California Department of Fish and Wildlife – Swainson's Hawk Nesting Survey Guidelines

For locating nesting Swainson's hawks, CDFW recommends using the "*Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*" dated May 31, 2000. This set of survey recommendations was developed by the Swainson's Hawk Technical Advisory Committee to maximize the potential for locating nesting Swainson's hawks, and thus reducing the potential for nest failures as a result of project activities/disturbances. In summary, surveys should be conducted in a manner that maximizes the potential to observe the adult Swainson's hawks, as well as the nest/chicks. To meet the CDFW recommendations for mitigation and protection of Swainson's hawks, surveys should be conducted for a 0.5-mile radius around all project activities, and if active nesting is identified within the 0.5-mile radius, consultation with CDFW to determine nesting buffers is required under these guidelines. The guidelines provide specific recommendations regarding the number of surveys based on when the project is scheduled to begin and the time of year the surveys are conducted.

California Department of Fish and Wildlife – Special-status Native Plant Survey Protocol

For conducting botanical surveys to detect special-status plant species, CDFW developed survey protocols identified in "*Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities*" dated March 20, 2018. Botanical field surveys provide information used to determine the potential environmental effects of proposed projects on special-status plants as required by law (e.g., CEQA, CESA, federal Endangered Species Act). According to the protocol, botanical field surveys should be conducted in a manner which maximizes the likelihood of locating special-status plants and sensitive natural communities that may be present. Botanical field surveys should be floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. "Focused surveys" that are limited to habitats known to support special-status plants or that are restricted to lists of likely potential special-status plants are not considered floristic in

nature and are not adequate to identify all plants in a project area to the level necessary to determine whether they are special-status plants.

California Department of Fish and Wildlife – Staff Report on Burrowing Owl Mitigation

CDFW issued survey protocols for conducting burrowing owl breeding and nonbreeding season surveys and pre-construction surveys in the *Staff Report on Burrowing Owl Mitigation* dated March 7, 2012.

In summary, for breeding season surveys, a minimum of four survey visits shall be conducted: 1) at least one site visit between February 15 and April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15. The survey shall be conducted in all portions of the project site that fit the description of habitat in Appendix A of the staff report. Surveys shall be walked in straight-line transects spaced 7 meters (m) to 20 m apart, adjusting for vegetation height and density. At the start of each transect and at least every 100 m, the surveyor shall scan the entire visible project area for burrowing owls using binoculars and record all potential burrows used by burrowing owls as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration. For nonbreeding season surveys, the methods described above for breeding season surveys are followed, but at least four visits, spread evenly, are conducted throughout the nonbreeding season.

Pre-construction surveys, referred to as "take avoidance surveys" in the staff report, are intended to detect the presence of burrowing owls on a project site at a fixed period in time and inform necessary take avoidance actions. Take avoidance surveys may detect changes in owl presence such as colonizing owls that have recently moved onto the site, migrating owls, resident burrowing owls changing burrow use, or young of the year that are still present and have not dispersed. In summary, survey methodology for pre-construction surveys should be conducted no less than 14 days prior to initiating ground disturbance activities.

California Native Plant Society

The CNPS, a nongovernmental organization, has no regulatory authority but provides information that is often used by regulatory bodies. The CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review, especially for those plant species included in Lists 1 and 2. The following identifies the definitions of the CNPS listings:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere.
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere.
- **Rank 2A:** Plants presumed extirpated in California but more common elsewhere.
- **Rank 2B:** Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- **Rank 3:** Plants about which more information is needed.
- **Rank 4:** Watch List: Plants of limited distribution.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site:

Goal 8 Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.

Objective 8.1 Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.

Policy 8.1.1 Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.

Policy 8.1.4 Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

Objective 8.2 Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.

Policy 8.2.1 Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site, in instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

Objective 8.3 Protect natural drainages and riparian corridors within the American Canyon Planning Area.

Policy 8.3.1 Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:

a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.
b. Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).
c. Where riparian corridors are retained, they shall be protected by an adequate buffer with a minimum 100-foot protection zone from the edge of the tree, shrub, or herb canopy . . .
d. Development shall incorporate habitat linkages (wildlife corridors) to adjacent open spaces, where appropriate and feasible.
e. Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages, or corridors from built environment.
f. Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.
g. Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.
h. Future development shall mitigate unavoidable adverse impacts to waters of the United States, wetlands, and riparian habitats (pursuant to the federal Clean Water Act and the California Fish and Game Code, Section 1600 *et seq*.) by replacement on an in-kind basis. Furthermore, replacement shall be based on a ratio determined by the California Department of Fish and Wildlife and/or United States Army Corps of Engineers in order to account for the potentially diminished habitat values of replacement habitat. Such replacement should occur on the original development site, whenever possible. Alternatively, replacement can be affected, subject to State and federal regulatory approval, by creation or restoration of replacement habitats elsewhere (off-site but preferably within the City's Planning Area), protected in perpetuity by provision for an appropriate conservation easement or dedication.

Policy 8.3.5 Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.

Policy 8.3.6 Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

Objective 8.4 Protect local vernal pools as well as the habitats of endangered species living within American Canyon's Planning Area.

Policy 8.4.1 Require that development plans incorporate all reasonable mitigation measures to avoid significantly impacting vernal pools for projects located within American Canyon's Planning Area.

Policy 8.4.2 Preserve, where possible, the habitat of several in-fact endangered species, including those shown on Figure 8-2 and listed in Table 8-1, as well as those that may be considered by the City in the future.

Policy 8.4.3 Encourage activities that improve the biological value and integrity of the City's natural resources through vegetation restoration, control of alien plants and animals, and landscape buffering.

Municipal Code

Municipal Code Chapter 18.40.110 sets forth the City's Tree Ordinance. The ordinance states that existing trees shall be preserved on the site unless otherwise approved by the City Council as a part of the site development plans. Additionally, unless specifically approved by the City Council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a 24-inch box of the same species unless specifically approved by the City Council.

3.3.5 - Methodology

Literature Review

A literature review was conducted to analyze existing documentation regarding biological resources and habitat conditions within the project site and vicinity and is summarized below.

Existing Documentation

As part of the literature review, an FCS Biologist compiled and analyzed existing environmental documentation for the project site and relevant areas in its vicinity. This documentation included literature pertaining to the habitat requirements of special-status species with the potential to occur in the project vicinity and federal register listings, protocols, and species data provided by the USFWS, CDFW, and CNPS. Additionally, FCS reviewed and evaluated all available supporting documentation provided by the applicant, including a finalized USACE jurisdictional determination, and species-specific studies and habitat assessments. These documents are attached to this BRA (Appendix C.2: Commerce Court 217 supporting documents; and Appendix C.3: Commerce Court 220 supporting documents), and include the following:

SDG Commerce 217 Documents

- Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. City of American Canyon, California. March 2020.
- Monk & Associates (M&A). 2020. Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site SDG Commerce 217 Distribution Center. September 2020.
- FirstCarbon Solutions (FCS). 2023. Pre-Construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 per the Mitigation Monitoring and

Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California. April 2023.

- RSA+. 2023. Commerce 217 Distribution Center Borrow Site Grading Plan. March 2023.

SDG Commerce 220 Documents

- Pinecrest Research Corp., Inc. 2023. Special-Status Animal Survey Report. August 2023.
- Pinecrest Research Corp., Inc. 2023. Special-Status Plant Survey Report. July 2023.
- Monk & Associates (M&A). 2023. Request for Reverification of Jurisdictional Determination and a PJD SDG Commerce 220 Project Site; USACE File Number: 2011-00322N American Canyon, California. May 2023.

Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity.[16] Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS).[17] Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, vegetation community locations, and potential locations of wildlife movement corridors.

Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.[18] These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to inform whether the soil conditions on-site are potentially suitable for any special-status plant species. However, NRCS soil maps utilize an approximately 1.4-acre minimum mapping unit, and line placement may not be accurate on a large (i.e., parcel-level) scale.

Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity based on a search of the USFWS Information for Planning and Consultation (IPaC) database,[19] the CNDDB, and the CNPS Electronic Inventory (CNPSEI)

[16] United States Geological Survey (USGS). 2022. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed September 14, 2023.

[17] United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed September 14, 2023.

[18] Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed September 14, 2023.

[19] United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed September 14, 2023.

of Rare and Endangered Vascular Plants of California for the Cuttings Wharf, California USGS 7.5-minute Topographic Quadrangle Map, and the eight surrounding quadrangles.[20,21] The CNDDB Biogeographic Information and Observation System (BIOS 6) was used to determine the distance between the known occurrences of special-status species and the project site.[22]

Field Surveys and Focused Surveys

FCS Biologists familiar with the biological resources of the region conducted field surveys on December 2, 2022, and March 17, 2023. The objective of the field surveys was to ascertain general site conditions, wildlife use, and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. Potentially sensitive areas identified during the literature review were ground-truthed during the field survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

Wildlife species detected during the reconnaissance-level surveys by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the project site.[23] Appropriate field guides were used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.[24,25,26] Online resources such as eBird and California Herps were also consulted, as necessary. [27,28]

M&A performed 10 field surveys on the greater 35-acre project site before it was subdivided into three lots (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330). Consequently, the SDG Commerce 220 project site was included in these surveys which were conducted on March 1 and April 27, 2006; June 14, 2011; February 14, March 21, and June 12, 2012; May 18, 2017; March 30, 2018; December 19 and December 27, 2019. Additional details concerning these surveys can be found in Appendix C.1 [Appendix D.1] of this document.

Pre-construction Surveys for SDG Commerce 217

Seven pre-construction surveys were conducted by FCS between January 18 and April 7, 2023, for a total of approximately 30 survey hours. Surveys were conducted for the entirety of the Commerce 217 project site and relevant adjacent areas (which included the adjacent SDG Commerce 220 site). Surveys were conducted pursuant to the January 2021 Mitigation, Monitoring, and Reporting Program (MMRP) for the Commerce 217 Warehouse Project. Surveys included nesting birds

[20] California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDB) RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed September 14, 2023.
[21] California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. September 14, 2023.
[22] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed September 14, 2023.
[23] California Department of Fish and Wildlife (CDFW). 2022. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed September 14, 2023.
[24] Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[25] Reid, F. 2006. A Field Guide to Mammals of North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[26] Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.
[27] eBird. 2022. Online bird occurrence database. Website: http://ebird.org/content/ebird/. Accessed September 14, 2023.
[28] California Herps. 2022. A Guide to the Amphibians and Reptiles of California. Website: http://www.californiaherps.com/. Accessed September 14, 2023.

(including Swainson's hawk) and burrowing owl detection. Surveys for western pond turtle adults and nests were also performed simultaneously while walking the site. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) and the Staff Report on Burrowing Owl Mitigation*.[29,30] Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Additional details concerning these surveys can be found in Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix D.1: SDG Commerce Site 217 Documents].

Special-status Animal Surveys for SDG Commerce 220

Eleven special-status animal surveys were conducted between January 18 and July 2, 2023, by Pinecrest for the entirety of the Commerce 220 project site. Surveys were conducted by Dr. Christopher DiVittorio to determine the presence or absence of several special-status species, including burrowing owl, Swainson's hawk, nesting raptors, nesting passerine birds, and western pond turtle. Survey methods followed established procedures and applicable protocols, including the R*ecommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, and the *Staff Report on Burrowing Owl Mitigation.*[31,32] Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Additional details concerning these surveys can be found in Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix D.2: SDG Commerce Site 220 Documents] of this document.

Protocol-level Rare Plant Surveys for SDG Commerce 220

Protocol-level rare plant surveys were conducted by Pinecrest during the growing season of 2023. An early-season site visit was performed on March 20. Mid-season site visits were performed on April 6, April 7, and May 29. A late-season site visit was also performed on July 2. Between the mid-season and late-season site visits, the majority of the site was graded; thus, the late-season site visit focused on remaining vegetation surrounding the areas of disturbance. Rare plants recorded and mapped in the field, if present, include all plants that are federal or State-listed as Rare, Threatened, or Endangered, all federal and State candidates for listing, all plants included in Lists 1 through 4 of the CNPS Inventory, and plants that qualify under the definition of "rare" in CEQA Guidelines Section 15380.

Botanical surveys were performed by Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by Dr. Zoya Akulova. During the site visit, Dr. DiVittorio surveyed the entirety of the project area using methods as specified in the CDFW publication titled Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and

[29] Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.
[30] California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.
[31] Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.
[32] California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

Sensitive Natural Communities.[33] Surveys were conducted by walking the entire project area on foot in parallel lines approximately 15 feet apart, identifying every species that was flowering, and making note of any species that were past flowering or that had not yet flowered. Voucher specimens were taken of any species that required identification in the laboratory. All terminology follows currently accepted nomenclature as described in The Jepson Manual. Additional details concerning these surveys can be found in Appendix C.1: *SDG Commerce Court 220 BRA, Section 3: Methods,* of this document.

Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, development, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated "islands" of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey and review of aerial photographs, and CDFW's BIOS 6 information on Bay Area Linkages. The focus of this study was to determine whether a change in land use at the project site could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, aerial photographs, USGS topographic maps and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.

3.3.6 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study checklist that includes questions for determining whether impacts to biological resources are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research (OPR) and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. They also reflect the requirements of laws other than CEQA that protect biological resources (e.g., the federal CWA, the Porter-Cologne Water Quality Control Act, the Endangered Species Act and CESA, and the Natural Community Conservation Planning Act). As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project.

Additional guidance on the significance of biological resource impacts is found in CEQA Guidelines Section 15065, subdivision (a)(1), which provides that a lead agency shall find that a project may have a significant effect on the environment if "[t]he project has the potential to: . . . substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; [or]substantially reduce the number or

[33] California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities. March 20, 2018.

restrict the range of an endangered, rare or threatened species[.]" The "mandatory findings of significance" are also found in the Appendix G sample Initial Study checklist, though near the end.

In light of the foregoing, the proposed project would have a significant effect related to biological resources if the proposed project would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service. (Refer to Section 7, Effects Found not to be Significant)

c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. (Refer to Section 4, Effects Found not to be Significant)

g) Substantially reduce the habitat of a fish or wildlife species.

h) Cause a fish or wildlife population to drop below self-sustaining levels.

i) Threaten to eliminate a plant or animal community. (Refer to Section 4, Effects Found not to be Significant)

j) Substantially reduce the number or restrict the range of an endangered, rare or threatened species.

3.3.7 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Special-status Species

Impact BIO-1: **The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.**

Impact Analysis

This impact analysis addresses thresholds a), g), and h).

Special-status Plant Species

No rare or special-status plant species were observed during the appropriately timed protocol-level floristic surveys (see Section 3.3.3, *Special-status Plant Species*) and are therefore determined to be absent from the site. This result is also supported by M&A's March 2020 BRA, which additionally states that in the recent past, blue gum eucalyptus trees covered most of the project site dating back for several decades; these trees emit allelopathic (growth inhibiting) chemicals from their leaves, acorns and bark that prevent other plants from growing under them.[34] Therefore, no impacts on special-status or rare plant species are expected to occur due to project construction or operation.

Special-status Wildlife Species

Swainson's Hawk

Potentially suitable Swainson's hawk nesting trees are located adjacent to the project site. If a Swainson's hawk nest is active near the project site during construction, the proposed project could cause indirect harm to the species through the noise, light and other human-caused disturbances resulting from project construction, which may result in this species abandoning its nests.

No Swainson hawks or nests were observed during the 18 field surveys conducted by FCS and Pinecrest in 2023. Out of an abundance of caution, FCS proposes that the project applicant implement the mitigation measures (MM) BIO-1a and BIO-1b, which require pre-construction surveys and the implementation of avoidance and minimization measures, if needed, to avoid indirect impacts on Swainson's hawk nesting habitat and to establish adequate nest protection zones to conform with CDFW Guidelines.[35]

Western Burrowing Owl

No western burrowing owls have been observed on the project site during the 18 field surveys conducted by FCS and Pinecrest in 2023. Additionally, no suitable burrows or ground squirrels were observed on-site during the surveys. Therefore, the likelihood of presence on the project site is considered to be low. Since the western burrowing owl is a mobile species that could move onto the project site prior to development, pre-construction surveys are recommended out of an abundance of caution. If burrowing owl are present on-site before grading, the proposed project may result in impacts to the western burrowing owl, considered a potentially significant impact pursuant to CEQA.

[34] Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.
[35] California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee. Sacramento, California. May 31, 2000.

However, MM BIO-1c is designed to detect, avoid, and passively relocate owls, and therefore, any potential significant impacts on this species would be reduced to less than significant.

Other Protected Nesting Birds (including northern harrier, golden eagle, white-tailed kite and others)

Areas adjacent to the project site provide suitable nesting habitat for a variety of species of nesting birds, including special-status bird species such as northern harrier, golden eagle, white-tailed kite, and others. Disturbed grassland and barren areas provide potential nesting opportunities for ground nesting birds. Construction activities that occur during the avian nesting season (generally February 1 to August 31) could disturb protected nesting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting season could result in direct harm to nesting birds, while noise, light, and other construction-related disturbances may cause nesting birds adjacent to the vegetation removal areas to abandon their nests.

No active raptor nests were observed within the project site during the 2023 field surveys conducted by FCS and Pinecrest; however white-tail kite individuals were observed foraging over the project site. Additionally, a juvenile, red-shouldered hawk was observed perched off-site within a large eucalyptus tree to the north of the SDG Commerce 217 site. Although no active nests have been observed on-site, it cannot be ruled out that avian species may nest within disturbance distance of the project site. With implementation of MM BIO-1d, requiring pre-construction nesting bird surveys and avoidance of direct and indirect impacts on nests, potential project-related impacts on protected bird nests can be reduced to a less than significant level under CEQA.

Roosting Bats (including Pallid Bat)

The project site is adjacent to trees that could provide suitable bat roosting habitat, including for special-status bats such as pallid bat. Potential indirect impacts could occur to roosting bats due to the proximity to disturbance distance during project construction. These activities could potentially subject bats to risk of injury or disturbance, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual bats by displacing them into adjacent territories belonging to other individuals. With implementation of MM BIO-1e, requiring pre-construction roosting bat surveys and avoidance of indirect impacts on active bat roosts, potential project-related impacts on protected roosting bats can be reduced to a less than significant level under CEQA.

Western Pond Turtle

No western pond turtles or nests were observed during the 2023 surveys conducted by FCS and Pinecrest. While the site appears to be unlikely to support western pond turtle, it cannot be ruled out entirely that a vagrant western pond turtle may be present on-site under unlikely circumstances before start of construction and could potentially be impacted by the project. Impacts to western pond turtle from the proposed project are considered potentially significant. MM BIO-1f would reduce this impact to a less than significant level through avoidance and minimization measures outlined below.

Monarch Butterfly

There is a potential for the monarch butterfly to overwinter in the eucalyptus woodland adjacent to the site. Construction activities, including dust, noise, and vibration adjacent to overwintering

colonies could result in loss of overwintering monarch butterflies. Therefore, MM BIO-1g which includes a pre-construction survey and, if found, avoidance in coordination with USFWS and CDFW are recommended to reduce any potential impacts on monarch butterfly to less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a Pre-construction Surveys for Swainson's Hawk

Prior to ground disturbance that occurs during the nesting season for Swainson's hawk (generally March 20 to July 20), a qualified Biologist shall conduct Swainson's hawk nesting surveys within a 0.5-mile radius of the project site to determine whether nests are occupied. Occupancy shall be determined through observation of all accessible areas, including from public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) on and near the project site.

The qualified Biologist shall follow the survey protocol outlined in the California Department of Fish and Wildlife (CDFW) *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, which recommends surveys according to the following survey periods:

I. **January–March 20:** Conduct one survey total.
II. **March 20–April 5:** Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset.
III. **April 5–April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset.
IV. **April 21–June 10:** Initiating surveys are not recommended. Monitoring of known nest sites only.
V. **June 10–July 30:** (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset.

Pre-construction surveys shall be completed for at least the two survey periods immediately prior to a project's initiation.

MM BIO-1b Swainson's Hawk Avoidance and Minimization and Construction Monitoring

Following the implementation of MM BIO-1a, if nests are located and determined to be occupied, minimization measures must be implemented, and construction monitoring conducted as follows:

1. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson's hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment.

2. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern.
3. No tree containing an active Swainson's hawk nest shall be removed.

MM BIO-1c Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found)

A qualified Biologist shall conduct a habitat assessment for wintering burrowing owl, and surveys if habitat is present. The qualified Biologist shall follow the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation habitat assessment and survey methodology prior to project activities occurring during the burrowing owl wintering season from September 1 to January 31. The habitat assessment and surveys shall encompass a sufficient buffer zone to detect owls nearby that may be impacted, which shall be a minimum of 1,640 feet unless otherwise approved in writing by the CDFW. Surveys shall include four nonbreeding season surveys spread evenly throughout the nonbreeding season pursuant to the CDFW 2012 Staff Report. Time lapses between surveys or project activities shall trigger subsequent surveys, as determined by a qualified Biologist, including but not limited to a final survey within 24 hours prior to ground disturbance and before construction equipment mobilizes to the project area. The qualified Biologist shall have a minimum of 2 years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections.

Detected burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan shall be subject to CDFW review. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a "take" avoidance, minimization, or mitigation measure; therefore, off-site habitat compensation shall be included in the eviction plan. Habitat compensation acreages shall be approved by CDFW, as the amount depends on-site-specific conditions and must be completed before project construction unless otherwise approved in writing by CDFW. Habitat compensation shall also include placement of a conservation easement and preparation and implementation of a long-term management plan prior to project construction.

MM BIO-1d Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

1. If the proposed project requires vegetation to be removed during the nesting season (February 1 to August 31), pre-construction surveys shall be conducted no more than 7 days prior to the start of ground or vegetation disturbance (including

tree removal) to determine whether or not active nests are present within the project site and buffer area as appropriate.

2. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).
3. The qualified Biologist shall monitor the active nest during construction activities and modify the protection zone accordingly to prevent project-related nest disturbance, until the young have fledged.

MM BIO-1e Roosting Bat Pre-construction Survey and Avoidance

A qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) within 250 feet of project construction activities (where accessible).

If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Grading shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

MM BIO-1f Protection of Western Pond Turtles

A qualified Biologist (i.e., a Biologist with at least 2 years of experience conducting surveys for western pond turtle detections) shall submit a wildlife exclusion fencing plan to the California Department of Fish and Wildlife (CDFW) for review and approval prior to starting construction. Exclusion fencing shall be installed along the western perimeter of the project site to prevent the species from traveling from

North Slough onto the project site during construction. A qualified Biologist shall survey the project site and adjacent habitat within 72 hours of the start of project activities to determine whether western pond turtle or their nests are present and guide the installation of the exclusion fence. If western pond turtles are discovered, a qualified Biologist with experience handling and relocating the species shall move the species to the nearest suitable habitat outside of the project area and exclusion fencing. If western pond turtle nests are found, CDFW shall be notified prior to starting project activities, and the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fence until eggs hatch and young turtles disperse to the adjacent North Slough. In addition, if nest(s) are located during surveys, moth balls (naphthalene) shall be sprinkled around the vicinity of the nest (no closer than 5 feet) to mask human scent and discourage predators. Grading within the nest site's 50-foot buffer area shall be delayed until the young leave the nest as determined by a qualified Biologist. If the CDFW allows translocation of any nestling pond turtles this shall be completed by a qualified Biologist under the direction of the CDFW.

MM BIO-1g Protection of Overwintering Monarch Butterfly

Activities such as vegetation removal, grading, or initial ground-disturbing activities shall be conducted between November 1 and July 31 (outside of the overwintering season) to the extent feasible. If such activities must be initiated during the overwintering season (August 1 through October 31), a pre-construction overwintering survey shall be conducted by a qualified Biologist no more than 7 days prior to vegetation removal, grading, or initial ground disturbance. The survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any colonies that could potentially be affected either directly or indirectly by project activities. If no colonies are present, then project activities can commence as scheduled. If a colony is present, project construction shall cease immediately to avoid all direct and indirect impacts and report the presence of the colony to the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and follow all recommendations provided by USFWS and CDFW.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

Wetlands and Jurisdictional Features

Impact BIO-2:	**The proposed project would not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

Impact Analysis

This impact analysis addresses threshold c).

The proposed project would avoid all impacts on potential jurisdictional wetland features through the implementation of a wetland buffer avoidance area (Exhibit 3.3-4). The wetland buffer avoidance area would ensure that construction activities do not impact the on-site jurisdictional wetland features. Upon operation, the project's stormwater would be directed away from the features. Additionally, the proposed project would be required to comply with applicable laws and regulations related to jurisdictional waters and wetlands (see Section 3.3.4, Regulatory Framework). These generally applicable laws and regulations are designed to avoid any net loss of area and function. With implementation of the wetland buffer avoidance area and the application of laws and regulations, potential indirect or residual impacts would be reduced to less than significant under CEQA.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None required.

Fish and Wildlife Movement Corridors

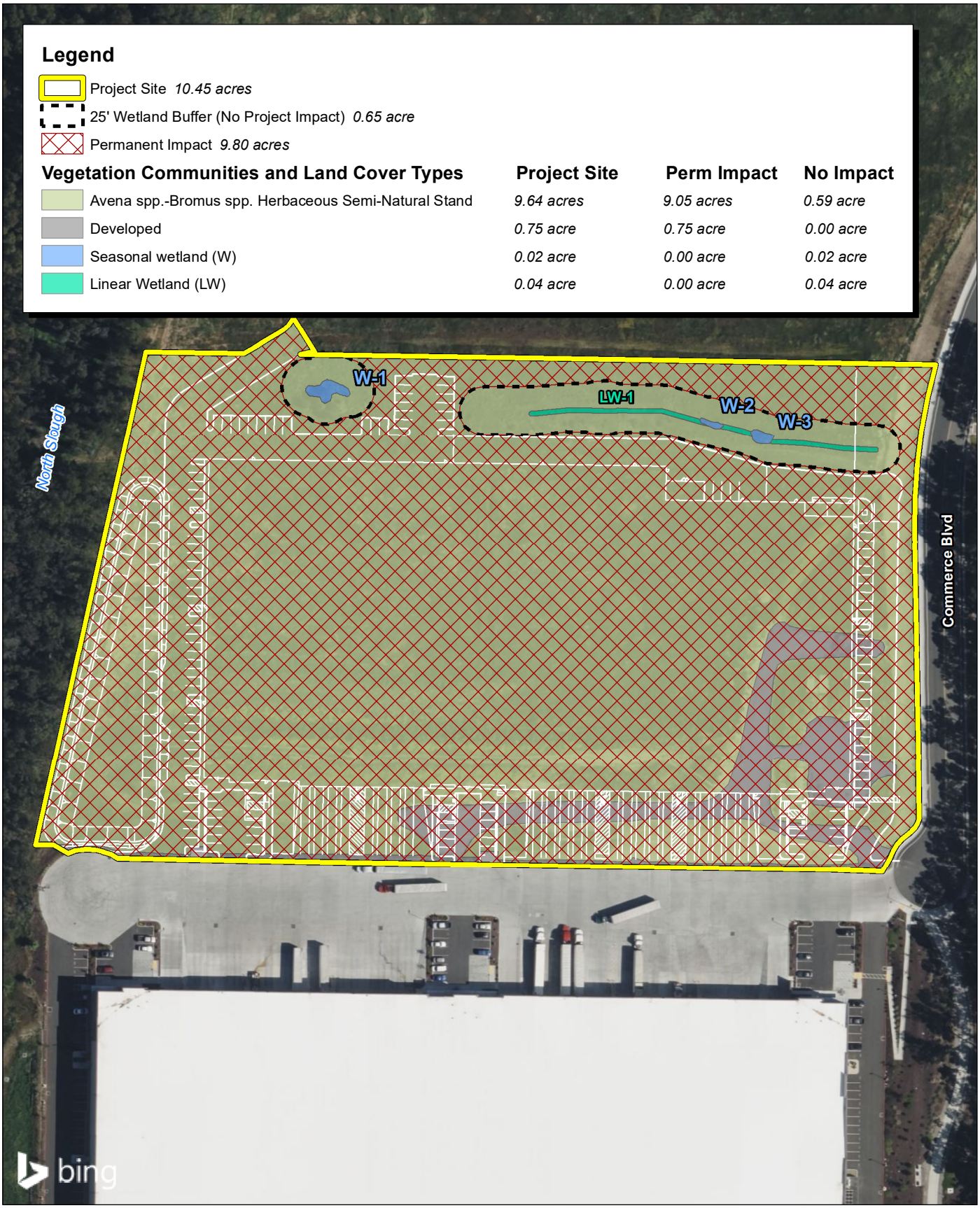
Impact BIO-3:	**The proposed project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.**

Impact Analysis

This impact analysis addresses thresholds d) and j).

The site does not function as a critical wildlife movement corridor, as discussed in Section 3.3.3, *Wildlife Movement Corridors and Nursery Sites*, above. This result is consistent with M&A's March 2020 BRA (Appendix C.2: *BRA for CDG 217 ISMND*). Certain common wildlife may move within or cross the site; however, it does not function to connect valuable habitats together, but rather it currently funnels wildlife east into a pocket of land generally surrounded with dense developments, including State Route (SR) 29 to the east, commercial and industrial areas to the north, and dense residential subdivision to the south, potentially constituting a population sink. Therefore, potential project-related impacts on wildlife movement are less than significant.

No substantial wildlife nursery sites, including breeding or nesting colonies, breeding ponds, or dens are present on-site. However, individual nesting birds and roosting bats have the potential of being present within disturbance distances seasonally. Potential impacts to individual nesting birds and roosting bats are addressed through the implementation of MM BIO-1a through MM BIO-1e (see above for details). As such, impacts to nursery sites would be less than significant.



Source: Bing Aerial Imagery. Monk & Associates Environmental Consultants, 08/2023.

FIRSTCARBON SOLUTIONS™

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Exhibit 3.3-4
Biological Impacts

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Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a through MM BIO-1e.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

Local Policies or Ordinances

Impact BIO-4:	**The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Impact Analysis

This impact analysis addresses threshold e).

The proposed project would not remove any trees as there are no trees located within the project site. Therefore, the proposed project would not remove any City-protected trees and no conflicts or impacts would occur.

All work for the proposed project would take place consistent with biological requirements of the General Plan and Zoning Ordinance of the City of American Canyon. The project site is designated "Commercial Recreational" by the City of American Canyon General Plan and zoned "Recreation." The Biological Resources Report provides the detailed assessment of biological resources required by General Plan Policies 8.1.1 and 8.1.4. Studies of sensitive biological resources have been either conducted by FCS and/or Pinecrest as part of the attached Biological Resources Report or were conducted by other consultants and independently reviewed and incorporated into the Biological Resources Report, consistent with General Plan Policy 8.2.1.

Botanical surveys were performed by Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by Dr. Zoya Akulova during the 2023 flowering season. The proposed project would construct a wetland buffer avoidance area that would ensure that construction activities do not impact the on-site jurisdictional wetland features. Upon operation, the project's stormwater would be directed away from the features. These wetland buffer areas are consistent with General Plan Policy 8.3.1.a, which requires the development plan to consider the nature of existing biological resources and all reasonable measures to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones; and General Plan Policy 8.4.3, which encourages activities that improve the biological value and integrity of the City's natural resources through vegetation restoration, control of alien plants and animals, and landscape buffering. As such, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation necessary.

3.3.8 - Cumulative Impacts

The geographic scope of the cumulative biological resources analysis is the project vicinity as the project activity would only affect the surrounding project area. Cumulative projects in the geographic scope of the biological resources analysis consist of developed and undeveloped lands primarily near the edge of existing urban development.

This analysis evaluates whether the impacts of the proposed project, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to biological resources. This analysis also considers whether incremental contribution of impacts associated with the implementation of the proposed project would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact. If there is no impact associated with respect to a particular CEQA threshold, discussion of cumulative impacts is not required. Accordingly, this cumulative discussion is limited to the potential impacts discussed above.

Special-Status Species

Cumulative projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1 are predominantly located in areas within or adjacent to urban development with limited potential to support special-status species. As described in the Regulatory Section herein, numerous laws and regulations are in place to protect biological resource within the cumulative project area, including, but not limited to CESA, federal Endangered Species Act, CWA, and applicable General Plan and Municipal Code requirements. Future projects within the cumulative geographic context would be required to comply with applicable federal, State, and local laws, regulations and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on biological resources. Standard pre-construction surveys and, if necessary, avoidance procedures would be required for cumulative projects with the potential to impact special-status species. Because cumulative development has limited potential to support special-status species and would be required to comply with the above requirements, cumulative impacts related to special-status species would be less than significant.

The proposed project's incremental contribution to these less than significant cumulative impacts would not be significant with adherence to the mitigation measures related to special-status species identified above (see MM BIO1a through MM BIO-1g) and compliance with other applicable standards and requirements under the comprehensive regulatory framework. Therefore, the proposed project's contribution to cumulative impacts related to special-status species would be less than significant.

Wetland and Jurisdictional Features

The cumulative project area contains undeveloped areas that may support wetland and jurisdictional features. In addition, the Napa River, related tidal lands, and North Slough are located to the south. Any future development that occurs within the cumulative analysis area would have to take into

account the potential impacts to wetlands and jurisdictional features and mitigate as required under applicable laws and regulations. As such, cumulative impacts to wetland and jurisdictional features would be less than significant.

As indicated under Impact BIO-2, the proposed project would avoid all impacts on potential jurisdictional wetland features through the implementation of a wetland buffer avoidance area (Exhibit 3.3.-4). As such, the proposed project would not combine with other reasonably foreseeable projects and would have a less than significant contribution to the related impacts. Therefore, the proposed project's contribution to the less than significant cumulative impact related to wetlands and jurisdictional features would not be cumulatively considerable.

Fish and Wildlife Movement Corridors

The larger geographic scope for cumulative projects contains various areas that may provide movement corridors for fish and wildlife, primarily the Napa River, related tidal lands and North Slough to the south. However, none of the identified cumulative projects include wildlife corridors that connect to the proposed project site. Other areas surrounding the project site consist primarily of urban development or undeveloped land significantly surrounded by urban development. Any future development that occurs within the cumulative analysis area would have to take into account the potential impacts to these corridors and mitigate as required under applicable laws and regulations. The cumulative projects are primarily located in urban or commercially developed areas and therefore are not likely to significantly impact wildlife movement corridors. Therefore, it can be reasonably assumed that there would be no cumulative impacts to fish and wildlife movement corridors.

As discussed under Impact BIO-3, the site does not function as a critical wildlife movement corridor, is not connected to any corridors present on cumulative project sites and does not otherwise connect valuable habitats together; accordingly, there would be no impacts to wildlife movement corridors. Therefore, the proposed project's contribution to cumulative impacts related to fish and wildlife movement would not be cumulatively considerable.

Local Policies and Ordinances

Projects listed in Table 3-1 are all located within the City of American Canyon and therefore would be required to abide by applicable local policies and ordinances, such as the City's Tree Ordinance for subdivisions contained in Municipal Code Section 18.40.110. Consistency with the General Plan and other regulations of the Municipal Code would also be required. Compulsory adherence to these regulations related to biological resources would ensure that impacts would be less than significant in this regard.

As discussed under Impact BIO-4, the proposed project would not remove any City-protected trees and would be consistent with the General Plan and Zoning Ordinance designations. Furthermore, the project is consistent with applicable General Plan policies regarding biological resources including assessment of such resources and wetland avoidance and buffer. Therefore, the proposed project's contribution to the less than significant cumulative impact related to local policies and ordinances would not be cumulatively considerable.

Level of Cumulative Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM BIO-1a through MM BIO-1g.

Level of Cumulative Significance After Mitigation

Le**s**s than significant impact with mitigation incorporated.

3.4 - Cultural Resources and Tribal Cultural Resources

3.4.1 - Introduction

This section describes the existing cultural and Tribal Cultural Resources (TCRs) setting and potential effects that may result from project implementation on the site and its surrounding area. The descriptions and analysis in this section are based on information provided by the Native American Heritage Commission (NAHC), a records search conducted at the Northwest Information Center (NWIC), archival research, and a pedestrian survey, as presented in the Phase I Cultural Resource Assessment (Phase I CRA) prepared for the proposed project are included in confidential Appendix D. Recommendations provided in the Phase I CRA pertaining to mitigation of potential impacts are incorporated into this section.

The following public comments pertaining to cultural resources were received in response to the Notice of Preparation (NOP):

- The Draft Environmental Impact Report (Draft EIR) should analyze the proposed project's consistency with Assembly Bill (AB) 52 and Senate Bill (SB) 18.
- The lead agency should consult with applicable California Native American tribes.
- A Cultural Resources Assessment should include applicable record searches, a field survey, and measures for inadvertent discovery of cultural and tribal cultural resources.

3.4.2 - Environmental Setting

Overview

The term "cultural resources" encompasses historic resources, archaeological resources, and burial sites, which are generally defined as follows:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State's history and are generally less than 200 years old. Historic resources often take the form of buildings, structures, and other elements of the built environment.
- **Archaeological Resources:** Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as later historic periods.
- **Tribal Cultural Resources:** TCRs include sites, features, places, or objects that are of cultural value to one or more California Native American Tribes.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred. Burial sites may be associated with precontact indigenous cultures as well as later historic periods.

More specifically, cultural resources may be understood as resources that have been formally recognized by a lead agency and/or are listed or determined eligible for listing on the California

Register of Historical Resources (CRHR) (Public Resources Code [PRC] § 5024.1, Title 14 California Code of Regulations [CCR] § 4852). However, the fact that a resource is not yet identified as a historical resource or found eligible for the CRHR does not preclude a lead agency from determining that said resource is a historical resource pursuant to Public Resources Code Sections 5020.1(j) or 5024.1. Under the California Environmental Quality Act (CEQA), a substantial adverse change in the significance of a historical resource would constitute a significant effect on the environment.

Cultural Setting

Following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current academic resources available; rather, it serves as a general overview. Unless otherwise stated, information contained in this section is drawn directly from the Phase I CRA conducted by FirstCarbon Solutions (FCS).

Prehistoric Background

In general, archaeological research in the greater San Francisco Bay Area has focused on coastal areas, where large shellmounds were relatively easily identified on the landscape. This research and its chronological framework, however, is relevant to and has a bearing on our understanding of prehistory in areas north of the San Francisco Bay, including modern American Canyon, Napa County.

Like many California cultural chronologies, the greater San Francisco Bay Area has a complex history. As synthesized by Milliken et al., three major chronologic frameworks exist for the Bay Area: an Archaic-Emergent temporal structure; the Central California Taxonomic System (CCTS) and a “hybrid system” that is utilized using the overarching CCTS scheme, while further demarcating time depth/period changes regionally, as used in the Archaic-Emergent temporal structure. Specifically, regional cultural patterns and phases are further defined within the San Francisco Bay Area by Dating Scheme D, which utilizes dated Olivella shell bead horizons. Milliken et al. used the term “bead horizons” to define the passage of short periods of time by the shifts in the trade of specific bead types throughout the Bay Area. This builds on Fredrickson, who proposed a chronology for the broader San Francisco Bay Area region. Fredrickson’s chronology is based on material patterns and includes the Windmiller Pattern (4500-3500 Before Present [BP]), Berkeley Pattern (3500-1500 BP) and the Augustine Pattern (1500-250 BP). The Windmiller Pattern is typified by a hunter-gatherer subsistence pattern, which included the exploitation of wild plants, game, and fish. Typical artifacts include clay balls, fishing hooks, fishing spears and ground stone tools. Artifacts from the Berkeley Pattern era reflect an increasing reliance on acorns, as mortars and pestles become more prolific. The Augustine Period was a period of increasing social complexity. Acorns continued to be the dominant food source and settlement patterns reflected an increasing sedentary lifestyle.

The Lower Archaic, 10,000 to 5500 BP, is typified in the Bay Area by a forager and gatherer lifestyle, as evidenced by the prevalence of milling slabs, hand stones, and large, wide-stemmed and leaf-shaped projectile points. The Middle Archaic, 5500 to 2500 BP, saw an increase in the presence of ground stone and cut shell beads, indicating that groups in the Bay Area were transitioning to a more sedentary lifestyle; interregional trade was increasing, and as the beads were found in mortuary contexts, that symbolism was becoming a regional identifier. The Early Upper Archaic, 2500 to 1570

BP, saw a shift away from cut beads to Olivella beads, and along the Bay, a new emphasis on Haliotis ornaments and bone tools, with net sinkers largely disappearing from assemblages. The Late Upper Archaic, 1570 to 950 BP, further defined by the bead phases M1–M4, is another time of transition, as saucer-shaped Olivella beads disappear from the record and Olivella saddle beads became dominant. The appearance of the saddle shaped Olivella beads coincides with the appearance and increase in Meganos complex dorsal extended burials. The Lower Emergent Period, 950 to 450 BP, is characterized by increasing complexity as beads were being produced for collectors as opposed to being produced primarily as mortuary items. Sedentism and increasing social stratification is evidenced by settlement patterns and mortuary practices. The Terminal Late Period saw change in the North Bay, as clamshell disk beads became prevalent, along with the toggle harpoon, hopper mortar, plain corner-notched arrow-sized projectile points, and magnesite tube beads; however, this was not the case in the South Bay. By 1650, only Olivella-lipped and spire-lopped beads were present.

Settlement patterns north of San Francisco Bay have varied over time. The currently accepted understanding of settlement patterns in this area is that a foraging and hunter-gatherer lifestyle centering on lacustrine resources remained dominant in the region until the Lower to Middle Archaic. At this point, there was a shift from foraging lacustrine resources to developing semi-permanent villages near marshes and grasslands, in order to gather those specific resources. This was followed by a shift to foragers residing in residential camps, with more consistent settlement occurring in "collector villages" during the Upper Archaic. By the Emergent Period, collectors were living in semi-permanent villages in oak woodlands, in which residential camps were now located along marshes.

Ethnographic Background

The Patwin

At the time of European contact, the project vicinity was primarily occupied by the Patwin Tribe of California Native Americans. The Patwin occupied the southwest Sacramento Valley from the town of Princeton, north of Colusa, south to San Pablo and Suisun bays, and from the lower hills of the eastern North Coast Ranges to the Sacramento River. Patwin territory extended approximately 40 miles east to west and 90 miles north to south. Based primarily on linguistic variation, the Patwin are the most southern division of the Wintuan population, who are members of the Penutian linguistic stock. Distinction is made between the Hill and River Patwin. Hill Patwin had villages located in valleys along the hills of the Vaca Mountains and Coast Ranges with populations concentrated in Indian, Bear, Capay, Cortina, Long, and Napa valleys. In general, the River Patwin occupied the west banks of the lower Sacramento River below the Feather River as well as the lower reaches of Cache and Putah creeks in the Sacramento Valley. The Hill Patwin villages of Napato and Tulukai lie in close proximity to the project area, and their place names remain part of the regional landscape to this day.

Patwin political organization was centered on the tribelet, which consisted of a primary village with smaller satellite villages governed by a head chief. Tribelets were autonomous and differed from each other with minor cultural variations. The economic and ceremonial activities of each village were administered by a chief whose position was typically passed on patrilineally although some

chiefs were chosen by village elders. The chief administered subsistence ventures, such as hunting and gathering expeditions, and served as the primary resource distributor.

The Patwin subsistence base varied with the seasons and included gathering seeds and plant resources on the plains, netting migratory waterfowl in the tule marshes, and netting salmon and other fish in the rivers and streams. Acorns were a staple in the Patwin diet and were obtained from communally owned hill and valley oak groves. The Patwin stored acorns in granaries as insurance against famine in poor harvest years. Ethnographic reports indicate the Patwin obtained large game such as deer, tule elk, and antelope by using nets or shooting with bows and arrows. Fish resources were of particular importance to the River Patwin and included perch, sturgeon, salmon, sucker, trout, pike, and other riverine species such as mussels and turtles, which were caught with bone fishhooks, nets, weirs, and seines.

The Patwin trade system included various resources that were exchanged with the Wappo, Nomlake, Southeastern Pomo, and Hill Patwin. The River Patwin obtained obsidian from sources to the west and east. Initially, finished shell beads were obtained from coastal tribes, but later, the River Patwin traded for whole shells from the Pacific Coast and produced the beads themselves. Relationships with nearby tribes and other Patwin tribelets were not always friendly. Patwin relations with Napa Valley groups were strained by provocations primarily incited by poaching; subsequent retaliations resulted in organized battles between individuals or groups or surprise attacks on villages.

Patwin dwellings, sweathouses and dance houses were all semi-subterranean, earth-covered structures. Mortuary practices included burials in cemeteries located at one end of the village, in which the possessions of the deceased were buried with them; at some locations, property was burned near the grave. Typically, only people who died or were killed away from the village were cremated. According to a Hill Patwin informant, “the River people [Patwin] set a corpse upright, then pushed the head down, broke the back, wrapped the body in a skin, and put it in the grave.” In addition, long burial ropes constructed of hemp were wrapped around the deceased, and the River Patwin utilized temporary containers made of tule reeds.

The Southern Wappo

The project site is also in close proximity to the ethnographic territory of the Southern Wappo. The Wappo language belongs to a small family of four languages, including Yuki, Coastal Yuki, and Huchnom. It is divided into five dialects distributed across two major territorial divisions. The smaller area included lands along the southern edge of Clear Lake; the larger ranged from just north of Napa, south to Geyserville and Middletown in the north. The Wappo were known to adopt words from other languages spoken in their vicinity, including Spanish names of objects with which they came into contact as a result of missionization. Of the 100 or known Wappo place names, at least one, cho*nóma, (meaning “abandoned camp”), remains in use as the probable Wappo name for the town of Sonoma. Like their Pomo neighbors, the basic sociopolitical unit was the village, which was usually located on a creek or other water source. Villages included one or two sweathouses as well as houses of varying size. One of the last remaining traditional Wappo villages observed in 1870 consisted of 11 grass houses serving 21 families totaling 92 people. Each house was made of grass thatch over a framework of bent poles and had a separate entrance and smoke-hole for each family inhabiting it.

Basic tools consisted of wedges, axes, and fire-drills made from stones, sticks, shells, and plants. Like the Pomo, the Wappo had a tradition of creating intricately woven baskets that were both functional and decorative. This tradition, along with several surviving songs and dances attributed to the Wappo, were primary forms of artistic expression. Imported clamshell beads and magnesite cylinders served as units of exchange and items of personal adornment. Food sources included a variety of plants and creatures, including acorns, buckeye, clover, abalone, clams, turtles, salmon, ducks, rabbits, and deer.

The Wappo had at least seven villages in the Geyserville area alone and estimates of their total population range from 5,000 to 8,000. Village chiefs might be elected or appointed, based on the organization of the individual village. Both men and women could occupy the role of chief, and some villages even had multiple chiefs, each with different spheres of influence, including trade, ceremonial roles, and warfare. The Wappo were generally regarded as a peaceful people, except during the Wappo-Pomo War in the early nineteenth century. The Wappo apparently attacked and killed members of the Alexander Valley Pomo who had carried away some Wappo supplies of acorns. The Pomo sought peace, which was granted immediately; however, the Pomo never returned to their Alexander Valley villages north of Healdsburg. The Wappo also tried to resist Spanish incursions and colonial expansion into their territories, but like the Pomo, their numbers were decimated by smallpox, hostility from the Mexican Army, and later by Euro-American settlements in the 1850s.

Historic Background

The Spanish Period (1769–1821)

Spanish exploration into Suisun Bay and into the Central Valley dates back to the late 1700s. Spanish mission records indicate that by 1800, Patwin inhabitants at Aguastos, the south-central area, and other villages were being taken to Mission Dolores (San Francisco de Asis), and that Mission Sonoma (San Francisco Solano), built in 1823, was baptizing Patwin tribal members until secularization of the missions in 1832-1836. Many Native Americans were not willing to convert. There are numerous accounts of neophytes fleeing the missions, and a series of “Indian Wars” broke out when the Spanish tried to return them to the missions.

The Mexican Period (1821–1848)

With the declaration of Mexican independence in 1821, Spanish control of Alta California ended, although little change actually occurred. Political change did not take place until mission secularization in 1834, when Native Americans were released from missionary control and the mission lands were granted to private individuals. Mission secularization removed the social protection and support on which Native Americans had come to rely. It exposed them to further exploitation by outside interests, often forcing them into a marginal existence as laborers for large ranchos. Following mission secularization, the Mexican population grew as the native population continued to decline. Anglo-American settlers began to arrive in Alta California during this period and often married into Mexican families, becoming Mexican citizens, which made them eligible to receive land grants. In 1846, on the eve of the U.S.-Mexican War (1846 to 1848), the estimated population of Alta California was 8,000 non-natives and 10,000 natives. However, these estimates have been debated. Cook suggests the Native American population was 100,000 in 1850; the U.S. Census of 1880 reports the Native American population as 20,385.

During this period, General Mariano Guadalupe Vallejo assumed authority of Sonoma Mission and established a friendly relationship with the Native Americans who were living there. In particular, Vallejo worked closely with Chief Solano, a Patwin who served as Vallejo's spokesperson when problems with Native American tribes arose. In 1843, Governor Manuel Micheltorena gave General Vallejo the 84,000-acre Soscoe land grant of Rancho Suscolto, which included the present-day Vallejo.

The American Period (1848–Contemporary)

During this period, and prior, Native American populations were declining rapidly because of an influx of Euro-American diseases. In 1832, a party of trappers from the Hudson's Bay Company, led by John Work, traveled down the Sacramento River, unintentionally spreading a malaria epidemic to Native Californians. Four years later, a smallpox epidemic decimated local populations, and it is estimated that up to 75 percent of the native population died.

After the upheaval of the Bear Flag Revolt in 1846, and the result of the Treaty of Guadalupe Hidalgo in 1848, California became a United States territory. In 1848, James W. Marshall discovered gold at Coloma in modern-day El Dorado County, which started the California Gold Rush into the region that forever altered the course of California's history. The arrival of thousands of gold seekers in the territory contributed to the exploration and settlement of the entire State. By late 1848, approximately 4 out of 5 men in California were gold miners.

By 1864, California's Gold Rush had essentially ended. The rich surface and river placers were largely exhausted and the miners either returned to their homelands or stayed to start new lives in California. After the gold rush, people in towns such as Jackson, Placerville, and Sonora turned to other means of commerce, such as ranching, agriculture, and timber production. With the decline of gold mining, agriculture and ranching came to the forefront in the State's economy. California's natural resources and moderate climate proved well suited for cultivation of a variety of fruits, nuts, vegetables, and grains.

Local History Napa County

European settlement in the Napa area began with the 1820 establishment of the Sonoma Mission and General Mariano Vallejo's 1838 reception of a land grant that included the Napa and Sonoma valleys. By 1848, the American population in the area had grown, and farmer Nathan Coombs laid out a town plat for Nappa City (the spelling changed to Napa by the 1870s), which served as the County seat when Napa became one of the original 27 counties of California in 1850.

During the mid-1850s, Napa County began to grow. While gold was being prospected in other areas of the State, Napa County became a center for silver and quicksilver mining. The County's population began to swell as pioneers, prospectors, and entrepreneurs moved in and set up residence. Two of those entrepreneurs were Edward Turner Bale and Samuel Brannan. Bale completed building the Bale Grist Mill a few miles north of Saint Helena in 1846. Brannan purchased land in the northern end of the valley at the foot of Mount Saint Helena and founded Calistoga. He began developing it as a resort town, taking advantage of the area's numerous mineral hot springs. He also founded the Napa Valley Railroad Company in 1864 to bring tourists to Calistoga from the San Francisco

ferryboats that docked in Vallejo. Other settlers turned to agriculture for their livelihood, primarily raising cattle, grain, and fruit crops.

Orchards and wheat gradually displaced cattle ranching as settlers' primary source of income, and the first Downtown Napa winery opened in the 1870s. While settlers initially relied on Native labor, Chinese immigrants became a more important source of labor as the Native populations declined in the later decades of the nineteenth century. Napa had a substantial Chinatown by 1886. In 1875, the State of California built the Napa State Hospital for the Insane at the southern edge of town; the City had competed with others around the State for the privilege of hosting the asylum, which brought considerable economic benefit with it in terms of public funding.

The Phylloxera louse infested Napa Valley and killed thousands of grapevines, seriously threatening the local wine industry. Many farmers replaced their grapevines with fruit trees. As discrimination against Chinese immigration climbed throughout the country in the late nineteenth century, Napa's Chinese population shrank, and farmers began to turn to Italian immigrants as a labor source.

The pattern of economic and population growth established during the war continued through the end of the 1950s. Blue-collar union jobs supported the local economy; by 1960, nearly 2,600 people were employed at Basalt Rock/Kaiser Steel and Napa's smaller manufacturing plants. Residential construction remained strong; between 1950 and 1957, nearly 5,000 dwelling units were constructed in Napa County, most of which were single-family houses in or near the Napa city limits. The downtown area remained the seat of County/City government and the commercial center of Napa during the postwar period through the mid-1960s.

The City's gradual development of a new City Hall, Police Station, and Fire Station at the Downtown Civic Center represented the most significant change to Downtown Napa's built environment during this era. By 1946, the City was discussing creation of a civic center, initially identifying the former Chinatown at First Street and the Napa River as a potential site. In 1948, the City Council began planning the new City Hall and selected the location along School Street between First Street and Second Street. Between 1951 and 1962, City Hall, the Police Station, and Fire Station No. 1 were constructed at their current locations.

In the 1960s, the local economy began a gradual shift away from its industrial roots. Tourism began to replace manufacturing as an engine of the local economy, but tourists passed through the City of Napa en route to wineries rather than arriving as a destination. State Route (SR) 29, which historically passed through the downtown area on Third Street, was rerouted to the west when a portion of SR-29 became a freeway in the late 1960s. This exacerbated downtown Napa's commercial decline, along with competition from malls and strip development. The City Council established a Redevelopment Agency in 1968, which was responsible for the destruction of many of Napa's historic commercial buildings in the early 1970s. Redevelopment efforts failed to re-establish Napa as the commercial heart of Napa County and the downtown area continued to suffer high turnover vacancy rates through the 1990s. This trend was reversed after 2005, when successful flood control measures made investment in the downtown area more attractive. Currently, downtown Napa is a hub of the local hospitality industry, featuring a concentration of hotels, restaurants, and wine tasting rooms.

The City of American Canyon

Located in southern Napa County, the City of American Canyon was incorporated as a city in 1992. The history of the City of American Canyon and its economy, growth, and development has been tied to the larger Napa region as a whole. The California Gold Rush brought many settlers to the region but American Canyon itself was largely devoid of gold deposits. Instead, the area was both rich in limestone and ideally suited for farming. In 1852, Simpson Thompson and his two sons established a large farm consisting of 475 acres of orchards and farmland as well as 300 acres of meadowlands for cattle grazing. In the early 1900s, the discovery of rich deposits of limestone led to the development of quarries that could produce over 2,000 barrels of cement per day. However, the exploitation of usable limestone and clay meant that by the 1930s, mining became economically untenable in the region. The economy of the region pivoted toward agriculture, particularly fruit orchards and the farming of wheat.

However, the City's economy would shift following the Paris Wine Tasting of 1976, better known as the Judgment of Paris. In a blind tasting, a panel of expert sommeliers scored wines from Napa estates such as Heitz Cellars or Stag's Leap higher than estates that produced First Growth Bordeaux wines. Their judgment sent shockwaves around the wine industry and established Napa as a world-class wine-growing region. While the region of Calistoga and St. Helena in Napa has been focused on producing top-tier wines and attracting high-end clientele, their success could not exist without the logistic support of the warehouses and distribution centers that grew up in American Canyon. These centers developed in subsequent years following the 1976 Judgment of Paris and provide the backbone for the distribution of domestic and imported wines both in the Bay Area and overseas today.

3.4.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation's significant prehistoric and historic properties. Under 36 Code of Federal Regulations 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above.

Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of the ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native groups to believe, express, and exercise their traditional religions. These rights include, but are not limited to, access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally-funded institution housing Native American Remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CEQA Guidelines Section 15064.5(a)—CEQA Definition of Historical Resources

California Environmental Quality Act (CEQA) Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as:

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.

(2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such

resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, State, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the CRHR.

Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations, as enumerated in Public Resources Code Section 5024.1. Cultural resources are recognized as nonrenewable resources and receive additional protection under the Public Resources Code and CEQA.

Public Resources Code 5024.1(c)—Definition of a Historic Resource

CEQA Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a "historical resource" as a resource that:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA Guidelines Section 15064.5(a)(3)—California Register of Historical Resources Criteria

As defined by CEQA Guidelines, Section 15064.5(a)(3)(A-D), a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model (see

criteria described above under the description of the NHPA), since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets NRHP criteria is clearly significant. In addition, a resource that does not meet NRHP standards may still be considered historically significant at a local or State level.

CEQA Guidelines 15064.5(c)—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine whether they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a "unique archaeological resource" as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); PRC § 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the County Coroner must be contacted. If the County Coroner determines that the human remains are Native American, the Coroner must contact the NAHC within 24 hours. The NAHC must identify the Most Likely Descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendant communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific

information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

Health and Safety Code Section 7050.5

Section 7050.5 of the Health and Safety code sets forth provisions related to the treatment of human remains. As the code states, "every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor" except under circumstances as provided in Section 5097.99 of the Public Resource Code. The regulations also provide guidelines for the treatment of human remains found in locations other than a dedicated cemetery including responsibilities of the Coroner.

Public Resources Code Section 5097.98

Section 5097.98 provides protocol for the discovery of human remains. It states that "when the commission receives notification of a discovery of Native American human remains from a County Coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify persons believed to be most likely descended from the deceased Native American." It also sets forth provisions for descendants' preferences for treatment of the human remains and what should be done if the commission is unable to identify a descendant.

California Public Resources Code Section 5097.91—Native American Heritage Commission

Section 5097.91 of the Public Resources Code established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.91 of the Public Resources Code, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the Public Resources Code specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner. Section 5097.5 defines the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands as a misdemeanor.

California Senate Bill 18—Protection of Tribal Cultural Places

SB 18 (California Government Code § 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American Tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB 18 requires public notice to be sent to tribes listed on the NAHC SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that may be affected by the proposed adoption or amendment to a general or specific plan.

California Assembly Bill 52—Effects on Tribal Cultural Resources

AB 52 was signed into law on September 25, 2014, and provides that any public or private "project with an effect that may cause a substantial adverse change in the significance of a Tribal Cultural Resource (TCR) is a project that may have a significant effect on the environment." TCRs include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the CRHR or included in a local register of historical resources." Under prior law, TCRs were typically addressed under the umbrella of "cultural resources," as discussed above. AB 52 formally added the category of "tribal cultural resources" to CEQA and extends the consultation and confidentiality requirements to all projects, rather than just projects subject to SB 18 as previously discussed.

The parties must consult in good faith, and consultation is deemed concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect on a TCR (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place.
- Protecting the cultural character and integrity of the resource.
- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.
- Permanent conservation easements with culturally appropriate management criteria.

California Public Resources Code Section 21074—Effects on Tribal Cultural Resources

AB 52 amended the CEQA statute to identify an additional category of resource to be considered under CEQA, called "tribal cultural resources." It added Public Resources Code Section 21074, which defines "tribal cultural resources" as follows:

(a) "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

A) Included or determined to be eligible for inclusion in the CRHR.
B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Local

City of American Canyon

General Plan

To promote the preservation and restoration of the sites, structures and districts that have architectural, historical, archaeological and/or cultural significance to the City of American Canyon.

Objective 8.19 Ensure that the City's historically and archaeologically significant resources are protected in a manner that preserves and/or enhances the resources' inherent historic value.

Policy 8.19.1 Conduct a comprehensive survey of archaeological and cultural resources and historic vegetation that is based on established criteria and encompasses the entire City and its Sphere of Influence.

Policy 8.19.2 Adopt a Preservation Ordinance that will authorize the City to designate appropriate vegetation or archaeological sites deemed to be of historic, archaeological, or cultural significance an American Canyon City Historic Point, Site or District. Such an ordinance shall conform to State and federal criteria for establishing a preservation ordinance.

Policy 8.19.3 Explore various methods for the future preservation of historic vegetation and archaeological and cultural resources. For example, consider establishing " receiver site" and "adopt a building" programs to preserve historic structures that must be removed from their sites. Additionally, consider utilizing the Secretary of the Interior Standards for Historic Rehabilitation and standards and guidelines prescribed by the State Office of Historic Preservation as the architectural and landscape design standards for rehabilitation, alteration, or additions to sites containing historic resources in order to preserve these structures in a manner consistent with the sites' architectural and historic integrity.

3.4.4 - Methodology

Records Searches and Pedestrian Survey to Identify Existing Cultural Resources

The information in this section is based on the Phase I CRA prepared for this project by FCS on March 13, 2023. The Phase I CRA used the following methods to analyze the potential impacts of project implementation:

Northwest Information Center

On November 29, 2022, a records search for the project site and a 0.50-mile radius beyond the project boundaries was conducted at the NWIC located at Sonoma State University in Rohnert Park, California. To identify any historic properties or resources, the current inventories of the NRHP, the CRHR, the California Historic Landmarks list, the California Points of Historical Interest list, and the California Built Environment Resource Directory (BERD) for Napa County were reviewed to determine the existence of previously documented local historical resources.

Results from the NWIC indicate that two resources have been recorded within the 0.5-mile radius (historic resource P-28-000602 and prehistoric resource 483A-001), none of which are located within the project boundaries (Table 3.4-1). In addition, 21 area-specific survey reports are on file within the 0.5-mile radius, one of which (S-000153) linearly transects the project boundary (Table 3.4-2). This indicates that the project site has been partially surveyed for cultural resources.

Table 3.4-1: Cultural Resources within 0.5-mile Radius of the Project Site

Resource No.	Resource Description	Date Recorded
P-28-000602	CA-NAP-727H Fogarty; AH03 Landscaping/orchard; AH05. Wells/cisterns; AH11. Walls/fences; AH15. Standing structures; AH16. Other	2007
483A-001	No name; AP02 Lithic scatter	No year
Source: Northwest Information Center (NWIC) Records Search. November 29, 2022.		

Table 3.4-2: Previous Investigations within 0.5-mile Radius of the Project Site

Report No.	Report Title/Project Focus	Author	Date
S-000153	**Archaeological Impact Evaluation: Proposed Sewage Pipeline, Napa to American Canyon, Napa County, California**	**Thomas F. King**	**1975**
S-000153a	A Re-examination of an Area of Archaeological Sensitivity near Green Island Road, Napa County, California	David A. Fredrickson	1975
S-000153b	Archaeological survey and monitoring along the Napa-American Canyon Pipeline right-of-way	Lynn Eisenman	1976
S-001012	A preliminary archaeological reconnaissance of the 73.28-acre Maher property, Napa County, California	Thomas L. Jackson	1976
S-002372	Green Island Industrial Park, Napa County, California	David Chavez	1980
S-008851	Archaeological Reconnaissance of the Zunino Property and the Department of Fish and Game Tract near American Canyon, Napa County, California	Suzanne Baker	1986
S-009213	Historic Overview and National Register of Historic Places Evaluation of Site CA-NAP- 727H, Napa County, California	Laurence H. Shoup and Suzanne Baker	1987
S-012439	Cultural Resources Investigations for the Port of Oakland Phase I Dredging, Cultural Resources Evaluation	Avid Chavez	1990
S-017315	An Archaeological Study of the Meyer Property in American Canyon, Napa County, California, APN 058-04-10 and 058-04-19	Jennifer A. Ferneau	1995
S-017582	Archaeological Reconnaissance, Napa River and Oat Hill Sanitary Landfill Area, Napa County, California	Archaeological Consulting and Research Services	No Date

Report No.	Report Title/Project Focus	Author	Date
S-022041	A Cultural Resource Inventory of the Napa Airport Master Environmental Assessment Area, Napa County, California	Katherine Flynn, William Roop, and Ronald Melander	1983
S-023924	Historic Properties Inventory for the Proposed City of American Canyon South Napa River Tidal Slough and Floodplain Restoration Project	Stacey Jordan and Richard L. Carrico	2001
S-024344	Archaeological Survey of the Cookie Hill Housing Development, Napa County, California	Katherine Flynn	1988
S-029931	Tribotech/SF-06921, 100 Napa Junction Road, American Canyon, California	Scott Billat	2005
S-030746	A Cultural Resources Study for the Hanna Bridge Project, Project #0253605003-32001, City of American Canyon, Napa County, California	Heidi Koenig	2005
S-034252	An Archaeological Survey of the Green Island Assessment and Reimbursement District, Napa County, California	Thomas M. Origer	1988
S-034253	Cultural Resources Inspection of the Hanna Court Project Area, American Canyon, Napa County, California	Miley Paul Holman	2006
S-035015	Cultural Resources Report for the Napa- Sonoma Marshes Wildlife Area Land Management Plan	Joanne Grant	2008
S-036581	A Cultural Resources Survey for the Oat Hill Winery Condominium Project, Napa Junction Road, American Canyon, Napa County, California	Vicki R. Beard	2009
S-043823	Cultural Resources Inventory and Evaluation Report for Napa River Salt Marsh Restoration Project, Napa and Sonoma Counties, California	No Author	2003
S-049803	Cultural Resources Assessment, Green Island Industrial District Roads Project, City of American Canyon, Napa County, California	Kara Brunzell and David Brunzell	2016
S-050025	Archaeological Survey Report for the Napa Junction Elementary School Project, City of American Canyon, Napa County, California	No Author	2018
S-051238	Cultural Resources Study-SDG Commerce 330 Warehouse Project, City of American Canyon, Napa County, California	Solano Archaeological Services	2018

Notes:
Report listed in **Bold** transects the project site.
Source: Northwest Information Center (NWIC) Records Search. November 29, 2022.

Historic Aerials

A review of 16 historical aerial photographs from 1948 to 2020 indicate that, from the earliest aerial in 1948 through 1993, the project site was a wooded, undeveloped field. Between 1993 and 2005, industrial and residential development gradually began to occur north and southeast of the project.

From 2005 to 2020, there was very little development or expansion in the area surrounding the project. The project site itself remains undeveloped.

Native American Heritage Commission

On November 21, 2022, FCS sent a letter to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File (SLF) for the Area of Potential Effect (APE). A response was received on December 16, 2022, indicating that the SLF search produced a positive result for Native American cultural resources within the project site. The NAHC included a list of 11 tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential TCRs that may be affected by implementation of the proposed project are addressed, a letter containing project information and requesting additional information was sent to each tribal representative on January 2, 2023. No responses have been received to date.

Table 3.4-3: Tribal Consultation

Tribal Contact	Date Letter Sent	Response from Tribal Contact
Cachil Dehe Band of Wintun Indians of the Colusa Indian Community Daniel Gomez, Chairman	January 2, 2023 Email.	None
Cortina Rancheria - Kletsel Dehe Band of Wintun Indians Charlie Wright, Chairperson	January 2, 2023 USPS	None
Guidiville Indian Rancheria Donald Duncan, Chairperson	January 2, 2023 Email.	None
Middletown Rancheria of Pomo Indians Jose Simon, Chairperson	January 2, 2023 Email.	None
Mishewal-Wappo Tribe of Alexander Valley Scott Gabaldon, Chairperson	January 2, 2023 Email.	None
Muwekma Ohlone Indian Tribe of the SF Bay Area Charlene Nijmeh, Chairperson	January 2, 2023 Email.	None
Muwekma Ohlone Indian Tribe of the SF Bay Area Monica Arellano, Vice Chairwoman	January 2, 2023 USPS	None
Pinoleville Pomo Nation Leona Willams, Chairperson	January 2, 2023 Email.	None
Yocha Dehe Wintun Nation Anthony Roberts, Chairperson	January 2, 2023 Email.	None
Yocha Dehe Wintun Nation Laverne Bill, Director of Cultural Resources	January 2, 2023 Email.	None
Yocha Dehe Wintun Nation Yvonne Perkins, THPO, Cultural Resources Chairman	January 2, 2023 Email.	None
Source: FirstCarbon Solutions (FCS) 2024		

Cultural Resources Pedestrian Survey

On January 6, 2023, FCS Senior Archaeologist Dr. Dana DePietro, PhD, and FCS Archaeologist and Historian Ti Ngo conducted a pedestrian survey for unrecorded cultural resources in the project site.

The project site is rectangular-shaped and is bounded by Commerce Court to the east, an industrial warehouse to the south, North Slough to the west, and undeveloped land (entitled for development as a wine distribution warehouse) to the north.

The survey began in the southeast corner of the project site and moved west and north, using east–west transects spaced at 15-meter intervals. All areas of the project site were closely inspected for culturally modified soils or other indicators of potential historic or prehistoric resources. Because of a high level of vegetation, visibility of native soils was approximately 5 percent across the project site. Visible soils consisted of dark brown alluvial clay (Munsell 7.5 YR 3/2) with inclusions of granite, quartz, and schist stones ranging from 2-5 centimeters. The soil in the southern boundary of the project site contained a mixture of imported fill from adjacent construction.

Survey conditions were documented using digital photographs and field notes. During the survey, the team examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations), or historic debris (e.g., glass, metal, ceramics).

No indication of historic or prehistoric archaeological resources were found over the course of the pedestrian survey.

3.4.5 - Buried Site Potential

In addition to the pedestrian survey, the potential for yet identified cultural resources in the vicinity was reviewed against geologic and topographic geographic information system data for the general area and information from other nearby projects. The proposed project was evaluated against a set of criteria identified by a geoarchaeological overview of the Central Valley that was prepared for the California Department of Transportation (Caltrans) Districts 6 and 9.[1] This study mapped the "archaeological sensitivity," or potential to support the presence of buried prehistoric archaeological deposits, throughout the Central Valley based on geology and environmental parameters including distance to water and landform slope. The methodology used in the study is applicable to other parts of California, and concluded that sites consisting of flat, Holocene-era deposits in close proximity to water resources had a moderate to high probability of containing subsurface archaeological deposits when compared to earlier Pleistocene deposits situated on slopes or further away from drainages, lakes, and rivers.

[1] Meyer, J., D. Craig Young, and Jeffrey S. Rosenthal. 2010. Volume I: A Geoarchaeological Overview and Assessment of Caltrans District 6 and 9, Cultural Resources Inventory of Caltrans District 6/9 Rural Conventional Highways. Submitted to Central California Department of Transportation, District 6.

The project site is flat and situated in close proximity to the Napa River with the Northern Slough along the western portion of the property. According to the geological map of the area by Wagner and Gutierrez, the surface of the project site consists almost entirely of Quaternary alluvial fan deposits, containing Holocene soils.[2] Applying the criteria set forth in Meyer et al. 2010, all Holocene-era deposits have the potential to contain archaeological deposits, which increases with the ease of the slope and proximity to water resources. This, coupled with the presence of a known precontact archaeological resource 1.2 mile to the north of the project footprint, indicates a moderate potential for unanticipated buried cultural resources to be impacted by project construction.

3.4.6 - Thresholds of Significance

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, cultural resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

c) Disturb any human remains, including those interred outside of formal cemeteries?

d) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

e) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

f) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

[2] Wagner, D.L., and Gutierrez, C.I., 2017, Preliminary geologic map of the Napa and Bodega Bay 30' x 60' quadrangles, California. California Geological Survey, Preliminary Geologic Maps PGM-17-04, Scale 1:100.000.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

3.4.7 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Historic Resources

Impact CUL-1: The proposed project could cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

Impact Analysis

Historic resources in this context refer to the built environment, mainly buildings and structures over 45 years in age that may be eligible for inclusion on the CRHR or NRHP. Record search results conducted at the NWIC did not identify any historic resources within the project site, but identified one historic resource (P-28-000602) within a 0.5-mile records search radius. The project site's proximity to the nearby Napa River, the Northern Slough waterway along its western boundary, and the lack of visibility of native soils due to high level of vegetation indicates a moderate potential for unanticipated cultural resources to be found during subsurface construction. FCS considers the potential for the proposed project to have an adverse effect on historic cultural resources to be moderate, creating a potentially significant impact.

Additionally, there is always a possibility that construction-related ground disturbance may uncover previously undiscovered historic cultural resources. As such, FCS recommends Worker Environmental Awareness Program (WEAP) training for archaeological resources for all construction personnel directly involved with project-related ground disturbance. The WEAP training shall be conducted by an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. This is included as Mitigation Measure (MM) CUL-1a. Furthermore, FCS recommends archaeological monitoring during ground-disturbing activities, as outlined in MM CUL-1b below. Lastly, MM CUL-1c outlines procedures for inadvertent discovery of cultural resources. With incorporation of MM CUL-1a, MM CUL-1b, and MM CUL-1c impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-1a All construction personnel directly involved with project-related ground disturbance shall attend a "tailgate" Worker Environmental Awareness Program (WEAP) training for archaeological resources. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist

who meets the Secretary of the Interior's Professional Qualification Standards for archaeology.

MM CUL-1b An Archaeological Monitor reporting to the qualified Archaeologist, shall be present during the clearing, grading, and trenching phases of the proposed project to check for the inadvertent discovery of archaeological resources or human remains. Over the course of the proposed project, should the Archaeologist determine that the probability of inadvertent discovery is low, they may make a recommendation to the lead agency that monitoring be reduced to regular periodic or "spot-check" monitoring, or that monitoring may cease altogether.

MM CUL-1c If buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the lead agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the Master Plan area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA Guidelines.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the lead agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the lead agency where they would be afforded long-term preservation to allow future scientific study.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

Archaeological Resources

Impact CUL-2:	**The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.**

Impact Analysis

The results of the records search from the NWIC identified one prehistoric archaeological resource (483A-001) located within the 0.5-mile records search radius. Additionally, the SLF search conducted by the NAHC came back positive for TCRs within the project site. No additional archaeological resources were encountered during the pedestrian field survey; however, this may have been due to poor soil visibility at the project site. Furthermore, FCS evaluated the potential for buried sites at the project site. The project site is located on relatively flat terrain and is situated in close proximity to wetlands, the Napa River, and the Northern Slough waterway on its western boundary. There is also a known precontact archaeological site 1 mile to the north of the project site. The combination of these factors suggests a moderate potential for unanticipated buried cultural resources to be impacted by project construction. This potentially significant impact would be reduced to a less than significant level through implementation of MM CUL-1a, MM CUL-1b, and MM CUL-1c.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM CUL-1a, MM CUL-1b, and MM CUL-1c.

Level of Significance After Mitigation

Le*s*s than significant impact with mitigation incorporated.

Human Remains

Impact CUL-3:	**The proposed project could disturb human remains, including those interred outside of formal cemeteries.**

Impact Analysis

While no formal cemeteries or areas containing human remains are known to be in the project vicinity, the possibility always exists that construction-related ground disturbance may uncover previously undiscovered human remains. In the unlikely event such a discovery is made, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 must be followed. Implementation of MM CUL-3, which details inadvertent discovery procedures, would reduce potential impacts to previously undiscovered human remains to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-3 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98.
2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
   - The descendant identified fails to make a recommendation.
   - The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

- When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

Listed or Eligible Tribal Cultural Resources

Impact CUL-4:	**The proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).**

Impact Analysis

Record search results from the NWIC indicate that there is one prehistoric resource located within a 0.5-mile radius of the project site, and a review of the NAHC SLF was positive for recorded TCRs being located within the project site. On January 2, 2023, FCS sent a letter containing project information to 11 tribal representatives recommended by the NAHC and requesting additional information about TCRs at the project site. No responses have been received to date. However, because the SLF search was positive, impacts are potentially significant. However, implementation of MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3 would reduce potentially significant impacts to TCRs to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

Lead Agency Determined Tribal Cultural Resources

Impact CUL-5: The proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

Construction

Record search results from the NWIC indicate that there is one prehistoric resource located within a 0.5-mile radius of the project site, and a review of the NAHC SLF was positive for recorded TCRs being located within the project site. On December 1, 2023, in compliance with AB 52, the City of American Canyon sent a letter containing project information to 11 tribal representatives recommended by the NAHC and requesting additional information about TCRs at the project site (Appendix D). No responses have been received to date. Even so, because the SLF search was positive, impacts are potentially significant. However, implementation of MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3 would reduce potentially significant impacts to TCRs to a less than significant level.

Level of Significance Before Mitigation

Less than significant impact with mitigation incorporated.

Mitigation Measures

MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3. Less than significant impact with mitigation incorporated.

3.4.8 - Cumulative Impacts

The geographic scope of the cumulative cultural resources analysis is a 0.5-mile radius of the project site. Cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site (including the off-site construction areas), the area near the project site would be the area most affected by project activities (generally within a 500-foot radius). The results of the cultural resources assessment and tribal consultation indicate that the project will not have a direct impact on any known historic resources, archaeological resources, human remains, or TCRs.

Construction activities associated with development projects in the project vicinity may have the potential to encounter undiscovered cultural resources. These projects would be required to mitigate for impacts through compliance with applicable federal and State laws governing cultural resources. Although there is the possibility that previously undiscovered resources could be encountered by subsurface earthwork activities associated with the cumulative projects, the implementation of construction mitigation measures would ensure that undiscovered cultural resources are not adversely affected by cumulative project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources. Although there is the possibility that previously undiscovered cultural resources and TCRs could be encountered by subsurface earthwork activities associated with the cumulative projects, the implementation of construction mitigation measures (MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3) would ensure that undiscovered TCRs are not adversely affected by cumulative project-related construction activities. Given the standard conditions of approval and mitigation measures that cumulative projects would be required to implement, the proposed project, in conjunction with other planned and approved projects, would result in a less than significant cumulative impact related to TCRs.

With the implementation of MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3, the proposed project would not result in a significant cumulative impact to cultural resources in the City of American Canyon or surrounding area.

Level of Cumulative Significance Before Mitigation

Potentially significant impact.

Cumulative Mitigation Measures

Implementation of MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.

Level of Cumulative Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

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3.5 - Energy

3.5.1 - Introduction

This section describes the existing energy setting in the project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to energy that could result from implementation of the project. Information in this section is based on project-specific energy calculation outputs included in Appendix A. No public comments were received during the Environmental Impact Report (EIR) scoping period related to energy.

3.5.2 - Existing Setting

Energy Basics

Energy is generally transmitted either in the form of electricity, measured in kilowatts (kW)[1] or megawatts (MW),[2] or natural gas measured in British Thermal Units (BTU) or cubic feet.[3] Fuel, such as gasoline or diesel, is measured in gallons or liters.

Electricity

Electricity is used primarily for lighting, appliances, and other uses associated with the project.

Natural Gas

Natural gas is used primarily for heating, water heating, and cooking purpose and is typically associated with commercial and residential uses.

Fuel

Fuel is used primarily for powering off-road equipment, trucks, and passenger vehicles. The typical fuel types used are diesel and gasoline.

Electricity Generation, Distribution, and Use

State of California

The State of California generated approximately 203,257 gigawatt-hours (GWh) of electricity in 2022. Approximately 47.8 percent of the energy generated is sourced from thermal energy sources (i.e., coal, natural gas, oil, waste heat/petroleum), with natural gas as the vast majority (47.5 percent of the total generation). Approximately 52.2 percent of the energy generated is sourced from renewable and non-greenhouse gas (GHG) emission sources (i.e., nuclear, hydropower, biomass, geothermal, solar, and wind).[4] Solar energy is the largest source of renewable energy, accounting for 19.9 percent of the total generation.

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1 1 kW = 1.000 watts; A watt is a derived unit of power that measures rate of energy conversion. 1 watt is equivalent to work being done at a rate of 1 joule of energy per second. In electrical terms, 1 watt is the power dissipated by a current of 1 ampere flowing across a resistance of 1 volt.

2 1 MW = 1 million watts

3 A unit for quantity of heat that equals 100,000 British thermal units. A British thermal unit is the quantity of heat required to raise the temperature of 1 pound of liquid water 1 degree Fahrenheit at a constant pressure of 1 atmosphere.

4 California Energy Commission (CEC). 2022. 2022 Total System Electric Generation. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation. Accessed November 13, 2023.

In 2019, California ranked second for total energy consumed, but the State's per capita energy consumption was less than all other states except Rhode Island. In 2021, California was ranked as the fourth-largest electricity producer in the country. The same year, California was the top producer of electricity from solar, geothermal, and biomass energy and was the fourth in conventional hydroelectric power generation.[5]

Electricity and natural gas is distributed through the various electric load-serving entities (LSEs) in California. These entities include investor-owned utilities (IOUs), publicly owned LSEs (including publicly owned utilities [POUs]), rural electric cooperatives, community choice aggregators, and electric service providers.[6]

County of Napa and City of American Canyon

Pacific Gas and Electric Company (PG&E) provides electricity to many of the cities throughout Napa County (County). Local community choice aggregations (CCAs) can also provide electricity services alternatives to the region's traditional utility supplier, PG&E. The local CCA for the City of American Canyon (City) is Marin Clean Energy (MCE). With the passing of Senate Bill (SB) 790 in 2011, residential and commercial customers within a local CCA jurisdiction are automatically enrolled in that CCA's electricity service but retain the ability to opt-out and return to their traditional utility supplier.

According to the California Energy Commission (CEC), Napa County's energy consumption was approximately 1,029 GWh in 2022.[7] As Napa County's population in 2021 was an estimated 134,300 people,[8] the County experienced a per capita electricity consumption of an estimated 7,661 kilo-watt hour (kWh) per year.

Project Site

The project site is currently undeveloped and does not consume electricity. MCE would procure, and PG&E would deliver, electricity to the proposed project.

Natural Gas Generation, Distribution, and Use

State of California

Natural gas is used for everything from generating electricity to cooking and space heating to alternative transportation fuel. Natural gas generation (in kWh) represented 10.7 percent of electric power generation in 1990 and increased over the 32-year period to represent 47.8 percent of electric power generation in 2022.[9]

[5] United States Energy Information Administration. 2022. California State Profile. Website: https://www.eia.gov/state/?sid=CA. Accessed November 13, 2023.
[6] California Energy Commission (CEC). 2023. Electric Load-Serving Entities (LSEs) in California Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/electric-load-serving-entities-lses. Accessed November 13, 2023.
[7] California Energy Commission (CEC). 2023. Electricity Generation by County. Website: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed November 13, 2023.
[8] United States Census Bureau. 2023. QuickFacts Napa County, California. Website: https://www.census.gov/quickfacts/fact/table/napacountycalifornia/PST045222. Accessed November 13, 2023.
[9] State of California Energy Commission. 2022. 2022 Total System Electric Generation. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation. Accessed November 13, 2023.

Natural gas-fired generation has become the dominant source of electricity in California, as it currently fuels approximately 45 percent of electricity consumption.[10] Because natural gas is a dispatchable resource that provides load when the availability of hydroelectric power generation and/or other sources decrease, use varies greatly from year to year. The availability of hydroelectric resources, the emergence of renewable resources for electricity generation, and overall consumer demand are the variables that shape natural gas use in electric generation.

County of Napa and City of American Canyon

PG&E provides natural gas to the Napa County, including the City of American Canyon. In 2021, Napa County's natural gas consumption was approximately 37.7 million U.S. Therms, or approximately 3,769,100 Million Metric British Thermal Units (MMBTU).[11] As Napa County's population in in 2021 was an estimated 134,300 people,[12] the County experienced a per capita natural gas consumption of an estimated 28.1 MMBtu per year.

Project Site

The project site is currently undeveloped and does not consume natural gas.

Fuel Use

State of California

California is one of the top producers of petroleum in the nation, with drilling operations occurring throughout the State. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay Area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received in the ports of Los Angeles, Long Beach, and the San Francisco Bay Area. Crude oil production in California and Alaska is in decline, and California refineries have become increasingly dependent on foreign imports.[13] Since 2012, foreign suppliers, led by Saudi Arabia, have provided over half of the crude oil refined in California.[14,15] According to the United States Energy Information Administration (EIA), California's field production of crude oil has steadily declined since the mid-1980s, totaling approximately 122.3 million barrels in 2022.[16]

[10] California Energy Commission (CEC). 2023. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california. Accessed November 13, 2023.

[11] California Energy Commission (CEC). 2020. Electricity Generation by County. Website: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed December 13, 2023.

[12] California Department of Finance (CDF). 2022. E-4 Population Estimates for Cities, Counties, and the State, 2021-2022 with 2020 Census Benchmark. Website: https://dof.ca.gov/forecasting/Demographics/estimates/e-4-population-estimates-for-cities-counties-and-the-state-2021-2022-with-2020-census-benchmark/. Accessed December 13, 2023.

[13] California Energy Commission (CEC). 2023. Oil Supply Sources to California Refineries. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries. Accessed November 13, 2023.

[14] California Energy Commission (CEC). 2021. Foreign Sources of Crude Oil Imports to California 2020. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports. Accessed November 13, 2023.

[15] California Energy Commission (CEC). 2023. Oil Supply Sources to California Refineries. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries. Accessed November 13, 2023.

[16] United States Energy Information Administration (EIA). 2022. California Field Production of Crude Oil. Website: https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpca2&f=a. Accessed November 13, 2023.

According to the EIA, transportation accounted for approximately 34 percent of California's total energy demand, amounting to approximately 2,355.5 trillion BTU in 2020.[17] California's transportation sector, including rail and aviation, consumed roughly 433 million barrels of petroleum fuels in 2020.[18] The CEC produces the California Annual Retail Fuel Outlet Report, which is a compilation of gasoline and diesel fuel sales data from across the State available at the county level. According to the CEC, California's 2022 fuel sales totaled 11,495 million gallons of gasoline and 1,846 million gallons of diesel.[19] Napa County fuel sales totaled an estimated 49 million gallons of gasoline and an estimated 7 million gallons of diesel in 2022.[20]

Alternative Fuels

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various Statewide regulations and plans, such as the Low Carbon Fuel Standard (LCFS) and SB 32. Conventional gasoline and diesel may be replaced, depending on the vehicle's capability, with transportation fuels including hydrogen, biodiesel, and electricity. Currently, public hydrogen refueling stations exist in California; however, none are in the City.[21,22]

3.5.3 - Regulatory Framework

Federal

Energy Policy and Conservation Act

Enacted in 1975, the Energy Policy and Conservation Act legislation established fuel economy standards for new light-duty vehicles (autos, pickups, vans, and sport-utility vehicles). The law placed responsibility on the National Highway Traffic and Safety Administration (NHTSA), a part of the United States Department of Transportation (USDOT), for establishing and regularly updating vehicle standards. The United States Environmental Protection Agency (EPA) administers the Corporate Average Fuel Economy (CAFE) program, which determines vehicle manufacturers' compliance with existing fuel economy standards.

Since the inception of the program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 miles per gallon (mpg) for the 1975 model year to 30.7 mpg for the 2014 model year and may increase to 54.5 mpg by 2025. On August 2, 2018, the NHTSA and EPA, operating under the direction of the Trump Administration, proposed the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule. This rule addresses emissions and fuel economy standards for motor vehicles and is separated into two parts as described below.

[17] United States Energy Information Administration (EIA). 2022. Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2020. Website: https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_te.pdf. Accessed November 13, 2023.
[18] United States Energy Information Administration (EIA). 2022. Table F16: Total Petroleum Consumption Estimates, 2020. Website: https://www.eia.gov/state/seds/sep_fuel/html/fuel_use_pa.html f. Accessed November 13, 2023.
[19] California Energy Commission (CEC). 2023. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results. Website: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting. Accessed November 13, 2023.
[20] Ibid.
[21] United State Department of Energy (DOE). Alternative Fuels Data Center. 2023. Alternative Fueling Station Counts by State. Website: https://afdc.energy.gov/stations/states. Accessed November 13, 2023.
[22] United State Department of Energy (DOE). Alternative Fuels Data Center. 2023. Alternative Fueling Station Locator [Interactive Database]. Website: https://afdc.energy.gov/stations/#/find/nearest?location=American%20Canyon,%20CA. Accessed December 13, 2023.

Part One, "One National Program" (84 Federal Register 51310) revokes a waiver granted by the EPA to the State of California under Section 209 of the Clean Air Act to enforce more stringent emission standards for motor vehicles than those required by the EPA for the explicit purpose of greenhouse gas (GHG) emission reduction and, indirectly, criteria air pollutants and ozone precursor emission reduction. This revocation became effective on November 26, 2019, potentially restricting the ability of the California Air Resources Board (ARB) to enforce more stringent GHG emission standards for new vehicles and set zero-emission vehicle mandates in California.

Part Two addresses CAFE standards for passenger cars and light trucks for model years 2021 to 2026. This rulemaking proposes new CAFE standards for model years 2022 through 2026 and would amend existing CAFE standards for model year 2021. The proposal would retain the model year 2020 standards (specifically, the footprint target curves for passenger cars and light trucks) through model year 2026. The proposal addressing CAFE standards was jointly developed by the NHTSA and EPA, with the EPA simultaneously proposing tailpipe carbon dioxide standards for the same vehicles covered by the same model years. The EPA and NHTSA published final rules to amend and establish national carbon dioxide and fuel economy standards on April 30, 2020 (Part Two of the SAFE Vehicles Rule) (85 Federal Register 24174).

On April 22, 2021, the Biden Administration formally proposed to roll back portions of the SAFE Vehicles Rule, thereby restoring California's right to enforce more stringent fuel efficiency standards.[23] Most recently, on December 21, 2021, the NHTSA finalized rules to repeal the SAFE I Rule. The final rule concludes the SAFE I Vehicles Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests. The final rule ensures the SAFE I Vehicles Rule will no longer form an improper barrier to states exploring creative solutions to address their local communities' environmental and public health challenges.[24]

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 was designed to improve vehicle fuel economy and help reduce nationwide dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil and confronting global climate change. Specifically, it increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard, requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, and reduces U.S. demand for oil by setting a national fuel economy standard of 35 mpg by 2020. The Act also set energy efficiency standards for lighting (specifically light bulbs) and appliances. The project would be required to install photosensors and energy-efficient lighting fixtures with the requirements of 42 United States Code Section 17001, *et seq.*

[23] National Highway Traffic Safety Administration (NHTSA). 2022. Corporate Average Fuel Economy. Website: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy. Accessed November 23, 2023.
[24] Ibid.

U.S. Executive Order 13693 (Energy Independence and Security Act Expansion)

In March 2015, Executive Order 13693 Planning for Federal Sustainability in the Next Decade was signed into action. The goal of this Executive Order is to expand on the Energy Independence and Security Act.

Energy Star Program

In 1992, the EPA introduced Energy Star© as a voluntary labeling program designed to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specification for maximum energy use established under the program are certified to display the Energy Star© label. In 1996, the EPA joined with the United State Department of Energy to expand the program, which now also includes qualifying commercial and industrial buildings as well as homes.

State

California Assembly Bill 1493: Pavley Regulations and Fuel Efficiency Standards

California Assembly Bill (AB) 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the by the United States District Court for the District of Columbia in 2011.[25] The standards were to be phased in during the 2009 through 2016 model years.[26]

The second phase of the implementation for the Pavley Bill was incorporated into amendments to the Low Emission Vehicle (LEV) Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car Program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation is anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles (EVs), and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.[27]

Advanced Clean Cars II was adopted in November 2022. The Advanced Clean Cars II regulations will rapidly scale down light-duty passenger car, pickup truck, and SUV emissions starting with the 2026 model year through 2035. The regulations are two-pronged. First, they amend the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles and rely on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric, and

[25] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed June 30, 2023.
[26] California Air Resources Board (ARB). Advanced Clean Cars Summary. Website: https://ww2.arb.ca.gov/sites/default/files/2019-12/acc%20summary-final_ac.pdf. Accessed June 30, 2023.
[27] California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures. Website: https://calcarbondash.org/cc/scopingplan/sp_measures_implementation_timeline.pdf. Accessed June 30, 2023.

plug-in hybrid electric vehicles, to meet air quality and climate change emissions standards. These amendments support Governor Newsom's 2020 Executive Order N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the Low-emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

In October 2023, ARB launched a new effort to consider potential amendments to the Advanced Clean Cars II regulations, including updates to the tailpipe greenhouse gas emission standard and limited revisions to the Low-emission Vehicle and Zero-emission Vehicle regulations.

These regulations rapidly scale down emissions of light-duty passenger cars, pickup trucks, and SUVs and require an increased number of zero-emission vehicles to meet air quality and climate change emissions goals.

California Senate Bill 1078: Renewable Electricity Standards

First established in 2002 under SB 1078, California Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent by 2020 and 50 percent by 2030.[28] In 2018, SB 100 further increased California's RPS and required retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030; and that ARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045. The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.

Senate Bills 350, 100, and 1020

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires doubling of the energy efficiency in existing buildings by 2030.

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's RPS Program (last updated by SB 350). SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045.

Senate Bill 1020 (SB 1020), signed into law on September 16, 2022, requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035, 95 percent by 2040, and 100 percent by 2045. All State agencies' facilities must be served by 100 percent renewable and

[28] California Public Utilities Commission (CPUC). Renewables Portfolio Standard (RPS) Program. Website: https://www.cpuc.ca.gov/rps/. Accessed November 27, 2023.

zero-carbon resources by 2030. SB 1020 also requires the CPUC, CEC, and ARB to issue a joint progress report outlining the reliability of the electrical grid with a focus on summer reliability and challenges and gaps. Additionally, SB 1020 requires the CPUC to define energy affordability and use energy affordability metrics to develop protections, incentives, discounts, or new programs for residential customers facing hardships due to energy or gas bills.

California Code of Regulations Title 24

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

California Code of Regulations Title 24 Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. The 2022 Building Energy Efficiency Standards became effective on January 1, 2023.[29]

Part 11 (California Green Building Standards Code)

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The Code is updated on a regular basis, with the most recent update consisting of the 2022 California Green Building Code Standards that became effective January 1, 2023.[30] Local jurisdictions are permitted to adopt more stringent requirements, as State Law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. The Code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The California Building Code (CBC) provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

California Public Utilities Code

The CPUC regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

[29] California Energy Commission. 2023. Building Energy Efficiency Standards. Website: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed December 18, 2023.
[30] Ibid.

Local

City of American Canyon

City of American Canyon General Plan

The City of American Canyon adopted its General Plan in 1994, which contains objectives and policies that help address energy use at the local level and improve energy efficiency and conservation:

Objective 8.22 Minimize transportation-related energy consumption.

Policy 8.22.1 Encourage the development of mixed use, pedestrian friendly employment/residential centers that help minimize vehicle trips in American Canyon and contribute to a reduction in energy consumption.

Policy 8.22.2 Encourage the clustering of residential structures.

Policy 8.22.3 Require that Development Plans provide for linkages between bicycle and pedestrian circulation systems and transit and employment centers, in accordance with established areawide plans.

Policy 8.22.4 Maintain a system of traffic signals and controls that minimizes waiting time and vehicle speed changes through routes.

Policy 8.22.5 Require that Development Plans provide for High Occupancy Vehicles (HOV) and public transportation, where feasible, through the provision of appropriate transit areas and park-and-ride locations along public transportation routes.

Objective 8.23 Reduce Energy consumption in buildings.

Policy 8.23.1 Require that developers employ energy-efficient subdivision and site planning methods as well as building design. Measures to be considered include building orientation and shading, landscaping, building reflectance, use of active and passive solar heating and hot water system, etc. In establishing these energy related design requirements, the City shall balance energy-efficient design with good planning principles.

Policy 8.23.2 Require that new City buildings be energy efficient.

Objective 8.24 Increase public awareness of energy conservation needs and means in order to encourage informed choices about energy conservation by the general public.

Policy 8.24.1 Cooperate with local utilities to provide energy conservation information to the public.

Policy 8.24.2 Develop public and/or public-private energy conservation educational programs for City employees and the public.

Objective 8.25 Increase the energy efficiency of City operations to save energy, reduce municipal costs, and provide an example to the private sector.

Policy 8.25.1 Introduce concepts of energy efficiency and lifecycle costing to City planning and operating decisions and to the design of all major City facilities.

Policy 8.25.2 Work with other agencies and utility companies to develop safe, economical and renewable energy resources.

Policy 8.25.3 Consider participating in energy conservation demonstration projects and promoting the use of treatment technologies that provide for the reuse of waste and water treatment by products, such as sludge and methane gas.

3.5.4 - Methodology

The approach to analyzing energy impacts is based on Public Resources Code Section 21100(b)(3), which states an EIR shall include "mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy." Guidance for implementing this section is provided in California Environmental Quality Act (CEQA) Guidelines Appendix F (Energy Conservation). CEQA Guidelines Section 15126.2(b) further explains, "This [energy] analysis may be included in related analyses of air quality, GHG emissions, transportation or utilities in the discretion of the lead agency." Consistent with that approach, additional discussion of the physical environmental impacts associated with production of energy is also included in the other resource chapters of this EIR, including but not limited to Section 3.2, Air Quality; Section 3.7, Greenhouse Gas Emissions; Section 3.13, Transportation; and Section 3.14, Utilities and Service Systems.

Energy consumption is analyzed herein in terms of construction and operational energy. Construction energy demand accounts for anticipated energy consumption during construction of development facilitated by the proposed project, such as fuel consumed by construction equipment and construction workers' vehicles traveling to and from the construction site. Operational energy demand accounts for the anticipated energy consumption during operation of the development facilitated by the project, such as fuel consumed by cars and trucks and electricity consumed for building power needs, including but not limited to lighting, water conveyance, and air conditioning.

3.5.5 - Thresholds of Significance

The lead agency utilizes the criteria in the CEQA Guidelines Appendix G Environmental Checklist to determine whether impacts related to energy are significant environmental effects. Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Significance Criteria

Impact ENER-1: Wasteful, Inefficient, or Unnecessary Energy Consumption

The methodology employed under Impact ENER-1, which focuses on determining whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources, follows the guidance provided in Appendix F of the CEQA Guidelines as well as the analytical precedent set by *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) (75 Cal.App.5th 63, 164-168).

According to Appendix F of the CEQA Guidelines, the goal of conserving energy is translated to include decreasing overall per capita energy consumption; decreasing reliance on fossil fuels such as coal, natural gas, and oil; and increasing reliance on renewable energy sources. In *League to Save Lake Tahoe Mountain etc. v. County of Placer*, the Appellate Court concluded that the analysis of wasteful, inefficient, and unnecessary energy consumption was not adequate because it did not consider whether additional renewable energy features can be added to the project.

The proposed project would be considered to result in a potentially significant impact if it would result in wasteful, inefficient, or unnecessary consumption of energy resources. Considering the guidance provided by Appendix F of the CEQA Guidelines and the Appellate Court decision in *League to Save Lake Tahoe Mountain etc. v. County of Placer*, the proposed project would be considered to result in wasteful, inefficient, or unnecessary consumption of energy resources if it would conflict with the following energy conservation goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, or oil; and
- Increasing reliance on renewable energy sources.

Impact ENER-2: Renewable Energy and Energy Efficiency Plan Consistency

This impact discussion focuses on project consistency with a local plan or policy adopted for the purpose of improving energy efficiency or reliance on renewable energy sources. Impact ENER-2 focuses on project consistency with relevant policies intended to improve energy efficiency and encourage the use of renewable energy sources. As such, the proposed project would be determined to conflict with the applicable energy efficiency or renewable energy plan if it would not adhere to applicable energy consumption related measures included in the City's General Plan.

3.5.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Energy Use

Impact ENER-1:	**The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.**

Impact Analysis

A discussion of the proposed project's anticipated energy usage is presented below. Energy use consumed by the proposed project was estimated and includes electricity and fuel consumption for project construction and operation. Energy calculations are included as part of Appendix B.

Construction Impacts

For purposes of this analysis, the project construction schedule was assumed to begin in September 2024 and conclude in August 2025. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require site preparation, grading, building construction, architectural coating, and paving. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., grading), and the actual construction of the building. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, graders, tractors, and cranes. Construction equipment is estimated to consume a total of approximately 32,838 gallons of diesel fuel over the entire construction duration (Appendix B).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB EMFAC mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix B. In total, the proposed project is estimated to generate 453,615 VMT and consume 29,325 gallons of combined gasoline and diesel for vehicle travel during construction. In total, project construction is expected to consume 62,162 gallons of combined gasoline and diesel from on-site equipment and construction vehicle trip fuel use.

The overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operational Impacts

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 3.5-1.

Table 3.5-1: Estimated Annual Project Energy Consumption in 2025

Energy Consumption Activity	Annual Consumption
Electricity Consumption	659,500 kWh
Building Natural Gas Consumption	0 kBTU
Operational Fuel Consumption-Natural Gas	13,980 gallons
Operational Fuel Consumption-Gasoline	42,129 gallons
Operational Fuel Consumption–Diesel	249,798 gallons
Operational Fuel Consumption–Electricity	35,233 kWh
Notes: kBTU = kilo-British Thermal Unit kWh = kilowatt-hour VMT = Vehicle Miles Traveled Source: Appendix B.	

Operation of the proposed warehouse would consume an estimated 659,500 kWh of electricity on an annual basis. Natural gas would not be utilized as a building fuel. The proposed project's building would be designed and constructed in accordance with the latest adopted energy efficiency standards, which are based on the State's Building Energy Efficiency Standards. These are widely regarded as the most advanced building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary. The proposed project would also install solar on the building roof top and would produce an estimated 235,000 kWh per year. Furthermore, the proposed building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized. Furthermore, the proposed project would use electric forklifts.

Project-related vehicle trips would consume an estimated 291,927 gallons of gasoline and diesel annually and would involve activities and travel routes typical of a warehouse-type project. The fossil fuels consumed by the project annually would decrease and shift to electricity consumption as the on-road passenger vehicle and heavy-duty truck fleets shift from gasoline and diesel to zero-emission electric vehicles per compliance with State regulations. Thus, transportation fuel consumption would not be wasteful, inefficient, or unnecessary. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Energy Efficiency and Renewable Energy Standards Consistency

Impact ENER-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Impact Analysis

The proposed project would be served with electricity provided by PG&E. In 2021, PG&E obtained 47.7 percent of its electricity from renewable energy sources.[31] PG&E also offers a 50 percent and 100 percent solar choice that source 70.9 and 93.9 percent of its power mix from eligible renewable energy sources respectively, as well as a Green Saver option that sources 89.9 percent of its power mix from eligible renewable energy sources.[32] The utility would be required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. The proposed warehouse building would be designed in accordance with Title 24, California's Energy Efficiency Standards for Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the design of the proposed project would ensure that the proposed project would not result in the use of energy in a wasteful manner. In addition, the proposed project would install solar on the building roof top and would produce an estimated 235,000 kWh per year. Furthermore, the proposed building would be insulated and refrigerated at approximately 58°F, making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized.

The proposed project would comply with existing State energy standards and with energy conservation policies contained in the General Plan. As such, the proposed project would not conflict with State or local renewable or energy efficiency objectives. Impacts would be less than significant.

The proposed project's compliance with Title 24 standards and other applicable regulations, as well as the use of solar panels on the building roof and use of cool night air via intake louvers and fans would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project's building, mechanical systems, or indoor and outdoor lighting. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

[31] California Energy Commission (CEC). 2023. Annual Power Content Labels for 2021. Website: https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure/power-content-label/annual-power-content-2. Accessed November 14, 2023.
[32] Ibid.

3.5.7 - Cumulative Impacts

Cumulative impacts occur when the incremental effects of a project are significant when combined with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. The geographic scope of the cumulative energy analysis is the portion of PG&E's service area that covers the City. Cumulative projects considered as part of this cumulative analysis include the proposed project, other cumulative projects identified in Section 4 Cumulative Effects of this EIR, and other past, present, and reasonably foreseeable future projects within the PG&E service area that covers the City.

Concerning electricity and natural gas, cumulative projects would be required to comply with applicable provisions of Title 24 Building Energy Efficiency Standards and CALGreen. Specifically, the buildings and other improvements that would be constructed as part of the various cumulative projects would be required to be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings as applicable. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), and indoor and outdoor lighting. Future cumulative development would also be required to meet even more stringent energy efficiency requirements through local and Statewide policy, such as Title 24, Part 6, which would require, for example, that newly constructed residential homes include on-site photovoltaic solar systems, with some exceptions. Furthermore, PG&E—which supplies electricity to the project site and vicinity—would be required by SB 100 to incrementally increase the proportion of renewable electricity generation supplying its in-state retail sales until it reaches 100 percent carbon-free electricity generation by 2045. Electricity would also be consumed during construction of the cumulative projects from the use of construction trailers and any electrically driven equipment, vehicles, or tools. Electricity consumed during construction of the cumulative projects would also be subject to the renewable electricity generation requirements established by SB 100, as PG&E would be the anticipated electricity supplier for the cumulative project areas. The incorporation of these regulations into the design of the cumulative projects would ensure that they would not result in the inefficient, unnecessary, or wasteful consumption of electricity or natural gas, and thus they would not have a significant cumulative impact.

Similarly, the proposed project's energy use would be limited to that which is necessary for the construction and operation of the proposed project. As discussed above, the proposed project would be required to comply with applicable Statewide and local policies and standards pertaining to energy efficiency and can reasonably be assumed to pursue greater energy efficiencies, to the extent commercially practicable in its operation, in the interest of reducing operating costs. In addition, the proposed project be built as all-electric and would not utilize natural gas during construction or operations. As such, the proposed project's incremental contribution to the less than significant cumulative impact would not be considerable with respect to energy consumption in the form of electricity and natural gas. Cumulative projects would be required to comply with California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, that limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Additionally, various federal and State regulations, including the LCFS, Pavley Clean Car Standards, and LEV Program, would serve to reduce the transportation fuel demand of cumulative projects.

Compliance with the aforementioned regulations by the cumulative projects would ensure that they would not result in the inefficient, unnecessary, or wasteful consumption of fuel and their cumulative impact would be less than significant. As discussed in more detail above, the proposed project would consume vehicle fuel during both construction and operation. As previously discussed, the proposed project would also be required to use fuels which conform to various federal and State regulations, such as the LCFS, Pavley Clean Car Standards, and LEV Program. In addition, the proposed project would consume fuels in an amount necessary to construct and operate the proposed project and would not consume excessive amounts of fuel beyond what is necessary in the interest of avoiding unnecessary construction or operation costs. Therefore, the proposed project's incremental contribution to the less than significant cumulative impact would not be considerable with respect to the wasteful or inefficient use of energy.

Considering the information provided above, the proposed project would not have a cumulatively considerable impact on energy consumption and would not conflict with any renewable energy plans. Cumulative impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.6 - Geology, Soils, and Seismicity

3.6.1 - Introduction

This section describes the existing geology, soils, and seismicity setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information from the California Geological Survey, information provided by the Geotechnical Engineering Investigation prepared by Krazan and Associates, Inc., dated July 2023 (Krazan). The report is provided in Appendix E.

No public comments pertaining to geology, soils, and seismicity were received in response to the Notice of Preparation (NOP).

3.6.2 - Environmental Setting

Regional Geology

The site is located in the southern portion of the Napa Valley, which is characterized as a relatively large northwest-trending alluvial valley within the Northern California Coast Range geomorphic province. The valley is at the southernmost end of the Mayacamas Mountains. South of the City of Napa, the hills on the western side of the valley terminate at the marshes bordering the northern end of San Pablo Bay; the hills on the northeast continue to near Sulphur Springs Mountain near the City of Vallejo. The bedrock ridges on each side of the Napa Valley trend northwest, parallel to the general north-northwest structural trend of the North Coast Ranges. Pre-Quaternary bedrock is generally restricted to the foothills, but locally there are low knolls or hills of Tertiary-age bedrock in the central and western parts of the valley. Quaternary alluvial fan deposits shed from the hills on the east, and fluvial deposits associated with the Napa River and its tributary valleys comprise the youngest deposits within the Napa Valley.[1]

Within the region, the San Andreas Fault system distributes shearing across a complex assemblage of primarily right-lateral, strike-slip, parallel, and sub-parallel faults that include the Hayward and Calaveras Faults and others (see the “Faulting” section of this report). The mountainous topography west of Napa Valley resulted from the latest Pliocene and Quaternary uplift associated with the younger structures.

Local Geology

Geologic mapping indicates that the near-surface deposits at and in the vicinity of the project site are late Pleistocene to Holocene-age fan deposits composed of sand, gravel, silt, and clay that are moderately to poorly sorted and moderately to poorly bedded.[2,3] The project site is on Quaternity alluvial fan (Qf) deposits. The Qf deposits are described as gently sloping, fan-shaped, relatively undissected alluvial surfaces.

[1] Cornerstone Earth Group. 2017. Geotechnical Investigation.
[2] Krazan and Associates, Inc. (Krazan). 2023. Geotechnical Engineering Investigation, Proposed SDG Commerce 220, LLC, Distribution Center, 1055 Commerce Court, American Canyon, California. July 25, 2023.
[3] Bezore, S.P., C.E. Randolph-Loar, and R.C. Witter (Bezore et al.). 2002. Geologic map of the Cuttings Wharf 7.5-minute quadrangle, Napa and Solano counties, California: A digital database. Preliminary Geologic Maps PGM-02-01. California Geological Survey. Map. Scale 1:24,000.

Seismicity

The term *seismicity* describes the effects of seismic waves that are radiated from an earthquake as it ruptures. While most of the energy released during an earthquake results in permanent ground displacement, as much as 10 percent may dissipate immediately in the form of seismic waves.

In 2015, the 2014 Working Group on California Earthquake Probabilities (WGCEP)[4] presented the Third Uniform California Earthquake Rupture Forecast (UCERF3). According to this report, the San Francisco Bay Area has an estimated 72 percent chance of experiencing an earthquake of magnitude (M) 6.7 or higher over the next 30 years (from when the study was conducted in 2014).[5] The UCERF3 also provides estimates for the West Napa Fault (1.9 percent), Hayward-Rodgers Creek (13.3 percent), and Green Valley Fault (4.4 percent), which are in proximity to the project site.[6]

To understand the implications of seismic events, a discussion of faulting and seismic hazards follows.

Faulting

Faults form in rocks when stresses overcome the internal strength of the rock, resulting in a fracture. Large faults develop in response to large, regional stresses operating over a long time, such as those stresses caused by the relative displacement between tectonic plates. According to the elastic rebound theory, these stresses cause strain to build up in the earth's crust until enough strain has built up to exceed the strength along a fault and cause a brittle failure. The slip between the two stuck plates or coherent blocks generates an earthquake. Following an earthquake, strain will build once again until the occurrence of another earthquake. The magnitude of slip is related to the maximum allowable strain that can be built up along a particular fault segment. The greatest build up in strain that is due to the largest relative motion between tectonic plates or fault blocks over the longest period of time will generally produce the largest earthquakes. The distribution of these earthquakes is a study of much interest for both hazard prediction and analysis of active deformation of the earth's crust. Deformation is a complex process, and strain caused by tectonic forces is not only accommodated through faulting but also by folding, uplift, and subsidence, which can be gradual or in direct response to earthquakes.

Faults are mapped to determine earthquake hazards since they occur where earthquakes tend to recur. A historic plane of weakness is more likely to fail under stress and strain than a previously unbroken block of crust. Faults are, therefore, a prime indicator of past seismic activity, and faults with recent activity are presumed to be the best candidates for future earthquakes. However, since slip is not always accommodated by faults that intersect the surface along traces, and since the orientation of stresses and strain in the crust can shift, predicting the location of future earthquakes

[4] Also referred to as WGCEP 2014, this is a working group composed of seismologists from the United States Geological Survey (USGS), California Geological Survey (CGS), Southern California Earthquake Center (SCEC), and California Earthquake Authority (CEA).

[5] Field, E. H., Glenn P. Biasi, Peter Bird, Timothy E. Dawson, Karen R. Felzer, David D. Jackson, Kaj M. Johnson, Thomas H. Jordan, Christopher Madden, Andrew J. Michael, Kevin R. Milner, Morgan T. Page, Tom Parsons, Peter M. Powers, Bruce E. Shaw, Wayne R. Thatcher, Ray J. Weldon II, and Yuehua Zeng (Field et al.). 2015. Long-Term Time-Dependent Probabilities for the Third Uniform California Earthquake Rupture Forecast (UCERF3). Bulletin of the Seismological Society of America, Vol. 105. April 2015.

[6] Ibid.

is complicated. Earthquakes sometimes occur in areas with previously undetected faults or along faults previously thought inactive.

The West Napa, Green Valley, Hayward-Rogers Creek, Mount Diablo Thrust, Calaveras, and San Andreas faults are the closest in proximity to the project site.[7] Predominate faults and their characteristics are summarized in Table 3.6-1**.**

Table 3.6-1: Fault Summary

Fault	Type	Relationship to Project Site		Maximum Credible Earthquake (magnitude)
		Direction	Distance (miles)	
West Napa	Normal-Oblique	West	0.8	6.50
Green Valley	Right-Lateral Strike-Slip	East	8.0	6.50
Hayward-Rogers Creek	Right-Lateral Strike-Slip	West	11.0	7.00

Sources: Cornerstone Earth Group. 2017.
Krazan & Associates Inc. 2021. Geotechnical Engineering Investigation Proposed SDG Commerce 224 Distribution Center 1055 Commerce Court American Canyon, California. January 18.

West Napa Fault

The West Napa Fault begins under San Pablo Bay and travels north through American Canyon and up the west side of the Napa Valley to the vicinity of Saint Helena. The West Napa Fault is designated an Alquist-Priolo Special Study Area. On August 24, 2014, a magnitude 6.0 earthquake (known as the South Napa Earthquake) occurred on the West Napa Fault. Prior to the 2014 South Napa Earthquake, the last major seismic event on the West Napa Fault was a magnitude 5.2 temblor whose epicenter was near Yountville in September 2000[8].

Exhibit 3.6-1 depicts the location of the West Napa Earthquake Fault Zones in relation to the project site. As shown in the exhibit, the project site is not within the West Napa Fault Zone.

Seismic Hazards

Seismic hazards pose a substantial danger to property and human safety and are present because of the risk of naturally occurring geologic events and processes impacting human development. Therefore, the hazard is influenced as much by the conditions of human development as by the frequency and distribution of major geologic events. Seismic hazards present in California include ground rupture along faults, strong seismic shaking, liquefaction, ground failure, landsliding, and slope failure.

[7] Krazan. 2021. Geotechnical Engineering Investigation Proposed SDG Commerce 224 Distribution Center 1055 Commerce Court American Canyon, California. January 18.
[8] United States Geological Survey (USGS). 2014. M6.0-6km NW of American Canyon.

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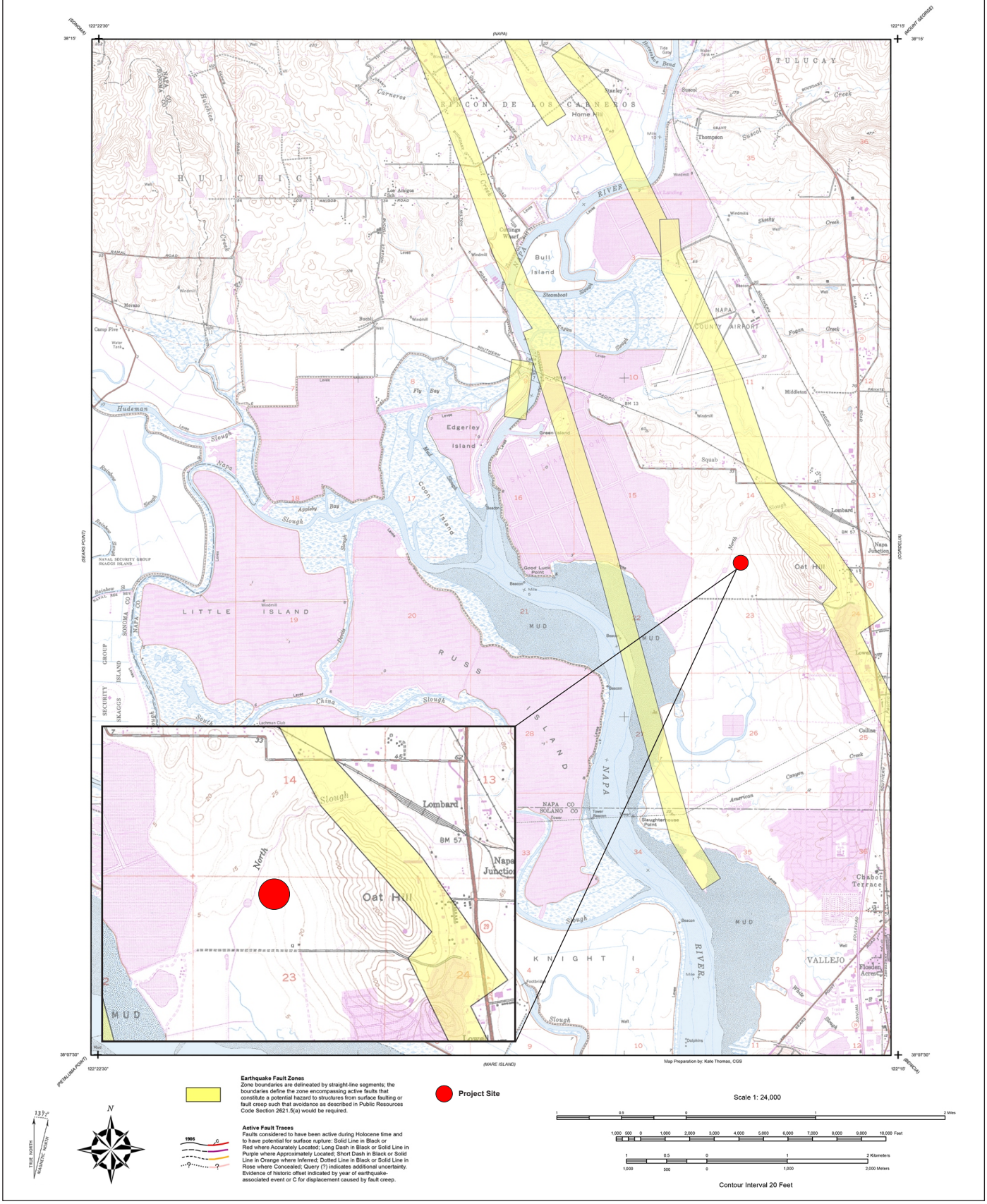

Source: California Conservation. California Geological Survey. 01/11/2018.

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Exhibit 3.6-1
Earthquake Fault Zone Map

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Fault Rupture

Fault rupture is a seismic hazard that affects structures sited above an active fault. The hazard from fault rupture is the movement of the ground surface along a fault during an earthquake. Typically, this movement takes place during the short time of an earthquake, but it also can occur slowly over many years in a process known as creep. Most structures and underground utilities cannot accommodate the surface displacements of several inches to several feet commonly associated with fault rupture or creep.

Following the August 24, 2014, seismic event on the West Napa Fault, fault rupture was observed on two Napa County Airport taxiways and various roadways in Napa County, including State Route (SR) 121 and Old Sonoma Road.

Ground Shaking

The severity of ground shaking depends on several variables, such as earthquake magnitude, epicenter distance, local geology, thickness, seismic wave-propagation properties of unconsolidated materials, groundwater conditions, and topographic setting. Ground shaking hazards are most pronounced in areas near faults or with unconsolidated alluvium.

Based on observations of damage from recent earthquakes in California (e.g., San Fernando 1971, Whittier-Narrows 1987, Landers 1992, Northridge 1994), ground shaking is responsible for 70 to 100 percent of all earthquake damage. The most common type of damage from ground shaking is structural damage to buildings, which can range from cosmetic stucco cracks to total collapse. The overall level of structural damage from a nearby large earthquake would likely be moderate to heavy, depending on the characteristics of the earthquake, the type of ground, and the condition of the building. Besides damage to buildings, strong ground shaking can cause severe damage from falling objects or broken utility lines. Fire and explosions are also hazards associated with strong ground shaking.

During the 2014 South Napa Earthquake, the United States Geological Survey (USGS) instrument readings at monitoring sites in Napa and Vallejo reported peak ground acceleration values ranging from 19.8 to 40.7 percent of gravity, which corresponds to “strong” and “very strong” ground shaking. Following the earthquake, more than 200 persons sought treatment at local hospitals, more than 150 buildings were “red tagged,”[9] and numerous utility lines experienced ruptures or leaks that disrupted service.

Ground Failure

Ground failure includes liquefaction, the liquefaction-induced phenomena of lateral spreading, and lurching.

Liquefaction is a process by which sediments below the water table temporarily lose strength during an earthquake and behave as a viscous liquid rather than a solid. Liquefaction is restricted to certain geologic and hydrologic environments, primarily recently deposited sand and silt in areas with high groundwater levels. The process of liquefaction involves seismic waves passing through saturated

[9] A red tagged building is considered uninhabitable without further assessment or repair under the California Building Standards Code.

granular layers, distorting the granular structure, and causing the particles to collapse. This causes the granular layer to behave temporarily as a viscous liquid, resulting in liquefaction.

Liquefaction can cause the soil beneath a structure to lose strength, which may result in the loss of foundation-bearing capacity. This loss of strength commonly causes the structure to settle or tip. Loss of bearing strength can also cause light buildings with basements, buried tanks, and foundation piles to rise buoyantly through the liquefied soil.

Lateral spreading is lateral ground movement, with some vertical component, caused by liquefaction. In effect, the soil rides on top of the liquefied layer. Lateral spreading can occur on relatively flat sites with slopes less than 2 percent, under certain circumstances, and can cause ground cracking and settlement.

Lurching is the movement of the ground surface toward an open face when the soil liquefies. An open face could be a graded slope, stream bank, canal face, gully, or other similar feature.

Landslides and Slope Failure

Landslides and other forms of slope failure form in response to the long-term geologic cycle of uplift, mass wasting, and disturbance of slopes. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides, and rock fall—processes that are commonly triggered by intense precipitation, which varies according to climactic shifts.

Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil.

Geologists classify landslides into several different types that reflect differences in the type of material and type of movement. The four most common types of landslides are translational, rotational, earth flow, and rock fall. Debris flows are another common type of landslide similar to earth flows, except that the soil and rock particles are coarser. Mudslide is a term that appears in non-technical literature to describe a variety of shallow, rapidly moving earth flows.

Surface Profile/Geomorphology

The project site predominantly consists of vacant land. Surface soils have a loose consistency and contain a moderate amount of grass and weeds. The site gently slopes from east to west.

Soil Borings and Subsurface Profile

Subsurface soil conditions were explored by Krazan & Associates by drilling 24 borings at the project site to depths ranging from approximately 10 to 50 feet below the existing grade. In addition, three bulk subgrade samples were obtained for testing.[10]

In general, surface soils at the project site consist of approximately 6 to 12 inches of soft silty clay or sandy clary or very loose silty sand. These soils are disturbed, have low strength characteristics, and

[10] Krazan. 2023. Geotechnical Engineering Investigation, Proposed SDG Commerce 220, LLC, Distribution Center, 1055 Commerce Court, American Canyon, California. July 25, 2023

are highly compressible when saturated. Within portions of the site, there is approximately 6 to 12 inches of fill materials. Beneath the loose surface soils and fill material, there is approximately 17.5 feet of stiff to hard sandy clary, silty clay, and medium dense/very stiff clayey sand/sandy clay. These soils are moderately strong and slightly to moderately compressible. The clayey soils have a moderate to high potential for expansion. Below 18.5 feet, there are layers of predominately stiff to very stiff sandy clay and silty clary, and medium dense silty sand/sandy silt were encountered. This soil contained varying amounts of gravel. They are moderately strong and slightly compressible.[11]

Paleontological Resources

The project site is on Quaternity alluvial fan deposits. The area within a 0.5-mile radius of the project site contains other Holocene deposits, Pleistocene alluvial fan deposits, the Pliocene Huichica Formation, and Cretaceous granitic rocks. Pleistocene alluvial fan deposits have the potential to be fossiliferous; however, the University of California Museum of Paleontology (UCMP) database lists no vertebrate or plant fossils in any of the forementioned geologic units in Napa County. The nearest Pleistocene vertebrate locality is approximately 10 miles southeast of American Canyon, in Solano County.

3.6.3 - Regulatory Framework

Federal

National Earthquake Hazards Reduction Program

The National Earthquake Hazards Reduction Program (NEHRP) was established by the United States Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law 95–124. In establishing the NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic goals remain unchanged:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts. There are four primary NEHRP agencies:

- National Institute of Standards and Technology of the Department of Commerce
- National Science Foundation
- USGS of the Department of the Interior

[11] Krazan. 2023.Geotechnical Engineering Investigation, Proposed SDG Commerce 220, LLC, Distribution Center, 1055 Commerce Court, American Canyon, California. July 25, 2023.

- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide State, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, authorized by Section 402(p) of the federal Clean Water Act, controls water pollution by regulating point sources, such as construction sites and industrial operations that discharge pollutants into waters of the United States. A Storm Water Pollution Prevention Plan (SWPPP) is required to control discharges from a project site, including soil erosion, to protect waterways. A SWPPP describes the measures or practices to control discharges during both the construction and operational phases of the project. A SWPPP identifies project design features and structural and nonstructural Best Management Practices (BMPs) that will be used to control, prevent, remove, or reduce stormwater pollution from the site, including sediment from erosion.

State

California Building Standards Code

The 2022 California Building Code (2022 CBC) is another name for the body of regulations known as the California Code of Regulations, Title 24, Part 2, which is a portion of the California Building Standards Code. The 2022 CBC incorporates by reference the International Building Code requirements with necessary California amendments. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards.

Compliance with the 2022 CBC requires (with very limited exceptions) that structures for human occupancy be designed and constructed to resist the effects of earthquake motions. The Seismic Design Category for a structure is determined in accordance with either California Building Code Section 1613–Earthquake Loads or the American Society of Civil Engineers Standard No. 7-05, Minimum Design Loads for Buildings and Other Structures. In brief, based on the engineering properties and soil-type of soils at a proposed site, the site is assigned a Site Class ranging from A to F. The Site Class is then combined with Spectral Response (ground acceleration induced by earthquake) information for the location to arrive at a Seismic Design Category ranging from A to D, of which D represents the most severe conditions. The classification of a specific site and related calculations must be determined by a qualified Geotechnical Engineer and are site specific.

Finally, the 2022 CBC requires that a geotechnical investigation be prepared for all new buildings that are 4,000 square feet or larger, as well as for smaller buildings if they meet certain criteria. The geotechnical investigation must be prepared by a California registered Geotechnical Engineer and address the classification and investigation of the soil, including requirements for geotechnical designs necessary to meet standards for reducing exposure to geological hazards.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] Sections 2621 to 2630) was passed in 1972 to provide a Statewide mechanism for reducing the hazard of surface fault rupture to structures used for human occupancy. The main purpose of the Act is to prevent the siting of buildings used for human occupancy across the traces of active faults. It should be noted that the Act addresses the potential hazard of surface fault rupture and is not directed toward other earthquake hazards, such as seismically induced ground shaking or landslides.

The law requires the State Geologist to identify regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults and to depict these zones on topographic base maps, typically at a scale of 1 inch to 2,000 feet. Earthquake Fault Zones vary in width, although they are often 0.75 mile wide. Once published, the maps are distributed to the affected cities, counties, and State agencies for their use in planning and controlling new or renewed construction. With the exception of single-family wood frame and steel-frame dwellings that are not part of a larger development (i.e., four units or more), local agencies are required to regulate development within the mapped zones. In general, construction within 50 feet of an active fault zone is prohibited.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (PRC §§ 2690–2699.6), which was passed in 1990, addresses earthquake hazards other than surface fault rupture. These hazards include strong ground shaking, earthquake-induced landslides, liquefaction, or other ground failures. Much like the Alquist-Priolo Earthquake Fault Zoning Act discussed above, these seismic hazard zones are mapped by the State Geologist to assist local government in the land use planning process. The Act states, “it is necessary to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety.” The Act also states, “cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard.”

Local

City of American Canyon

General Plan

The City of American Canyon (City) General Plan sets forth the following guiding and implementing policies relevant to geology, soils, and seismicity:

Goal 9 Reduce the potential level of death, injury, property damage, economic and social dislocation (i.e., business closures and homelessness due to structural damage) and disruption of vital services that could result from earthquake damage.

Goal 9C Ensure that seismic, geologic, and soils hazards that might affect areas designated for human use or habitation are properly mitigated or avoided entirely prior to development.

Objective 9.1 Protect life, ensure public safety, substantially reduce the damage to and ensure the orderly evacuation of building occupants following a seismic event.

Policy 9.1.1 Promote the collection of relevant data on fault location and the history of fault displacement as a basis for future refinement of fault zone policies and development standards. Particular attention should be paid to the West Napa Fault that is generally depicted in Figure 9-1 and should be evaluated in conjunction with proposed development. Based on predevelopment studies, limitations on new development shall be imposed if necessary in the identified fault areas.

Policy 9.1.2 Implement mandatory development restrictions and investigation requirements (by the State, under the Alquist-Priolo Act, or by the City) on that portion of the West Napa Fault Zone located within American Canyon and its Planning Area.

Policy 9.1.3 Require that any building intended to have occupancy be located at least 50 feet from either side of an active or potentially active fault.

Objective 9.2 Protect health and life safety, and reduce the level of potential property damage from the adverse effects of strong seismic ground shaking by implementing effective, state-of-the-art standards for seismic design of structures in the City.

Policy 9.2.1 Require that development be designed in accordance with seismic requirements of the Uniform Building Code.

Objective 9.3 Protect life and essential lifelines (e.g., gas, electricity, water), reduce the risk of property damage due to liquefaction, and promote the collection of more complete information on liquefaction susceptibility throughout the Planning Area.

Policy 9.3.1 Avoid development in areas with known liquefaction risk. If these areas cannot be avoided, require a qualified geologist, hydrologist, or civil engineer to determine the liquefaction potential at proposed development sites.

Policy 9.3.2 Require the submittal of liquefaction mitigation plans for proposed developments located in areas determined to have a high level of liquefaction risk.

Objective 9.4 Protect life, ensure safety, and substantially reduce the potential level of property damage from landslides, mudflows, slope failures and soil hazards. Promote the collection and utilization of more complete information on slope instability potential throughout the City and Planning Area.

Policy 9.4.5 Review proposals for new development and expansion of existing development in areas that are susceptible to collapsible or expansive soils and require adequate mitigation of these hazards.

Municipal Code

American Canyon Municipal Code, Chapter 16.02 adopts the California Building Code; as such, all new construction within the city limits is required to adhere to its seismic safety standards. The City of American Canyon Community Development Department is responsible for the administration and enforcement of the Building Code.

3.6.4 - Methodology

This analysis section is based on the Geotechnical Engineering Investigation prepared by Krazan and Associates in July 2023 (Appendix E). FirstCarbon Solutions (FCS) also obtained information about faults and seismic hazards from sources including the USGS, the United States Department of Agriculture, and the City of American Canyon General Plan. FCS also conducted a records search of the UCMP database in June 2023.

3.6.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether impacts to geology and soils are significant environmental effects. Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:
   i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
   ii. Strong seismic ground shaking?
   iii. Seismic-related ground failure, including liquefaction?
   iv. Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

3.6.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Seismic Hazards

Impact GEO-1: The proposed project may expose people or structures to potential substantial adverse effects associated with seismic hazards.

Impact Analysis

This impact evaluates potential exposure to seismic hazards, including fault rupture, strong ground shaking, ground failure and liquefaction, and landslides, and addresses whether the project could exacerbate any such hazards. Each issue is discussed separately.

Fault Rupture

There are no active earthquake faults within the project site; refer to Exhibit 3.6-1. For these reasons, the proposed project would not be subject to fault rupture during a seismic event nor would it exacerbate exposure to fault rupture hazards. Impacts in this regard would be less than significant.

Strong Ground Shaking

The project site is located in a seismically active region of California and is susceptible to strong ground shaking during a seismic event, which constitutes a potentially significant impact. The Geotechnical Engineering Investigation prepared by Krazan & Associates proposes several recommendations that address seismic ground shaking hazards, including seismic provisions from Section 1613.2.2 of the 2019 CBC. These recommendations are included as Mitigation Measure (MM) GEO-1 and updated to 2022 CBC as necessary. The implementation of this mitigation measure would ensure that the proposed project is not exposed to strong ground shaking hazards. Impacts would be less than significant.

Ground Failure and Liquefaction

The Geotechnical Engineering Investigation evaluated the potential for soil liquefaction during a seismic event using the LIQUEFYPRO computer program (Version 5.9d) developed by CivilTech Software. Conservative estimates for earthquake magnitude, peak horizontal ground surface acceleration, and groundwater depth were used as inputs. It was determined that soils below a depth of 10 feet have a slight to very low potential for liquefaction under seismic shaking due to predominately medium dense/stiff to very stiff sandy and clayey soils. The analysis also indicates that the total and differential seismic induced settlement is not anticipated to exceed 1 and 2/3 inch, respectively. This level of risk for liquefaction and settlement are not considered significant, and no mitigation is required.

Landslides

The project site contains relatively flat relief. There are no slopes near the project site that may be susceptible to landsliding during a seismic event, which precludes the possibility of the proposed project being susceptible to landsliding. Thus, the proposed project would not exacerbate exposure to such hazards. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact (ground shaking).

Mitigation Measures

MM GEO-1 Prior to the issuance of the building permit, recommendations from the Geotechnical Engineering Investigation prepared by Krazan & Associates [Draft EIR Appendix E] shall be incorporated into all project plans and applicable construction-related permits and submitted to the City of American Canyon for review and approval.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

Erosion

Impact GEO-2: The proposed project may result in substantial soil erosion or the loss of topsoil.

Impact Analysis

The proposed project would involve grading, building construction, paving, and utility installation activities that may cause erosion and sedimentation. This includes construction activities associated with the proposed project. Left unabated, the accumulation of sediment in downstream waterways could result in the blockage of flows, potentially causing increased localized ponding or flooding. As such, MM HYD-1 in Section 3.9, Hydrology and Water Quality, requires the implementation of stormwater quality control measures during construction activities to prevent pollutants from entering downstream waterways. Standard stormwater pollution prevention measures would include implementing structural and nonstructural control measures within and around disturbed areas to prevent soil and pollutants from leaving the project site. With implementation of MM HYD-1, impacts would be less than significant.

Upon project completion, the majority of the site would consist of impermeable surfaces, thereby reducing the risk of erosion on-site. Implementation of the project's Stormwater Control Plan (Appendix F) would ensure that erosion would not occur on-site during operation by implementing Low Impact Development design concepts, including stormwater control measures such as the proposed on-site retention basin.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM HYD-1.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

Unstable Geologic Location

Impact GEO-3: The proposed project would not be located on a geologic unit or soil that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Impact Analysis

The stability of the underlying geologic units and soils are functions of their constituents. For example, soils with high organic or fill content would generally be considered unsuitable to support urban development. Likewise, soils that are composed of well-compacted alluvium would generally be considered suitable to support urban development. As further explained in Impact GEO-1, the project site is not located in an area with significant risks of landslide or liquefaction. The site is underlain by Quaternity alluvial fan deposits and is not susceptible to subsidence or collapse. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Expansive Soil

Impact GEO-4: The proposed project may create substantial risks to life or property as a result of expansive soil conditions on the project site.

Impact Analysis

Beneath 6 to 12 inches of the loose surface soils and fill materials, approximately 17 feet of stiff to hard sandy clay, silty clay, and medium dense/very stiff clayey sand/sandy clay were encountered during the soil borings conducted by Krazan & Associates. Field and laboratory tests suggest that these soils are moderately strong and slightly to moderately compressible. The clayey soils had a moderate to high potential for expansion. The Geotechnical Engineering Investigation proposes several recommendations that address expansive soils, including either recompaction of surface soils with non-expansive engineered fill or lime treatment. These recommendations are required by MM GEO-1. Impacts would be less than significant with mitigation incorporated.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure GEO-1.

Level of Significance After Mitigation

Le*s*s than significant impact with mitigation incorporated.

Paleontological Resources

Impact GEO-5: **The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**

Impact Analysis

As described above, the project site is located on Quaternity alluvial fan deposits. Pleistocene alluvial fan deposits have the potential to be fossiliferous. However, the UCMP database lists no vertebrate or plant fossils in any of the forementioned geologic units in Napa County. The nearest Pleistocene vertebrate locality is approximately 10 miles southeast of American Canyon, in Solano County. As such, the potential for the proposed project to uncover vertebrate or plant fossils is low. Although it is extremely unlikely, it is always possible for unknown paleontological resources to be discovered during ground-disturbing activities. MM GEO-5 outlines procedures in case of an inadvertent discovery. Impacts would be less than significant with this mitigation incorporated.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GEO-5 Although extremely unlikely, should any significant paleontological resources (e.g., bones, teeth, well-preserved plant elements) be unearthed by the construction crew, their activities shall be diverted at least 15 feet from the find until a professional Paleontologist has assessed it and, if deemed significant, salvaged in a timely manner. Collected fossils shall be deposited in an appropriate repository, such as the University of California Museum of Paleontology (UCMP), where they shall be properly curated and made available for future research.

Level of Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

3.6.7 - Cumulative Impacts

The geographic scope of the cumulative geology, soils, and seismicity analysis is the project vicinity. Adverse effects associated with geologic, soil, and seismic hazards tend to be site specific, because each project site has its own geologic and soils conditions, and each project has its own design characteristics, localized within the area near the project site most affected by project activities (generally within a 0. 5-mile radius).

Past, present, and future development projects in the project vicinity have the potential to exacerbate exposure to seismic hazards. The project site may be subject to strong ground shaking during an earthquake; thus, MM GEO-1 requires the project applicant to implement all recommendations of the Geotechnical Engineering Investigation, including all California Building Standards Code applicable requirements into project plans. Other nearby past, present, and reasonably foreseeable development projects may exacerbate exposure to similar potential seismic hazards and have been and would be required to comply with the relevant State and local laws designed to mitigate seismic hazards and mitigation measures imposed under CEQA. Therefore, the

proposed project in conjunction with other cumulative development would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death in the event of a major earthquake; fault rupture; ground shaking; seismic-related ground failure; landslide; or liquefaction.

Regarding soil erosion, development activities could lead to increased erosion rates on-site soils, which could cause unstable ground surfaces and increased sedimentation in nearby streams and drainage channels. MM HYD-1 requires implementation of standard stormwater pollution prevention measures to ensure earthwork activities do not result in substantial erosion off-site. This mitigation, in turn, would have to comply with the NPDES stormwater permitting program, which regulates water quality originating from construction sites. The NPDES program, which governs projects Statewide (and nationwide), requires the preparation and implementation of SWPPPs for construction activities that disturb more than 1 acre and the implementation of BMPs that ensure the reduction of pollutants during stormwater discharges, as well as compliance with all applicable water quality requirements. The proposed project would be required to comply with these regulations, as have and would other nearby past, present, and reasonably foreseeable development projects. Therefore, the proposed project in conjunction with other nearby cumulative development would not have a cumulatively significant impact associated with erosion.

The project site contains native soils that have expansive characteristics, which may exacerbate exposure of project structures to expansive soil hazards. MM GEO-1 requires the project applicant to implement all recommendations of the Geotechnical Engineering Investigation and incorporate them into project plans. Other nearby past, present, and reasonably foreseeable development projects could be exposed to expansive soil hazards and, therefore, have been and would be required to implement similar mitigation measures based on State and local regulations and CEQA requirements. As such, the proposed project, in conjunction with other nearby past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact associated with expansive soils.

Paleontological resource impacts tend to be localized because the integrity of any given resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). While the likelihood of an unknown paleontological resources to be discovered on-site is low, MM GEO-5 requires assessment and, if deemed appropriate, salvage of any discovered paleontological resources thereby reducing impacts to less than significant. Similarly, construction activities associated with cumulative development projects in the project vicinity may have the potential to encounter undiscovered paleontological resources. These cumulative projects listed in Table 3-1 would be required to mitigate for impacts through compliance with applicable federal and State laws governing paleontological resources.

Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable planned and approved projects in the vicinity, would not have a cumulatively significant impact related to geology, soils, and seismicity.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure GEO-1, MM HYD-1, and MM GEO-5.

Level of Cumulative Significance After Mitigation

Le***s***s than significant impact with mitigation incorporated.

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3.7 - Greenhouse Gas Emissions

3.7.1 - Introduction

This section describes the existing greenhouse gas (GHG) emissions setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on project-specific information and modeling results utilizing California Emissions Estimator Model (CalEEMod) Version 2022.1. The Greenhouse Gas Analysis is included in this Draft Environmental Impact Report (Draft EIR) as Appendix A. Public comments were received during the EIR scoping period concerning the increase in GHG emissions due to the proposed industrial use.

3.7.2 - Environmental Setting

Greenhouse Gases and Global Emission Sources

Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Prominent GHGs that naturally occur in the Earth's atmosphere are water vapor, carbon dioxide (CO_2), methane (CH_4), oxides of nitrogen (NO_X), and ozone. Anthropogenic (human-caused) GHG emissions include releases of these GHGs plus release of human-made gases with high global warming potential (GWP) (ozone-depleting substances such as chlorofluorocarbons [CFCs][1] and aerosols, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere. The GWP of a gas is essentially a measurement of the radiative forcing of a GHG compared with the reference gas, CO_2.

Individual GHG compounds have varying potential for contributing to global warming. For example, CH_4 is 25 times as potent as CO_2, while SF_6 is 22,200 times more potent than CO_2 on a molecule-per-molecule basis. To simplify reporting and analysis, methods have been set forth to describe emissions of GHGs in terms of a single gas. The most commonly accepted method for comparing GHG emissions is the GWP methodology defined in the Intergovernmental Panel on Climate Change (IPCC) reference documents.[2] The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalents (CO_2e), which compares the gas in question to that of the same mass of CO_2 (by definition, CO_2 has a GWP of 1). The GWP of a GHG is a measure of how much a given mass of a GHG is estimated to contribute to global warming. Thus, to describe how much global warming a given type and amount of GHG may cause, the CO_2e is used. A CO_2e is the mass emissions of an individual GHG multiplied by its GWP. As such, a high GWP represents high absorption of infrared radiation and a long atmospheric lifetime compared to CO_2. One must also select a time horizon to convert GHG emissions to equivalent CO_2 emissions to account for chemical reactivity and lifetime differences among various GHG species. The standard time horizon for climate change analysis is 100 years. Generally, GHG emissions are quantified in terms of metric tons (MT) of CO_2e (MT CO_2e) emitted per year.

[1] CFCs destroy stratospheric ozone. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited CFCs production in 1987.
[2] United Nations Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC. Geneva, Switzerland.

Units commonly used to describe the concentration of GHGs in the atmosphere are parts per million (ppm), parts per billion (ppb), and parts per trillion (ppt), referring to the number of molecules of the GHG in a sampling of 1 million, 1 billion, or 1 trillion molecules of air. Collectively, HFCs, PFCs, and SF_6 are referred to as high GWP gases. CO_2 is by far the largest component of worldwide CO_2e emissions, followed by CH_4, nitrous oxide (N_2O), and high GWP gases, in order of decreasing contribution to CO_2e.

The primary human processes that release GHGs include the burning of fossil fuels for transportation, heating, and electricity generation; agricultural practices that release CH_4, such as livestock grazing and crop residue decomposition; and industrial processes that release smaller amounts of high GWP gases. Deforestation and land cover conversion have also been identified as contributing to global warming by reducing the Earth's capacity to remove CO_2 from the air and altering the Earth's albedo or surface reflectance, thus allowing more solar radiation to be absorbed. Specifically, CO_2 emissions associated with fossil fuel combustion are the primary contributors to human-induced climate change. CO_2, CH_4, and N_2O emissions associated with human activities are the next largest contributors to climate change.

Global Climate Change Issue

Climate change is a global problem because GHGs are global pollutants, unlike criteria air pollutants and hazardous air pollutants (also called toxic air contaminants), which are pollutants of regional and local concern. Pollutants with localized air quality effects have relatively short atmospheric lifetimes, approximately 1 day; by contrast, GHGs have long atmospheric lifetimes, several years to several thousand years. GHGs persist in the atmosphere for a long enough time to be dispersed around the globe.

Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, more CO_2 is currently emitted into the atmosphere than is sequestered. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through photosynthesis and dissolution, respectively. These are two of the most common processes of CO_2 sequestration. Of the total annual human-caused CO_2 emissions, approximately 54 percent is sequestered through ocean uptake, Northern Hemisphere forest regrowth, and other terrestrial sinks within a year, whereas the remaining 46 percent of human-caused CO_2 emissions is stored in the atmosphere.[3]

Similarly, effects of GHGs are borne globally, as opposed to the localized air quality effects of criteria air pollutants and hazardous air pollutants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known and cannot be quantified, and no single project would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global or local climates or microclimate.

Emissions of GHGs have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. A cumulative discussion and analysis of project impacts on global climate change is presented in this Draft EIR because, although it is unlikely that a single project will contribute significantly to climate change, cumulative emissions from many projects affect global GHG concentrations and the climate system.

[3] Seinfeld, J. H. and S.N. Pandis. 1998. Atmospheric Chemistry and Physics from Air Pollution to Climate Change. John Wiley & Sons.

Although the international, national, State, and regional communities are beginning to address GHGs and the potential effects of climate change, worldwide GHG emissions will likely continue to rise over the next decades.

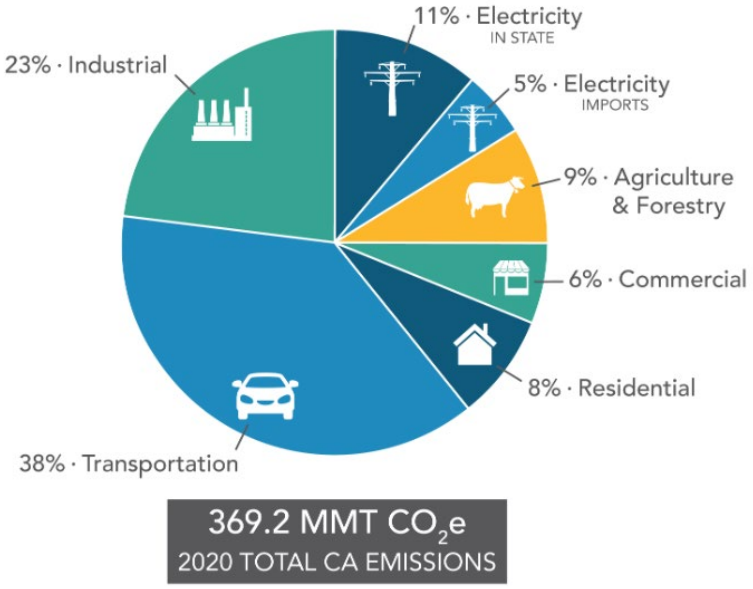
Climate and Topography

Climate is the accumulation of daily and seasonal weather events over a long period of time, whereas weather is defined as the condition of the atmosphere at any particular time and place. For a detailed discussion of existing regional and project site climate and topography, see Section 3.2, Air Quality.

Existing GHG Emissions

California GHG Inventory

As the second largest emitter of GHG emissions in the U.S. and the 12th to 16th largest GHG emissions emitter in the world, California contributes a large quantity (369.3 MMT CO_2e in 2020) of GHG emissions to the atmosphere.[4] Emissions of CO_2 are byproducts of fossil fuel combustion and are attributable in large part to human activities associated with transportation, industry/ manufacturing, electricity and natural gas consumption, and agriculture. In California, the transportation sector is the largest emitter at 38 percent of GHG emissions, followed by industry/ manufacturing at 23 percent of GHG emissions (Figure 3.7-1).[5]



Source: California Air Resources Board (ARB). 2022. California Greenhouse Gas Emission Inventory–2020 Edition. Website: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed November 24, 2023.

Figure 3.7-1: 2010 California Greenhouse Gas Emissions by Sector

[4] California Air Resources Board (ARB). 2022. California Greenhouse Gas Emission Inventory – 2020 Edition. Website: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed November 24, 2023.

[5] Ibid.

City of American Canyon

Based on the City of American Canyon's 2012 Energy Efficiency Climate Action Plan (EECAP), the City generated approximately 120,201 MT of CO_2e in 2010.[6] On-road transportation was the major source accounting for 39.9 percent of the total, largely due to passenger vehicles, but also commercial trips and buses. Commercial/industrial energy was the second largest source of emissions at 27 percent. Residential energy usage represented 18 percent, and solid waste and wastewater represented 7 percent each. Off-road transportation accounted for 2 percent. Agriculture accounted for less than 1 percent of emissions.

Climate Change Trends and Effects

CO_2 accounts for more than 75 percent of all anthropogenic GHG emissions, the atmospheric residence time of CO_2 is decades to centuries, and global atmospheric concentrations of CO_2 continue to increase at a faster rate than ever previously recorded. Thus, the warming impacts of CO_2 will persist for hundreds of years after mitigation is implemented to reduce GHG concentrations.

Substantially higher temperatures, more extreme wildfires, and rising sea levels are just some of the direct effects experienced in California.[7,8] As reported by the California Natural Resources Agency in 2009, despite annual variations in weather patterns, California has seen a trend of increased average temperatures, more extreme hot days, fewer cold nights, longer growing seasons, less winter snow, and earlier snowmelt and rainwater runoff. Statewide average temperatures increased by about 1.7°F (degrees Fahrenheit) from 1895 to 2011, and a larger proportion of total precipitation is falling as rain instead of snow.[9] Sea level rose by as much as 7 inches along the California coast over the last century, leading to increased erosion and adding pressure to the State's infrastructure, water supplies, and natural resources.

These observed trends in California's climate are projected to continue in the future. Research indicates that California will experience overall hotter and drier conditions with a continued reduction in winter snow (with concurrent increases in winter rains), as well as increased average temperatures and accelerating sea level rise. The frequency, intensity, and duration of extreme weather events such as heat waves, wildfires, droughts, and floods will also change.[10] In addition, increased air pollution and spread of insects potentially carrying infectious diseases will also occur as the climate-associated temperature and associated species clines shift in latitude.

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6 City of American Canyon. 2012. Energy Efficiency Climate Action Plan. Website: https://www.cityofamericancanyon.org/home/showpublisheddocument/5024. Accessed November 22, 2023.

7 California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008. Website: http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf. Accessed November 22, 2023.

8 California Energy Commission (CEC). 2012. Our Changing Climate 2012: Vulnerability & Adaptation to the Increasing Risks from Climate Change in California. Website: http://www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf. Accessed November 22, 2023.

9 California Energy Commission (CEC). 2006. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004. Draft Final Report. CEC-600-2006-013-D. Website: http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-D.PDF. Accessed November 22, 2023.

10 California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008. Website: http://resources.ca.gov/docs/climate /Statewide_Adaptation_Strategy.pdf. Accessed November 22, 2023.

The following is a summary of climate change factors and predicted trends specific to California.

In California, climate change may result in consequences such as the following.[11,12]

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of Southern California are estimated to increase by approximately 30 percent toward the end of the twenty-first century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more Northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about 7 inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

[11] California Climate Change Center (CCCC). 2006. Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center. July 2006. CEC-500-2006-077. Website: http://www.scc.ca.gov/webmaster/ftp/pdf/climate_change/assessing_risks.pdf. Accessed January 11, 2024.

[12] Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071. Website: http://www.energy.ca.gov/2008publications/CEC-500-2008-071/CEC-500-2008-071.PDF. Accessed January 11, 2024

3.7.3 - Regulatory Framework

Regulations relevant to the analysis are discussed below.

Federal

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the United States Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California's authority to set its own GHG emissions standards and to adopt its own Zero-Emission Vehicle (ZEV) mandates. On April 30, 2020, the EPA and the NHTSA published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and CO_2 emissions standards for passenger cars and trucks of model years 2021-2026, such that the standards increase by approximately 1.5 percent each year through model year 2026, as compared to the approximately 5 percent annual increase required under the 2012 standards.[13]

State

Assembly Bill 1493 Pavley Regulations and Fuel Efficiency Standards

California Assembly Bill (AB) 1493, enacted on July 22, 2002, required the California Air Resources Board (ARB) to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the United States District Court for the District of Columbia in 2011.[14] The standards were to be phased in during the 2009 through 2016 model years.[15]

The second phase of the implementation for the Pavley Bill was incorporated into Amendments to the Low Emission Vehicle (LEV) Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car Program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation is anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric vehicles (EVs), newly emerging plug-in hybrid EVs and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.[16]

[13] National Highway Traffic Safety Administration (NHTSA). 2020. The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule. March. Website: https://www.nhtsa.gov/corporate-average-fuel-economy/safe#:~:text=The%20Safer%20Affordable%20Fuel%2DEfficient%20(SAFE)%20Vehicles%20Rule%2C,model%20years%202021%20through%202026. Accessed January 11, 2024.

[14] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed January 11, 2024.

[15] California Air Resources Board (ARB). Advanced Clean Cars Summary. Website: https://ww2.arb.ca.gov/sites/default/files/2019-12/acc%20summary-final_ac.pdf. Accessed January 11, 2024.

[16] California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures. Website: https://calcarbondash.org/cc/scopingplan/sp_measures_implementation_timeline.pdf. Accessed January 11, 2024.

Advanced Clean Cars II was adopted in November 2022. The Advanced Clean Cars II regulations will rapidly scale down light-duty passenger car, pickup truck and SUV emissions starting with the 2026 model year through 2035. The regulations are two-pronged. First, they amend the ZEV Regulation to require an increasing number of ZEVs, and rely on currently available advanced vehicle technologies, including battery electric, hydrogen fuel cell electric and plug-in hybrid EVs, to meet air quality and climate change emissions standards. These amendments support Governor Newsom's 2020 Executive Order N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the LEV Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

In October 2023, staff launched a new effort to consider potential amendments to the Advanced Clean Cars II regulations, including updates to the tailpipe GHG emission standard and limited revisions to the LEV and ZEV regulations.

These regulations rapidly scale down emissions of light-duty passenger cars, pickup trucks and SUVs and require an increased number of ZEVs to meet air quality and climate change emissions goals.

Assembly Bill 32

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs.

The ARB is the State agency charged with monitoring and regulating sources of GHGs. The ARB approved the 1990 GHG emissions level of 427 MMT CO_2e on December 6, 2007.[17] Therefore, to meet the State's target, emissions generated in California in 2020 are required to be equal to or less than 427 MMT CO_2e. Emissions in 2020 in a Business as Usual (BAU) scenario were estimated to be 596 MMT CO_2e, which do not account for reductions from AB 32 regulations.[18] At that rate, a 28 percent reduction was required to achieve the 427 MMT CO_2e 1990 inventory. In October 2010, ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. Under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels.[19] On July 11, 2018, the ARB announced that the State has meet its target of reducing GHG emissions to 1990 levels.[20]

[17] California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: https://www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed January 11, 2024.

[18] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed January 11, 2024.

[19] California Air Resources Board (ARB). GHG 2020 Business-as-Usual Emissions Projection. 2014 Edition BAU Emissions Projection. Website: https://ww2.arb.ca.gov/ghg-bau. Accessed January 11, 2024.

[20] California Air Resources Board. 2018. Climate Pollutants Fall Below 1990 Levels for First Time. Website: https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time. Accessed January 11, 2024.

California Air Resources Board Scoping Plan

The ARB Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32.[21] The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target included energy efficiency programs, renewable energy expansion, Cap-and-Trade, establishing targets for transportation-related GHGs, and the high GWP fee program.

The ARB approved the First Update to the Scoping Plan on May 22, 2014. The First Update builds upon the Initial Scoping Plan with new strategies and recommendations.

Senate Bill 375—the Sustainable Communities and Climate Protection Act of 2008

Senate Bill (SB) 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires Metropolitan Planning Organizations (MPOs) to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Senate Bill 32 and the 2017 Climate Change Scoping Plan Update

The Governor signed SB 32 in September 2016, giving the ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states that "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the State [air resources] board shall ensure that Statewide greenhouse gas emissions are reduced to at least 40 percent below the Statewide greenhouse gas emissions limit no later than December 31, 2030." The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017.

2022 ARB Scoping Plan

The 2022 Scoping Plan[22] establishes a scenario by which the State may achieve carbon neutrality by 2045 or earlier, and it outlines a technologically feasible, cost-effective, and equity-focused path for achieving this climate target. The 2022 Scoping Plan addresses the latest climate-related legislation and direction from current Governor Gavin Newsom, who, by his signing of AB 1279, required the State to reduce Statewide anthropogenic GHG emissions to at least 85 percent below 1990 levels by 2045 and to maintain net negative GHG emissions thereafter. The 2022 Scoping Plan relies on the

[21] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed January 11, 2024.

[22] California Air Resources Board (ARB). 2022 Scoping Plan. Website: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed January 11, 2024.

aggressive reduction of fossil fuels in all Statewide sectors and accelerating existing carbon reduction programs. Aspects of the 2022 Scoping Plan's scenario include:

- Rapidly moving to zero-emission transportation by electrifying cars, buses, trains, and trucks.
- Phasing out the use of fossil gas used for heating homes and buildings.
- Clamping down on chemicals, refrigerants, and other high GWP gases.
- Providing communities with sustainable options for walking, biking, and public transit to reduce reliance on cars.
- Continuing to develop solar arrays, wind turbine capacity, and other resources that provide clean, renewable energy.
- Scale up options such as renewable hydrogen and biomethane for end uses that are hard to electrify.

ARB estimates that successfully achieving the outcomes called for by the 2022 Scoping Plan will reduce demand for liquid petroleum by 94 percent and total fossil fuel by 86 percent in 2045, relative to 2022. The 2022 Scoping Plan also emphasizes the role of natural and working lands and carbon capturing technologies to address residual emissions and achieve net negative emissions.

Senate Bill 350: Clean Energy and Pollution Reduction Act

As enacted in 2015, this law establishes clean energy, clean air, and GHG emissions reduction goals, as well as increasing California's renewable electricity procurement goals from 33 percent to 50 percent by 2030. The bill further requires the State to double the energy efficiency in existing buildings by 2030.[23]

Senate Bill 100: Renewable Portfolio Standard Program

On September 10, 2018, former Governor Newsom signed SB 100, requiring California electricity utility providers to supply all in-state end users with electricity sourced from renewable or carbon-free sources by 2045. Specifically, SB 100 accelerates previously established renewable goals and requires that the program achieve 100 percent of electricity sourced from carbon-free sources by the end of 2045, with interim milestones of 50 percent by the end of 2026 and 60 percent by 2030.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the State and guide the actions of State agencies.

Executive Order S-3-05

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.

[23] California Legislative Information (California Leginfo). 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed January 11, 2024.

- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an Executive Order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07—Low Carbon Fuel Standard

The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a Statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission (CEC), ARB, University of California, and other agencies to develop and propose protocols for measuring the "lifecycle carbon intensity" of transportation fuels. The ARB adopted the LCFS on April 23, 2009.

The LCFS was subject to legal challenge in 2011. Ultimately, on August 8, 2013, the Fifth District Court of Appeal (California) ruled that the ARB failed to comply with the California Environmental Quality Act (CEQA) and the Administrative Procedure Act when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal directed that Resolution 09-31 and two Executive Orders of the ARB approving LCFS regulations promulgated to reduce GHG emissions be set aside. However, the Court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, the ARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The Final Rulemaking Package adopting the regulation was filed with the Office of Administrative Law (OAL) on October 2, 2015. The OAL approved the regulation on November 16, 2015. In 2018, the Board approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote ZEV adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector. [24]

Executive Order B-30-15

On April 29, 2015, former Governor Edmund G. Brown Jr. issued an Executive Order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's Executive Order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The Executive Order sets

[24] California Air Resource Board (ARB). 2023. LCFS Regulation. Website: https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-regulation. Accessed January 11, 2024.

a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MT CO_2e. The Executive Order also requires the State's climate adaptation plan to be updated every 3 years and for the State to continue its climate change research program, among other provisions.

Executive Order N-79-20

Executive Order N-79-20 directs the State to require that, by 2035, all new cars and passenger trucks sold in California be ZEVs.

ARB Advanced Clean Truck and Advanced Clean Fleet Regulations

The Advanced Clean Truck Regulation and recently approved Advanced Clean Fleets (ACF) regulation are part of a holistic approach to accelerate a large-scale transition of zero-emission medium and heavy-duty vehicles. Together, these regulations will transition California's truck fleet to ZEV by 2045. The regulation has a manufacturer sales requirement; by 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b–3 truck sales, 75 percent of class 4–8 straight truck sales, and 40 percent of truck tractor sales. The rule also has a company and fleet requirement that gathers information about shipments and shuttle services. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

ARB Advanced Clean Cars II Rule

Adopted by the ARB in August 2022, the Advanced Clean Cars II regulation supports the implementation of Executive Order N-79-20 and requires that by 2035, all new passenger cars, trucks, and SUVs sold in California will be zero emissions.[25]

Small Off-Road Engine Regulations

Small Off-Road Engine (SORE) Regulations will require that most newly manufactured SORE, such as those found in leaf blowers, lawn mowers, and other equipment, be zero-emission starting in 2024. Despite their small size, these engines are highly polluting. The volume of smog-forming emissions from this type of equipment has surpassed emissions from light-duty passenger cars and is projected to be nearly twice those of passenger cars by 2031. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-emission standards starting in 2028.[26] Engines that use diesel fuel and engines that are used in stationary equipment, including standby generators, are not subject to the SORE regulations.

Large Spark Ignition Regulation

The Large Spark Ignition Fleet Rule and Amendments, commonly referred to as the "Forklift Rule" applies to forklifts, sweeper/scrubbers, industrial tow tractors, and airport ground support equipment. It applies to fleets (four or more vehicles) and includes off-road gasoline, propane,

[25] California Air Resource Board (ARB). Proposed Advanced Clean Cars II Regulations. Website: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii. Accessed January 11, 2024.

[26] California Air Resources Board (ARB). 2021. Website: https://ww2.arb.ca.gov/news/carb-approves-updated-regulations-requiring-most-new-small-road-engines-be-zero-emission-2024. Accessed January 11, 2024.

liquefied petroleum gas (LPG), compressed natural gas, and electric forklifts ≥25 horsepower (hp).[27] The regulation sets fleet average emission level requirements that decreases each year to encourage the use of EV and low-emissions engines.

The ARB is currently working on drafting a zero-emission forklift measure to drive greater deployment of zero-emission forklifts within fleets throughout the State. The intent of this proposed rule is to phase out any propane forklifts 13 years or older beginning in 2026 for use in California. The new change would also mean facilities would not be able to purchase new propane forklifts beginning in 2026. The measure is currently in rulemaking and scheduled for Board consideration in September 2023.[28]

California Regulations and Building Standards Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

California Code of Regulations Title 13: Motor Vehicles

California Code of Regulations, Title 13: Division 3, Chapter 10, Article 1, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.[29] This measure seeks to reduce public exposure to diesel particulate matter (DPM) and other air contaminants by establishing idling restrictions, emission standards, and other requirements for heavy-duty diesel engines and alternative idle-reduction technologies to limit the idling of diesel-fueled commercial motor vehicles. Any person that owns, operates, or causes to operate any diesel-fueled commercial motor vehicle must not allow a vehicle to idle for more than 5 consecutive minutes at any location or operate a diesel-fueled auxiliary power system for greater than 5 minutes at any location when within 100 feet of a restricted area.

California Code of Regulations, Title 13: Division 3, Chapter 9, Article 4.8, Section 2449: General Requirements for In-Use Off-Road Diesel-Fueled Fleets. This measure regulates NO_X, DPM, and other criteria pollutant emissions from in-use, off-road diesel-fueled vehicles. This measure also requires each fleet to meet fleet average requirements or demonstrate that it has met "Best Available Control Technology" requirements. Additionally, this measure requires medium and large fleets to have a written idling policy that is made available to operators of the vehicles informing them that idling is limited to 5 consecutive minutes or less.

Title 20 Appliance Efficiency Regulations

California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally

[27] California Air Resources Board (ARB). 2023. Large Spark-Ignition Fleet Regulation Overview. Website: https://ww2.arb.ca.gov/sites/default/files/offroadzone/landing/lsi.html. Accessed January 11, 2024.
[28] California Air Resources Board (ARB). 2023. Website: https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts. Accessed January 11, 2024.
[29] California Air Resource Board (ARB). Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Website: https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling. Accessed January 11, 2024.

regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

Title 24 Energy Efficiency Standards

California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The current version of Title 24 adopted by the CEC was effective on January 1, 2020. CEC recently approved the latest 2022 Energy Code, which became effective on January 1, 2023.[30] All newly constructed buildings shall have a solar photovoltaic (PV) system installed, including high-rise multifamily housing, offices, retail, warehouse, and hotel uses.

Title 24 California Green Building Standards Code

California Code of Regulations Title 24 Part 11 code is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went into effect on January 1, 2011. The code is updated on a regular basis, with the current version consisting of the 2022 California Green Building Code Standards Code (CALGreen) that became effective January 1, 2023.[31] Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. California Building Standards Code (CBC) provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

CALGreen standards distinguish between residential and nonresidential occupancy. Recent additions to the code are requirements related to EV charging infrastructure, water conservation and recycling, and changes made to avoid conflicts with California energy efficiency standards under Title 24, Part 6. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

The latest update, 2022 California Green Building Standards Code went into effect on January 1, 2023. The revised code significantly increases the Mandatory Measures for EV charging requirements for both new residential and commercial buildings.

New nonresidential buildings must follow a regulatory schedule that specifies the minimum number of EV Capable, EV Ready and EV Equipped Spaces. The 2022 update requires the addition of required EV service equipment (EVSE) spaces. EVSE means "installed charging receptacles or permanently

[30] California Energy Commission (CEC). 2022 Building Energy Efficiency Standards. Website: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed January 11, 2024.

[31] California Energy Commission (CEC). 2021. CEC Approves 2022 CALGreen Building Standards Code. Website: http://calenergycommission.blogspot.com/2021/10/cec-approves-2022-calgreen-building.html. Accessed January 11, 2024.

installed chargers." These are the number of charging receptacles/stations that are required to be fully installed.

CALGreen 2022 update includes mandatory nonresidential measures for site development EV charging under Section 5.106.5.3 Electric Vehicle (EV) Charging. To comply with CALGreen EV charging requirements, the proposed project would be required to meet the following standards:

- The transformer, main service equipment and subpanels shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
- The construction documents shall indicate one or more location(s) convenient to the planned off-street loading space(s) reserved for medium- and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s).
- Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium- and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipment for medium- and heavy-duty vehicles.
- Load to the future location of the charging for medium- and heavy-duty ZEVs. For warehouses with greater than 256,000 square feet, 400 KVA of additional capacity required for raceway, busway, transformer and panel.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881 Water Conservation Act. The bill required local agencies to adopt a local Landscape Ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected under the Ordinance. Former Governor Brown's Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed the California Department of Water Resources (DWR) to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems.
- Incentives for graywater usage.
- Improvements in on-site stormwater capture.
- Limits on the portion of landscapes that can be planted with high water use plants.
- Reporting requirements for local agencies.

Senate Bill 97 and the CEQA Guidelines Revisions

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. SB 97 states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG

emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)."

The 2010 CEQA Amendments first guided public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The 2010 CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change. The 2010 CEQA Amendments also revised Appendix F of the CEQA Guidelines, which focuses on energy conservation, and the sample environmental checklist in Appendix G was amended to include GHG questions.

- The most recent 2018 CEQA Amendments expanded upon the previous guidance by specifying that:
  - The lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to Statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and State regulatory schemes.
  - In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

A lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has the discretion to select the model or methodology it considers most appropriate to enable decision-makers to intelligently take into account the proposed project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of a particular model or methodology selected for use.

California Supreme Court GHG Ruling

In a November 30, 2015 ruling, the California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Wildlife* on the Newhall Ranch project concluded that whether the project was consistent with meeting Statewide emission reduction goals is a legally permissible criterion of significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence. The Court offered potential solutions on pages 25-27 of the ruling to address this issue, as summarized below:

Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU**. A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with Statewide goals (page 25).
- **Compliance with Regulatory Programs or Performance Based Standards**. A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities" (page 26).
- **Compliance with GHG Reduction Plans or Climate Action Plans**. A lead agency may utilize "geographically specific GHG emission reduction plans" such as Climate Action Plans (CAPs) or GHG emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (page 26).
- **Compliance with Local Air District Thresholds**. A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts (page 27).

3.7.4 - Bay Area Air Quality Management District

Plan Bay Area 2050: Strategy for a Sustainable Region

On October 21, 2021, the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) adopted Plan Bay Area 2050, an integrated transportation and land use strategy through 2050 that updates the nine-county region's long-range plan to meet the requirements of SB 375. Working in collaboration with cities and counties, the Plan Bay Area 2050 advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. Plan Bay Area 2050 remains on track to meet a 20 percent per capita reduction of GHG emissions by 2035 from 2005 conditions.[32]

Bay Area Air Quality Management District 2050 Climate Resolution Goals

In 2013, the Bay Area Air Quality Management District (BAAQMD) Board of Directors approved a Resolution (No. 2013-11) adopting a GHG goal and a commitment to developing a regional climate protection strategy that commits to the following:

- Setting a goal for the Bay Area region to reduce GHG emissions to 80 percent below 1990 levels by 2050.
- Developing a Regional Climate Protection Strategy to make progress toward the 2050 goal and to complement existing climate action efforts at the State, regional, and local levels.
- Preparing a work program to guide the BAAQMD climate protection activities in the near term.

Bay Area Air Quality Management District 2017 Clean Air Plan

The BAAQMD adopted the 2017 Clean Air Plan on April 19, 2017, to comply with State air quality planning requirements set forth in the California Health and Safety Code. The 2017 Clean Air Plan

[32] Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2021. Plan Bay Area 2050. October 21.

includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminates (TACs), to reduce emissions of CH_4 and other "super-greenhouse gases" that are potent climate pollutants in the near term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The proposed control strategy for the 2017 Clean Air Plan consists of 85 specific control measures targeting a variety of local, regional, and global pollutants. The control measures have been developed for stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and Super GHG pollutants. Implementation of some of the control measures could involve retrofitting, replacing, or installing new air pollution control equipment, changes in product formulations, or construction of infrastructure that have the potential to create air quality impacts.

The BAAQMD CEQA Guidelines set forth criteria for determining consistency with the 2017 Clean Air Plan. In general, a project is considered consistent if the project (1) supports the primary goals of the 2017 Clean Air Plan, (2) includes control measures, and (3) does not interfere with implementation of the 2017 Clean Air Plan measures.

Bay Area Air Quality Management District CEQA Air Quality Guidelines

The purpose of the BAAQMD's 2022 CEQA Air Quality Guidelines is to assist lead agencies in evaluating air quality and GHG impacts of projects and plans proposed in the Air Basin. The most recent version of the CEQA Air Quality Guidelines was revised April 2023 and includes revisions made to address the Supreme Court's opinion (*California Building Industry Association v. Bay Area Air Quality Management District*, December 2015).[33] The BAAQMD's 2022 CEQA Air Quality Guidelines contain instructions on how to evaluate, measure, and mitigate air quality impacts generated from land development construction and operation activities. They focus on criteria air pollutant, GHG, TAC, and odor emissions generated from plans or projects and are intended to help lead agencies navigate through the CEQA process. The 2022 CEQA Air Quality Guidelines are presented as advisory recommendations based on substantial evidence to assist local agencies.

The BAAQMD's 2022 CEQA Air Quality Guidelines provide recommended significance thresholds for GHGs for land use development projects and plans. The new thresholds state that if a project would contribute its "fair share" of what will be required to achieve California's long-term climate goal of carbon neutrality by 2045, then a reviewing agency can find that the impact will not be significant because the project will help to solve the problem of global climate change. The thresholds for new land use projects require projects to meet either of one of two enumerated Criteria "A" or "B" detailed in Table 3.7-1. If a land use development project cannot demonstrate consistency with

[33] In March 2012, the Alameda County Superior Court ordered BAAQMD to set aside use of the significance thresholds within the BAAQMD 2010 CEQA Guidelines and cease dissemination until they complete an assessment of the environmental effects of the thresholds in accordance with CEQA. The Court found that the thresholds, themselves, constitute a "project" for which environmental review is required. In August 2013, the First District Court of Appeal reversed the Alameda County Superior Court's decision. The Court held that adoption of the thresholds was not a "project" subject to CEQA because environmental changes that might result from their adoption were too speculative to be considered "reasonably foreseeable" under CEQA. In December 2015, the California Supreme Court reversed the Court of Appeal's decision and remanded the matter back to the appellate court to reconsider the case in light of the Supreme Court's opinion.

Criterion A or Criterion B, then that project would result in a potentially significant impact related to the generation of direct and indirect GHG emissions.

Table 3.7-1: BAAQMD Thresholds of Significance for Greenhouse Gases

Thresholds for Land Use Projects (Must Include A or B)
A. Projects must include, at a minimum, the following project design elements:
1. Buildings a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
2. Transportation a. Achieve a reduction in project-generated Vehicle Miles Traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).
Source: Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Guidelines. April 20.

Project consistency with Criteria A is based on incorporating project design criteria based on key attributes consistent with the 2022 Scoping Plan and states long-term carbon neutrality goals. Projects incorporating these elements would be contributing their "fair share" of what will be required to achieve California's long-term climate goal of carbon neutrality by 2045. These include criteria for building energy design (elimination of natural gas) as well as criteria related to reduction in transportation emissions via Vehicle Miles Traveled (VMT) reductions and installation of EV charging infrastructure.

Project consistency with Criterion B involves demonstrating compliance with a local "qualified" GHG plan. CEQA Guidelines Section 15183.5(b) allows projects and plans to be analyzed through a streamlined or tiered approach utilizing an adopted Greenhouse Gas Reduction Plan. A "qualified" reduction strategy capable of being utilized for a streamlined or tiered analysis under CEQA must meet the following requirements:

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;

- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendments if the plan is not achieving specified levels; and
- Be adopted in a public process following environmental review.

As discussed below under Local Regulations, and Approach to Analysis, the City of American Canyon has adopted its own GHG threshold standards for industrial uses, which will be used to evaluate the proposed project's GHG impact significance.

Local

City of American Canyon Energy Efficiency Climate Action Plan

The proposed project is within the jurisdiction of the City of American Canyon, which has adopted an Energy Efficiency Climate Action Plan (EECAP) as discussed above in the Regulatory Framework section. The EECAP outlines a course of action to reduce community-wide GHG emissions generated within the City of American Canyon. The EECAP includes two measures to reduce energy-related emissions from new nonresidential projects: (1) Participation in PG&E's Savings by Design program for nonresidential construction programs and (2) incorporation of energy efficiency improvements beyond Title 24 for new nonresidential construction. The City would impose the requirements of these measures as applicable through the project Conditions of Approval. The EECAP establishes emission reduction goals to reduce GHG emissions in the City by 15 percent below the 2020 business-as-usual emissions level, consistent with AB 32. Because the EECAP was prepared based on the 2020 GHG targets, which are now superseded by the 2030 GHG targets established in SB 32, the EECAP would not apply for streamlining.

City of American Canyon General Plan

The City of American Canyon adopted its General Plan in 1994, which contains objectives and policies that help address climate change and reduce the community's GHG emissions at the local level and improve energy efficiency and conservation. Under Resolution 2021-60, the General Plan was updated September 7, 2021, to include additional climate change and adaptation policies. The following objectives and policies from the City's General Plan are relevant to GHG emissions and energy conservation:

Objective 1.37 Consider initiatives to reduce direct and indirect greenhouse gas (GHG) emissions from transportation sources, and from new, renovated, and existing development in the City.

Policy 1.37.6 Reduce vehicle engine idling in American Canyon by educating the broader community (i.e.: businesses, commuters, residents) on the greenhouse gas impacts caused by engine idling, and implementing feasible commercial vehicle regulations.

Goal 8F Reduce consumption of nonrenewable energy sources and support the development and utilization of new energy sources.

Objective 8.22 Minimize transportation-related energy consumption.

Policy 8.22.1 Encourage the development of mixed use, pedestrian friendly employment/residential centers that help minimize vehicle trips in American Canyon and contribute to a reduction in energy consumption.

Policy 8.22.2 Encourage the clustering of residential structures.

Policy 8.22.3 Require that Development Plans provide for linkages between bicycle and pedestrian circulation systems and transit and employment centers, in accordance with established areawide plans.

Policy 8.22.4 Maintain a system of traffic signals and controls that minimizes waiting time and vehicle speed changes through routes.

Policy 8.22.5 Require that Development Plans provide for High-Occupancy Vehicles (HOV) and public transportation, where feasible, through the provision of appropriate transit areas and park-and-ride locations along public transportation routes.

Objective 8.23 Reduce Energy consumption in buildings.

Policy 8.23.1 Require that developers employ energy efficient subdivision and site planning methods as well as building design. Measures to be considered include building orientation and shading, landscaping, building reflectance, use of active and passive solar heating and hot water system, etc. In establishing these energy-related design requirements, the City shall balance energy efficient design with good planning principles.

Policy 8.23.2 Require that new City buildings be energy efficient.

Objective 8.24 Increase public awareness of energy conservation needs and means in order to encourage informed choices about energy conservation by the general public.

Policy 8.24.1 Cooperate with local utilities to provide energy conservation information to the public.

Policy 8.24.2 Develop public and/or public-private energy conservation educational programs for City employees and the public.

Objective 8.25 Increase the energy efficiency of City operations to save energy, reduce municipal costs, and provide an example to the private sector.

Policy 8.25.1 Introduce concepts of energy efficiency and lifecycle costing to City planning and operating decisions and to the design of all major City facilities.

Policy 8.25.2 Work with other agencies and utility companies to develop safe, economical and renewable energy resources.

Policy 8.25.3 Consider participating in energy conservation demonstration projects and promoting the use of treatment technologies that provide for the reuse of waste and water treatment by products, such as sludge and methane gas.

In addition to the above General Plan policies related to GHG emissions and energy consumption, the City adopted a Climate Emergency Proclamation on November 16, 2021.

City of American Canyon Municipal Code

19.01.061, Industrial Use Greenhouse Gas Standards (Ordinance No. 2024-014)

A. Every Industrial Use Land Use Proposal for which the City of American Canyon is the Lead Agency shall use the following threshold to evaluate the significance of greenhouse gas (GHG) impact under the California Environmental Quality Act (CEQA):

1) **TIER 1.** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

2) **Tier 2.** Consider whether the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, *etc.* If not, move to Tier 3.

3) **Tier 3.** Consider whether the project includes, at a minimum, the following project design elements:

i. Buildings

1. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
2. The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b}(3) and Section 15126.2(b) of the State CEQA Guidelines.

ii. Transportation

1. The project will achieve a reduction in project-generated vehicle miles traveled ("VMT") below the regional average consistent with

the current version of the California Climate Change Scoping Plan (currently 15 percent).

2. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. If the project does not include the above project design elements, the Project has a significant GHG impact. If it does include the above project design elements, move to Tier 4.

4) **Tier 4.** Consider whether the project generates GHG emissions in excess of the South Coast Air Quality Management District's 10,000 MT CO2e per year screening threshold for industrial uses and stationary projects. If so, the project has a significant GHG impact.

Chapter 19.09, Industrial Commerce Centers Sustainability Standards (Ordinance No. 2024-013)

Chapter 19.09 of the Municipal Code is applicable to all warehousing, logistics and distribution facilities throughout the City for which an NOP is issued after March 1, 2024 under the implementing Guidelines of the CEQA. The NOP for the proposed project was issued on October 27, 2023. As such, the proposed project is not subject to Chapter 19.09 of the Municipal Code (Ordinance No. 2024-013). However, for informational purposes, the extent to which the project complies is addressed in Section 3.7.7.

A warehousing, logistics or distribution facility means facilities used for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials and excludes bulk storage of materials, which are flammable, explosive, or create hazardous or commonly recognized offensive conditions) before their distribution to retail locations or other warehouses. The facilities are generally greater than 200,000 square feet in size, with a land coverage ratio of approximately 50 to 80 percent, and a dock-high loading door ratio of approximately 1:5,000-8,000 square feet. They are characterized by dock high loading doors, could be on opposing sides of the building (cross dock facility); significant movement and storage of products, materials, or equipment; truck activities frequently outside of the peak hour of the adjacent street system; and freeway access, including:

- Freight yards/forwarding terminals;
- Warehousing distribution/high cube distribution centers;
- Moving agencies;
- Parcel delivery terminals;
- Railroad freight stations;
- Shipping/receiving yards; and
- Truck terminals.

The following sections shall supersede any existing requirements in the Municipal Code and Specific Plans:

1. On-site motorized operational equipment, including but not limited to forklifts, yard trucks, and pallet jacks, shall be ZE (zero emission). This includes electrical hook ups to

the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors.

2. All outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and landscaping equipment) shall be zero-emission vehicles. Each building shall include the necessary charging stations or other necessary infrastructure for zero-emission cargo handling equipment.
3. Prior to issuance of a business license, the City shall ensure rooftop solar panels are installed and can be operated in such a manner that they will supply 100% of the power needed to operate all non-refrigerated portions of the facility including the parking areas.
4. Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide chilled, cooled, or freezer warehouse space, a conduit shall be installed during construction of the building shell from the electrical room to 100% of the loading dock doors that have potential to serve the refrigerated space. When tenant improvement building permits are issued for any refrigerated warehouse space, electric plug-in units shall be installed at every dock door servicing the refrigerated space to allow transport refrigeration units (TRUs) to plug in. Truck operators with TRUs shall be required to utilize electric plug-in units when at loading docks.
5. All generators, and all diesel-fueled off-road construction equipment greater than 75 horsepower, will be zero-emissions or equipped with CARB Tier IV-compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. After either (1) the completion of grading or, (2) the completion of an electrical hookup at the site, whichever is first, require all generators and all diesel-fueled off-road construction equipment, to be zero-emissions or equipped with CARB Tier IV-compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by the City in the event that the applicant documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment.
6. Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle charging stations on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) electric vehicle charging stations for 25% of the employee parking spaces required.
7. Install HVAC and/or HEPA air filtration systems in all warehouse facilities.

3.7.5 - Thresholds of Significance

The lead agency utilizes the criteria in CEQA Guidelines Appendix G Environmental Checklist to determine whether GHG emission impacts are significant environmental effects. Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

3.7.6 - Approach to Analysis

In developing its 2022 GHG significance thresholds, BAAQMD analyzed what new land use development projects will require to achieve California's long-term climate goal of carbon neutrality by 2045, thereby better representing what design elements new land use development projects need to incorporate to sufficiently contribute to achieving the State's goal. BAAQMD established thresholds recommendations for residential and commercial projects, but did not recommend a threshold for industrial land uses. Unlike residential and commercial projects, industrial land uses' GHG emissions primarily come from mobile sources like truck emissions.

The South Coast Air Quality Management District (SCAQMD) has developed a threshold of significance for industrial land uses that is supported by substantial evidence and captures the significant sources of GHG impacts.

The City adopted its own GHG thresholds for industrial projects, which combines BAAQMD's baseline threshold with the SCAQMD's threshold will capture the presently known GHG emissions from industrial land uses. The City's GHG thresholds are shown above under Local Regulations and have been used for this analysis. Accordingly, the analysis below addresses both Impact GHG-1 and Impact GHG-2.

3.7.7 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

Greenhouse Gas Emissions and Conflict with Plan, Policy, or Regulation that Reduces Emissions

Impact GHG-1:	**The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**
and	
Impact GHG-2:	**The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.**

Impact Analysis

Both construction and operational activities have the potential to generate GHG emissions. The proposed project would generate GHG emissions during temporary (short-term) construction activities such as site grading, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and construction worker vehicle trips. On-site construction activities would vary depending on the level of construction activity.

Long-term, operational GHG emissions would result from project-generated vehicular traffic, operation of any landscaping equipment, off-site generation of electrical power over the life of the proposed project, the energy required to convey water to and wastewater from the project site, the emissions associated with the hauling and disposal of solid waste from the project site, and any fugitive refrigerants from air conditioning or refrigerators.

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. Therefore, this section measures the proposed project's incremental contribution to the cumulative environmental impact. The following is a discussion of the proposed project's contribution to GHG emissions during both the construction and operation phases. The proposed project's GHG emissions are quantified for informational purposes only.

Construction

At the time of this analysis, the construction of the proposed project was anticipated to begin in the third quarter 2024 and be completed 11 months later. The proposed project's construction emissions are presented in Table 3.7-2. As vehicle and equipment fuel efficiencies and emission control standards continue to incrementally improve with each year, project construction emissions are likely to decrease nominally from what is shown in Table 3.7-2 should the construction schedule move to later years. Therefore, the construction GHG emissions contained in Table 3.7-2 represent a conservative assessment of project construction emissions. CalEEMod outputs which detail the GHG emissions during each construction phase are shown in Appendix B.

Table 3.7-2: Proposed Project Construction GHG Emissions

Construction Year	Total MT CO_2e per year (approx.)
2024	252
2025	352
Entire Construction Duration (2024-2025)	
Total	**604**
Amortized over 30 years	***20***
Notes: Because of rounding, total MT CO_2e may be marginally different from CalEEMod output.	

Construction Year	Total MT CO_2e per year (approx.)

MT CO_2e = metric tons of carbon dioxide equivalents
Source: Appendix B

As shown above, the proposed project would generate approximately 604 MT CO_2e during construction.

Operation

Operational or long-term emissions occur over the life of the project. Project operations were modeled for the 2025 operational year, immediately following the completion of construction. Sources for operational emissions are summarized below and are described in more detail in Section 3.2. Sources for operational GHG emissions include:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the project site.
- **Area Sources:** These emissions refer to those produced during activities such as landscape maintenance.
- **Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the proposed project.
- **Electricity generated by on-site solar improvements:** This is the estimated electricity that would be generated by the project's solar infrastructure. This is calculated manually (i.e., outside of CalEEMod) to account for the energy generated on-site that would offset some electricity needs from off-site power plants.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the proposed project.

Table 3.7-3 presents the estimated annual GHG emissions from the proposed project's operational activities. As shown in Table 3.7-3, the proposed project would generate approximately 3,112 MT CO_2e per year after the inclusion of 20 MT CO_2e per year from project construction. CalEEMod outputs which detail the GHG emissions during operation and calculations for solar energy generated by the proposed project, are shown in Appendix B.

Table 3.7-3: Operational Greenhouse Gas Emissions

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Mobile–Trucks	3003
Area	5
Energy–Electricity	29

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Energy–On-site Solar[1]	(10)
Water/Waste	65
Amortized Construction Emissions	20
Total Annual Project Emissions	**3,112**

Notes:
MT CO_2e = metric tons carbon dioxide equivalent
[1] These emissions are calculated manually (i.e., not reflected in CalEEMod) to estimate the amount of electricity that would be generated by the proposed solar improvements.
Totals were summed using unrounded numbers and may not appear to sum exactly due to rounding.
Source: Appendix B.

For informational purposes, Table 3.7-4 is provided to illustrate the proposed project's downward trend of GHG emissions as the State advances regulations on 1) reducing GHG emissions from truck fleet and landscaping equipment and 2) increasing renewable energy use. Relevant regulations that would achieve future GHG emissions include but not limited to:

- SB 100, requiring California electricity utility providers to supply all in-state end users with electricity sourced from renewable or carbon-free sources by 2045; and
- Executive Order N-79-20 which requires transition to ZEV short-haul/drayage trucks, heavy-duty long-haul trucks, and off-road equipment.

Calculations detailing the reduction in project operational GHG emissions as a result of compliance with the aforementioned regulations are shown in Appendix B.

Table 3.7-4: Operational Greenhouse Gas Emission Beyond Buildout Year (Compliance with Applicable Regulations)

Construction Year	2025	2030	2045
Mobile	3,003	2,343	364
Area (Landscape Equipment)	5	0	0
Energy–Electricity	19	19	0
Water/Waste	65	65	65
Construction (Amortized)	**20**	**20**	**20**
Total Annual (in Metric Ton)	***3,112***	***2,447***	***449***
The exact truck fleet that would be used by the proposed project is unknown. However, if the project's truck fleet meets the "priority fleet" designation under the Advanced Clean Fleet (ACF) rule,[1] the project's truck fleet would be subject to additional regulations that would result in further mobile source GHG reductions:			
Total Annual if project fleet is considered "priority" under ACF	***3,003***	***2,056***	***128***
Notes: ACF = Advanced Clean Fleet			

Construction Year	2025	2030	2045

[1] The ACF regulation applies to fleets performing drayage operations, those owned by State, local, and federal government agencies, and high priority fleets. High priority fleets are entities that own, operate, or direct at least one vehicle in California, and that have either $50 million or more in gross annual revenues, or that own, operate, or have common ownership or control of a total of 50 or more vehicles (excluding light-duty package delivery vehicles). The regulation affects medium- and heavy-duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds, off-road yard tractors, and light-duty mail and package delivery vehicles.

Project Impact

As previously discussed, the City adopted its own GHG thresholds for industrial projects (Ordinance No. 2024-013), including the proposed project. As shown above in Local Regulations, the GHG thresholds consist of four tiers that the project can be evaluated against to determine its GHG impact significance.

The proposed project is evaluated against each of the four tiers:

Tier 1–CEQA exemption: The proposed project is not exempt from CEQA, therefore this tier does not apply.

Tier 2–Qualified GHG reduction plan: The EECAP was prepared based on the 2020 GHG targets, which are now superseded by the 2030 GHG targets established in SB 32. Therefore, the EECAP would not apply for streamlining.

Tier 3–Project design elements: The proposed buildings would be all-electric design which satisfies the first design element that prohibits natural gas appliances or plumbing. As demonstrated in Section 3.5, Energy, the proposed project would not result in any wasteful, inefficient, or unnecessary energy usage; therefore, the proposed project is consistent with the second design element. However, as discussed in Section 3.13, the proposed project would have a significant and unavoidable VMT impact. As such, this tier does not apply to the proposed project.

Tier 4–Screening threshold: The last tier relates to project emissions in exceedance of SCAQMD's 10,000 MT CO_2e per year screening threshold for industrial uses and stationary projects. As shown in Table 3.7-3 and Table 3.7-4, the proposed project's construction and operation GHG emissions would be far below the 10,000 MT CO_2e per year screening threshold. Therefore, the proposed project is consistent with this tier and would not have a significant GHG impact.

Furthermore, although the proposed project is not required to implement the industrial sustainability measures that were recently adopted by the City, which only applies to projects for which a Notice of Preparation is issued after March 1, 2024 (Ordinance No. 2024-013), the proposed project includes similar design features such as the use of zero-emission forklifts and solar panels. The proposed solar panels would be installed on the project's building roof top, which would produce an estimated 235,000 kilowatt-hour (kWh) per year.

In summary, the proposed project would satisfy Tier 4 of the City's GHG standards. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

Less than significant impact.

3.7.8 - Cumulative Impacts

The geographic scope of the cumulative GHG emissions analysis is the San Francisco Bay Area Air Basin (SFBAAB), which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. In a larger sense, however, the relevant geographic area is the entire Earth, as explained by the California Supreme Court. "[B]ecause of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 219.) "'With respect to climate change, an individual project's emissions would most likely not have any appreciable impact on the global problem by themselves, but they would contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the proposed project's incremental addition of greenhouse gases is "cumulatively considerable" in light of the global problem, and thus significant.'" (*Id.*, quoting Crockett, Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World (July 2011) Golden Gate U. Envtl. L.J. 203, 207–208).)

The proposed project would emit new GHG emissions, as would other past, present, and reasonably foreseeable projects within the Air Basin. The BAAQMD provides guidance for evaluating whether a project would contribute its "fair share" of what will be required to achieve California's long-term climate goal of carbon neutrality by 2045, in which case a reviewing agency can find that the impact will not be significant because the project will help to solve the problem of global climate change. The analysis showed that the proposed project would have a less than significant GHG impact and as such, would result in a less than signfiicant cumulative impact as well. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable future development in the Air Basin and around the world, would not result in a significant cumulative GHG emissions impact. The proposed project's contribution would not be cumulatively considerable and thus less than significant.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None required.

Level of Cumulative Significance After Mitigation

Less than significant impact.

3.8 - Hazards and Hazardous Materials

3.8.1 - Introduction

This section describes the existing hazards and hazardous materials setting and the potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on a Phase I Environmental Site Assessment (ESA) prepared by Cameron-Cole, LLC on April 27, 2023, included in this Draft Environmental Impact Report (Draft EIR) as Appendix G.

No public comments pertaining to hazards and hazardous materials were received in response to the Notice of Preparation (NOP).

3.8.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed of, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic: Causes human health effects
- Ignitable: Has the ability to burn
- Corrosive: Causes severe burns or damage to materials
- Reactive: Causes explosions or generates toxic gases

Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Common Hazardous Materials

Asbestos

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used for acoustic insulation, thermal insulation, fireproofing, and in other building materials. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. When these fibers get into the air, they may be inhaled into the lungs, where they can cause significant health problems. The California Occupational Health and Safety Administration (Cal/OSHA) defines asbestos-containing construction materials as any material that contains more than 0.1 percent asbestos by weight.

There are no structures on the project site; thus, there is no basis to assume presence of asbestos-containing materials.

Lead

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably in paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil. Both the United States Environmental Protection Agency (EPA) and the California Department of Health Services define lead paint as containing a minimum of 0.5 percent by weight. Lead-containing waste materials with a concentration greater than 0.1 percent are considered hazardous waste by California law.

There are no structures on the project site; thus, there is no basis to assume presence of lead-based paint.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are mixtures of synthetic chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. Electrical transformers are one of the most common sources of PCBs.

There are no structures or electrical transformers on the project site thus, there is no basis to assume presence of PCBs.

Radon

Radon is a carcinogenic, radioactive gas resulting from the natural breakdown of uranium in soil, rock, and water. Radon gas enters a building through cracks in foundations and walls. Once inside the building, radon decay products may become attached to dust particles and inhaled, or the decayed radioactive particles alone may be inhaled and cause damage to lung tissue. The EPA has established a safe radon exposure threshold of 4 picocuries per liter of air (pCi/l).

The California Department of Health Services has conducted more than 48,000 indoor radon tests in more than 1,700 zip codes through the State, including in the 94503 (American Canyon) zip code. A total of 18 tests have been conducted in the 94503 zip code, none of which yielded indoor radon levels above 4 pCi/l[1].

[1] California Department of Health Services. 2016. California Indoor Radon Levels. Website: https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf. Accessed March 17, 2023.

Low-Frequency Electromagnetic Fields

Electrical transmission and distribution lines emit extremely low-frequency electromagnetic fields (EMFs), which have been suspected to be linked to cancer. However, scientific research has never conclusively established a link between EMFs and cancer. In 2007, the World Health Organization issued a report titled "Extremely Low-Frequency Fields, Environmental Health Criteria Monograph No. 238" that concluded that evidence between extremely low-frequency EMFs and childhood leukemia is not strong enough to be considered causal, although it did note that the issue still was of concern. The same report indicated that there is inadequate evidence or no evidence linking low-frequency EMFs and health effects associated with all other diseases.

The nearest high voltage electrical transmission line (i.e., tower line) is located 1.7 miles south of the project site.

Aviation

The Napa County Airport is located 1.65 miles north of the project site and is within Zone D of the Napa County (County) Airport Land Use Compatibility Plan (ALUCP). The County-owned airport consists of three runways, ranging from 2,500 to 5,930 feet in length.[2] The airport averages 446 operations per day and 163,000 operations annually (the Federal Aviation Administration [FAA] defines an "operation" as one takeoff or landing).[3]

The County ALUCP contemplates aviation activity at Napa County Airport increasing to 575 operations per day (or approximately 210,000 operations annually).[4]

Phase I ESA

A Phase I ESA was prepared by Cameron-Cole, LLC on April 27, 2023, to evaluate the presence or likely presence of hazardous substances within the project site. Cameron-Cole used historical resources, personal interviews, and federal and State agency files regarding site operations and past historical use, as well as site reconnaissance to inform their conclusions.

Recognized Environmental Conditions

A recognized environmental condition (REC) is defined as the presence of either:

- Hazardous substances or petroleum products in, on, or at the project site to a release to the environment
- The likely presence of hazardous substances or petroleum products in, on, or at the project site due to a release or likely release to the environment, or
- The presence of hazardous substances or petroleum products in, on, or at the project site under conditions that pose a material threat of a future release to the environment.

[2] County of Napa. Flight Planning. Website: https://www.countyofnapa.org/1012/Flight-Planning#:~:text=Napa%20County%20Airport%20%2D%20APC&text=Runways%3A,%3A%20134.0%2C%20Double%20tandem%3A%20120.0. Accessed April 16, 2024.
[3] Napa County Airport Land Use Commission. 1999. Airport Land Use Compatibility Plan. December 15.
[4] Ibid.

The Phase I ESA did not identify any RECs at the time of the report.

Record Searches

Cameron-Cole performed a query of Envirosite for a comprehensive government agency information search in accordance with American Society of Testing and Materials (ASTM) International Standard E1527-21. The project site was not identified in any of the standard or other ascertainable records databases searched.

Through the review of historical sources, Cameron-Cole identified that the property at 2 Eucalyptus Drive, which is directly east of the project site, was listed in the National Pollutant Discharge Elimination System (NPDES) and the Napa County Leaking Underground Storage Tank (LUST) databases. Note that this property historically included the project site until approximately 2012. In 1990, the property was inspected by Napa County officials. Two 10,000-gallon underground storage tanks (USTs), one 3,000-gallon UST, 55-gallon drums, and hazardous materials were observed in a section of the property east of the project site. These items have since been removed from the adjoining property. The site has undergone two Phase I ESAs as well as a Limited Site Investigation including soil sampling.

The record search identified off-site points of interest with respect to interpreted groundwater flow direction, which is inferred to flow west (Table 3.8-1). However, it was determined that none of the sites in the surrounding areas present an environmental threat to the subject property.

Table 3.8-1: Off-site Points of Interest

Name	Relationship to Project Site (approximate)	Summary
SDG Commerce 330	420 feet south	No violations are listed for this site.
2 Eucalyptus Drive (Napa Junction Elementary School)	1,229 feet southeast	This site is listed as a dredge/fill site. No violations are listed for the project site.
American Canyon Wastewater Treatment Facility	1,021 feet northwest	Sewage treatment facility. California Hazardous Material Incident Report System (CHMIRS)–CA database description mentions a sewage release into a tributary of the Napa River in 2014. The release is contained but unrecoverable. DOCKET database lists the site with the Enforcement Action Case Number CA-200018545. The site has an NPDES Individual Permit, which is expired. The site is listed in the Enforced Permit Compliant Facilities (PCS

Name	Relationship to Project Site (approximate)	Summary
		ENF) database, which is the federal equivalent of NPDES, as a State Clean Water Act Penalty. No other databases list violations for the site.
Source: Cameron-Cole 2023.		

Site Reconnaissance

Cameron-Cole conducted a site reconnaissance on March 13, 2023, to determine the presence or absence of hazardous substance or petroleum product storage areas or spills as indicated by stressed vegetation, soil staining, storage tanks, drums, etc.

A very minimal oil sheen was observed on a puddle of water in the western portion of the project site. The sheen was determined to be de minimis and is likely attributed to naturally occurring oils from the historic eucalyptus groves on and adjacent to the project site. Furthermore, a de minimis amount of household waste was noted during site reconnaissance. No hazardous waste was observed during the site reconnaissance. Several rock piles were present throughout the project site. A large mound of soil was observed on the southern edge of the project site. The property owner stated that the soil observed on the project site was excess soil placed there during the development of the adjoining property to the south.

Historical Use and Soil Testing

The Phase I ESA found, through the review of historical and aerial photographs, that the project site may have historically been used for agricultural purposes, which commonly is associated with the use of pesticides, herbicides, or fertilizers. However, no evidence of improper applications, releases, or potential releases of agricultural chemicals were noted in the report. As such, the possible historic use of the subject property for agricultural purposes is not considered an REC.

The project site contained a eucalyptus tree grove that existed from at least 1937 through approximately 2012 and was used for paintball activities from approximately 1992 until approximately 2012. A Limited Site Investigation of the 2 Eucalyptus Drive property (of which the project site was formerly a part of), prepared by ICES on April 19, 2019, included soil testing from within the project site. Total petroleum hydrocarbons as diesel (TPHd) was detected above the reported residential Environmental Screening Level (ESL) from soils within the project site, but it is assumed to be the result of the natural oil compounds in eucalyptus trees. Further, the levels of TPHd detected are below the current ESL. Arsenic and vanadium were also identified at concentrations above the stated Regional Screening Levels (RSLs) in project site soil samples but were within background levels for area soils. As such, the concentrations of TPHd, arsenic, and vanadium identified during the 2010 Limited Site Investigation in soils on the project site are not considered recognized environmental conditions for the subject property.

3.8.3 - Regulatory Framework

Federal

Federal Toxic Substances Control Act and Resource Conservation and Recovery Act

The Federal Toxic Substances Control Act of 1976 and the Resource Conservation and Recovery Act of 1976 (RCRA) regulate the generation, transportation, treatment, storage, and disposal of hazardous and non-hazardous waste. The regulatory program is administered by the EPA. It mandates that hazardous waste be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. The HSWA also prohibited the use of certain techniques for the disposal of some hazardous wastes and provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks and performance standards to ensure that the stored material will not corrode the tanks.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of and response to uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Transportation of Hazardous Materials

The Hazardous Materials Transportation Act of 1974, as amended, is the basic statute regulating hazardous materials transportation in the United States. Transportation of hazardous materials is regulated by the United States Department of Transportation (USDOT) Office of Hazardous Materials Safety. The Office of Hazardous Materials Safety formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 Code of Federal Regulations Parts 100-185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections; use of vehicle controls and equipment, including emergency equipment; procedures for safe operation of the transport vehicle; instruction on the properties of

the hazardous material being transported; and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 Code of Federal Regulations Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

State

Cortese List

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." The list, or a site's presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act (CEQA). While Government Code Section 65962.5 makes reference to the preparation of a "list," many changes have occurred related to web-based information access since 1992 and this information is now largely available on the websites of GeoTracker and EnviroStor. Those requesting a copy of the Cortese "list" are now referred directly to the appropriate information resources contained on the internet web sites (e.g., GeoTracker and EnviroStor).

Handling and Storage of Hazardous Waste

The handling and storage of hazardous materials is regulated on the federal level by the EPA under the CERCLA as amended by the Superfund Amendments and Reauthorization Act (SARA). Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses that store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

In California, the handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500-25543.3, facilities handling hazardous materials are required to prepare a Hazardous Materials Business Plan. The business plan provides information to the local emergency response agency regarding the types and quantities of hazardous materials stored at a facility and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California code, facilities are required to prepare a Risk Management Plan and California Accidental Release Plan, which provide information on the potential impact zone of a worst-case release and requires plans and programs designed to minimize the probability of a release and mitigate potential impacts.

California Hazardous Waste Control Law

The California Hazardous Waste Control Law (HWCL) is administered by the California Environmental Protection Agency (Cal/EPA) to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the EPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and approximately 300 common materials that may

be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

The California Code of Regulations, Title 22, Chapter 11, Article 2, Section 66261.10 defines hazardous waste as a substance that may:

> (1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed or otherwise managed.

According to California Code of Regulations Title 22, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated or is being stored prior to proper disposal.

Toxic substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability or death. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels. (The level depends on the substance involved.) Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances are hazardous because of their flammable properties. Gasoline, hexane, and natural gas are examples of ignitable substances. Corrosive substances are chemically active and can damage other materials or cause severe bums upon contact. Examples include strong acids and bases such as sulfuric (battery) acid or lye. Reactive substances may cause explosions or generate gases or fumes. Explosives, pressurized canisters, and pure sodium metal (which reacts violently with water) are examples of reactive materials.

Other types of hazardous materials include radioactive and biohazardous materials. Radioactive materials and wastes contain radioisotopes, which are atoms with unstable nuclei that emit ionizing radiation to increase their stability. Radioactive waste mixed with chemical hazardous waste is referred to as “mixed wastes.” Biohazardous materials and wastes include anything derived from living organisms. They may be contaminated with disease-causing agents, such as bacteria or viruses.

The Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that any business that handles hazardous materials prepare a business plan that must include details, including floor plans, of the facility and business conducted at the site, an inventory of hazardous materials that are handled or stored on the site, an emergency response plan, a training program in safety procedures and emergency response for new employees, and an annual refresher course in the same topics for all employees.

The Porter-Cologne Water Quality Act (California Water Code, Section 13000, *et seq*.) established the authority of the California State Water Resources Control Board (State Water Board) and provided

the Regional Water Quality Control Board (RWQCB) with the primary responsibility of the protection of water quality in the State of California.

Hazardous Materials Worker Safety

Cal/OSHA and the Federal Occupational Safety and Health Administration (OSHA) are the agencies responsible for assuring worker safety by developing and enforcing workplace safety regulations in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR §§ 337-340, Chapter 3.2). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

California Fire Code

California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code at Part 9. The California Fire Code includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The Fire Code requires two points of vehicular access for any nonresidential building 30 feet tall or higher.

California Department of Transportation and California Highway Patrol

The California Vehicle Code Section 31303 requires that hazardous materials be transported via routes with the least overall travel time and prohibits the transportation of hazardous materials through residential neighborhoods. In California, the California Highway Patrol (CHP) is authorized to designate and enforce route restrictions for the transportation of hazardous materials. To operate in California, all hazardous waste transporters must be registered with the California Department of Toxic Substances Control (DTSC). Unless specifically exempted, hazardous waste transporters must comply with the CHP Regulations, the California State Fire Marshal Regulations, and the USDOT Regulations. In addition, hazardous waste transporters must comply with Division 20, Chapter 6.5, Article 6 and 13 of the California Health and Safety Code and Title 22, Division 4.5, Chapter 13 of the California Code of Regulations, both of which are administered by the DTSC.

San Francisco Bay Regional Water Quality Control Board

There are nine RWQCBs throughout the State. The San Francisco Bay RWQCB has jurisdiction over the City of American Canyon. Individual RWQCBs function as the lead agencies responsible for identifying, monitoring, and cleaning up LUSTs. Storage of hazardous materials in USTs is regulated by the State Water Board, which oversees the nine RWQCBs.

California State Aeronautics Act

The State Aeronautics Act, Public Utilities Code Section 21001, *et seq.* are the foundation for the California Department of Transportation (Caltrans) Division of Aeronautics aviation policies. The Division issues permits for and annually inspects hospital heliports and public use airports, makes recommendations regarding proposed school sites within 2 miles of an airport runway, and authorizes helicopter landing sites at/near schools. Aviation system planning provides for the integration of aviation into transportation system planning on a regional, Statewide, and national

basis. The Division of Aeronautics administers noise regulation and land use planning laws that foster compatible land use around airports and encourages environmental mitigation measures to lessen noise, air pollution, and other impacts caused by aviation. The Division of Aeronautics also provides grants and loans for safety, maintenance, and capital improvement projects at airports.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following guiding and implementing policies relevant to hazards and hazardous materials:

Goal 1N Ensure the compatibility of development within American Canyon with the Napa County Airport.

Objective 1.27 Ensure that lands in American Canyon are developed in a manner which protects them from the noise and operational impacts of, and does not adversely constrain, the Napa County Airport.

Policy 1.27.2 Review all applications for new development, expansion of existing uses, and reuse within Napa County Airport Compatibility Zones "A" through "E" for compliance with the appropriate use and development conditions.

Goal 6A Maintain a high level of fire protection and emergency services to City/District businesses and residences.

Objective 6.3 Ensure that the Fire District's facility, manpower and equipment needs keep pace with the City's growth.

Policy 6.3.1 Require that City planning staff work closely with Fire District officials to ensure that fie facilities and personnel are expanded commensurably to serve the needs of the City's growing population and development base.

Policy 6.4.3 Require, through the development review process, that all structures and facilities subject to the District's jurisdiction adhere to City, State, and federal regulatory standards such as the Uniform Building and Fire Codes and other applicable safety guidelines.

County of Napa

Napa County Airport Land Use Compatibility Plan

The ALUCP governs land use around two Napa County aviation facilities: the Napa County Airport and Parrett Field in Angwin. The ALUCP was adopted by the Napa County Airport Land Use

Commission in April 1991 and revised in December 1999. The project site is within Zone D of the ALUCP.[5]

Flight Hazards

The ALUCP identifies two categories of flight hazards: physical obstructions and land use characteristics.

Physical obstructions are associated with tall objects or structures. The ALUCP establishes a height restriction ranging from 50 feet to 185 feet above ground level.

Land use characteristics involve uses that may produce hazards to aviation. Specific characteristics prohibited within the airport land use planning boundaries are listed below:

- Glare or distracting lights, which could be mistaken for airport lights
- Sources of dust, steam, or smoke that may impair pilot visibility
- Sources of electrical interference with aircraft communications or navigation
- Any use that may attract large flocks or birds, especially landfills or certain agricultural uses

Zone D

The ALUCP provides the following description of Zone D in Table 3-1:

> Common Traffic Pattern: This area is defined by the flight pattern of each airport and illustrated in the respective "Airport Impact Areas" figures contained in Part III. These areas are routinely overflown by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 feet above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes (especially on circle-to-land instrument approaches), a moderate level of risk exists.

The ALUCP establishes the following standards for Zone D:

- Maximum density recommendation of 100 persons per acre inside structures for nonresidential uses.
- Maximum density recommendation of 150 persons per acre (both indoors and outdoors) for nonresidential uses.
- Residential uses are prohibited.
- Uses hazardous to flight are prohibited (i.e., features that attract large numbers of birds and sources of smoke, glare, distracting lights, or electrical interference).
- Overflight easement or deed restrictions are required.

[5] Napa County Airport Land Use Commission. 1999. Napa County Airport Land Use Compatibility Plan.

- Building envelopes and approach surfaces are required on all development plans within 100 feet of approach zones.
- Clustering is encouraged to maximize open land areas.
- Noise level reduction measures may be required for noise-sensitive uses.

The ALUCP states that most nonresidential uses are considered "normally acceptable" within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheaters, and ponds are identified as "not normally acceptable" within Zone D.

Hazard Mitigation Plan and Emergency Operation Plan

The City of American Canyon is included in the Napa County Hazard Mitigation Plan, which provides an explanation of prevalent hazards within the County and how those hazards may affect the County. The Plan identifies mitigation strategies to respond to the potential hazards, including actions to achieve the greatest risk reduction based upon available resources.[6]

The City of American Canyon is also included in the County of Napa Emergency Operation Plan which addresses coordinated and planned response to extraordinary emergency situations within the County. The Plan is a guide for the response to, management of, and recovery from emergencies.[7]

3.8.4 - Methodology

FirstCarbon Solutions (FCS) evaluated potential impacts on hazards and hazardous materials based on a Phase I ESA and site reconnaissance prepared by Cameron-Cole, LLC on April 27, 2023.

3.8.5 - Thresholds of Significance

The lead agency utilizes the criteria in the CEQA Guidelines Appendix G Environmental Checklist to determine whether hazards and hazardous materials impacts resulting from the implementation of the proposed project would be considered significant if the project would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

[6] Napa County. 2020. Hazard Mitigation Plan. Website: https://www.cityofamericancanyon.org/government/public-safety/emergency-preparedness/hazard-mitigation-plan. Accessed May 31, 2023.

[7] Napa County. 2016. Emergency Operations Plan. Website: https://www.cityofamericancanyon.org/government/public-safety/emergency-preparedness/hazard-mitigation-plan. Accessed May 31, 2023.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working the project area?

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires? (Refer to Section 4, Effects Found Not To Be Significant.)

3.8.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Routine Transport, Use, or Disposal of Hazardous Materials/Risk of Upset

Impact HAZ-1:	**Buildout of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.**

Impact Analysis

This impact assesses both threshold (a) and (b).

Construction

Construction activities would entail the use of heavy equipment on the project site. Potential hazardous materials transported, used, or disposed of during project construction would be limited to commonly used substances such as gasoline, diesel, oil, grease, mechanical fluids, paints, and cleaning solvents. Construction equipment would be serviced by trained technicians and potentially hazardous materials would be stored in secured facilities. Furthermore, the safe handling of these commonly used substances is governed by occupational health and safety laws and regulations and construction contract requirements. Therefore, the use of this equipment and these substances during construction would not present any undue risks to the public or the environment.

Operation

The proposed wine warehouse would be used for distribution, fulfillment, and storage of a non-hazardous commodity (wine). No large quantity hazardous materials handling would occur.

The proposed end user would be expected to handle small quantities of commonly used hazardous substances such as cleaning solvents, diesel, gasoline, grease/degreasers, mechanical fluids, and oil as part of daily operations. Given the small quantities involved and the characteristics of use (e.g., routine maintenance and cleaning), their use would not be considered a potential significant risk to human health or the environment. The use of acutely hazardous materials of any quantity that have the potential to result in releases that could potentially expose substantial numbers of people or the environment to harm is not anticipated by project end uses.

Furthermore, as summarized in Section 3.7.2, Environmental Setting, the project site does not have RECs or conditions that would create a risk of release of hazardous materials during ground disturbance or during operation of the proposed project.

American Canyon Water Reclamation Facility

The American Canyon Water Reclamation Facility is located approximately 1,021 feet northwest of the project site. Gaseous chlorine is typically used during wastewater treatment and can pose a significant risk to human health because of its properties. In this case, the Water Reclamation Facility does not handle or store gaseous chlorine, which precludes the possibility of the proposed project being exposed to such a release.

Agricultural Chemicals

The project site does not support cultivated agriculture. Aerial photographs and historic topographical maps indicate that the project site has not supported cultivated agricultural production since the 1950s. Thus, there is no basis to assume presence of agricultural chemicals, including herbicides and pesticides.

Hazardous Building Materials

The project site does not contain any structures. Aerial photographs and historic topographical maps indicate that the project site has not supported structures in the past; thus, there is no basis to assume the presence of hazardous building materials including asbestos, lead, or PCBs.

Radon

The California Department of Health Services has conducted more than 48,000 indoor radon tests in more than 1,700 zip codes through the State, including in the 94503 (American Canyon) zip code. A total of 18 tests have been conducted in the 94503 zip code, none of which yielded indoor radon levels above 4 pCi/l. Moreover, the proposed project proposes slab-on-grade construction, which has a low susceptibility to radon intrusion. In contrast, buildings with subsurface spaces such as basements or parking garages have a much higher susceptibility to radon intrusion.

Electromagnetic Fields

There are no high voltage electrical facilities (e.g., tower lines) within 0.5 mile of the project site. As such, the proposed project site would not be exposed to high levels of low-frequency EMFs.

Conclusion

In summary, the construction and operational activities of the proposed project would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials and would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Exposure of Schools to Hazardous Materials

Impact HAZ-2:	**The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

Impact Analysis

Napa Junction Magnet Elementary School is located 1,000 feet southeast of the project site, which is less than 0.25 mile.

However, the proposed wine warehouse would be used for distribution, fulfillment, and storage of a non-hazardous commodity (wine). No large quantity hazardous materials handling would occur. Furthermore, the proposed end user would be expected to handle small quantities of commonly used hazardous substances such as cleaning solvents, diesel, gasoline, grease/degreasers, mechanical fluids, and oil as part of daily operations. Given the small quantities involved and the characteristics of use (e.g., routine maintenance and cleaning), their use would not be considered a potential risk to Napa Junction Magnet Elementary School. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Government Code Section 65962.5 Sites–Cortese List

Impact HAZ-3:	**The proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.**

Impact Analysis

Cortese List

The project site is not listed on the Cortese List, which includes various hazardous materials databases compiled to Government Code 65962.5.

Two sites within 0.75 mile of the project site are listed on the Cortese List. Both are listed as "Case Closed," signifying that the regulatory agency with jurisdiction has determined that no further action is necessary. Thus, they do not pose a risk to human health or the environment and the proposed project would not be exposed to hazards or hazardous materials from past uses of the project site or the site vicinity. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Airports

Impact HAZ-4: The proposed project would not create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport.

Impact Analysis

The project site is located 1.65 miles south of the Napa County Airport and is within Zone D of the Napa County ALUCP.

As explained in Section 3.5.6 of this Draft Environmental Impact Report (Draft EIR), the California Supreme Court, in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 377, has held generally "agencies subject to CEQA generally are *not* required to analyze the impact of existing environmental conditions on a project's future users or residents." However, the Court recognized that the Legislature has created an exception with respect to noise, safety, and land use compatibility issues near airports (*Id*. at p. 391). Public Resources Code Section 21096[a] creates special rules for EIRs prepared for projects either "situated within airport land use compatibility plan boundaries" or, where no such plan is in place, "within two nautical miles of a public airport or public use airport." Such EIRs must use "the Airport Land Use Planning Handbook" published by the Division of Aeronautics of the Department of Transportation as a technical resource.

The Napa County ALUCP states that most nonresidential uses are considered "normally acceptable" within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheaters, and ponds are identified as "not normally acceptable" within Zone D. In addition, uses that are hazardous to flight are prohibited (i.e., features that attract large numbers of birds and are sources of smoke, glare, distracting lights, or electrical interference). The proposed project's wine warehouse end use is nonresidential in nature and, thus, would be acceptable within Zone D.

Finally, there are no project attributes that would produce sources of smoke, glare, distracting lights, or electrical interference. Therefore, the proposed project complies with the applicable safety requirements of Zone D. As such, the proposed project would not create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Emergency Response and Evacuation

Impact HAZ-5: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact Analysis

Vehicular and truck access would be taken from one driveway on Commerce Court that would be shared with the SDG Commerce 330 project. Drive aisles would be provided around the full perimeter of the building to support emergency ingress and egress. In addition, internal connection to the SDG Commerce 217 Warehouse to the north and the SDG Commerce 330 Warehouse to the south would also be provided. Accordingly, the proposed project would provide two points of emergency access and, thus, would comply with California Fire Code requirements.

The bike path south of the Commerce Court cul-de-sac, which provides provide connection to Eucalyptus Drive, has a gated Emergency Vehicle Access point. This would be available for emergency response and evacuation to and from the project site.

Furthermore, no aspect of the proposed project would conflict with the Napa County Emergency Operations Plan or Hazards Mitigation Plan.

For these reasons, the proposed project would provide sufficient emergency access and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.8.7 - Cumulative Impacts

For most topics, the geographic scope of the cumulative hazards and hazardous materials analysis is the project area. Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the project area would be most affected by project activities. For the transport of hazardous materials, the geographic scope includes local and regional transportation facilities.

The proposed project would not result in any significant impacts associated with hazardous materials because there is no evidence of contamination from past uses and any use or storage of hazardous materials during construction or operations would be subject to compliance with regulatory requirements and mitigation measures. Accordingly, all project-related impacts associated with hazardous materials were found be less than significant. As with the proposed project, other past, present, and reasonably foreseeable projects have been and would continue to be required to comply with applicable federal, State, and local regulatory requirements regarding the transport of hazardous materials, cleanup of hazardous materials, and the use and storage of hazardous

materials during construction and operation. Additionally, hazardous material impacts tend to be localized to individual project sites. Consequently, no significant cumulative impacts would occur.

Therefore, the proposed project, in conjunction with other past, approved, and reasonably foreseeable future projects, would not have a cumulatively significant impact related to hazards and hazardous materials.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.9 - Hydrology and Water Quality

3.9.1 - Introduction

This section describes the existing hydrology and water quality setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on the Hydrology Report, Hydraulic Calculations, and Stormwater Control Plan prepared by RSA, provided in Appendix G. Additional information was obtained through site reconnaissance, review of project plans, and review of resources, including the City of American Canyon General Plan, the California Department of Water Resources (DWR) Bulletin 118, the Clean Water Act 303(d) list, and the Western Regional Climate Center.

No public comments pertaining to hydrology and water quality were received in response to the Notice of Preparation.

3.9.2 - Environmental Setting

Climate and Meteorology

The City of American Canyon (City) is characterized by a Mediterranean climate with warm summers, mild winters, and moderate precipitation. Temperatures in American Canyon range from an average monthly low of 38.3°F (degrees Fahrenheit) in January to an average monthly high of 82.1°F in September. Average annual rainfall is 24.6 inches with the majority occurring from November to March. General meteorological data for the American Canyon area, as measured at the Napa State Hospital weather station,[1] are presented in Table 3.9-1.

Table 3.9-1: American Canyon Meteorological Summary

Month	Temperature (°F)		Average Precipitation (inches)
	Average Low	Average High	
January	38.3	57.0	5.14
February	40.8	61.5	4.38
March	42.0	65.0	3.35
April	43.7	69.6	1.65
May	47.6	74.6	0.68
June	51.3	79.8	0.21
July	53.4	81.9	0.02
August	53.2	81.7	0.06
September	51.5	82.1	0.31
October	47.9	76.5	1.36

[1] Western Regional Climate Center. 2022. Napa State Hospital (WRCC ID# 046074). Website: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6074. Accessed December 11, 2023.

Month	Temperature (°F)		Average Precipitation (inches)
	Average Low	Average High	
November	42.6	65.9	2.98
December	38.8	57.6	4.50
Annual Average	**45.9**	**71.1**	**24.66**

Notes:
°F = degrees Fahrenheit
Averages derived from measurements taken between January 1, 1893, and June 10, 2016, at Napa State Hospital (WRCC ID# 046074).
Source: Western Regional Climate Center. 2023.

Regional Hydrology

The project site is located within the 426-square-mile Napa River Watershed. The Napa River drains 47 tributaries along its 55-mile length from the headwaters of Mount St. Helena in the Mayacamas Mountain Range at approximately 3,700 feet above mean sea level to San Pablo Bay, part of San Francisco Bay.

Within the large Napa River Watershed, major land cover types are forest (35 percent), grassland/rangeland (23 percent), and agriculture (19 percent). The San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) indicates that two-thirds of the agricultural land is vineyards and urban development covers approximately 8 percent of the watershed.[2] The majority of streams in the Napa Valley have been altered by urbanization, agriculture, and grazing. Since the 1800s, large sections of the Napa River have been straightened, the banks hardened, flows redirected, and several levees constructed.

Local Hydrology

At a more local scale, the project site is within the North Slough watershed. North Slough begins in the Sulfur Springs Mountains northeast of American Canyon and meanders to the southwest through the Green Island Business Park and Wetlands Edge Park to its confluence with the Napa River. North Slough is located immediately west of the project site.

The predominant soil type at the project site is Haire Clay Loam, which is identified as Hydraulic Soil Group D.[3]

Storm Drainage

The project site is undeveloped and does not have any existing storm drainage facilities. Runoff either ponds on-site and percolates into the soil or sheet flows into the municipal storm drainage

[2] San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). Basin Plan.
[3] RSA. 2023. Hydrology Report for SDG Commerce 220 Distribution Center, American Canyon, CA. Project #4122068.0. July 21, 2023.

facilities within Green Island Road. Runoff from the project site moves via surface flows to the west, where it is ultimately conveyed through the North Slough to the Napa River.[4]

Surface Water Quality

The Napa River is listed as impaired on the Clean Water Act 303(d) list for pathogens and sediment/siltation. These pollutants are a result of agriculture, urban runoff, and storm sewers; land development; and construction. The Napa River was previously listed on the Clean Water Act 303(d) list for nutrients; however, the RWQCB de-listed the Napa River for this pollutant in 2014 (Resolution Number R2-2014-0006).

Groundwater

The project site is located within the 40,500-acre Napa-Sonoma Lowlands Groundwater Subbasin. The subbasin consists primarily of alluvium and alluvial fans that were deposited at and near the mouths of the Napa River and Sonoma Creek adjacent to San Pablo Bay. To a lesser extent, portions of the City are underlain by sandstone and mudstone/shale, of which the former comprises some of the more productive water-bearing units within the region. The City of American Canyon does not maintain any municipal groundwater wells; however, as many as 41 private wells have been identified that draw from the subbasin within and near the City. Nearly all of these wells reported relatively low-flow rates, ranging from 0.5 gallon per minute (gpm) to 45 gpm.[5]

Groundwater Quality

Groundwater quality in the Napa-Sonoma Lowlands Subbasin is generally suitable for municipal and agricultural uses. Primary constituents of concern are high total dissolved solids (TDS), nitrate, boron, and organic compounds. High TDS are typically found in wells in areas closest to the San Francisco Bay. The DWR indicates that the Napa-Sonoma Lowlands Subbasin shows a TDS range of 50 to 300 milligrams per liter (mg/L) with an average of 185 mg/L.

3.9.3 - Regulatory Framework

Clean Water Act

Section 303 of the Clean Water Act (CWA) requires states to adopt water quality standards for all surface waters of the United States. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards (see description of the Porter-Cologne Water Quality Control Act, below). Standards are based on the designated beneficial use(s) of the water body. Where multiple uses exist, water quality standards must protect the most sensitive use.

Section 401 of the CWA requires any person applying for a federal permit or license that may result in the discharge of pollutants into waters of the United States (including wetlands) to obtain a state water quality certification. In California, such certifications are administered by the California State Water Resources Control Board (State Water Board) through the nine RWQCBs (see a description of

[4] RSA. 2023. Hydrology Report for SDG Commerce 220 Distribution Center, American Canyon, CA. Project #4122068.0. July 21, 2023.
[5] California Department of Water Resources (DWR). 2003. Bulletin 118: Napa-Sonoma Lowlands Groundwater Subbasin.

State regulations below). In order to acquire certification, it must be demonstrated that the activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit by a federal agency may be granted until 401 certification has been granted. Section 401 water quality certifications are typically required prior to obtaining a Section 404 permit from the United States Army Corps of Engineers (USACE).

Section 402 of the CWA mandates that certain types of construction activity comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) stormwater program. In California, any construction activity (with the exception of certain industrial activities, none of which are proposed for this project) that disturbs at least 1 acre is covered under the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) issued by the State Water Board and implemented and enforced by RWQCBs.

Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in the City of American Canyon are regulated under the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, MS4 Order No. 2013-0001-DWQ (General Permit). In 1987, Congress amended the CWA to mandate controls on discharges from municipal separate storm sewer systems (MS4s). Acting under the federal mandate and the California Water Code, California RWQCBs require cities, towns, and counties to regulate activities that can result in pollutants entering their storm drains. All municipalities prohibit non-stormwater discharges to storm drains and require residents and businesses to use Best Management Practices (BMPs) to minimize the amount of pollutants in runoff. The Municipal Regional Permit is overseen by the San Francisco Bay RWQCB. On February 5, 2013, the State Water Board reissued the Phase II Stormwater NPDES Permit for small MS4s. Provision E.12, “Post-Construction Stormwater Management Program,” mandates municipalities to require specified features and facilities—to control pollutant sources, runoff volumes, rates, and durations and to treat runoff before discharge from the site—be included in development plans of projects that create or replace 5,000 square feet or more of impervious surface as conditions of issuing approvals and permits. The new requirements continue a progression of increasingly stringent requirements since 1989.

Provision E.12 required all municipal permittees to implement these requirements by June 30, 2015, to the extent allowed by applicable law. This includes projects requiring discretionary approvals that have not been deemed complete for processing and discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals.

In July of 2014, the Bay Area Stormwater Management Agencies Association (BASMAA), through the BASMAA Phase II Committee, created the BASMAA Manual to assist applicants for development approvals to prepare submittals to demonstrate that their projects comply with the NPDES permit requirements. Applicants who seek development approvals for applicable projects should follow the manual when preparing their submittals. The manual is designed to ensure compliance with the requirements and promote integrated Low Impact Development (LID) design.

Section E.12.c of the General Permit pertains to LID and how it relates to hydromodification management. This permit provision requires that stormwater discharges not cause an increase in the

erosion potential of the receiving stream over the existing condition. Increases in runoff flow and volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

Section 404 of the CWA requires that a permit be obtained from the USACE prior to any activity associated with discharge of dredged or fill material into waters of the United States, including wetlands.

State

Water Quality Statutes and Regulations

Section 303(d) of the CWA requires that the State Water Board identify surface water bodies within California that do not meet established water quality standards. Once identified, the affected water body is included in the State Water Board "303(d) Listing of Impaired Water Bodies" and a comprehensive program must then be developed to limit the amount of pollutant discharges into that water body. This program includes the establishment of Total Maximum Daily Loads (TMDL) for pollutant discharges into the designated water body. The most recent 303(d) listing for California was approved by the United States Environmental Protection Agency (EPA) in 2010.

The Porter-Cologne Water Quality Control Act of 1969 authorized the State Water Board to provide comprehensive protection for California's waters through water allocation and water quality protection. The State Water Board implements the requirement of the CWA Section 303, indicating that water quality standards have to be set for certain waters by adopting water quality control plans under the Porter-Cologne Act. The Porter-Cologne Act established the responsibilities and authorities of the nine RWQCBs, which include preparing water quality plans for areas in the region, identifying water quality objectives, and issuing NPDES permits and Waste Discharge Requirements (WDRs). Water quality objectives are defined as limits or levels of water quality constituents and characteristics established for reasonable protection of beneficial uses or prevention of nuisance. The Porter-Cologne Act was later amended to provide the authority delegated from the EPA to issue NPDES permits. The San Francisco Bay RWQCB has jurisdiction over the project site.

Post-construction stormwater controls to satisfy requirements of the NPDES Program are permitted under the Phase II Small Municipal Separate Storm Sewer System (MS4) Permit (Order R2-2015-0049). Facilities must be designed to evapotranspire, infiltrate, harvest/use, and bio treat stormwater. As of July 1, 2016, hydromodification management procedures are required.

Projects disturbing more than 1 acre of land during construction are required to comply with the General Permit. General Permit activities are regulated at a local level by the RWQCB pursuant to a general permit. No site-specific authorization is needed. To obtain coverage under the General Permit, a project applicant must provide a Notice of Intent (NOI), a Storm Water Pollution Prevention Plan (SWPPP), and other documents required by Attachment B of the General Permit. Activities subject to the General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation.

The General Permit uses a risk-based permitting approach and mandates certain requirements based on the project risk level (Level 1, Level 2, or Level 3). The project risk level is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on project location and timing (such as wet season versus dry season activities). The receiving water risk depends on whether the proposed project would discharge to a sediment-sensitive receiving water. The determination of the project risk level would be made when the NOI is filed (once more details of the timing of the construction activity are known).

The performance standard in the General Permit is that dischargers minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through the use of controls, structures, and BMPs. A SWPPP must be prepared by a qualified SWPPP developer who meets the certification requirements in the General Permit. The purpose of the SWPPP is (1) to help identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges, and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Examples of BMPs include silt fencing, street sweeping, and inspection. Operation of BMPs must be overseen by a qualified SWPPP practitioner who meets the requirements outlined in the permit.

Section 1600–1616 of the California Fish and Game Code requires that the California Department of Fish and Wildlife (CDFW) be notified of activity that will: substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared that outlines reasonable conditions necessary to protect natural resources threatened by the proposed activity.

Stormwater Guidance Publications

California Stormwater Quality Association (CASQA), a professional organization, has published guidance for stormwater management. The organization's Stormwater Best Management Handbook provides guidance for compliance with State stormwater regulations for construction. The Handbook provides detailed monitoring guidance and inspection forms, including a SWPPP Template. The handbook addresses selection and implementation of BMPs to eliminate or to reduce the discharge of pollutants and control or reduce impacts to the hydrologic cycle associated with development and redevelopment activities.

The California Department of Transportation (Caltrans) also has published a Stormwater Quality Handbook Construction Site Best Management Practices Manual that provides similar guidance for transportation projects.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following guiding and implementing policies relevant to hydrology and water quality:

Goal 10 Protect the lives and property of American Canyon's residents and visitors from flood hazards.

Objective 10.1 Design both new development and redevelopment projects in a manner that minimizes hazards associated with flooding.

Policies

Policy 10.1.1 Retain and enhance natural watercourses, including perennial and intermittent streams, as the City's primary flood control channels whenever feasible.

Policy 10.1.4 Ensure that stormwater drainage is designed for peak flow conditions.

Policy 10.1.5 Prohibit the development of structures designed for human occupancy within the 100-year floodplain, unless flood hazards are adequately mitigated. Mitigation can be accomplished by building foundations a minimum of one (1) foot above the 100-year flood elevation, or by other means approved by the City Engineer.

Policy 10.1.12 Require that proposed developments within the 100-year floodplain submit information regarding the flood hazard prepared by a qualified Civil Engineer or Hydrologist.

Policy 10.1.13 Require that proposed developments within the 100-year floodplain submit plans to adequately mitigate flood hazards and demonstrate that such improvements will not create or increase downstream or upstream flood hazards.

Stormwater Management

As required under State Water Board Order No. 2013-001 DWQ, the City of American Canyon maintains a Storm Water Management Plan (SWMP) (NPDES Permit No. CAS 612007). As one element of that program, the City requires regulated projects to address post-construction stormwater quality. The City of American Canyon requires regulated projects, such as this one, to prepare a Stormwater Control Plan in accordance with the Bay Area Stormwater Management Agencies Association–Post-Construction Manual. The Stormwater Control Plan must include post-construction stormwater treatment measures such as bioretention facilities and source control BMPs. The SWMP must also address ongoing maintenance of those facilities.

In addition, the City requires that a Preliminary Hydrology and Hydraulics Study be prepared to determine whether there are significant impacts. Storm drain design is required to conform to Section 4 of the City's Engineering Standard Plans and Specifications for Public Improvements. Those

standards require, among other things, that post-development runoff be no greater than 90 percent of pre-development runoff.

3.9.4 - Methodology

FCS conducted site reconnaissance of the project vicinity in November 2022. Additional information was provided by review of project plans and review of resources, including the City of American Canyon General Plan, the DWR Bulletin 118, the CWA 303(d) list, and the Western Regional Climate Center.

3.9.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether hydrology and water quality impacts resulting from the implementation of the proposed project would be considered significant if the project would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
   (i) Result in substantial erosion or siltation on- or off-site;
   (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
   (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
   (iv) Impede or redirect flood flows?

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (Refer to Section 4, Effects Found not to be Significant)

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Refer to Section 4, Effects Found not to be Significant)

3.9.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Water Quality

Impact HYD-1: The proposed project could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Impact Analysis

This analysis assesses the potential for the proposed project to degrade surface water quality in downstream water bodies.

The potential for the proposed project to degrade water quality arises from (1) short-term land disturbance from construction activities and presence of contaminants associated with construction machinery, and (2) long-term changes to land use and drainage patterns that may increase the delivery of sediments, nutrients, organic compounds, trash/debris, and other contaminants to waterways tributary to the Napa River. Left unabated, increased loading of such pollutants could cause geomorphic change in downstream channel reaches, degrade habitat, and undermine TMDL and other water quality requirements.

Construction activities would disturb the entire 10.45 acres of the project site and would include grading, building construction, paving, and utility installation. Construction would require the use of gasoline and diesel-powered heavy equipment, such as bulldozers, backhoes, water pumps, and air compressors. Chemicals, such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances, could be used during construction. An accidental release of any of these substances could degrade the quality of the surface water runoff and adversely affect receiving waters. As such, Mitigation Measure (MM) HYD-1 is proposed, requiring the development and implementation of a SWPPP to outline site-specific stormwater quality control measures (such as BMPs) during construction activities to prevent pollutants from entering downstream waterways. With implementation of MM HYD-1, construction-related water quality impacts would be reduced to a less than significant level.

As part of the proposed project, the parcel's stormwater runoff would be directed to the proposed detention/bioretention pond via storm drain pipes. The stormwater detention/bioretention pond is designed to provide sufficient capacity to accommodate and treat the stormwater in conformance with federal, State, and regional requirements. The roof drains will be connected to the proposed detention/bioretention pond and storm drain systems surrounding the building by way of down spouts on the exterior of the building.

According to the Hydrology Report, the proposed project would result in a net decrease in peak stormwater runoff rates from the existing conditions. The proposed stormwater detention and treatment satisfies the City of American Canyon Engineering Standards Plans and Specifications (ESPS) and the BASMAA Stormwater Control Plan standards.[6]

A Stormwater Control Plan was prepared for the proposed project and is included as Appendix G. The Stormwater Control Plan has been reviewed and verified by the City of American Canyon to ensure the proposed stormwater controls are adequate pursuant to the requirements of Order No.

[6] RSA. 2023. Hydrology Report for SDG Commerce 220 Distribution Center, American Canyon, CA. Project #4122068.0. July 21, 2023.

R2-2015-0049 (or a more recent permit) and that an operation and maintenance program is in place to ensure the long-term functionality of the stormwater controls.

As indicated in the Stormwater Control Plan, post-construction typical urban contaminants associated with roadways, parking areas, and rooftops will be introduced to the project site. Moreover, the increase in impervious surface coverage increases the efficiency by which sediment and other pollutants are delivered downstream. Concentration of flow by the storm drain system could increase the erosive energy of flows, thereby increasing sediment supply from the project site. Runoff from landscaped areas may also contain residual pesticides and nutrients. Consequently, there is potential for long-term degradation of runoff water quality from the implementation of the proposed project.[7]

Utilizing a three-tiered LID/BMP design approach, the proposed project would implement the following post-construction stormwater management methods:

- Provide site-specific designed BMPs to maintain pre-development runoff characteristics, protect sensitive resource areas, and attempt to minimize new impervious areas. The site has been designed to limit the amount of disturbed area and new impervious areas.
- Utilize source control BMPs that use structural controls and operational procedures to limit pollutants at their source. The proposed project would implement the following source control BMPs: mark “No Dumping! Flows to River” on storm drain inlets; plumb interior floor drains to sanitary sewer; carefully manage pesticide use for landscaped areas; post “Do Not Dump Hazardous Materials Here” on refuse areas; utilize enclosed trash compactors; grade loading docks to minimize run-on and contain spills; and drain parking areas to bioretention planters.
- Utilize treatment control BMPs designed to reduce the amount of pollutants in stormwater and to reduce runoff rates or volumes. All new impervious areas would be routed through either a bioretention basin or an infiltration planter. The floors of bioretention basins would be amended with a layer of gravel overlain by a layer of specialized biosoil. The biosoil shall be a sandy loam material to promote infiltration while allowing for vegetation to establish. An underdrain shall be installed to facilitate infiltration as the local soils have low infiltration potential. Bioretention basins have been configured to drain within 48 hours to prevent vector concerns.

The pollution prevention measures, BMPs, LID design concepts, and ongoing maintenance requirements provided in the Stormwater Control Plan shall be implemented during construction to control stormwater pollution from operational activities and facilities. Additionally, MM HYD-1 requires the development and implementation of a SWPPP to outline site-specific stormwater quality control measures during construction activities to prevent pollutants from entering downstream waterways. The impact would be less than significant with mitigation incorporated.

[7] RSA. 2023. Stormwater Control Plan for a Regulated Project for Commerce 220 Distribution Center, American Canyon, CA. #4122068.0. July 21, 2023.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HYD-1 Prior to the issuance of grading permits or building permits (whichever occurs first), the project applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) by preparing a Storm Water Pollution Prevention Plan (SWPPP) and submitting it, along with a Notice of Intent (NOI), to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The City of American Canyon shall confirm that the applicant has prepared a SWPPP and obtained coverage under the General Permit prior to issuance of grading or building permits. The SWPPP shall identify a practical sequence for Best Management Practice (BMP) implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall address both the project site and adjacent parcel where soil stockpiles would be removed and the borrow pit would be created to provide fill for the project site. The SWPPP shall include but not be limited to the following elements:

- Temporary erosion control measures shall be employed for disturbed areas.
- No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months. Disturbed areas shall be covered with soil stabilizers, mulch, fiber rolls, or temporary vegetation.
- Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures. Drop inlets shall be lined with filter fabric/geotextile.
- Discharge from the stormwater system shall be diffused in such a way as to mimic existing overland flow conditions.
- The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. This may include locating construction-related equipment and processes that contain or generate pollutants in a secure way, away from storm drains, gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities.
- BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure.
- In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance as an interim erosion control measure throughout the wet season.

Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a SWPPP in accordance with the requirements of the Statewide General Permit. The SWPPP shall be implemented during construction.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Groundwater

Impact HYD-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Impact Analysis

This analysis assesses the potential for the proposed project to deplete groundwater supplies (overdraft) or interfere substantially with groundwater recharge.

Groundwater Overdraft

The proposed project would be served with potable and recycled water service provided by the City of American Canyon; potable and recycled water infrastructure currently exist within Commerce Court. The City of American Canyon Public Works Department provides potable and nonpotable water to a service area of approximately 30 square miles that encompasses city limits and its sphere of influence. The City obtains its water supply from a variety of sources, all of which (except for recycled water) are imported from outside of the City. Imported water is mostly sourced from the State Water Project (SWP) and purchased from the Napa County Flood Control and Water Conservation District (FCWCD) and the City of Vallejo.

The City of American Canyon does not maintain any municipal groundwater wells; however, as many as 41 private wells have been identified that draw from the subbasin within and near the City. The proposed project would not rely on groundwater wells as a water supply source. Therefore, the proposed project would not exacerbate groundwater overdraft (to the extent that it exists) or conflict with the provisions of a sustainable groundwater management plan. Impacts would be less than significant.

Groundwater Recharge

The proposed project would result in an increase in additional pervious surfaces. However, the project site is at a relatively low elevation and is near the Napa River; thus, groundwater levels tend to be high and soils in the lowest portions of the site are often saturated. Accordingly, the groundwater water recharge potential of the project site is limited. The proposed project includes a groundwater basin where stormwater would be allowed to infiltrate into the soils, contributing to groundwater recharge. In addition, the on-site wetlands would be preserved and would continue to contribute to groundwater recharge. For these reasons, impacts to groundwater recharge would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Drainage

Impact HYD-3:	**The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows.**

Impact Analysis

The proposed project would result in the development of a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. Thus, the proposed project would increase the amount of impervious surface coverage on the project site and would create the potential for increased runoff leaving the project site that may create potential flooding conditions in downstream waterways. However, the Hydrology Report indicates that the proposed project would result in a net decrease in peak stormwater runoff rates, and the proposed detention and treatment would satisfy the City of American Canyon ESPS and the BASMAA stormwater standards.

The proposed project would install a storm drainage system designed for a 100-year/24-hour storm event, consistent with the City's engineering standards plan and specifications. Inlets would capture surface runoff, where it would enter an underground piping system that would convey stormwater to the proposed detention/bioretention pond.

In accordance with applicable provisions of Section C.3 of the San Francisco Bay RWQCB Municipal Regional Permit (Order No. R2-2015-0049, NPDES Permit No. CAS612008 or a more recent permit), the proposed project would implement LID stormwater management methods into the on-site storm drainage system consisting of rainwater harvesting and use, infiltration, evapotranspiration, or biotreatment.

Collectively, these measures would serve to slow, reduce, and meter the volume of runoff leaving the project site and ensure that the proposed project would not substantially alter the existing drainage pattern of the project site through the addition of impervious surfaces or result in substantial erosion. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.9.7 - Cumulative Impacts

The geographic scope of the cumulative hydrology and water quality analysis is the North Slough watershed, which generally encompasses the areas south of Green Island Road on the west side of State Route (SR) 29. Hydrologic and water quality impacts tend to be localized to a watershed; therefore, the area within the North Slough watershed would be most affected by project activities.

The proposed project would involve short-term construction and long-term operational activities that would have the potential to degrade water quality in downstream water bodies. These activities are subject to regulatory requirements that would ensure no significant adverse impacts would occur. MM HYD-1 would require implementation of various construction and operational water quality control measures that would prevent the release of pollutants into downstream waterways. These measures include preparation of a SWPPP in accordance with the requirements of the Statewide Construction General Permit and compliance with the Municipal Regional Permit, including implementation of BMPs and LID features.

Other past, present, and reasonably foreseeable projects that propose new development have been and would be required to implement similar mitigation measures in accordance with applicable laws and regulations. The combined implementation of construction and operation water quality control measures by other past, present, and reasonably foreseeable projects would avoid, or reduce to a less than significant level, any related cumulative impacts on downstream waterways including North Slough and the Napa River.

All other project-related hydrology impacts were found to be less than significant and did not require mitigation (e.g., groundwater and drainage). Other past, present, and reasonably foreseeable projects that result in groundwater and drainage impacts have been and would be required to comply with applicable laws and regulations designed to protect groundwater resources and ensure adequate drainage facilities are provided for all projects and include facilities to prevent and reduce runoff from development sites.

Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable planned and approved projects in the vicinity, would not have a cumulatively significant impact related to hydrology and water quality.

Level of Cumulative Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM HYD-1

Level of Cumulative Significance After Mitigation

Le**s**s than significant impact with mitigation incorporated.

3.10 - Land Use

3.10.1 - Introduction

This section describes the existing land use and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on-site reconnaissance and review of the City of American Canyon General Plan, the American Canyon Municipal Code, and the Napa County Airport Land Use Compatibility Plan (ALUCP).

The following public comments pertaining to land use were received in response to the Notice of Preparation (NOP):

- A commenter requested that the proposed project avoid land use conflicts between warehouses and sensitive receptors and mitigate the impacts of any unavoidable land use conflicts.
- A commenter asked whether a warehouse development is allowed on land zoned for Recreation.

3.10.2 - Environmental Setting

Land Use

Project Site

The project site contains undeveloped land that gently slopes from east to west and is approximately 13 to 25 feet above mean sea level. A linear wetland and another isolated wetland are located within the northern portion of the property. The southern portion of the project site contains several soil stockpiles that are intended for use at the SDG Commerce 217 property. A young eucalyptus tree is located near Commerce Court. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk. Chapter 2, Project Description, Exhibit 2-3 provides photographs of the project site.

Surrounding Area

North

A wine distribution warehouse known as SDG Commerce 217 is being constructed to the north of the project site at the time of this writing. This parcel totals 10.39 acres. The area further to the north consists of multiple industrial warehouses and other industrial type land uses.

East

Commerce Court, a two-lane undivided roadway, forms the eastern boundary of the project site. A 68-foot-wide City Public Access and Utility easement is located within Commerce Court with underground sewer, water, reclaimed water, sewer force main and underground power. A eucalyptus grove is located east of Commerce Court. A residence, dirt/gravel roads, and various accessory structures are located throughout this eucalyptus grove as well as Paint Jungle, a paintball recreation area.

South

A wine distribution warehouse known as SDG Commerce 330 is located south of the project site. This parcel totals 15.24 acres. Napa Junction Magnet Elementary School is located further to the south.

West

An 11.23-acre parcel containing a eucalyptus grove and North Slough are located west of the project site. The American Canyon Water Reclamation Facility is located west of North Slough. Further west is the Napa River and associated wetlands.

Land Use Designations

Project Site

The project site is designated Commercial Recreation (CR) by the City of American Canyon General Plan[1] and zoned Recreation (REC).[2] A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zoning district.

A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The adopted Ordinance was “to make winery uses more feasible” and allows wine-related wareshousing and distribuiton facilities as conditionally permitted uses within the REC zoning district.

Surrounding Land Uses

Table 3.10-1 summarizes the surrounding land uses. As shown in the table, all surrounding properties are designated for either industrial or public use.

Table 3.10-1: Surrounding Land Use Designations

Land Use	Relationship to Project Site	Land Use Designation	
		General Plan	Zoning
American Canyon Water Reclamation Facility	West	Public	Public
Eucalyptus grove	West	Commercial Recreation	Recreation
SDG Commerce 217 (Warehouse under construction)	North	Commercial Recreation	Recreation
Eucalyptus grove/Residence	East	Commercial Recreation	Recreation
SDG Commerce 330 (Existing Warehouse)	South	Commercial Recreation	Recreation

[1] City of American Canyon. 1992. General Plan.
[2] City of American Canyon. 2022. Zoning Ordinance.

Land Use	Relationship to Project Site	Land Use Designation	
		General Plan	Zoning
Source: City of American Canyon Public Map. Website: https://gis.countyofnapa.org/portal/apps/webappviewer/index.html?id=7138cfe804e34f43a03f6bb603439965. Accessed February 28, 2023.			

Napa County Airport

The Napa County Airport is located 1.65 miles north of the project site. The County-owned airport occupies approximately 824 acres and contains three runways (ranging from 2,510 to 5,931 feet in length), associated taxiways and tarmacs, a control tower, approximately 200 hangars, approximately 160 tie-down spaces, and a helicopter pad. The airport averages 148 operations per day and 54,020 operations annually. (The Federal Aviation Administration defines an "operation" as one takeoff or landing).

Per the Napa County ALUCP, the project site is located within Napa County Airport Land Use Compatibility Zone D (Common Traffic Pattern). Zone D is defined as the area where structures are routinely over flown by aircraft at altitudes of 300 to 1,000 feet with frequent single-event noise intrusion[3].

3.10.3 - Regulatory Framework

State

State Aeronautics Act

The State Aeronautics Act requires each county with an airport to establish an Airport Land Use Commission (ALUC) to regulate land use around airports to protect public safety and ensure that land uses near airports do not interfere with aviation operations. The Napa County ALUCP regulates land use around the Napa County Airport, as well as two other aviation facilities in the County, by requiring compliance with the policies of the plan. In certain circumstances, local governments may override the decisions of the ALUC.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan provides a blueprint for future development within American Canyon and the Sphere of Influence. The American Canyon Council adopted its most recent General Plan on November 3, 1994. The General Plan contains the following chapters: land use, housing, economic development, circulation, utilities, public facilities and services, parks and recreation, natural historic/cultural resources, geology, flooding, and noise. Each chapter establishes goals and policies to guide future land use activities and development within the General Plan boundaries. Note that the Circulation Element was comprehensively updated in 2013, the Housing Element was comprehensively updated in 2015, and incremental amendments have been made to

[3] Napa County Airport Land Use Commission (ALUC). 1991, as amended 1999. Napa County Airport Land Use Compatibility Plan.

the Land Use Element over time and as recently as 2021. In early 2020, the City initiated the General Plan Update process. The update will ensure that the City grows according to current community needs and priorities. The expected completion date is unknown as of the writing of this document.

Commercial Recreation

The City of American Canyon General Plan designates the project site as CR. According to Goal 1H of the General Plan, commercial recreation centers are intended to provide for the development of commercial enterprises that capitalize upon the natural environmental setting and resources of the City. Typical permitted uses include recreation vehicle parks, interpretative nature centers and conference facilities and similar uses. Density is to be determined based on characteristics of site and resources. Policy 1.21.4 indicates that the appropriate scale of development should be determined on a case-by-case basis to account for the specific environmental characteristics of a site and nature of the proposed project in areas designated as CR.

American Canyon Zoning Ordinance

American Canyon Municipal Code Title 19 contains the Zoning Ordinance. The project site is designated "Recreation" by the Zoning Ordinance. The Zoning Ordinance indicates the purpose of the Recreation zone is to maintain adequate open space, preserve important environmental resources, accommodate passive recreation, preclude development or activities in wetlands and significant habitats, and support compatible commercial activities which capitalize on local and regional agricultural vineyard resources. Zoning Ordinance (No. 2018-01) was adopted by the City Council on January 16, 2018 expanding the Zoning to "allow limited non-winery uses with a conditional use permit." Per Municipal Code Section 19.15.020, winery related uses, including such activities as bottling, storage, logistics, distribution, wine packing and wine-related services, are conditionally permitted within the Recreation zone subject to approval of a use permit by the planning commission. However, when a discretionary application subject to a CEQA environmental review requires a statement of overriding considerations, the City Council is the approval authority (Municipal Code 19.01(C,D), Relationship to other Regulations and Requirements).

County of Napa

Napa County Airport Land Use Compatibility Plan

The Napa County ALUCP governs land use around two Napa County aviation facilities: the Napa County Airport and Parrett Field in Angwin. The ALUCP was adopted by the Napa County ALUC in April 1991, revised in December 1999, and is currently being updated with an expected completion date of late fall 2023 or spring/summer 2024.

Noise

Table 2-1 of the ALUCP identifies acceptable aviation noise levels by land use. For warehouse and light industrial uses, aviation noise levels of up to 60 A-weighted decibel (dBA) Community Noise Equivalent Level (CNEL) are listed as "clearly acceptable" and noise levels between 60 and 65 dBA CNEL are listed as "normally acceptable." Noise levels between 65 and 75 dBA CNEL are listed as "marginally acceptable."

Flight Hazards

The ALUCP identifies two categories of flight hazards: physical obstructions and land use characteristics.

Physical obstructions are associated with tall objects or structures. The ALUCP establishes a height restriction ranging from 50 feet to 185 feet above ground level.

Certain land use activities may pose hazards to aviation. Specific characteristics that should be avoided within the airport land use planning boundaries are listed below:

- Glare or distracting lights, which could be mistaken for airport lights.
- Sources of dust, steam, or smoke that may impair pilot visibility.
- Sources of electrical interference with aircraft communications or navigation.
- Any use that may attract large flocks or birds, especially landfills or certain agricultural uses.

Zone D

The ALUCP provides the following description of Zone D in Table 3-1:

> Common Traffic Pattern: This area is defined by the flight pattern of each airport and illustrated in the respective "Airport Impact Areas" figures contained in Part III. These areas are routinely overflown by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 feet above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes (especially on circle-to-land instrument approaches) a moderate level of risk exists.

The ALUCP establishes the following standards for Zone D:

- Maximum density recommendation of 100 persons per acre inside structures for nonresidential uses.
- Maximum density recommendation of 150 persons per acre (both indoors and outdoors) for nonresidential uses.
- Residential uses are prohibited.
- Uses hazardous to flight are prohibited (i.e., features that attract large numbers of birds and sources of smoke, glare, distracting lights, or electrical interference).
- Overflight easement or deed restrictions are required.
- Building envelopes and approach surfaces are required on all development plans within 100 feet of approach zones.
- Clustering is encouraged to maximize open land areas.
- Noise level reduction measures may be required for noise-sensitive uses.

The ALUCP states that most nonresidential uses are considered "normally acceptable" within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheaters, and ponds are identified as "not normally acceptable" within Zone D.

3.10.4 - Methodology

FirstCarbon Solutions (FCS) evaluated the potential for land use impacts through site reconnaissance and review of applicable land use policy documents. FCS performed site reconnaissance on the project site and surrounding land uses in November 2022. Photographs were taken of the project site and surrounding land uses to document existing conditions. FCS reviewed the City of American Canyon General Plan, the American Canyon Zoning Ordinance, and the Napa County ALUCP to identify applicable policies and provisions that pertain to the proposed project. The proposed project's plans were reviewed to evaluate consistency with General Plan and Zoning Ordinance's standards.

3.10.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether impacts to land use are significant environmental effects. Thus, the proposed project would have a significant effect if it would:

a) Physically divide an established community (Refer to Section 4, Effects Found not to be Significant); or

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

3.10.6 - Project Impacts Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

General Plan Consistency

Impact LU-1:	**The proposed project would not conflict with the applicable provisions of the City of American Canyon General Plan.**

Impact Analysis

This impact assesses project consistency with the General Plan land use designation and the applicable goals, objectives, and policies of the General Plan

Land Use Designation

The City of American Canyon General Plan designates the project site as CR. General Plan Land Use Element Goal 1H indicates the purpose of the CR designation is to provide for the development of commercial enterprises that capitalize upon the natural environmental setting and resources of the City. Density is to be determined on a case-by-case basis to account for the specific environmental characteristics of the site and nature of the proposed project area.

The proposed project would consist of the development of a 219,834-square-foot wine warehouse on the project site with a floor area ratio (FAR) of 0.496. The wine storage and distribution warehouse capitalizes on the local area's agricultural resources related to "Winery" work in conjunction with viticulture-related activities, such as bottling, storage, logistics, fulfillment, distribution, wine-packing, and wine-related services activities, including the use of cool night air for refrigeration purposes, and, therefore, is consistent with the CR designation in this regard.

The General Plan describes typical permitted uses in the CR land use category as recreation vehicle parks, interpretative nature centers and conference facilities, and similar uses.[4] The proposed use is consistent with the Recreation Designation in the General Plan because wine-related uses are permitted uses in this designation through the implementation of the Commercial Recreation zoning district. The wine storage and distribution warehouse would be consistent with the policies of the General Plan as indicated in Table 3.10-2. The approval of significantly similar wine distribution warehouses directly to the south and north of the project site in 2019 and 2021 (Commerce 330 and Commerce 217) within the CR land use designation, confirms the proposed project's consistency with allowable uses in the CR Land Use designation. As indicated in the environmental documentation for the adjacent wine distribution warehouses, the City Attorney reviewed the allowed uses in the Recreation zone (which includes the proposed project type use) and determined they are consistent with the CR land use in the General Plan.[5,6] Furthermore, as discussed in Impact LU-2, the proposed project would be consistent with the types of conditionally permitted uses set forth in the Zoning Ordinance for the Recreation zoning district. As such, the proposed project, with the issuance of a conditional use permit, would be consistent with the CR land use designation.

Goals, Objectives, and Policies

Table 3.10-2 evaluates project consistency with the relevant goals, objectives, and policies of the City of American Canyon General Plan. The conclusions expressed in Table 3.10-2 reflect the best judgment of City staff. The ultimate question of the meaning of particular General Plan policies, and thus the proposed project's consistency with them, lies with the City Council. The ultimate question of the meaning of particular General Plan policies, and thus the proposed project's consistency with them, lies with the City Council. The language found in general plans is sometimes susceptible to varying interpretations. Case law interpreting the Planning and Zoning Law (Government Code § 65000 *et seq*.) makes it clear that: (i) the ultimate meaning of such policies is to be determined by the elected City Council or a lower tier decision-making body such as a planning commission, as opposed to City staff and EIR consultants, applicants, or members of the public; and (ii) the decision-making body's interpretations of such policies will prevail if they are "reasonable," even though other reasonable interpretations are also possible (*See No Oil, Inc.* v. *City of Los Angeles* (1987) 196 Cal.App.3d 223, 245-246, 249). Courts also have recognized that, because general plans often contain numerous policies adopted to effect differing or competing legislative goals, a development project may be "consistent" with a general plan, taken as a whole, even though the project appears to be inconsistent or arguably inconsistent with some specific policies within a given general plan (*Sequoyah Hills Homeowners Association* v. *City of Oakland* (1993) 23 Cal.App.4th 704, 719).

[4] City of American Canyon, General Plan Land Use Element. 1994, as amended through September 2021.
[5] City of American Canyon, 2021, Final Initial Study for the SDG Commerce 217 Distribution Center Project. February.
[6] City of American Canyon, 2019, Final Initial Study for the SDG Commerce 330 Warehouse Project. January.

Furthermore, courts strive to "reconcile" or "harmonize" seemingly disparate general plan policies to the extent reasonably possible (*No Oil, supra,* 196 Cal.App.3d at p. 244).

As shown in the table, City staff concludes that the proposed project is consistent with all applicable goals, objectives, and policies. Impacts would be less than significant. Should City decision-makers choose to approve the proposed project, they may rely on the analysis in the table as support for the conclusion that the proposed project is consistent with the General Plan. Certification of the Final EIR will be indicative of agreement with the conclusions in the table.

Table 3.10-2: General Plan Consistency Analysis

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
Land Use	Goal 1A	Provide for a diversity of land uses that a. serve the needs of existing and future residents; b. capitalize upon the tourism and agricultural heritage of the region; c. capitalize upon and preserves the unique environmental resources and character of the area; d. offer sustained employment opportunities for residents of the City and the surrounding region; e. sustain and enhance the long-term economic viability of the City; f. revitalize areas of physical and economic deterioration and/or obsolescence; g. are developed at densities/intensities that are economically viable and complementary with the natural environmental setting and existing development; and h. provide a greater balance of jobs and housing.	**Consistent:** The proposed project would develop 219,834 square feet of wine warehouse on the project site. The project site is designated Commercial Recreation (CR) by the General Plan and the end uses are consistent with the allowable uses for this land use designation. The proposed project would create approximately 35 full-time and 20 part-time jobs, stimulate capital investment, and expand the tax base. The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. As such, the proposed project would be consistent with the provisions of this goal, including serving the needs of residents, protecting environmental resources, creating employment opportunities, and balancing jobs and housing.
	Objective 1.1	Accommodate the development of a balance of land uses that (a) provide for the housing, commercial, employment, educational, cultural, entertainment, and recreation needs of residents, (b) capture visitor and tourist activity, (c) provide employment opportunities for residents of the greater sub region; and (d) provide open space and	**Consistent:** The proposed project would develop a 219,834-square-foot wine warehouse that would create approximately 35 full-time and 20 part-time jobs, primarily for residents of the region. The proposed project would also preserve on-site wetland areas, consistent with the item that calls for open space and aesthetic relief from developed urban areas.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		aesthetic relief from developed urban/suburban areas.	
	Policy 1.1.4	Provide adequate transportation (vehicle, bicycle, and pedestrian) and utility (sewer, water, energy, etc.) infrastructure and public services (police, fire, schools, etc.) to support the needs of the residents and businesses of American Canyon.	**Consistent:** This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Goal 1B	Provide for the orderly development of American Canyon that maintains its distinctive character.	**Consistent:** The proposed project would develop 219,834 square feet of new industrial uses on a site designated for such use located within the American Canyon city limits. The project site is surrounded by urban uses and infrastructure on three sides. As such, it is well suited for new development and would advance the goal of orderly development that maintains American Canyon's distinctive character.
	Objective 1.2	Promote a rate of growth that is consistent with the ability of the City to provide adequate infrastructure and services and does not adversely impact the distinctive character and quality of life in American Canyon.	**Consistent:** The proposed project would develop 219,834 square feet of new industrial uses on a site designated for such use located within the American Canyon city limits. The project site is surrounded by urban uses and infrastructure on three sides. The proposed project would occur in an area where adequate infrastructure and services exist such that it would not exceed the City's ability to serve it. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 1.2.2	Establish as a priority the development of projects that are contiguous with and infill the existing pattern of development, avoiding leap-frog development, except for large scale	**Consistent:** The project site is surrounded by urban uses and infrastructure on three sides. The proposed project would meet the

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		master planned projects that are linked to and planned to be extensions of existing development and for which infrastructure and services are in place or funded.	criteria set forth in this policy for a "priority" project.
	Objective 1.3	Ensure that land use development is coordinated with the ability to provide adequate public infrastructure (transportation facilities, wastewater collection and treatment, water supply, electrical, natural gas, telecommunications, solid waste disposal, and storm drainage) and public services (governmental administrative, capital improvements, police, fire, recreational, cultural, etc.).	**Consistent:** This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 1.3.1	Implement public infrastructure and service improvements necessary to support land uses accommodated by the Land Use Plan (as defined in the Circulation and Public Utilities and Services Elements.)	**Consistent:** Adequate infrastructure and service levels exist in the project vicinity such that only minor improvements or upgrades are necessary to serve the proposed project. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 1.3.2	Require that type, amount, and location of development be correlated with the provision of adequate supporting infrastructure and services (as defined in the Circulation and Public Utilities and Services Elements.)	**Consistent:** This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 1.3.3	Regulate the type, location, and/or timing of development as necessary in the event that there is inadequate public infrastructure or services to support land use development.	**Consistent:** Adequate infrastructure and service levels exist in the project vicinity such that only minor improvements or upgrades are necessary to serve the proposed project. Refer to Section 3.13, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Goal 1C	Create a pattern and character of land use development that establishes American Canyon as a distinct "place" differentiated from adjacent urban areas, maintains a semi-rural character, and respects the environmental setting.	**Consistent:** The project site is designated for commercial recreation. The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. As such, the proposed project would promote a development pattern that differentiates American Canyon from adjacent urban areas and also respects the natural environment.
	Objective 1.4	Provide for a pattern of development that (a) establishes distinct neighborhoods, districts, places of community activity and culture and open spaces that are interlinked and promote a cohesive image, (b) locates jobs, commerce, recreation, and other places of community activity within close proximity to all housing units, minimizing the need for vehicular use, (c) achieves a balance of uses to serve both sides of Highway 29, and (d) establishes an overall compact urban form surrounded by open space.	**Consistent:** The project site would be consistent with the surrounding neighborhood. The proposed project would create approximately 35 full-time and 20 part-time jobs in proximity to nearby housing to the south. The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. Accordingly, the proposed project would advance the objectives associated a cohesive image, creation of jobs near housing units, and promoting a compact urban form surrounded by open space.
	Policy 1.4.1	Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the Land Use Plan Map (Figure 1-1).	**Consistent:** The proposed project is consistent with the CR land use designation and is therefore consistent with the patterns and distribution of use and density depicted on the Land Use Plan Map (Figure 1-1 of the General Plan).
	Policy 1.4.2	Require that development within each land use classification adheres to applicable requirements and standards.	**Consistent:** The project site is designated for commercial recreation. As discussed in Impacts LU-1 and LU-2, the proposed project would comply with all applicable requirements and standards.
	Objective 1.5	Maintain the character and quality of the natural environmental resources of the City and protect the population and development from	**Consistent:** The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. Refer to Section 3.1,

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		the adverse impacts of environmental hazards.	Aesthetics; Section 3.3, Biological Resources; Section 3.8, Hazards and Hazardous Materials; and Section 3.9, Hydrology and Water Quality for further discussion.
	Policy 1.5.1	Require that development be designed and sited to protect significant environmental resources by adherence to the policies, standards, and programs contained in the Natural and Historic/Cultural Resources, Geology and Flood Hazards, and Noise Elements of the General Plan, as well as federal (NEPA) and State (CEQA) regulations.	**Consistent:** The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. Refer to Section 3.1, Aesthetics; Section 3.3, Biological Resources; Section 3.6, Geology, Soils, and Seismicity; Section 3.8, Hazards and Hazardous Materials; Section 3.9, Hydrology and Water Quality; and Section 3.11, Noise for further discussion.
	Goal 1I	Ensure the development of industrial uses that provide employment for residents of American Canyon and the surrounding region and contribute significant revenue for the City.	**Consistent:** The proposed project would develop a 219,834-square-foot warehouse on a site designated for such use located within the American Canyon city limits. The proposed project is estimated to create approximately 35 full-time and 20 part-time jobs for local residents. As such, it would advance the goal of providing employment opportunities and contributing significant revenue for the City.
	Objective 1.22	Provide for the continuation of existing and development of new industries that capitalize upon the geographic advantages of the City (including adjacency to Napa County Airport and the railroad), the agricultural production of the region, and emerging types of businesses (such as “thematic” and “environmental” based industries), offer opportunities for the clustering of key economic sectors, and maintain the environmental quality of the City.	**Consistent:** The project site is designated for commercial recreation. The proposed project would develop a 219,834-square-foot wine warehouse. This is consistent with the objective of promoting the development of existing and new industries that capitalize on the geographic advantages of the City.
	Policy 1.22.2	Allow for the inclusion of businesses that are ancillary to and support industrial uses such as related retail sales facilities for manufacturers,	**Consistent:** The proposed project would develop a 219,834-square-foot wine warehouse uses. Ancillary office space would be

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		financial institutions, restaurants, photocopy shops, specialty recreational uses (batting cages and health clubs/spas), and similar uses.	provided within the warehouses. The provision of these ancillary uses is consistent with the intent of this policy.
	Policy 1.22.3	Permit development according to the following standards: a. Labor-intensive uses: a maximum floor area ratio of 0.5. b. Low labor uses (such as warehousing): a maximum floor area ratio of 0.7.	**Consistent:** The proposed project would have a 0.496 floor area ratio (FAR), which would be within the General Plan's allowable FAR of 0.50 for labor-intensive uses and FAR of 0.70 for low labor uses.
	Policy 1.22.4	Require that development be designed to achieve a high level of quality and compatibility with existing uses including the consideration of the following: a. architectural treatment of all building elevations; b. use of extensive landscape along the primary street frontages and parking lots; and c. enclosure of storage areas visible from principal highways (including Highway 29) and peripheral residential and commercial districts with decorative screening or other elements.	**Consistent:** The proposed buildings would use concrete tilt-up panel construction and contemporary finishes and treatments similar to other industrial buildings in the project vicinity. Landscaping would be installed within parking areas and along the Commerce Court frontage. The City's design review process would ensure consistency with the applicable policies.
	Policy 1.22.5	Require that industrial areas developed as research and development and office-oriented business parks be designed to convey a unified character by consideration of Policy 1.22.4 and the following: a. inclusion of pedestrian walkways, arcades, an/or other visual elements to interconnect individual buildings; b. differentiation of building façades by materials, color, architectural details and modulation of building volumes; c. incorporation of extensive landscape in parking areas, along building frontages, and other public areas; d. use of consistent and well-designed public and informational signage; and e. installation of elements that define the key entries to the industrial district.	**Consistent:** The proposed project would provide internal pedestrian facilities, contemporary finishes and treatments similar to other industrial buildings in the project vicinity, landscaping within parking areas and along the Commerce Court frontage, and signage consistent with this policy. The City's design review process would ensure consistency with the applicable policies.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.22.7	Require that truck access be controlled so that it is safe and efficient and minimizes exposure to adjacent residential neighborhoods.	**Consistent:** Trucks would access the project site from Commerce Court via Green Island Road. The project site's location also allows for convenient access to State Route (SR) 29 such that residential areas in American Canyon would be avoided by trucks accessing the project site.
	Goal 1N	Ensure the compatibility of development within American Canyon with the Napa County Airport.	**Consistent:** As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of the Napa County Airport Land Use Compatibility Plan (ALUCP). Refer to Section 3.8, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Objective 1.27	Ensure that lands in American Canyon are developed in a manner which protects them from the noise and operational impacts of, and does not adversely constrain, the Napa County Airport.	**Consistent:** As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of the Napa County ALUCP including those that pertain to noise and safety. Refer to Section 3.6, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Policy 1.27.1	Require that development comply with the land use and development conditions stipulated in Tables 1-1 and 1-2 for areas depicted on Figure 1-3. [. . .] ZONE D Common Traffic Pattern: This area is defined by the flight pattern for the Napa County Airport as illustrated on Figure 1-3. These areas are routinely overflown by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes	**Consistent:** The project site is located within Zone D of the Napa County ALUCP. As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of Zone D as set forth in Tables 1-1 and 1-2. Refer to Section 3.8, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		(especially on circle-to-land instrument approaches) a moderate level of risk exists.	
	Policy 1.27.2	Review all applications for new development, expansion of existing uses, and reuse within Napa County Airport Compatibility Zones "A" through "E" for compliance with the appropriate use and development conditions.	**Consistent:** As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of Zone D of the Napa County ALUCP. Refer to Section 3.8, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Goal 1R	Ensure a high quality of the City's built environment, architecture, landscape, and public open spaces.	**Consistent:** The proposed project consists of a contemporary 219,834 square foot wine warehouse. This would advance the goal of providing a high-quality built environment and open space. Refer to Section 3.1, Aesthetics.
	Objective 1.32	Attain residential, commercial, industrial, and public buildings and sites which convey a high-quality visual image and character.	**Consistent:** The proposed buildings would use concrete tilt-up panel construction and contemporary finishes and treatments similar to other industrial buildings in the project vicinity. Landscaping would be installed within parking areas and along the Commerce Court frontage. Outdoor storage areas would be enclosed where necessary to screen them from view from major roadways. Overall, these characteristics would advance the objective of attaining high-quality visual character. The City's design review process would ensure consistency with the applicable policies. Refer to Section 3.1, Aesthetics, for further discussion.
	Policy 1.32.1	Require adherence to the Design and Development Principles prescribed in this Plan and the City's Design Review Guidelines which shall be updated periodically.	**Consistent:** The proposed project would incorporate relevant design concepts set forth in the latest adopted edition of the Design Review Guidelines. Moreover, the City's design review process would ensure consistency with the applicable policies.
	Policy 1.32.2	Require that development projects subject to discretionary review	**Consistent:** The proposed project is subject to discretionary review and,

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		submit and implement a landscaping plan.	therefore, the applicant has prepared and submitted a preliminary landscaping plan to the City, which will be considered as part of the approval process. A final landscaping plan will be required as part of the City's design review process, which would ensure consistency with the applicable policies. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.32.5	Require the use of drought tolerant species in landscape design in accordance with the provisions of the Water Conservation and Landscape Act.	**Consistent:** The proposed landscaping plan incorporates drought tolerant species in accordance with the provisions of the Water Conservation and Landscape Act. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.32.6	Require that commercial, industrial, and multi-family residential development incorporate adequate drought-conscious irrigation systems and maintain the health of the landscape.	**Consistent:** The proposed landscaping plan incorporates adequate drought-conscious irrigation systems in accordance with the provisions of the Water Conservation and Landscape Act. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.32.7	Require that all commercial, industrial, multi-family, and common area landscape be adequately irrigated with automatic irrigation systems.	**Consistent:** The proposed landscaping plan incorporates automatic irrigation systems. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.32.8	Promote the use of reclaimed water for the irrigation of public and private landscape, as available.	**Consistent:** The proposed project would be served with reclaimed water provided by the City of American Canyon for landscape irrigation purposes. Refer to Chapter 2, Project Description, for further discussion.
	Objective 1.33	Ensure that structures and sites are designed and constructed to maintain their long-term quality and provide for the needs of their occupants.	**Consistent:** All proposed structures would be designed to suit the needs of the end user, consistent with this objective. The City's design review process would ensure consistency with the applicable policies. Refer to Chapter 2, Project Description, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.33.1	Require that all structures be constructed in accordance with the requirements of the City's building and other pertinent codes and regulations; including new, adaptively reused, and renovated buildings.	**Consistent:** All proposed structures would be required to adhere to the latest adopted edition of the California Building Standards Code (CBC) at the time building permits are sought.
	Policy 1.33.3	Require that all development be designed to provide adequate space for access, parking, supporting functions, open space, and other pertinent elements.	**Consistent:** The proposed project would provide 134 car and 23 truck parking spaces. Five would be designated handicap access and one would be compact. There would be five electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE stall, and 19 electric vehicle (EV) capable stalls. Per the 2022 California Green Building Standards Code (CALGreen), nonresidential developments with 101–150 parking spaces must provide at least 17 EV capable spaces and at least four EV capable spaces provided with EVSE. The proposed project would meet these requirements. Additionally, the proposed project would preserve the existing on-site wetlands. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.33.4	Require that all commercial, industrial, and public development incorporate appropriate design elements to facilitate access for and use by the physically challenged.	**Consistent:** All proposed structures would be required to incorporate all applicable disability access requirements set forth by the Americans with Disabilities Act (ADA). The proposed project would provide 134 car and 23 truck parking spaces. Five would be designated handicap access and one would be compact. Refer to Chapter 2, Project Description, for further discussion.
Economic Development Element	Goal 3	Provide for the economic needs of American Canyon residents by capitalizing on the marketability of the City's industrial land and promoting a mix of uses which create quality jobs and foster fiscal stability.	**Consistent:** The proposed project would develop a 219,834-square-foot wine warehouse. The proposed project would create approximately 35 full-time jobs and 20 part-time jobs, stimulate capital investment,

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			and expand the tax base. These characteristics are consistent with the goal of providing for the economic needs of American Canyon residents.
	Objective 3.1	Maximize the City's market potential in terms of industrial/ business park and community-serving commercial activity. Increased industrial activity can be a catalyst for broadening the City's economic base by providing quality jobs and tax revenues, as well as, stimulating infrastructure improvements.	**Consistent:** The proposed project would develop a 219,834-square-foot wine warehouse. The proposed project would create approximately 35 full-time jobs and 20 part-time jobs, stimulate capital investment, and expand the tax base. These characteristics are consistent with the objective of maximizing the City's market potential in terms of industrial/ business park activity.
	Policy 3.1.1	Adopt a Land Use Map which designates acreage for heavy industrial, light industrial/ business park, commercial, and recreational commercial activities.	**Consistent:** The project site is currently designated CR by the City of American Canyon General Plan and the proposed project's uses are consistent with the allowable uses of this land use designation. Refer to Impact LU-1 for further discussion.
	Goal 3A	Generate new industrial growth through diversification of the industrial base and maintenance of current activity to provide employment opportunities for residents and generate fiscal revenues for the City.	**Consistent:** The proposed project would develop a 219,834-square-foot wine warehouse. This is consistent with the goal of generating new industrial growth through diversification of the industrial base.
	Objective 3.4	Increase the number of firms within the industries now represented in the City and capture new, clean, nonpolluting industries that are stable and compatible with City needs in terms of traffic, air quality, and employment.	**Consistent:** The proposed project would develop a 219,834-square-foot wine warehouse and is consistent with other adjacent warehousing firms. The proposed project is estimated to create approximately 35 full-time jobs and 20 part-time jobs. The proposed project would implement traffic improvements as necessary and feasible to mitigate impacts on traffic operations. Refer to Section 3.2, Air Quality, and Section 3.13, Transportation, for further details.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 3.4.2	Establish design and FAR standards for industrial buildings which will create and maintain an attractive image for American Canyon's industrial areas without imposing overly restrictive regulations.	**Consistent:** The proposed project would have a FAR of 0.496 that would be within the allowable FAR of the project site.
	Policy 3.4.3	In partnership with landowners and tenants, improve the infrastructure (particularly access across the North Slough drainage channel and the railroad) in the Green Island Industrial Park and Annexes and expand infrastructure services to the undeveloped sites on the north side of Green Island Road to link the two industrial areas and provide land use and design continuity to both sides of Green Island Road.	**Consistent:** The proposed project would take vehicular access from Commerce Court via Green Island Road. The proposed project would be located among existing warehouse land uses.
	Objective 3.5	Make available sufficient acreage in order to capture the City's fair-share of regional industrial growth through the year 2010.	**Consistent:** The project site is designated CR by the General Plan and is served with existing infrastructure. Thus, the project site is well suited to advance the objective of facilitating industrial development within American Canyon.
	Policy 3.5.1	Designate a sufficient amount of land to accommodate the projected growth in demand for industrial space by 2010.	**Consistent:** The project site is designated CR by the General Plan and is served with existing infrastructure. Thus, the project site is well suited to advance the policy of accommodating new industrial development within American Canyon.
Circulation Element	Guiding Policy 1.1	Community Priorities. Safe and convenient access to activities in the community is provided by a well-designed local roadway system. That system serves the community's primary need for mobility and includes a planned hierarchy of roadways to meet that need. The following Community Priorities relate most directly to this Element: • Encourage and foster a strong sense of community and safety, as well as the "hometown" feeling by	**Consistent:** Vehicular access to the project site would be provided from Commerce Court, which provides a connection to SR-29. The project site's location also allows for convenient access to SR-12 such that safe and convenient access can be provided for trucks and residential areas would be avoided. Refer to Section 3.13, Transportation for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		creation of a town center through land use and circulation planning. • Improve a hierarchy of roadway networks to achieve and maintain acceptable traffic Level of Service (LOS) and provide a Citywide system of bicycle lanes and recreational trails that improve accessibility without the use of an automobile. • Improve SR-29 so that it serves as a visually attractive gateway into the City while providing access to commercial businesses and serving intra and inter-regional traffic and goods movement.	
	Guiding Policy 1.2	Implement planned roadway improvements. Use Figure 3: General Plan Circulation System, and Table 3: Major Circulation Improvements, to identify, schedule, and implement roadway and complementary intersection improvements to support General Plan buildout conditions. Planned improvements may be phased as development occurs and need for increased capacity is identified.	**Consistent:** This Draft EIR evaluates project-related transportation impacts. Refer to Section 3.13, Transportation, for further discussion.
	Guiding Policy 1.3	Design circulation system to focus regional travel on SR-29. SR-29 is important for both Citywide and north–south regional travel. As both City and regional travel grow, design the City circulation system to discourage regional traffic from bypassing SR-29 and impacting City streets. Also, cooperatively work with regional partners, including Caltrans, NCTPA and others explore a complete streets approach that will expand the travel capacity of SR-29.	**Consistent:** Vehicular access to the project site would be provided from Commerce Court which provides a connection to SR-29 and SR-12 via Green Island Road, which are all truck routes. Refer to Section 3.13, Transportation, for further discussion.

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	Guiding Policy 1.6	Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak hours where possible and as long as possible. However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond the control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce the impact of any development use or density planned for in the Land Use Element of the General Plan. The following locations that may not achieve or maintain LOS D are as follows and therefore will be exempt from the LOS D policy: • State Route 29 through the City • American Canyon Road from SR-29 to Flosden Road–Newell Drive • Flosden Road south of American Canyon Road.	**Consistent:** This Draft EIR evaluates project-related transportation impacts. Refer to Section 3.13, Transportation, for further discussion.
	Guiding Policy 1.9	Use of existing facilities. Make efficient use of existing transportation facilities, and improve these facilities as necessary in accordance with the Circulation Map.	**Consistent:** The proposed project would rely on the existing Commerce Court for vehicular access.
	Guiding Policy 1.11	Reduce Vehicle Miles Traveled. Through layout of land uses, improved alternate modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by City residents.	**Consistent:** The project site has convenient access to SR-12 and SR-29. The development of the proposed project's a 219,834-square-foot wine warehouse is within the North Bay Region and would contribute to reducing trip length by locating these facilities closer to customers within this region. Finally, the development of approximately 35 full-time jobs and 20 part-time jobs in a housing-rich part of the Bay Area region would allow employees to work closer to where they live, thereby reducing vehicle miles traveled. Refer to

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			Section 3.13, Transportation, for further discussion.
	Guiding Policy 1.12	Circulation System Enhancements. Achieve, maintain and/or improve mobility in the City by considering circulation system enhancements beyond improvements identified on the Circulation Map, where feasible and appropriate. Improve the circulation system, in accordance with the Circulation Map, at minimum, to support multimodal travel of all users and goods and where feasible, apply creative circulation system enhancements that increase system capacity and that are acceptable to the City and its residents and where applicable, Caltrans.	**Consistent:** This Draft EIR evaluates project-related transportation impacts. Refer to Section 3.13, Transportation, for further discussion.
	Implementing Policy 1.13	Financing Program. Develop a transportation financing program that will fully fund the planned expansion of the existing transportation network consistent with the General Plan. The financing program will include an update to the existing Transportation Impact Fee (TIF) program consistent with AB 1600.	**Consistent:** The proposed project would pay fees in accordance with the City's latest adopted traffic impact fee schedule, as applicable. This is consistent with the policy of implementing a transportation financing program that will fully fund the planned expansion of the existing transportation network.
	Implementing Policy 1.14	Work with Caltrans on highway improvements. Continue to work with the Caltrans to achieve timely context sensitive design solutions, funding and construction of programmed highway improvements.	**Consistent:** The proposed project would not result in impacts to Caltrans facilities. Refer to Section 3.13, Transportation, for further discussion.
	Implementing Policy 1.16	Use of Congestion Management Process. Utilize the NCTPA Congestion Management Program (CMP) to determine the timing and degree of regional roadway facility improvements in accordance with region wide plans. Actively participate in the Community-Based SR-29 Gateway Corridor Improvement Plan process to identify a funded SR-29 travel capacity enhancement through the City.	**Consistent:** The proposed project would not result in impacts to regional roadway facilities. Refer to Section 3.13, Transportation, for further discussion.

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	Implementing Policy 1.17	Regional fair-share fee program. Work with Caltrans, NCTPA, Napa County, and other jurisdictions to establish a fair-share fee program for improvements to routes of regional significance and State highways. This fee should reflect traffic generated by individual municipalities/ unincorporated communities as well as pass-through traffic.	**Consistent:** The proposed project would pay fees in accordance with the City's latest adopted traffic impact fee schedule, as applicable. This includes improvements under the jurisdiction of Caltrans, Napa County Transportation and Planning Agency (NCTPA), and the County of Napa.
	Implementing Policy 1.19	Complete Streets. When constructing or modifying transportation facilities, consistent with Resolution 2012-72, "Complete Streets Policy of the City of American Canyon," strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists and pedestrians appropriate for the road classification and adjacent land use.	**Consistent:** The proposed project does not include the construction or modification of transportation facilities. It would be accessed from the existing Commerce Court. Refer to Section 3.13, Transportation, for further discussion.
	Implementing Policy 1.23	Access Restriction. Minimize, where possible, the number of access points along arterial roadways, including by consolidating or relocating driveways to provide for more efficient traffic movement.	**Consistent:** The proposed project would have one access point on Commerce Court and connect to the warehouses to the south and north. This is consistent with the policy of providing for more efficient traffic movement.
	Implementing Policy 1.24	Impacts of new development. Based upon the findings of a traffic impact study, consistent with Guiding Policy 1.26, new development will be responsible for mitigation of transportation related impacts.	**Consistent:** A traffic impact study was prepared as part of this Draft EIR. Refer to Section 3.13, Transportation, for further discussion.
	Implementing Policy 1.26	Update and adopt Transportation Impact Analysis (TIA) guidelines. Update and adopt Transportation Impact Analysis guidelines and a Multimodal LOS assessment methodology for the evaluation of potential transportation impacts resulting from new development that is specific to the City and that will supersede existing LOS standards and guidelines.	**Consistent:** A traffic impact study was prepared as part of this Draft EIR in accordance with the City of American Canyon's latest guidance for such studies. Refer to Section 3.13, Transportation, for further discussion.

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	Implementing Policy 1.35	General transit and pedestrian access. In reviewing designs of proposed developments, ensure that provision is made for access to current and future public transit services. In particular, pedestrian access to arterial and collector streets from subdivisions should not be impeded by continuous segments of sound walls.	**Consistent:** There is an existing sidewalk along the project frontage with Commerce Court. In addition, Commerce Court is suitable for bicycle travel. Furthermore, the project site is located near the Commerce Court Emergency Vehicle Access that connects to Eucalyptus Drive, which also functions as a Class I bicycle/pedestrian facility.
	Guiding Policy 2.1	Promote walking and bicycling. Promote walking and bike riding for transportation, recreation, and improvement of public and environmental health.	**Consistent:** There is an existing sidewalk along the project frontage with Commerce Court. In addition, Commerce Court is suitable for bicycle travel. Furthermore, the project site is located near the Commerce Court Emergency Vehicle Access that connects to Eucalyptus Drive, which also functions as a Class I bicycle/pedestrian facility.
	Guiding Policy 2.3	Develop a safe and efficient non-motorized circulation system. Provide safe and direct pedestrian routes and bikeways between places.	**Consistent:** There is an existing sidewalk along the project frontage with Commerce Court. In addition, Commerce Court is suitable for bicycle travel. Furthermore, the project site is located near the Commerce Court Emergency Vehicle Access that connects to Eucalyptus Drive, which also functions as a Class I bicycle/pedestrian facility. Collectively, these characteristics would promote a safe and efficient non-motorized circulation system.
	Implementing Policy 2.7	Universal design. Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts.	**Consistent:** There is an existing sidewalk along the project frontage with Commerce Court. In addition, Commerce Court is suitable for bicycle travel. Furthermore, the project site is located near the Commerce Court Emergency Vehicle Access that connects to Eucalyptus Drive, which also functions as a Class I bicycle/pedestrian facility. The proposed project's internal pedestrian facilities would also comply with the ADA.

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	Implementing Policy 2.18	Pedestrian connections to employment destinations. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade-separated crossings over State Route 29.	**Consistent:** The proposed project's internal pedestrian facilities would connect to the Commerce Court sidewalk and, thus, advance the policy of providing pedestrian connections to employment destinations. The City's design review process would ensure consistency with this policy.
	Guiding Policy 4.1	Promote safe and efficient goods movement. Promote the safe and efficient movement of goods via truck and rail with minimum disruptions to residential areas.	**Consistent:** The project site has convenient access to SR-12 and SR-29. This is consistent with the policy of promoting safe and efficient goods movement. Refer to Section 3.13, Transportation for further discussion.
	Guiding Policy 4.2	Promote railroad safety. Minimize the safety problems associated with the railroad, including the construction and maintenance of at-grade crossings and the physical barrier effect of the track alignment on the City.	**Consistent:** Both existing railroad grade crossings on Green Island Road would receive safety improvements as part of a City-sponsored project. Although these improvements are independent of the proposed project, they would promote railroad safety on a route used by project-related trips.
	Guiding Policy 4.4	New truck route designation. All highways, arterials, and industrial streets shall be designated truck routes.	**Consistent:** The project site would be accessed via Commerce Court which is a designated truck route.
	Guiding Policy 4.6	Location of industrial development. Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements.	**Consistent:** The project site's land use would be consistent with other adjacent land uses. There are no residential adjacent to this area, nor would project-related truck routes travel through such areas.
	Guiding Policy 4.7	Secure truck parking. Encourage high-security off-street parking for tractor-trailer rigs in industrial designated areas.	**Consistent:** The proposed project would provide 134 car and 23 truck parking spaces. Five would be designated handicap access and one would be compact. The project site would include nighttime lighting. As such, the proposed project would provide secure truck parking.

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Utilities	Goal 5	It shall be the goal of American Canyon to establish and maintain a secure water supply and treatment, distribution and storage system to serve the land uses proposed under the General Plan.	**Consistent:** This Draft EIR evaluates project impacts on water supply and distribution and concludes that adequate supplies and infrastructure are available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Objective 5.2	Obtain additional water supply sources as necessary to supplement the [North Bay Aqueduct] supply and serve anticipated growth under the proposed land use plan.	**Consistent:** The City of American Canyon had adequate water supplies available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 5.2.4	Promote water conservation and wastewater reclamation as additional water supply sources.	**Consistent:** The proposed project would employ drought tolerant landscaping and be served with recycled water for nonpotable irrigation purposes. This is consistent with the policy of promoting water conservation and wastewater reclamation. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 5.2.5	In the event that sufficient capacity is not available to serve a proposed project, the City shall not approve the project until additional capacity or adequate mitigation is provided.	**Consistent:** The City of American Canyon has adequate water supplies available to serve the project. In addition, the proposed project would comply with the City's Zero Water Footprint Policy, which requires new development projects to secure offsets to ensure that existing customers do not experience a loss in reliability or an increase in rates.
	Objective 5.4	Establish a water management program to promote water conservation and wastewater reuse.	**Consistent:** The proposed project would employ drought tolerant landscaping and be served with recycled water for nonpotable irrigation purposes. This is consistent with the objective of promoting water conservation and wastewater reuse. Refer to Section 3.14, Utilities and Service Systems, for further discussion.

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	Policy 5.4.1	Promote the use of water-saving plumbing fixtures and water-saving landscaping.	**Consistent:** The proposed project would employ drought tolerant landscaping. The proposed project's plumbing fixtures would comply with the water conservation standards set forth in the latest adopted edition of the California Plumbing Code. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Goal 5B	It shall be the goal of American Canyon to develop and maintain a water treatment and distribution system that meets generally accepted operational criteria for service to provide daily and peak demands, including fire flow requirements, to meet present and future needs in a timely and cost effective manner.	**Consistent:** This Draft EIR evaluates project impacts on water supply and distribution and concludes that adequate supplies and infrastructure are available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Objective 5.7	Expand water treatment, storage and distribution facilities as necessary to meet increasing water demands.	**Consistent:** The existing water distribution lines in Commerce Court have adequate capacity to serve the proposed project. The City of American Canyon also has adequate water supplies available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 5.7.3	Require adequate water supply, distribution, storage, and treatment facilities to be operational prior to the issuance of certificates of occupancy.	**Consistent:** The existing water distribution lines in Commerce Court have adequate capacity to serve the proposed project. The City of American Canyon has adequate water supplies available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 5.7.4	Require all new development to be served from an approved domestic water supply.	**Consistent:** The proposed project would be served with potable water provided by the City of American Canyon, which is an approved domestic water supply.
	Policy 5.7.5	Monitor the demands on the water system and, as necessary, manage	**Consistent:** This Draft EIR evaluates project impacts on water supply

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		development to mitigate impacts and/or facilitate improvements.	and distribution and concludes that adequate supplies and infrastructure are available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Objective 5.8	Ensure that the costs of improvements to the water supply, distribution, storage, and treatment system are borne by those who benefit.	**Consistent:** The project applicant would construct or provide the full cost of on-site water infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.8.1	Require improvements to the existing water supply, distribution, storage, and treatment facilities necessitated by a new development proposal be borne by the project proponent (in proportion to benefit); either through the payment of fees, or by the actual construction of the improvements.	**Consistent:** The project applicant would construct or provide the full cost of on-site water infrastructure and off-site improvements necessary to serve the proposed project.
	Goal 5C	Establish and maintain adequate planning, construction, maintenance, and funding for storm drain and flood control facilities to support permitted land uses and preserve the public safety; upgrading existing deficient systems and expanding, where necessary, to accommodate new permitted development and to protect existing development in the City. Pursue public funding sources (i.e., grants) to reduce fiscal impacts of implementation to the City.	**Consistent:** The proposed project would install an on-site stormwater drainage system that would include storm drain pipes and a bioretention pond. The system would be designed to accommodate peak storm event runoff in accordance with the City's latest adopted standards. This is consistent with the goal of providing adequate storm drain and flood control facilities to support permitted land uses and preserve the public safety. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Objective 5.10	Ensure that adequate storm drain and flood control facilities are provided and properly maintained to protect life and property from flood hazards.	**Consistent:** The proposed project would install an on-site stormwater drainage system that would be designed to accommodate peak storm event runoff in accordance with the City's latest adopted standards. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.

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	Policy 5.10.1	Provide for the maintenance of existing public storm drains and flood control facilities and for the construction of upgraded and expanded storm drain and flood control facilities, where necessary, to protect existing and accommodate new permitted development.	**Consistent:** The project applicant would install on-site storm drainage infrastructure and be responsible for its maintenance and upkeep. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Policy 5.10.3	Require that adequate storm drain and flood control facilities be constructed coincident with new development.	**Consistent:** The project applicant would be required to install on-site storm drainage infrastructure prior to issuance of the certificate of occupancy. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Policy 5.10.4	Limit new development, when necessary, until adequate flood control facilities are constructed to protect existing development and accommodate the new development runoff, or until mitigation is provided.	**Consistent:** The project applicant would be required to install on-site storm drainage infrastructure prior to issuance of the certificate of occupancy. This is consistent with the policy of requiring adequate flood control facilities to be constructed in conjunction with new development. Refer to Chapter 2, Project Description, for further discussion.
	Objective 5.11	Ensure that the costs of improvements to the storm drain and flood control system are borne by those who benefit.	**Consistent:** The project applicant would construct or provide the full cost of on-site storm drainage infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.11.1	Require improvements to existing storm drain and flood control facilities necessitated by a new development proposal be borne by the project proponent; either through the payment of fees, or by the actual construction of the improvements in accordance with State Nexus Legislation.	**Consistent:** The project applicant would construct or provide the full cost of on-site storm drainage infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.11.3	Collect adequate amounts of fees and charges to fund the operation/maintenance of existing facilities and to construct new facilities.	**Consistent:** The project applicant would provide all required storm drainage fees to the City of American Canyon.
	Goal 5D	Maintain the quality of surface and subsurface water resources within	**Consistent:** As required by applicable laws and regulations, the

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		the City of American Canyon and its Planning Area.	proposed project would implement stormwater quality measures and practices to maintain the quality of surface and subsurface water resources.
	Objective 5.12	Enhance runoff water quality upstream of points of discharge to channelized drainage courses.	**Consistent:** As required by applicable laws and regulations, the proposed project would implement stormwater quality measures and practices that would enhance runoff water quality prior to discharge in downstream waterways. Refer to Section 3.9, Hydrology and Water Quality for further discussion.
	Policy 5.12.1	Capitalize on opportunities to reduce pollutant loading through passive treatment systems such as vegetated filter strips, grass swales, and infiltration/ sedimentation areas in suitable open space areas, and incorporated into landscaping adjacent to parking lots and streets.	**Consistent:** Passive treatment systems would be incorporated into the proposed project's storm drainage system where appropriate. Refer to Section 3.9, Hydrology and Water Quality for further discussion.
	Policy 5.12.2	Incorporate features in new drainage detention facilities which enhance the water quality of discharges from the facility.	**Consistent:** The proposed project's storm drainage system would include storm drain pipes and a bioretention pond, which would serve to enhance the water quality of discharges from the facility through percolation of pollutants into the soil. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Policy 5.12.3	Minimize impervious area that is directly connected to piped or channelized drainage systems in new development.	**Consistent:** The two, on-site isolated wetlands would be preserved. This would be consistent with the policy of minimizing impervious area that is directly connected to piped or channelized drainage systems in new development. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Objective 5.13	Prevent degradation of surface water quality due to construction activities and industrial operations.	**Consistent**: As required by applicable laws and regulations, the proposed project would implement construction and operation

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			stormwater pollution prevention measures to prevent degradation of surface water quality. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Policy 5.13.1	Require that development activities comply with the State General Storm Water Permit For Construction Activities with measures that protect surface water quality to the maximum extent practicable.	**Consistent:** The proposed project's construction and operation stormwater pollution prevention measures would comply with the applicable stormwater permits. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Goal 5E	It shall be the goal of the City of American Canyon to establish and maintain adequate planning, construction, maintenance, and funding for wastewater collection and treatment facilities to support land uses; upgrading existing deficient systems, and expanding, where necessary, in the City's service area.	**Consistent:** This Draft EIR evaluates project impacts on wastewater collection and treatment and concludes that adequate capacity is available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Objective 5.14	Provide a system of wastewater collection and treatment facilities which will adequately convey and treat wastewater generated by existing and future development in the City's service area.	**Consistent:** Aside from laterals to serve proposed buildings, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in place prior to the issuance of a certificate of occupancy. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Policy 5.14.2	Provide for the construction of upgraded and expanded wastewater collection and treatment improvements to support existing and new development.	**Consistent:** The proposed project would connect to an existing sewer line located within Commerce Court. Aside from laterals to serve proposed buildings, no other wastewater upgrades would be required. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.

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	Policy 5.14.4	Require new development to connect to a master planned sanitary sewer system. Where construction of master planned facilities is not feasible, and where the future construction of master planned faculties will not be jeopardized, the City Council may permit the construction of interim faculties sufficient to serve the present and short-term future needs.	**Consistent:** The proposed project would be served with sanitary sewer service provided by the City of American Canyon. The proposed project would connect to an existing sewer line located within Commerce Court; no interim facilities would be necessary. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Policy 5.14.5	Require all new development to secure sewer capacity rights prior to or at the time building permits are issued.	**Consistent:** The City of American Canyon has indicated that the proposed project would be served with adequate sewer capacity. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Objective 5.15	Ensure that wastewater collection and treatment facilities are upgraded and installed in a timely manner to meet usage requirements and maximize cost efficiency.	**Consistent:** Aside from laterals to serve the proposed building, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in place prior to the issuance of a certificate of occupancy. Refer to Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Policy 5.15.1	Require that wastewater collection and treatment facilities be installed and available for use prior to the issuance of a certificate of occupancy.	**Consistent:** Aside from laterals to serve the proposed building, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in place prior to the issuance of a certificate of occupancy. Refer to Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Objective 5.16	Ensure that the costs of infrastructure improvements are borne by those who benefit.	**Consistent:** The project applicant would construct or provide the full cost of on-site sewer infrastructure and off-site improvements

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			necessary to serve the proposed project and would be subject to City fee programs.
	Policy 5.16.1	Require that the cost for improvements to the existing wastewater collection and treatment facilities necessitated by a new development proposal be borne by the project proponent in proportion to benefit; either through the payment of fees, or by the actual construction of the improvements.	**Consistent:** The project applicant would construct or provide the full cost of on-site sewer infrastructure and off-site improvements necessary to serve the proposed project and would be subject to City fee programs.
Public Services and Facilities	Goal 6A	Maintain a high level of fire protection and emergency services to City/District businesses and residences.	**Consistent:** This Draft EIR evaluates project impacts on the American Canyon Fire Protection District and concludes that adequate levels of service can be provided. Refer to Section 3.12, Public Services, for further discussion.
	Objective 6.3	Ensure that the Fire District's facility, manpower and equipment needs keep pace with the City's growth.	**Consistent:** This Draft EIR evaluates project impacts on the American Canyon Fire Protection District and concludes that adequate levels of service can be provided. Refer to Section 3.12, Public Services, for further discussion.
	Policy 6.3.1	Require that City planning staff work closely with Fire District officials to ensure that fire facilities and personnel are expanded commensurably to serve the needs of the City's growing population and development base.	**Consistent:** The American Canyon Fire Protection District was consulted during the preparation of this Draft EIR to determine whether the proposed project would impede its ability to provide fire protection. Refer to Section 3.12, Public Services, for further discussion.
	Policy 6.4.3	Require, through the development review process, that all structures and facilities subject to the District's jurisdiction adhere to City, State and federal regulatory standards such as the Uniform Building and Fire Codes and other applicable safety guidelines.	**Consistent:** All proposed project structures would be required to comply with the latest adopted edition of the California Fire Code.
	Goal 6B	Ensure a high level of police protection for the City's residents, businesses and visitors.	**Consistent:** This Draft EIR evaluates project impacts on the American Canyon Police Department and

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			concludes that no new or expanded police facilities would be required. Refer to Section 3.12, Public Services, for further discussion.
	Objective 6.7	Coordinate development activities with the Napa County Sheriff's Department or other contract agency to ensure that adequate facilities and services are maintained for the City's residents, businesses and visitors.	**Consistent:** This Draft EIR evaluates project impacts on the American Canyon Police Department and concludes that no new or expanded police facilities would be required. Refer to Section 3.12, Public Services, for further discussion.
	Policy 6.7.1	Work with the Sheriff's Department to ensure that enough personnel are added to the Department to serve the needs of a growing population and a developing City.	**Consistent:** This Draft EIR evaluates project impacts on the American Canyon Police Department and concludes that no new or expanded police facilities would be required. Refer to Section 3.12, Public Services, for further discussion.
	Objective 6.9	Increase the residents' and Sheriff's Department ability to minimize crime and improve security for all uses of public and private buildings, sites, and open spaces.	**Consistent:** The proposed project incorporates design features such as low-profile landscaping and exterior lighting to prevent and deter criminal activity.
	Policy 6.9.2	Require that landscaping in proximity to commercial, industrial, multi-family, and public structures be sited to allow for security surveillance.	**Consistent:** The proposed project would provide low-profile, non-obtrusive landscaping to allow for adequate security surveillance. Refer to Chapter 2, Project Description, for discussion of the proposed project's landscaping.
	Policy 6.9.3	Require the incorporation of lighting which provides adequate exterior illumination to facilitate security surveillance around commercial, industrial, multi-family, and public structures.	**Consistent:** The proposed project would provide exterior lighting that would provide adequate illumination.
Natural and Historic/ Cultural Resources	Goal 8	Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.	**Consistent:** This Draft EIR evaluates the proposed project's potential impacts on biological resources and requires mitigation where necessary to reduce impacts to a level of less than significant. Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.1	Maintain data and information regarding areas of significant biological	**Consistent:** This Draft EIR's evaluation of potential impacts on

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		value within the Planning Area to facilitate resource conservation and the appropriate management of development.	biological resources included review of relevant databases of biological information and field surveys of the project site. The findings thereof were used in developing appropriate mitigation for project impacts. This is consistent with the objective of using best available information to facilitate resource conservation. Refer to Section 3.3, Biological Resources, for further discussion.
	Policy 8.1.1	Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.	**Consistent:** This Draft EIR's evaluation of potential impacts on biological resources included review of relevant databases of biological information and field surveys of the project site. The findings thereof were used in developing appropriate mitigation for project impacts. This is consistent with the policy of using the best available information to evaluate impacts on biological resources. Refer to Section 3.3, Biological Resources, for further discussion.
	Policy 8.1.4	Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.	**Consistent:** This Draft EIR evaluates the proposed project's potential impacts on biological resources and requires mitigation where necessary to reduce impacts to a level of less than significant. Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.2	Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.	**Consistent:** The proposed project site includes two isolated wetlands that would be preserved. This is consistent with the objective of balancing the preservation of natural habitat areas with new development.
	Policy 8.2.1	Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats or with areas potentially occupied by vernal pools	**Consistent:** The project site contains two isolated wetlands. This Draft EIR includes biological and wetland analysis conducted by FCS, a biological consulting firm.

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	No.	Text	
		(see Figure 8-2) shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site. In instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.	Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.3	Protect natural drainages and riparian corridors within the American Canyon Planning Area.	**Consistent:** The proposed project avoids any impacts to North Slough, which is located west of the project site. The on-site wetlands would be preserved. This is consistent with the objective of protecting natural drainages and riparian corridors.
	Policy 8.3.1	Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards: a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones. b. Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g." c. Where riparian corridors are retained, they shall be protected	**Consistent:** The proposed project is designed to preserve the two isolated wetlands. The proposed project would be required to obtain approvals from United States Army Corp of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) and adhere to all provisions of those permits. For these reasons, the proposed project is consistent with the provisions of this policy.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		by an adequate buffer with a minimum 100-foot protection zone from the edge of the tree, shrub, or herb canopy (see Policy 8.3.2). d. Development shall incorporate habitat linkages (wildlife corridors) to adjacent open spaces, where appropriate and feasible. e. Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment. f. Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible. g. Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats. h. Future development shall mitigate unavoidable adverse impacts to waters of the United States, wetlands and riparian habitats (pursuant to the Federal Clean Water Act and the California Fish and Game Code, Section 1600 *et seq*.) by replacement on an in-kind basis. Furthermore, replacement shall be based on a ratio determined by the California Department of Fish and Wildlife and/or United States Army Corp of Engineers in order to account for the potentially diminished habitat values of replacement habitat. Such replacement should occur on the original development site, whenever possible. Alternatively, replacement can be effected, subject to State and federal regulatory approval, by creation or restoration of replacement habitats elsewhere (off-site but preferably within the City's Planning Area), protected in perpetuity by provision for an	

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		appropriate conservation easement or dedication.	
	Policy 8.3.2	Prohibit development and grading that alters the biological integrity of the Riparian Corridors as depicted on the Biological Habitats Map, unless no feasible alternative exists or the damaged habitat is replaced with habitat of equivalent value. Development that is permitted within Riparian Corridors shall: a. minimize removal of vegetation, erosion, sedimentation and runoff by appropriate protection or vegetation and landscape; b. provide for sufficient passage of native and anadromous fish; c. minimize wastewater discharges and entrapment; d. prevent ground water depletion or substantial interference with surface and subsurface flows; e. provide for natural vegetation buffers; f. minimize the channelization of streams and other watercourses; g. provide for the enhancement of riparian corridors.	**Consistent:** The proposed project avoids any impacts to North Slough, which is located west of the project site.
	Policy 8.3.3	Permit only the following uses within retained Riparian Corridors: a. education and research, excluding buildings and other structures; b. passive (non-motorized) recreation; c. trails and scenic overlooks on public land(s) if located outside of undeveloped buffer zones; d. fish and wildlife management activities; e. necessary water supply projects; f. resource consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code; g. flood control projects where no other methods are available to protect the public safety;	**Consistent:** The proposed project avoids any impacts to North Slough, which is located west of the project site.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		h. bridges when supports are not in significant conflict with riparian resources; and i. underground utilities.	
	Policy 8.3.5	Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.	**Consistent:** The proposed project avoids any impacts to North Slough, which is located west of the project site.
	Policy 8.4.2	Preserve, where possible, the habitat of several in-fact endangered species, including those shown on Figure 8-2 and listed in Table 8-1, as well as those that may be considered by the City in the future.	**Consistent:** The proposed project preserves the two isolated wetlands on the project site.
Geology	Goal 9	Reduce the potential level of death, injury, property damage, economic and social dislocation (i.e., business closures and homelessness due to structural damage) and disruption of vital services that could result from earthquake damage.	**Consistent:** Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC to reduce the potential level of death, injury, property damage, and economic and social dislocation to acceptable levels. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Goal 9C	Ensure that seismic, geologic, and soils hazards that might affect areas designated for human use or habitation are properly mitigated or avoided entirely prior to development.	**Consistent:** Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC to ensure that seismic hazards are properly mitigated or avoided entirely prior to development. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.1	Protect life, ensure public safety, substantially reduce the damage to and ensure the orderly evacuation of building occupants following a seismic event.	**Consistent:** Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC to protect life, ensure public safety, and substantially reduce damage to structures. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 9.1.1	Promote the collection of relevant data on fault location and the history of fault displacement as a basis for future refinement of fault zone policies and development standards. Particular attention should be paid to the West Napa Fault that is generally depicted in Figure 9-1 and should be evaluated in conjunction with proposed development. Based on predevelopment studies, limitations on new development shall be imposed if necessary in the identified fault areas.	**Consistent:** The project site is not located within the West Napa Fault zone. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.1.2	Implement mandatory development restrictions and investigation requirements (by the State, under the Alquist-Priolo Act, or by the City) on that portion of the West Napa Fault zone located within American Canyon and its Planning Area.	**Consistent:** The project site is not located within the West Napa Fault zone. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.2	Protect health and life safety, and reduce the level of potential property damage from the adverse effects of strong seismic ground shaking by implementing effective, state-of-the-art standards for seismic design of structures in the City.	**Consistent:** Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC to ensure that strong seismic ground shaking hazards are properly mitigated. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.2.1	Require that development be designed in accordance with seismic requirements of the Uniform Building Code.	**Consistent:** Implementation of the proposed project would require compulsory compliance with of the latest adopted edition of the CBC seismic design requirements. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.3	Protect life and essential lifelines (e.g., gas, electricity, water), reduce the risk of property damage due to liquefaction, and promote the collection of more complete information on liquefaction susceptibility throughout the Planning Area.	**Consistent:** The risk of liquefaction at the project site is low. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.3.1	Avoid development in areas with known liquefaction risk. If these	**Consistent:** The risk of liquefaction at the project site is low. Refer to

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		areas cannot be avoided, require a qualified geologist, hydrologist, or civil engineer to determine the liquefaction potential at proposed development sites.	Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.6	Minimize to the greatest extent feasible the loss of life, serious injuries, and major social and economic disruption caused by the collapse of, or severe damage to, vulnerable structures (e.g., buildings, bridges, water storage facilities, key railroad components) resulting from an earthquake.	**Consistent:** Project structures and infrastructure would be designed and constructed in accordance with the latest adopted edition of the CBC's seismic safety requirements. Adherence to these standards would minimize potential exposure to disruptions associated with earthquakes. Refer to Section 3.6, Geology, Soils, and Seismicity for further discussion.
Flood Hazards	Goal 10	Protect the lives and property of American Canyon's residents and visitors from flood hazards.	**Consistent:** The project site is located outside of a 100-year flood hazard area. Therefore, the proposed project's uses (including employees) would not be exposed to flood hazards. Refer to Section 3.9, Hydrology and Water Quality.
	Objective 10.1	Design both new development and redevelopment projects in a manner that minimizes hazards associated with flooding.	**Consistent:** The project site is located outside of a 100-year flood hazard area. Therefore, the proposed project's uses (including employees) would not be exposed to flood hazards. Refer to Section 3.9, Hydrology and Water Quality.
	Policy 10.1.1	Retain and enhance natural watercourses, including perennial and intermittent streams, as the City's primary flood control channels whenever feasible.	**Consistent:** The proposed project avoids any impacts to North Slough, which is located west of the project site.
	Policy 10.1.4	Ensure that stormwater drainage is designed for peak flow conditions.	**Consistent:** The proposed project's storm drainage system would be designed in accordance with the City's peak flow design standards. Refer to Section 3.9, Hydrology and Water Quality.
	Policy 10.1.5	Prohibit the development of structures designed for human occupancy within the 100-year floodplain, unless flood hazards are adequately mitigated. Mitigation can be accomplished by building foundations a minimum of	**Consistent:** The project site is located outside of a 100-year flood hazard area. Therefore, the proposed warehouse would not be located within the 100-year

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		one (1) foot above the 100-year flood elevation, or by other means approved by the City Engineer (see Figure 10-1).	floodplain. Refer to Section 3.9, Hydrology and Water Quality.
Noise	Goal 11	Ensure that American Canyon's existing and future residents, employees and employers, as well as visitors to the City, are protected from the adverse human health and environmental impacts of excessive noise levels created by stationary and ambient (intrusive) noise sources and conditions. Take all necessary and appropriate action to avoid or mitigate the detrimental effects of such excessive noise on the community.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts. No mitigation is necessary to achieve acceptable noise levels. Refer to Section 3.11, Noise, for further discussion.
	Objective 11.1	Control both ambient and stationary (intrusive) noise conditions and impacts that may occur in American Canyon. Maintain base line information regarding ambient and stationary noise sources within the community.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts including ambient and stationary noise sources. Refer to Section 3.11, Noise, for further discussion.
	Policy 11.1.1	Promote noise compatible land use relationships by implementing the noise standards identified in Figure 11-2, to be utilized for design purposes in new development and for establishing a program to attenuate existing noise problems.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts and assesses noise levels against the standards identified in Figure 11-2 to determine whether significant impacts would occur. No mitigation is necessary to achieve acceptable noise levels. Refer to Section 3.11, Noise, for further discussion.
	Policy 11.1.2	Monitor and update available data regarding the community's ambient and stationary noise levels.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts including the analysis of ambient and stationary noise levels. Refer to Section 3.11, Noise, for further discussion.
	Objective 11.2	Protect residents, employees, and visitors to the community from excessive noise exposure. If possible, mitigate the adverse impacts of existing or unavoidable excessive noise on these same groups.	**Consistent:** This Draft EIR includes an evaluation of project-related noise impacts. No mitigation is necessary to achieve acceptable noise levels. Refer to Section 3.11, Noise, for further discussion.
	Policy 11.2.1	Require that new development for locations in which the exterior or interior noise levels indicated in Figure 11-2 are likely to be exceeded,	**Consistent:** The project site is not located in any "Sensitive Noise Areas" depicted on Figure 11-2. Regardless, a noise analysis was

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		submit a noise attenuation study prepared by a qualified acoustical engineer in order to determine appropriate mitigation measures.	prepared for the proposed project and no mitigation is identified as necessary. Refer to Section 3.11, Noise, for further discussion.
	Policy 11.2.4	Require that new industrial, commercial and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior Ldn of 65 dB(A) in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. Additionally, require that potentially significant noise generators, including uses such as night clubs that cause sporadic noise intensities, submit noise analyses prepared by an acoustical expert that include specific recommendations for mitigation when: a) the project is located in close proximity to noise-sensitive land uses or land that is planned for noise-sensitive land uses, or b) the proposed noise source could violate the noise provisions of the General Plan or City Noise ordinance.	**Consistent:** Noise-sensitive land uses near the project site were identified and analyzed as a part of this Draft EIR. The proposed project would not have the potential to increase ambient noise levels above 65 dBA L_{dn}. Refer to Section 3.11, Noise for further discussion.
	Objective 11.3	Minimize the adverse impacts of traffic-generated noise on residential and other "noise-sensitive" uses as depicted on Figure 11-5.	**Consistent:** Trucks traveling to and from the project site would use Green Island Road to reach SR-29 and SR-12, which would avoid areas designated for residential use by the General Plan. Refer to Section 3.11, Noise for further discussion.
	Policy 11.3.1	Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design by employing the following strategies: a. Consider the impacts of truck routes, the effects of a variety of truck traffic, and future motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned. b. Mitigate traffic volumes and vehicle speed through residential neighborhoods.	**Consistent:** Trucks would use Green Island Road to reach SR-29 and SR-12 to reach the project site. This routing would avoid residential areas and, therefore, would be consistent with this policy. Refer to Section 3.8, Hazards and Hazardous Materials and Section 3.11, Noise, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		c. Work closely with the State of California Department of Transportation (Caltrans) in the early stages of highway improvements and design modifications to ensure that proper consideration is given to potential noise impacts on the City.	
	Policy 11.3.2	Require that all new nonresidential development design and configure on-site ingress and egress points to divert traffic (and its resultant noise) away from "noise-sensitive" land uses to the greatest degree practicable.	**Consistent:** Trucks traveling to and from the project site would use Green Island Road to reach SR-29 and SR-12, which would avoid areas designated for residential use by the General Plan as well as nearby sensitive receptors. Refer to Section 3.11, Noise for further discussion.
	Policy 11.4.1	Restrict the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses (see Figure 11-5).	**Consistent:** The project site is located outside the 55 dBA CNEL contour of Napa County Airport. Regardless, the proposed project consists of industrial uses which are "normally acceptable" land use activities within this noise contour. Refer to Section 3.8, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Policy 11.4.2	Require that development in the vicinity of Napa Airport comply with the noise standards contained in the Airport Land Use Compatibility Plan (ALUCP).	**Consistent:** The Napa County ALUCP identifies aviation noise levels between 60 and 65 dBA CNEL as "normally acceptable" for warehouse uses. As such, the proposed project would be consistent with the ALUCP noise standards. Refer to Section 3.9, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Objective 11.5	Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or "noise-sensitive" uses.	**Consistent:** The project site is in an area that contains noise-tolerant nonresidential uses. As such, the proposed project would not have the potential to cause "spillover" noise into adjoining residential neighborhoods or "noise-sensitive" uses. Refer to Section 3.11, Noise, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Objective 11.7	Minimize the impacts of construction noise on adjacent uses.	**Consistent:** The project site is in an area that contains noise-tolerant nonresidential uses. As such, surrounding land uses would not experience intrusive noise levels during project-related construction activities. Refer to Section 3.11, Noise, for further discussion.
Source: City of American Canyon 2023; FirstCarbon Solutions (FCS) 2023.			

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Municipal Code Consistency

Impact LU-2: **The proposed project would not conflict with the applicable provisions of the American Canyon Municipal Code.**

Impact Analysis

The proposed project would develop a 219,834-square-foot wine warehouse on the project site.

Per Municipal Code Section 19.15.020, winery related uses, including such activities as bottling, storage, logistics, distribution, wine packing and wine-related services, are conditionally permitted within the Recreation zone subject to approval of a use permit by the planning commission. Therefore, the project's proposed end uses would be consistent with the types of conditionally permitted uses set forth in the Zoning Ordinance for the Recreation zoning district.

The proposed project would also be consistent with the Municipal Code's applicable development standards for the Recreation zone as outlined in Table 3.10-3.

Table 3.10-3: Development Standards Consistency

Development Standard	Allowable	Proposed Project
Maximum Site Coverage[1,2]	50%	49.6 (0.496 FAR)
Maximum Building Height	35 Feet	35 Feet
Minimum Building Setback from Local Streets	15 feet	63 Feet
Minimum Building Setback–Interior Nonresidential–Side	35 Feet	65 Feet (minimum)
Minimum Building Setback–Interior Nonresidential–Rear	35 Feet	88 Feet (minimum)

Development Standard	Allowable	Proposed Project
Notes: [1] Outdoor winery related equipment such as tanks and crushing equipment customarily located outside of buildings are not included within the lot coverage standards. Note that no crushing is proposed. [2] Outdoor winery related equipment shall be screened from view of public streets, parks and trails with landscaping, opaque fence or wall. Note that no outdoor winery equipment is proposed. Source: FirstCarbon Solutions (FCS) 2023. City of American Canyon Municipal Code 2023.		

Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Airport Land Use Compatibility Plan Consistency

Impact LU-3: The proposed project would not conflict with the applicable provisions of the Napa County Airport Land Use Compatibility Plan.

Impact Analysis

The project site falls within the Napa County ALUCP Area.

The ALUCP establishes policies and compatibility zones addressing four key focus areas: noise, safety, airspace protection, and overflight. The ALUCP defines five compatibility zones that address the key focus areas in a composite manner:

- Zone A encompasses the Runway Protection Zones and areas lateral to the runway.
- Zone B includes the approach/departure zone where aircraft will be below 100 feet above ground.
- Zone C is defined by the extended approach/departure zone where aircraft will be below 300 feet above ground level.
- Zone D encompasses the common traffic pattern. These areas are routinely overflown by aircraft.
- Zone E includes the other airport environs and defines the Airport's influence area and ALUC's planning area.

The project site falls entirely within Zone D. Zone D is characterized by moderate risk, frequent noise intrusion and routine overflights below 1,000 feet above ground level. The ALUCP indicates that warehousing, low intensity light industrial uses and office uses are normally acceptable uses. ALUCP Table 3-2, Airport Vicinity Land Use Compatibility Criteria, establishes maximum densities for indoor and outdoor uses. Within Zone D, indoor uses are limited to no more than 100 people per net acre. Uses with an outdoor component can have up to 150 per net acre. The ALUCP does not limit the number of people that can be clustered in any one acre of the parcel within Zone D. Net acreage is

defined as the total site area inclusive of parking areas and landscaping, less the area dedicated for streets.

Additionally, the ALUCP prohibits residential uses and uses posing hazards to flight. Hazards to flight include objects that penetrate FAR Part 77 airspace surfaces, uses that would attract large numbers of birds, and uses that would create smoke, glare, distracting lights, or electronic interference.

The analysis that follows assesses the ALUCP density and airspace criteria that relate to the project site.

Maximum Density

The proposed project includes a single distribution warehouse for winery related functions. This land use is generally consistent with ALUCP criteria, provided that the uses do not attract large concentrations of people.

The ALUCP sets forth maximum density criterion of 100 people per net acre for Zone D. The ALUCP identifies three methods for calculating density: (1) parking ordinance; (2) maximum occupancy; and (3) other methodologies in cases where density cannot be reasonably estimated based upon parking or square footage. The ALUCP identifies the parking ordinance methodology as the preferred method for calculating density.

A total of 134 car and 23 truck parking spaces would be provided on-site. It is anticipated that approximately 35 full-time employees and up to 20 part-time employees would be on-site at any given time. The proposed uses would generate client or user trips and it is estimated that such trips would be limited to 2 or 4 occurrences per day. Therefore, an anticipated maximum persons on-site would be approximately 59 (employees plus maximum estimated client or user trips), which is far less than the density criterion of 100 people per net acre for Zone D. Conversely, if the parking space totals were used to estimate on-site density, the anticipated maximum persons on-site would be approximately 151, also far less than the density criterion of 100 people per net acre for Zone D. Furthermore, an Avigation and Hazard Easement Deed extending over the whole of the property was executed by the landowner and recorded by Napa County on July 26, 2019. As such, the proposed project would be consistent with maximum allowable densities in Zone D. Impacts would be less than significant.

Wildlife Attractants

The two isolated wetlands would be preserved. Depending on their characteristics, wetlands can be avian attractants. Avian species are considered potential hazards to aviation activities due to the potential for bird strikes.

The isolated wetlands are small in comparison to adjacent available wetland areas and do not currently attract significant amounts of avian species. Upon project completion, the wetlands would be surrounded by pervious surfaces including buildings, parking areas, and drive aisles. These features would be expected to deter avian activity.

As such, the proposed project would not increase the avian attractant attributes of the project site or nearby areas under the Napa County Airport flight path compared to existing conditions. Impacts would be less than significant.

Light, Glare, Dust, Steam, and Other Aviation Hazards

The ALUCP Policy 3.3.5 states the following:

> Policy 3.3.5: Land uses which may produce hazards to aircraft in flight shall not be permitted within any airport's planning area. Specific characteristics to be avoided include: (1) glare or distracting lights which could be mistaken for airport lights; (2) sources of dust, steam, or smoke which may impair pilot visibility; (3) sources of electrical interference with aircraft communications or navigation; and (4) any use which may attract large flocks of birds, especially landfills and certain agricultural uses.

The proposed project's end uses include warehouse and ancillary office operations, which are considered normally acceptable by the ALUCP as long as they do not create hazards. As indicated in Section 3.1, Aesthetics, the proposed project is not expected to result in significant impacts related to light and glare and would be required to abide by applicable Municipal Code Ordinances regarding light, glare and light spillage. As such, the proposed project would not create hazards to aviation. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.10.7 - Cumulative Impacts

The geographic scope of the cumulative land use analysis is the area within 1 mile of the project site. Existing development in this area is predominantly industrial uses, including the airport. Projects under construction include the Napa Logistics Park Project, which is approved for warehouse and other similar uses. Foreseeable future development in the area includes SDG Commerce 217 and the Green Island Road Widening Project.

The proposed project would be consistent with the American Canyon General Plan, American Canyon Zoning Ordinance, and the Napa County ALUCP because its proposed uses are allowed under these plans. The existing uses in the area are generally industrial and related compatible uses. Projects under consideration in the area and reasonably foreseeable future projects would also be required to be consistent with the General Plan, the City's Zoning Ordinance, and the Airport Land Use Compatibility Plan. Additionally, the proposed project and other nearby development would be and have been required to implement wildlife management plans to ensure compatibility with airport operations. Consequently, the proposed project, in conjunction with past, present, and reasonably foreseeable development, would not result in a cumulatively significant land use impact.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

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3.11 - Noise

3.11.1 - Introduction

This section describes the existing noise setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on noise modeling performed by FirstCarbon Solutions (FCS). The noise modeling output is included in this Draft Environmental Impact Report (Draft EIR) as Appendix H.

The following public comments pertaining to noise were received in response to the Notice of Preparation (NOP):

- Notes that noise levels resulting from warehouse uses, such as truck traffic and loading activities, should be analyzed in the Draft EIR.
- States that noise impacts on sensitive receptors should be addressed in the Draft EIR.
- States that the Draft EIR should analyze ways in which noise impacts could be reduced via physical, structural, and/or vegetative buffers.
- Requests that the Department of Justice Best Practices and Mitigation Measures for Warehouses[1] be incorporated into the proposed project.
- States that construction noise should be addressed in the Draft EIR.

3.11.2 - Environmental Setting

Characteristics of Noise

Noise is generally defined as unwanted or objectionable sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment. Noise effects can be caused by pitch or loudness. *Pitch* is the number of complete vibrations or cycles per second of a wave that result in the range of tone from high to low; higher-pitched sounds are louder to humans than lower-pitched sounds. *Loudness* is the intensity or amplitude of sound.

Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit, which expresses the ratio of the sound pressure level being measured to a standard reference level. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Only audible changes in existing ambient or background noise levels are considered potentially significant.

[1] California Department of Justice. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf. Accessed November 28, 2023.

The human ear is not equally sensitive to all frequencies within the audible sound spectrum, so sound pressure level measurements can be weighted to better represent frequency-based sensitivity of average healthy human hearing. One such specific "filtering" of sound is called "A-weighting." A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear. Because decibels are logarithmic units, they cannot be added or subtracted by ordinary arithmetic means. For example, if one noise source produces a noise level of 70 dB, the addition of another noise source with the same noise level would not produce 140 dB; rather, they would combine to produce a noise level of 73 dB.

Noise Descriptors

There are many ways to rate noise for various intervals, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and community noise equivalent level (CNEL) or the day-night average level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source, as well as ground absorption, atmospheric conditions (wind, temperature gradients, and humidity) and refraction, and shielding by natural and manmade features. Sound from point sources, such as an air conditioning condenser, a piece of construction equipment, or an idling truck, radiates uniformly outward as it travels away from the source in a spherical pattern.

The attenuation or sound drop-off rate is dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in noise models: soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA per each doubling of the distance

(dBA/DD) is typically observed over soft ground with landscaping, as compared with a 6 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. For line sources, such as traffic noise on a roadway, a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3 dBA/DD drop-off rate for hard-site conditions. Table 3.11-1 briefly defines these measurement descriptors and other sound terminology used in this section.

Table 3.11-1: Sound Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, can be detected by a receiving mechanism such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which represents the squared ratio of sound pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.
Equivalent Noise Level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Maximum and Minimum Noise Levels (L_{max} and L_{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-Night Level (DNL or L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m. (nighttime).
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m.
Source: Data compiled by FirstCarbon Solutions (FCS). 2023.	

Traffic Noise

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the Federal Highway Administration (FHWA) community noise assessment criteria, this change is "barely perceptible"; for reference, a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

Stationary Noise

A stationary noise producer is any entity in a fixed location that emits noise. Examples of stationary noise sources include machinery, engines, energy production, and other mechanical or powered equipment and activities such as loading and unloading or public assembly that may occur at commercial, industrial, manufacturing, or institutional facilities. Furthermore, while noise generated by the use of motor vehicles over public roads is preempted from local regulation, the use of these vehicles is considered a stationary noise source when operated on private property such as at a construction site, a truck terminal, or warehousing facility. The emitted noise from the producer can be mitigated to acceptable levels either at the source or on the adjacent property through the use of proper planning, setbacks, block walls, acoustic-rated windows, or dense landscaping or by changing the location of the noise producer.

The effects of stationary noise depend on factors such as characteristics of the equipment and operations, distance and pathway between the generator and receptor, and weather. Stationary noise sources may be regulated at the point of manufacture (e.g., equipment or engines), with limitations on the hours of operation, or with provision of intervening structures, barriers, or topography.

Construction activities are a common source of stationary noise. Construction-period noise levels are higher than background ambient noise levels but eventually cease once construction is complete. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on each construction site and, therefore, would change the noise levels as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.11-2 shows typical noise levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

Table 3.11-2: Typical Construction Equipment Maximum Noise Levels

Type of Equipment	Impact Device? (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Impact Pile Driver	Yes	95
Auger Drill Rig	No	85
Vibratory Pile Driver	No	95
Jackhammers	Yes	85
Pneumatic Tools	No	85
Pumps	No	77
Scrapers	No	85
Cranes	No	85
Portable Generators	No	82
Rollers	No	85
Bulldozers	No	85
Tractors	No	84
Front-End Loaders	No	80
Backhoe	No	80
Excavators	No	85
Graders	No	85
Air Compressors	No	80
Dump Truck	No	84
Concrete Mixer Truck	No	85
Pickup Truck	No	55

Notes:
dBA = A-weighted decibel
Source: Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.

Noise from Multiple Sources

Because sound pressure levels in decibels are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. Therefore, sound pressure levels in decibels are logarithmically added on an energy summation basis. In other words, adding a new noise source to an existing noise source, both producing noise at the same level, will not double the noise level. Instead, if the difference between two noise sources is 10 dBA or more, the louder noise source will dominate, and the resultant noise level will be equal to the noise level of the louder source. In general, if the difference between two noise sources is 0–1 dBA, the resultant noise level will be 3 dBA higher than the louder noise source, or both sources if they are equal. If the difference between two noise sources is 2–3 dBA, the resultant noise level will be 2 dBA above the louder noise source.

If the difference between two noise sources is 4–10 dBA, the resultant noise level will be 1 dBA higher than the louder noise source.

Characteristics of Vibration

Groundborne vibration consists of rapidly fluctuating motion through a solid medium, specifically the ground, which has an average motion of zero and in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The effect of groundborne vibration typically only causes a nuisance to people, but in extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels—denoted as LV—and is based on the reference quantity of 1 microinch per second. To distinguish vibration levels from noise levels, the unit is written as "VdB."

Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. When assessing annoyance from groundborne vibration, vibration is typically expressed as rms velocity in units of decibels of 1 microinch per second, with the unit written in VdB. Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. Human perception of vibration starts at levels as low as 67 VdB. Annoyance due to vibration in residential settings starts at approximately 70 VdB.

Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Construction activities, such as blasting, pile driving, and operating heavy earthmoving equipment, are common sources of groundborne vibration. Construction vibration impacts on building structures are generally assessed in terms of PPV. Typical vibration source levels from construction equipment are shown in Table 3.11-3.

Table 3.11-3: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer (small)	0.003	58
Jackhammer	0.035	79

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer (large)	0.089	87
Caisson drilling	0.089	87
Vibratory Roller (small)	0.101	88
Compactor	0.138	90
Clam Shovel Drop	0.202	94
Vibratory Roller (large)	0.210	94
Pile Driver (impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112

Notes:
PPV = peak particle velocity
rms = root mean square
VdB = velocity in decibels
Source:
Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.

The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform medium, while groundborne vibrations travel through the earth, which may contain significant geological differences. Factors that influence groundborne vibration include:

- **Vibration source:** Type of activity or equipment, such as impact or mobile, and depth of vibration source;
- **Vibration path:** Soil type, rock layers, soil layering, depth to water table, and frost depth; and
- **Vibration receiver:** Foundation type, building construction, and acoustical absorption.

Among these factors that influence groundborne vibration, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In

addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock. Vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface and can result in groundborne vibration problems at large distance from the source. Factors such as layering of the soil and depth to the water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil type, but it has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests. The vibration level (calculated below as "PPV") at a distance from a point source can generally be calculated using the vibration reference equation:

$$PPV = PPV_{ref} * (25/D)^n \text{ (in/sec)}$$

Where:

PPV_{ref} = reference measurement at 25 feet from vibration source
D = distance from equipment to the receptor
n = vibration attenuation rate through ground

According to Chapter 12 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual, an "n" value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.[2]

Existing Noise Levels

The project site is located in the City of American Canyon (City), Napa County (County), California. The project site is bounded by a eucalyptus grove, North Slough, and Napa River to the west; a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 and other industrial development to the north; Commerce Court, beyond which is a paintball recreation area within a stand of eucalyptus trees to the east; and a wine distribution warehouse known as SDG Commerce 330 to the south beyond which is wetlands Edge Park; refer to Chapter 2, Project Description, Exhibit

[2] Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment Manual. May.

2-2. Napa County Airport is located approximately 1.6 miles north of the project site. The dominant noise sources in the project vicinity are traffic on local roadways and railroad and airport activity.

Noise-Sensitive Land Uses

Noise-sensitive land uses generally consist of those uses where exposure to noise would result in adverse effects, as well as uses for which quiet is an essential element of their intended purpose. Residential dwellings are of primary concern, because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other typical noise-sensitive land uses include hospitals, convalescent facilities, hotels, schools, religious institutions, libraries, and other uses where low noise levels are essential.

3.11.3 - Regulatory Framework

Federal

Currently, no federal noise standards regulate environmental noise associated with temporary construction activities or the long-term operations of development projects. As such, both temporary and long-term noise impacts result from the proposed project would be largely regulated or otherwise evaluated by State and local agency standards designed to protect public well-being and health.

Federal Transit Administration Standards and Guidelines

Though not regulatory in nature, vibration impact criteria for buildings and other structures have been established by the FTA, as building and structural damages are generally the foremost concern when evaluating the impacts of construction-related vibrations. For the evaluation of the proposed project's construction-related vibration impacts, the following FTA vibration impact criteria, shown in Table 3.11-4, are used given the absence of applicable federal, State, and City standards specific to temporary construction activities and their potential to result in building and structural damages.[3]

Table 3.11-4: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced-Concrete, Steel or Timber (no plaster)	0.5	102
II. Engineered Concrete and Masonry (no plaster)	0.3	98
III. Non-engineered Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90

Notes:
PPV = peak particle velocity
VdB = velocity in decibels
Source:
Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

[3] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual.

State

California General Plan Guidelines

The State of California's General Plan Guidelines propose county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. The State's suggested compatibility considerations between various land uses and exterior noise levels are not regulatory in nature but are recommendations intended to aid communities in determining their own noise-acceptability standards.

Local

Since the State and federal government have preempted the setting of standards for noise levels that can be emitted by transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning. The applicable sections of the City of American Canyon General Plan (General Plan) and City of American Canyon Municipal Code (Municipal Code) are stated below.

City of American Canyon

General Plan

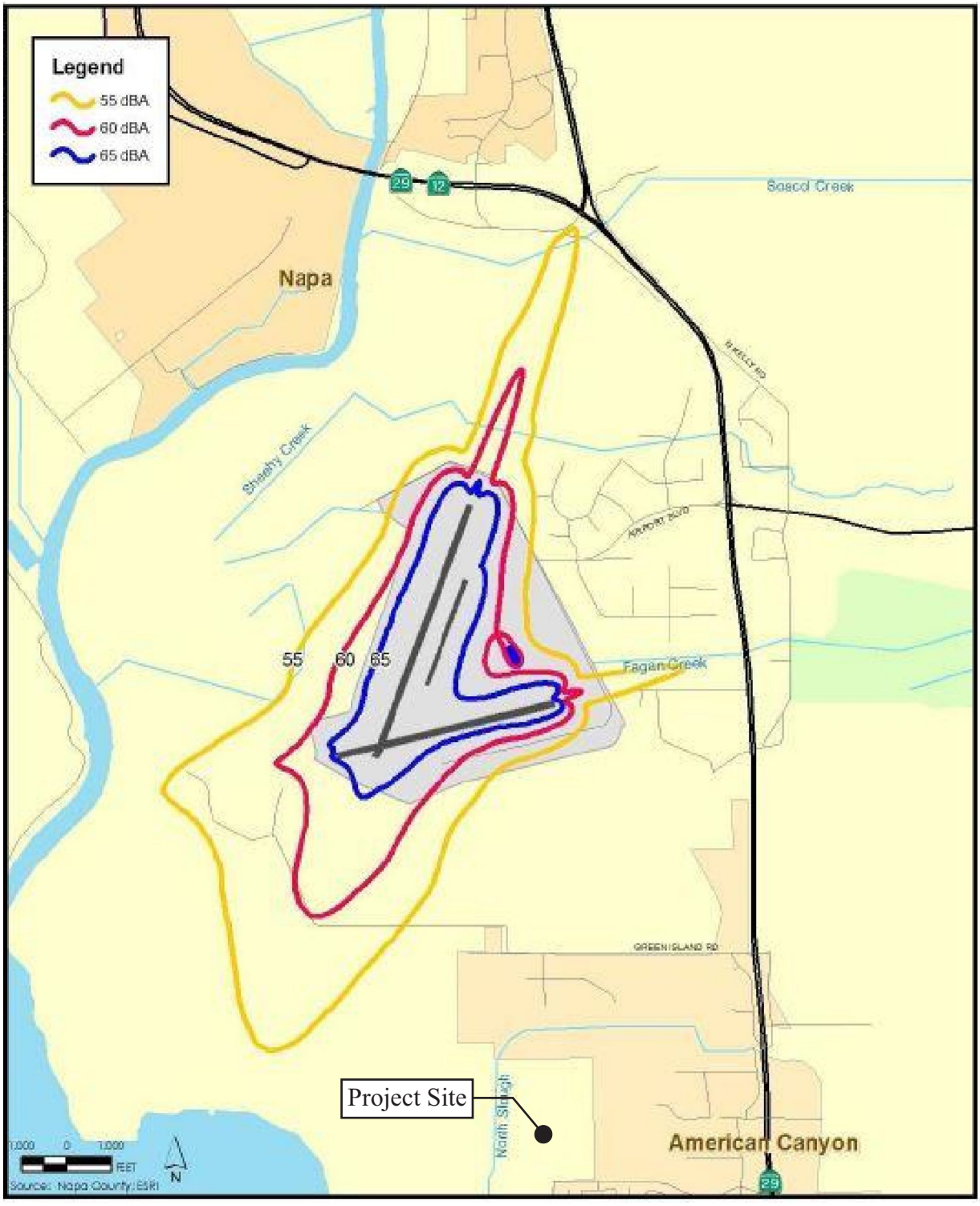
The General Plan sets forth the following goal of ensuring that American Canyon's existing and future residents, employees and employers, as well as visitors to the City, are protected from the adverse human health and environmental impacts of excessive noise levels created by stationary and ambient (intrusive) noise sources and conditions. The City takes all necessary and appropriate action to avoid or mitigate the detrimental effects of such excessive noise on the community. Exhibit 3.11-1 illustrates the acceptable noise-compatible land use relationships by implementing the noise standards identified in Figure 11-2 of the General Plan. The objectives and policies relevant to noise that are applicable to the proposed project are:

Objective 11.1 Control both ambient and stationary (intrusive) noise conditions and impacts that may occur in American Canyon. Maintain base line information regarding ambient and stationary noise sources within the community.

Policy 11.1.1 Promote noise-compatible land use relationships by implementing the noise standards identified in Figure 11-2 [of the General Plan], to be utilized for design purposes in new development and for establishing a program to attenuate existing noise problems.

Policy 11.1.2 Monitor and update available data regarding the community's ambient and stationary noise levels.

Objective 11.2 Protect residents, employees, and visitors to the community from excessive noise exposure. If possible, mitigate the adverse impacts of existing or unavoidable excessive noise on these same groups.



Source: Napa County, 2004. The City of American Canyon General Plan.

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Exhibit 3.11-1
Noise Land Use Compatibility

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Policy 11.2.1 Require that new development for locations in which the exterior or interior noise levels indicated in Figure 11-2 [of the General Plan] are likely to be exceeded, submit a noise attenuation study prepared by a qualified acoustical engineer in order to determine appropriate mitigation measures.

Policy 11.2.4 Require that new industrial, commercial, and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior Ldn of 65 dBA in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. Additionally, require that potentially significant noise generators, including uses such as night clubs that cause sporadic noise intensities, submit noise analyses prepared by an acoustical expert that include specific recommendations for mitigation when: (a) the project is located in close proximity to noise-sensitive land uses or land that is planned for noise-sensitive land uses, or (b) the proposed noise source could violate the noise provisions of the General Plan or City Noise Ordinance.

Objective 11.3 Minimize the adverse impacts of traffic-generated noise on residential and other "noise-sensitive" uses as depicted on Figure 11-5 [of the General Plan].

Policy 11.3.1 Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design by employing the following strategies:

a. Consider the impacts of truck routes, the effects of a variety of truck traffic, and future motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned.
b. Mitigate traffic volumes and vehicle speed through residential neighborhoods.
c. Work closely with the State of California Department of Transportation (Caltrans) in the early stages of highway improvements and design modifications to ensure that proper consideration is given to potential noise impacts on the City.

Policy 11.3.2 Require that all new nonresidential development design and configure on-site ingress and egress points to divert traffic (and its resultant noise) away from "noise-sensitive" land uses to the greatest degree practicable.

Policy 11.4.1 Restrict the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses (see Figure 11-5 [of the General Plan]).

Policy 11.4.2 Require that development in the vicinity of Napa Airport comply with the noise standards contained in the Airport Land Use Compatibility Plan (ALUCP).

Objective 11.5 Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or "noise-sensitive" uses.

Objective 11.7 Minimize the impacts of construction noise on adjacent uses.

City of American Canyon Municipal Code

The Municipal Code establishes an exterior noise level criterion of 50 dBA for single- or multi-family residential land uses; 55 dBA for multi-family residential land uses from 10:00 p.m. to 7:00 a.m.; and 60 dBA for all residential land uses from 7:00 a.m. to 10:00 p.m. within outdoor activity areas of each residential land uses. Additionally, the City requires that cumulative noise exposure from exterior noise sources within noise-sensitive dwellings not exceed 55 dBA from 10:00 p.m. to 7:00 a.m. and 60 dBA from 7:00 a.m. to 10:00 p.m. The City establishes different exterior noise limits for construction noise impacts for residential land uses to be 75 dBA from 7:00 a.m. to 7:00 p.m. and 60 dBA from 7:00 p.m. to 7:00 a.m.

3.11.4 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether noise impacts resulting from the implementation of the proposed project would be considered significant if the project would cause:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b) Generation of excessive groundborne vibration or groundborne noise levels?

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

3.11.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Substantial Noise Increase in Excess of Standards

Impact NOI-1:	**The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**

Impact Analysis

Construction

For purposes of this analysis, a significant impact would occur if construction noise impacts were greater than 75 dBA between the hours of 7:00 a.m. and 7:00 p.m. or greater than 60 dBA from 7:00 p.m. to 7:00 a.m., per the City's policies, and would result in a substantial temporary increase in ambient noise levels that could result in annoyance or sleep disturbance of nearby sensitive receptors.

Construction-related Traffic Noise

Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. One type of short-term noise impact that could occur during project construction would result from the increase in traffic flow on local streets associated with the transport of workers, equipment, and materials to and from the project site. The transport of workers and construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. Typically, a doubling of the Average Daily Traffic (ADT) hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels, which, as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Project-related construction trips would not be expected to double the hourly or daily traffic volumes along any roadway segment in the project vicinity. For this reason, short-term intermittent noise from construction trips would not be expected to result in a perceptible increase in hourly or daily average traffic noise levels in the project vicinity. Therefore, short-term construction-related noise impacts associated with the transportation of workers and equipment to the project site would be less than significant.

Construction Equipment Operational Noise

The second type of short-term noise impact is related to noise generated during construction on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.11-2 lists typical construction equipment noise levels, based on a distance of 50 feet between the equipment and a noise receptor. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Impact equipment such as pile drivers are not expected to be used during construction of the proposed project.

The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders.

Construction of the project is expected to require the use of scrapers, bulldozers, water trucks, haul trucks, and pickup trucks. Based on the information provided in Table 3.11-2, the maximum noise level generated by each scraper is assumed to be 85 dBA L_{max} at 50 feet from this equipment. Each bulldozer would also generate 85 dBA L_{max} at 50 feet. The maximum noise level generated by graders is approximately 85 dBA L_{max} at 50 feet. A characteristic of sound is that each doubling of sound sources with equal strength increases a sound level by 3 dBA. Assuming that each piece of

construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq}. The acoustic center reference is used because construction equipment must operate at some distance from one another on a project site and the combined noise level as measured at a point equidistant from the sources (acoustic center) would be the worst-case maximum noise level. The effect on sensitive receptors is evaluated below.

The closest residential receptor to the project site's construction footprint is the single-family residential unit located approximately 900 feet east of the project site. At this distance, and with the screening provided by the intervening brush and trees, construction noise levels would result in a relative worst-case hourly average of 45 dBA L_{eq} at this receptor. These noise levels could occur temporarily under the reasonable worst-case scenario of multiple pieces of heavy construction equipment operating simultaneously in relatively the same locations at the nearest project boundary for an hour period. If these noise levels were to occur every hour from 7:00 a.m. to 7:00 p.m., they would result in a reasonable worst-case average noise level of 42 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The next closest sensitive receptor is the Napa Junction Magnet Elementary School located south of the project site, just north of Eucalyptus Drive. This receptor would be approximately 1,200 feet from the acoustic center of construction activity where multiple pieces of heavy construction equipment would operate simultaneously during construction of the proposed parking areas near the project's southeastern boundary. At this distance, construction noise levels would result in a relative worst-case hourly average of 43 dBA L_{eq} at this receptor. These noise levels could occur temporarily under the reasonable worst-case scenario of multiple pieces of heavy construction equipment operating simultaneously in relatively the same locations at the nearest project boundary for an hour-long period. If these noise levels were to occur every hour from 7:00 a.m. to 7:00 p.m., they would result in a reasonable worst-case average noise level of 40 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The proposed project would limit construction activity to the hours of 7:00 a.m. to 7:00 p.m. The calculated reasonable worst-case construction noise levels identified in the analyses above are within the construction noise limits established by the City of no greater than 75 dBA during the hours of 7:00 a.m. to 7:00 p.m. and no greater than 60 dBA during nighttime hours. Therefore, project construction activities would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of City standards, and temporary construction noise impacts would be less than significant.

Operation

Implementation of the proposed project would result in mobile and stationary operational noise sources. Potential noise impacts with these project-related sources are analyzed below.

Mobile Source Operational Noise Impacts

A significant impact would occur if implementation of the proposed project would result in a substantial increase in traffic noise levels compared with traffic noise levels existing without the proposed project. The County does not define what is a substantial increase in traffic noise levels. As noted in the characteristics of noise discussion, audible increases in noise levels generally refer to a change of 3 dBA or more as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Furthermore, a doubling of the ADT hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels. Therefore, for the purposes of this analysis, a doubling of the existing ADT volumes would result in a substantial permanent increase in traffic noise levels.

Based on the traffic analysis prepared by W-Trans for the proposed project,[4] the proposed project would generate an estimated total of 372 average daily trips, with 35 trips occurring during the AM peak-hour and 27 trips occurring during the PM peak-hour. These traffic volumes would not result in a doubling of traffic on Commerce Boulevard, adjacent to the project site. For instance, the facility immediately south of the project site was analyzed and determined to generate 559 average weekday trips.[5] Therefore, project-related traffic would result in a less than 3 dBA increase in traffic noise levels on local access roadways in the project vicinity.

Therefore, the increase in hourly average or daily traffic noise levels resulting from project operations would not be perceptible along any roadway segment in the project vicinity. Implementation of the project would not result in a substantial increase in traffic noise levels compared with traffic noise levels existing without the project and would represent a less than significant impact.

Stationary Source Operational Noise Impacts

A significant impact would occur if operational noise levels generated by stationary noise sources at the proposed project site would result in a substantial permanent increase in ambient noise levels in excess of the City's noise performance standards. The City requires that new industrial, commercial, and related land uses demonstrate that they would not directly cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. Furthermore, the City has established an exterior noise level criterion of 50 dBA for single- or double-family residential land uses; 55 dBA for multi-family residential land uses from 10:00 p.m. to 7:00 a.m.; and 60 dBA for all residential land uses from 7:00 a.m. to 10:00 p.m. within outdoor activity areas of each residential land uses.

The proposed project would generate noise from parking lot activities, new exterior mechanical equipment sources, such as rooftop ventilation systems on proposed industrial uses, and truck loading and unloading activities. Potential impacts from these noise sources are discussed below.

[4] W-Trans. 2023. 1055 Commerce Court Memorandum of Assumptions. April 26.
[5] City of American Canyon. 2019. Final Initial Study for the SDG Commerce 330 Warehouse Project. January.

Parking Lot Activities

Typical parking lot activities include people conversing, doors shutting, and vehicles idling, which generate noise levels ranging from approximately 60 dBA to 70 dBA L_{max} at 50 feet. These activities are expected to occur sporadically throughout the day as visitors and staff arrive and leave the parking lot areas at the project site.

The closest residential receptor to the project site construction footprint is the single-family residential unit located approximately 900 feet east of the project site. With the distance attenuation and assuming minimal shielding from intervening brush and trees, noise levels associated with daily parking lot activities would attenuate to approximately 42 dBA L_{max} at this façade. Assuming a reasonable worst-case scenario of one parking movement for every parking stall within a single hour would result in an hourly average noise level of 31 dBA L_{eq} as measured at this nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 38 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The next closest noise-sensitive receptor is the Napa Junction Magnet Elementary School located south of the project site, just north of Eucalyptus Drive. The nearest façade of this receptor is located over 1200 feet south of the nearest proposed parking areas. With the distance attenuation and assuming minimal shielding from intervening structures and terrain, noise levels associated with daily parking lot activities would attenuate to approximately 39 dBA L_{max} at this façade. Assuming a reasonable worst-case scenario of one parking movement for every parking stall within a single hour would result in an hourly average noise level of 27 dBA L_{eq} as measured at this nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 34 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

Therefore, the proposed project's reasonable worst-case parking lot noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA for receiving school land uses, nor would they exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses. Therefore, project parking lot activities would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and the impact of noise produced by project-related parking lot activities to off-site sensitive receptors would be less than significant.

Mechanical Equipment Operations

The proposed project would include mechanical cooling system equipment that would be located in an enclosed mechanical area on the north side of the proposed building. In addition, the project would include a night air cooling system that consists of wall mounted intake fans covered by louvers. The loudest of these systems would be the mechanical cooling system compressor fans. Typical mechanical equipment cooling system compressor fans have documented noise levels ranging from 50 dBA to 60 dBA L_{eq} at a distance of 25 feet.

The closest residential receptor to the project site construction footprint is the single-family residential unit located approximately 900 feet east of the project site. At this distance, noise generated by the proposed mechanical cooling system compressor fans would attenuate to below 16

dBA L_{eq} at the nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 23 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The next closest noise-sensitive receptor is the Napa Junction Magnet Elementary School located south of the project site, just north of Eucalyptus Drive. The nearest façade of this receptor is located approximately 1,265 feet south of the nearest potential location for proposed mechanical cooling system compressor fans. At this distance, noise generated by the compressor fan equipment would attenuate to below 12 dBA L_{eq} at the nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 18 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

Therefore, the proposed project's reasonable worst-case mechanical equipment operations noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA for receiving school land uses, nor would they exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses. Therefore, project mechanical equipment operations would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and the impact of noise produced by project-related mechanical equipment operations to off-site sensitive receptors would be less than significant.

Truck Loading Activities

Noise would also be generated by truck loading and unloading activities at the loading docks along the western side of the proposed building and at the proposed surface level loading areas on the north and south sides of the building. Typical maximum noise levels from truck loading and unloading activity are 70 dBA L_{max} as measured at 50 feet. These maximum noise levels include noise from associated truck loading/unloading activity, including trucks maneuvering, truck trailer loading, truck trailer unloading, backup alarms or beepers, and truck docking noise.

The closest residential receptor to the project site construction footprint is a single-family residential land use east of the project site. The nearest façade of this receptor is located 1,030 feet from the nearest loading docks. Assuming a reasonable worst-case scenario of one truck loading operation for every loading dock within a single hour would result in an hourly average noise level of 28 dBA L_{eq} as measured at this nearest receptor. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 35 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The next closest noise-sensitive receptor is the Napa Junction Magnet Elementary School located south of the project site, just north of Eucalyptus Drive. The nearest façade of this receptor is located 1,280 feet from the nearest loading docks. Assuming a reasonable worst-case scenario of one truck loading operation for every loading dock within a single hour would result in an hourly average noise level of 27 dBA L_{eq} as measured at this nearest receptor. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 33

dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

Therefore, the proposed project's truck loading/unloading activity noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA for receiving school land uses, nor would they exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses. Therefore, project truck loading/unloading operations would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and the impact of noise produced by project-related truck loading/unloading operations to off-site sensitive receptors would be less than significant.

Stationary Source Operational Noise Impact Conclusion

As shown in the analysis above, none of the proposed project's stationary operational noise sources would result in an increase of 3 dBA or greater above the City's performance threshold of 65 dBA L_{dn} for stationary noise sources as measured at the nearest sensitive receptor, nor would they exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses. Therefore, noise impacts from stationary operational noise sources would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Groundborne Vibration/Noise Levels

Impact NOI-2:	**The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.**

Impact Analysis

This section analyzes both construction and operational groundborne vibration and noise impacts. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. Groundborne noise is generated when vibrating building components radiate sound, or noise generated by groundborne vibration. In general, if groundborne vibration levels do not exceed levels considered perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

The City of American Canyon has not established quantitative groundborne vibration thresholds for construction or operation. Therefore, for the purposes of this analysis, the FTA's vibration impact criteria are utilized to analyze vibration impacts. The FTA has established industry-accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its

Transit Noise and Vibration Impact Assessment Manual.[6] The construction vibration impact criteria are summarized in Table 3.11-4.

Construction

A significant impact would occur if existing structures at the project site or in the project vicinity would be exposed to groundborne vibration levels in excess of levels established by the FTA's Construction Vibration Impact Criteria for the listed type of structure, as shown in Table 3.11-4.

Of the variety of equipment used during construction, the large vibratory rollers that could be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Large vibratory rollers produce groundborne vibration levels ranging up to 0.201 inch per second (in/sec) PPV at 25 feet from the operating equipment.

The nearest off-site receptor to the project construction footprint where the heaviest construction equipment would operate is the commercial building located south of the project site. The façade of this structure would be located approximately 130 feet from the nearest point on the project site where the heaviest construction equipment would potentially operate. At this distance, groundborne vibration levels would range up to 0.017 PPV from operation of the types of equipment that would produce the highest vibration levels, which is well below the FTA's Construction Vibration Impact Criteria of 0.5 PPV for this type of structure, which is a building of reinforced-concrete, steel or timber (no plaster) construction. Therefore, the impact of short-term groundborne vibration associated with construction to off-site receptors would be less than significant.

Operation

Implementation of the proposed project would not include any permanent sources that would expose persons at any existing sensitive land use in the project vicinity to groundborne vibration levels that could be perceptible without instruments.

For informational purposes, the Southern Pacific Railroad rail line is located over 3,000 feet northeast of the project site. At this distance potential groundborne vibration impacts would be less than significant for the proposed type of structure, based on FTA vibration screening criteria. There are no other existing significant permanent sources of groundborne vibration in the project vicinity to which the proposed project would be exposed.

Therefore, project operational groundborne vibration level impacts would be considered less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

[6] Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. September.

Excessive Noise Levels from Airport Activity

Impact NOI-3:	**The proposed project would not expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.**

Impact Analysis

A significant impact would occur if the proposed project would expose people residing or working in the project area to excessive noise levels for a project located in the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. The City's General Plan Policy 11.4.1 restricts the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses; and General Plan Policy 11.4.2 requires that development in the vicinity of Napa Airport comply with the noise standards contained in the ALUCP.

The project site is not located within the vicinity of a private airstrip. However, the project site is located within 2 miles of a public airport; the Napa County Airport is located approximately 1.6 miles north of the project site. As such, the project site is located outside of the 55 dBA CNEL airport noise contours. Therefore, while aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels. These noise levels are considered normally acceptable for new industrial land use development within the City as shown in Exhibit 3.11-1. On this basis, implementation of the project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.11.6 - Cumulative Impacts

The geographic scope for the cumulative analysis for noise and vibration impacts is limited to areas within 1,000 feet of the project site boundary for on-site noise sources because of the localized nature of noise and vibration impacts. This analysis first evaluates whether the impacts of cumulative development could result in a cumulatively significant noise or vibration impact. If there is a cumulative significant impact, this analysis then considers whether the incremental contribution of the impacts associated with the implementation of the proposed project would be cumulatively considerable. Both conditions must apply for the project's cumulative effects to rise to the level of significance.

Construction Noise

As noted above, the geographic scope of the cumulative noise analysis is the project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the area surrounding the project site (approximately 1,000 feet) would be the area most affected by proposed project activities. Cumulative development would be required to comply with all applicable construction hour requirements and would also be anticipated to incorporate appropriate Best Management Practices (BMPs) to help reduce construction noise. Additionally, cumulative development would comply with design review regulations directing the siting, design, and insulation of new development and redevelopment and all applicable noise policies, standards, and requirements in the General Plan and Municipal Code, which would ensure that noise impacts are less than significant.

There is only one project on the cumulative projects list that is within 1,000 feet of the project site, the project immediately north of this project site. That project is currently under construction and will be completed before this project begins construction. Therefore, there would not be an existing cumulative construction noise impact condition.

Because there is not a cumulative significant construction noise impact to existing or planned land uses in the project vicinity, the incremental contribution of project construction noise would not be cumulatively considerable. Therefore, the proposed project would result in a less than significant cumulative impact related to construction noise.

Operational Traffic Noise

If there is an identified cumulative traffic noise impact in the project vicinity, and if the proposed project would result in an incremental contribution to an identified cumulative traffic noise impact, then the project's impact would be cumulatively considerable.

Traffic noise levels along Commerce Boulevard adjacent to the project site do not exceed acceptable noise levels for the adjoining land uses. Therefore, there is not an existing cumulative traffic noise impact condition to which the proposed project could contribute. Because there is not a cumulative significant traffic noise impact along roadway segments to which project trips could contribute, the incremental contribution of project traffic noise would not be cumulatively considerable. Therefore, the proposed project would result in a less than significant cumulative impact related to traffic noise.

Operational Stationary Noise

For stationary operational noise sources, a significant impact would occur if the cumulative projects would cause the L_{dn} at noise-sensitive uses to increase by 3 dB or greater above the City's performance threshold of 65 dBA L_{dn} or exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses.

As shown in the stationary source noise impact discussion above, project noise levels from project-related mechanical equipment operations would not exceed existing ambient noise levels as measured at the nearest off-site sensitive land uses and, therefore, would not result in any increase in ambient noise levels in the project vicinity and would not contribute to any cumulative stationary

source noise impact condition. Thus, there is a less than significant cumulative impact related to operational stationary noise sources in the project vicinity.

Construction Vibration

The geographic scope of the cumulative construction vibration analysis is the project vicinity, including surrounding sensitive receptors. Construction vibration impacts are very localized; therefore, the area surrounding the project site (approximately 100 feet) would be the area most affected by proposed project construction activities.

There is no cumulative project within 100 feet of the project site, and, therefore, there is no potential for the proposed project to contribute to a cumulative construction-related groundborne vibration impact in the project vicinity. Therefore, there is a less than significant cumulative impact related to construction vibration impacts in the project vicinity.

Operational Vibration

Because operational vibration impacts are very localized, the only potential sources of cumulatively considerable contribution to vibration conditions in the project vicinity would result from introduction of past, present, and reasonably foreseeable future permanent sources of groundborne vibration in the project site vicinity.

Implementation of the proposed project would not include any permanent sources that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the project vicinity.

Therefore, implementation of the proposed project would not result in a cumulatively considerable contribution to vibration conditions in the project vicinity. This impact would be less than significant.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.12 - Public Services

3.12.1 - Introductions

This section describes the existing conditions related to public services in the project area, as well as the relevant regulatory framework. This section also evaluates the possible impacts related to public services that could result from implementation of the proposed project. Descriptions and analysis in this section are based on information provided by the City of American Canyon General Plan (General Plan), American Canyon Fire Protection District (ACFPD), and American Canyon Police Department (Police Department).

No public comments pertaining to public services were received in response to the Notice of Preparation (NOP).

3.12.2 - Environmental Setting

Fire Protection and Emergency Medical Services

The ACFPD provides fire protection and Emergency Medical Services (EMS) to the City of American Canyon (City) as well as nearby unincorporated areas of Southern Napa County. The ACFPD's response area encompasses approximately 7 square miles. The ACFPD is headquartered at 911 Donaldson Way East (Station 11). The ACFPD's Board of Directors, comprised of five elected members, oversees the District and the Fire Chief.[1]

Stations

The ACFPD operates two fire stations: Station 11 (911 Donaldson Way) and Station 211 (225 James Road).[2] Station 211 was reopened in June 2020 after being closed for several years. Station 11 is approximately 1.57 miles from the project site. Station 211 is approximately 1.26 miles from the project site.

Organization

The ACFPD is organized into two groups: Administration and Support, and Operations. Operations is the largest division and is responsible for responding to calls for service. Administration is the principal responsibility of the Fire Chief, and this division oversees field operations, policy reviews, and budgeting.

Services Provided

The ACFPD provides emergency operations, fire suppression, wildland firefighting, first-response non-transport EMS, Type 1 urban search and rescue and swiftwater rescue. The ACFPD is also a member of the Napa County HazMat Team, provides public education and prevention programs, and maintains a Community Emergency Response Team.[3]

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1 American Canyon Fire Protection District (ACFPD). 2022. Long-Range Master Plan. Website: https://www.cityofamericancanyon.org/home/showpublisheddocument/19513/638084122376770000. Accessed January 3, 2024.
2 Ibid.
3 American Canyon Fire Protection District (ACFPD). 2022. Long-Range Master Plan. Website: https://www.cityofamericancanyon.org/home/showpublisheddocument/19513/638084122376770000. Accessed January 3, 2024.

Apparatus

The ACFPD has four six-line apparatus, all but one are in excellent condition. Currently, the ACFPD ladder truck is cross-staffed and located at Station 11. If not initially staffed in response to an incident, a mutual aid ladder truck from Vallejo Station 21 (about 4 miles from the City center) or Napa Station 1 (about 8 miles from the City center) would need to be dispatched. The ACFPD also has air/light/rescue apparatus, command/utility vehicles, inflatable rescue boats, an ambulance, and towable technical rescue equipment trailers.[4]

Staffing

The ACFPD relies on a three-platoon system (A, B, and C shifts) wherein each platoon is scheduled for a 48-hour shift which achieves a minimum staffing level of six personnel. The ACFPD is authorized with 22 emergency personnel to provide fire suppression, rescue, and EMS services. The 22 authorized positions includes six Captains, 10 Firefighters/driver-operators, two probationary Firefighters, and three reserve support staff. The career staffing level for the ACFPD is 0.992 per 1,000 population, which is below the recommended national average of 1.54 per 1,000.[5]

Incidents

The ACFPD responded to over 1,800 incidents in 2021; 62 percent of the emergency medical responses and motor vehicle responses. According to ACFPD data, 10.6 percent of the incidents were recorded as providing mutual aid, most of which went to either unincorporated Napa County or the City of Vallejo.[6]

Response Times

The response time goal for delivering the full Emergency Response Framework (ERF) to a building fire is within 9 minutes, 20 seconds, 90 percent of the time. In 2021, overall response time for all priority incidents was within 5 minutes, 53 seconds, 90 percent of the time.[7]

Insurance Services Office Rating

As of 2014, ACFPD has an Insurance Services Office (ISO) rating of Class 2/2Y on a scale of 1 to 10, with 1 being the best. An ISO rating accounts for factors such as emergency communication, fire department, water supply, divergence, and community risk reduction.[8]

Police Protection

The American Canyon Police Department (Police Department) provides police protection to the City of American Canyon. The Police Department is staffed by the Napa County Sheriff's Office, which provides law enforcement services on a contract basis to the City of American Canyon. The Police Department is headquartered at 911 Donaldson Way East.

[4] American Canyon Fire Protection District (ACFPD). 2022. Long-Range Master Plan. Website: https://www.cityofamericancanyon.org/home/showpublisheddocument/19513/638084122376770000. Accessed January 3, 2024.
[5] Ibid.
[6] Ibid.
[7] Ibid.
[8] Ibid.

Organization

The Sheriff's Office consists of the following divisions: Operations and Services. The Operations Division includes Patrol, Investigations Bureau, Napa Special Investigations Bureau, Problem-Oriented Policing Program, Animal Services, Special Assignments (including SWAT and Dive Teams), and Team Auxiliaries. The Services Division consists of the Coroner's Bureau, Court Services Bureau, Transportation Bureau, Technical Services Bureau, Administration, Property and Evidence Bureau, and Special Assignments (including Honor Guard).[9]

Staffing

As of the 2023/2024 Fiscal Year, the Police Department was staffed with 27 sworn officers, two police technicians, and one Records Technician. The 27 sworn officers include the Chief, two School Resource Officers, one Community Resource Officer, two K-9 Handlers, five Sergeants, and 16 Patrol Officers.[10]

Calls for Service

In 2023 the Police Department received 15,294 calls for service.[11]

3.12.3 - Regulatory Framework

State

California Building Standards Code

Title 24 of the California Code of Regulations, also known as the California Building Standards Code (CBC), is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in national and international model codes.
- Building standards that have been adopted and adapted from national and international model code standards to meet California conditions.
- Building standards, authorized by the California legislature, which constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns.

The California Fire Code is a component of the CBC and contains fire safety-related building standards.

Local

City of American Canyon

General Plan

The General Plan sets forth the following goals relevant to public services:

[9] Napa County Sheriff's Office. 2021. 2021 Annual Report. Website: https://www.countyofnapa.org/DocumentCenter/View/25161/2021-NCSO-Annual-Report---Final_Web. Accessed January 3, 2024.
[10] American Canyon Police Department. 2024. 2023 Annual Report. March.
[11] Ibid.

Goal 6A Maintain a high level of fire protection and emergency services to City/District businesses and residents.

Goal 6B Ensure a high level of police protection for the City's residents, businesses, and visitors.

Policy 6.7.1 Work with the Sheriff's Department to ensure that enough personnel are added to the Department to serve the needs of a growing population and a developing City.

Municipal Code Chapter 15.08

Chapter 15.08 of the American Canyon Municipal Code establishes development impact fees for parks and civic facilities fees to defray the actual costs of constructing improvements to mitigate impacts resulting from proposed new development identified in the American Canyon General Plan. As defined in the Municipal Code, ""civic facilities" include, but are not necessarily limited to " . . . a police station, a corporation yard, a public library, or similar facilities desired to serve the public . . . ." Fees are calculated based on a cost per unit (e.g., dwelling unit, square feet, hotel/motel rooms, etc.) as identified in the Ordinance Chapter.

Ordinance 2013-01 Fire Service Fee

Ordinance 2013-01 provides revenue necessary to maintain current fire service levels via the required payment of fees based on a formula that includes structure construction type, fire flow area (in square feet), proximity of other structures, type of occupancy, and presence of fire protection devices.

American Canyon Fire Protection District

Resolution 83-4

ACFPD Resolution 83-4, as amended by Resolution 2023-16, is the "Fire Mitigation Fee," a one-time assessment to all new development for capital improvements (i.e., a new fire station).

3.12.4 - Methodology

FCS reviewed the General Plan, the South County Region Municipal Service Review and Sphere of Influence Updates, and the City and County's websites for information about public service providers.

FCS evaluated project impacts on public services through review of the proposed project in relation to the General Plan, ACFPD, and information regarding Police Department services and facilities.

3.12.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether impacts to public services and utilities resulting from the implementation of the proposed project would be considered significant if the project would:

. . . result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?
b) Police protection?
c) Schools? (Refer to Chapter 4, Effects Found not to be Significant)
d) Parks? (Refer to Chapter 4, Effects Found not to be Significant)
e) Other public facilities? (Refer to Chapter 4, Effects Found not to be Significant)

3.12.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Fire Protection

Impact PUB-1:	**The proposed project would not result in a need for new or expanded fire protection facilities that may have physical impacts on the environment.**

Impact Analysis

The proposed project would be served with fire protection and EMS provided by the ACFPD. The ACFPD will have the opportunity to review and comment on security measures during the proposed project's plan check review process.

Vehicular access would be taken from one driveway on Commerce Court. Reciprocal access would be provided with the existing wine warehouse (SDG Commerce 330) to the south and the entitled wine warehouse (SDG Commerce 217) to the north. All access points would be accessible to large emergency vehicles such as fire engines. This would comply with California Fire Code requirements for emergency vehicle accessibility.

The project site is located 4.4 miles from Station 11, via Paoli Loop Road and Green Island Road. However, emergency responders have the ability to avoid Paoli Loop Road and make a left turn directly onto Green Island Road from State Route (SR) 29. This route reduces the travel distance to 3.6 miles. Using an average travel speed of 35 miles per hour (mph), it would take a fire engine 6 minutes and 10 seconds to reach the project site when responding from Station 11. This would be outside the ACFPD's 5-minute response time objective. Furthermore, congestion on SR-29 may increase travel time such that it is longer.

The ACFPD indicated in July 2022 that it intends to develop a new fire station in the northern portion of the American Canyon city limits, within the project vicinity. A site has not yet been selected, nor has any facility planning occurred at the time of Draft EIR release. The ACFPD would undertake a separate environmental review process for this new fire station. The ultimate development of a new fire station in the industrial area would significantly improve fire response times in the northern portion of American Canyon, including at the project site.

The proposed project would be required to pay two separate special assessments to fund fire protection and EMS. The first is the "Fire Mitigation Fee," a one-time assessment to all new development for capital improvements (i.e., a new fire station), per ACFPD Resolution 83-4 as amended by Resolution 2023-16. The second is the "Fire Service Fee" and an annual assessment for each parcel based on a formula that includes structure construction type, fire flow area (in square feet), proximity of other structures, type of occupancy, and presence of fire protection devices, per City of American Canyon Ordinance 2013-01.

In summary, while the proposed project is in an area that does not meet the ACFPD's response time objective, the ACFPD has plans to build a new "North" fire station that would significantly reduce response time to the project site. This facility would be subject to a separate environmental review process. Furthermore, the proposed project is required to pay a Fire Mitigation Fee and Fire Service Fee to support facility development and calls for service. As such, the proposed project would not create a need for new or expanded fire protection facilities (beyond the new "North" fire station).

Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Police Protection

Impact PUB-2:	**The proposed project would not result in a need for new or expanded police protection facilities that may have physical impacts on the environment.**

Impact Analysis

The proposed project would be served with police protection provided by the American Canyon Police Department. The Police Department is staffed by the Napa County Sheriff's Office, which provides law enforcement services on a contract basis to the City of American Canyon.

The proposed project would be expected to be staffed from 6:00 a.m. to 6:00 p.m., Monday through Friday and 6:00 a.m. to 12:00 a.m., Monday through Friday during peak seasonal months, typically June through November. Security measures including exterior lighting, alarm systems, and video surveillance would be employed to deter and prevent criminal activity. For these reasons, the proposed project would be expected to generate minimal calls for service and, therefore, would not create a need for new or expanded police facilities. The Police Department will have the opportunity to review and comment on security measures during the plan check review process. Lastly, new developments are required by Chapter 15.08 of the Municipal Code to pay a fair share Park and Civic Facilities Development Impact Fee, which includes funding for police facilities as needed. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.12.7 - Cumulative Impacts

The geographic scope of the cumulative public services analysis is the service area of each of the providers serving the proposed project. Because of differences in the nature of the public service areas, they are discussed separately.

Fire Protection and Emergency Medical Services

The geographic scope of the cumulative fire protection and EMS analysis is the ACFPD service area, which consists of the American Canyon city limits and small portions of unincorporated Napa County.

The proposed project would result in the development of a 219,834-square-foot wine warehouse on the project site. The project site is located within 3.6 miles of the nearest fire station and is within an area and that does not meet the ACFPD's response time objective. However, the ACFPD has plans to build a new "North" fire station which would significantly reduce response time to the project site. This facility would be subject to a separate environmental review process. Furthermore, the proposed project is required to pay a Fire Mitigation Fee and Fire Service Fee to support facility development and calls for service. As such, the proposed project would not create a need for new or expanded fire protection facilities (beyond the new "North" fire station) and would not result in a physical impact on the environment. Additionally, the proposed project would comply with all applicable requirements of the California Fire Code, including provision of adequate emergency access points, and it would be accessible to fire apparatus. Other past, present, and reasonably foreseeable development projects in the ACFPD service area have been and would be reviewed for impacts on fire protection and EMS and have been and would be required to address any potential impact with mitigation and compulsory fee payments. Additionally, the ACFPD plans for service needs consistent with existing demands and growth anticipated in the City planning documents. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable development, would not have a cumulatively significant impact related to fire protection and EMS.

Police Protection

The geographic scope of the cumulative police protection analysis is the service area of the American Canyon Police Department, which consists of the American Canyon city limits.

The proposed project and other past, present, and reasonably foreseeable projects in the police service area have been and would continue to be reviewed for impacts on police services and also have been and would continue to be required to address any potential impact with mitigation. Additionally, the Police Department plans for service needs consistent with existing demands and growth anticipated in the City planning documents. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable development, would not have a cumulatively significant impact related to police protection.

Level of Cumulative Significance Before Mitigation

Fire Protection and Emergency Medical Services: Less than significant impact.
Police Protection: Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.13 - Transportation

3.13.1 - Introduction

This section describes existing conditions related to transportation in the project area as well as the relevant regulatory framework. This section also includes an evaluation of the possible impacts related to transportation that could result from implementation of the project.

The following comments were received during the Environmental Impact Report (EIR) scoping period related to transportation:

- A commenter noted that the proposed project could result in increased daily truck and passenger car trips, which could contribute to increased traffic jams, traffic accidents, and unsafe conditions for pedestrians and bicyclists.
- A commenter provided example measures to reduce traffic impacts, including the enforcement of truck routes, prevention of truck parking in residential neighborhoods, a requirement for the preparation and approval of a truck routing plan, construction of new or improved alternative transit method infrastructure, securing increase public transit service to the project area, designated areas for employee pickup and drop-off, implementing traffic control and safety measures, strategic placement of entrances and exits, construction of roadway improvements, and the preparation of a construction traffic control plan. A commenter requested that parking demand is evaluated.
- A commenter requested that increases in truck traffic in the area are evaluated.
- A commenter requested evidence that a majority of employees at the project site would be local residents.
- A commenter outlines methodology for a Travel Demand Analysis and for Construction-Related Impacts Analysis.

3.13.2 - Environmental Setting

Roadway Network

The following roads provide primary access to the project site:

- **Commerce Court** is a two-lane connector that provides access to the project site from Green Island Road. The southern end of the street is a cul-de-sac, adjacent to the project driveway. The speed limit on Commerce Court is 25 miles per hour (mph).
- **Green Island Road** is a two-lane connector providing access for southbound traffic on State Route (SR) 29 traveling to and from the project area. In 2016, counts indicated that Green Island Road carried 8,200 vehicles per day.
- **Paoli Loop Road** provides access to and from the project area for northbound traffic on SR-29. It is a two-lane connector extending from SR-29 to Green Island Road with a speed limit of 25 mph.

- **SR-29** is the primary north–south route through Napa County, connecting to most of the County's communities and extending north to Lake County and south to Solano County. It is classified as a regional corridor and, within the project area, is a four-lane divided highway with a 55 mph speed limit. Traffic volumes were estimated by Caltrans to be 35,000 vehicles per day in 2021.

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. Sidewalks are present along Commerce Court on the project frontage as well as the segment of Commerce Court north of the project site, although the sidewalks do not extend to Green Island Road, and Green Island Road also lacks pedestrian facilities between Commerce Court and SR-29. A sidewalk connection is provided at the southern terminus of Commerce Court, extending to the northern terminus of Wetlands Edge Road and connecting to the sidewalk network in the adjacent residential neighborhood. Because of this connection south of the project site, there are continuous pedestrian facilities connecting the project site to Napa Junction Elementary School, nearby residences, and recreational areas in the vicinity, as well as commercial land uses and bus stops over 1 mile from the project site on the SR-29 corridor.

The existing sidewalk gaps along the connecting roadways north of the project impact convenient and continuous access for pedestrians and present safety concerns in those locations where appropriate pedestrian infrastructure would address potential conflicts with vehicle traffic. However, given the industrial character of the area and lack of residential areas, commercial land uses, or bus stops, the pedestrian demand is expected to be low. The pedestrian facilities network south of the project provides access between the site and nearby land uses expected to generate pedestrian trips.

Bicycle Facilities

The *Highway Design Manual* published by the California Department of Transportation (Caltrans) classifies bikeways into four categories:

- Class I Multiuse Path–a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- Class II Bike Lane–a striped and signed lane for one-way bike travel on a street or highway.
- Class III Bike Route–signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- Class IV Bikeway–also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Bike lanes are present along the segment of Commerce Court immediately north of the project site. A Class I path extends from the southern terminus of Commerce Court to the northern terminus of

Wetlands Edge Court, providing access to numerous bicycle facilities in the neighborhood south of the project. This includes a Class I multiuse path that runs along the west side of Wetlands Edge Road from Eucalyptus Drive to Kensington Way. Along all other streets in the project vicinity, bicyclists ride in the roadway and/or on sidewalks. Table 3.13-1 summarizes the existing and planned bicycle facilities in the project vicinity as contained in the City of American Canyon Bicycle Plan.

Table 3.13-1: Bicycle Facility Summary

Status	Facility	Class	Length (miles)	Beginning Point	Ending Point
Existing	Commerce-Wetlands Edge Connector	I	0.12	Commerce Court	Wetlands Edge Court
	Eucalyptus Drive	I	0.17	Wetlands Edge Court	Greenwing Street
	Wetlands Edge Court	I	0.14	Eucalyptus Drive	End
	Wetlands Edge Road	I	1.36	Eucalyptus Drive	Kensington Way
Planned	Broadway	I	2.80	Northern City limit	Southern City limit
	Green Island Road	I	0.33	Vine Trail	Commerce Court
	Hess Road Path	I	0.83	Commerce Court	Lombard Road
	Vine Trail	I	1.62	Middleton Way	Watson Lane
	Commerce Court	II	0.30	Hess Collection Driveway	Green Island Road
	Donaldson Way	II	0.80	Eucalyptus Drive	Benton Way
	Lombard Road	II	0.35	Vine Trail	Napa Junction Road
	Napa Junction Road	II	0.33	Theresa Avenue	End
	Rio del Mar	II	1.00	Wetlands Edge Road	Broadway
	Theresa Avenue	II	0.30	Napa Junction Road	Eucalyptus Drive

Source: W-Trans. 2023.

Transit Facilities

Vine Transit provides fixed route bus service throughout Napa County (County). American Canyon Transit (ACT) operates a local shuttle route within American Canyon (City), but primarily serves as the City's paratransit service provider, operating an on-demand, door-to-door service for persons with disabilities who cannot independently use regular fixed route transit services. Neither Vine Transit nor ACT maintains stops within an acceptable walking distance of the project site. The nearest bus stop to the project site is located on Rio del Mar near Eucalyptus Drive and serves Vine Transit Route 11, approximately 1.3 miles south of the project site.

On-demand private taxi services are available in the study area 24 hours a day. Taxis can be used for trips in the project vicinity as well as other destinations in Napa County and the Bay Area. Ride-

hailing services, also known as Transportation Network Companies (TNCs), can also be used to provide transportation services near the project and throughout the Bay Area.

3.13.3 - Regulatory Framework

State

California Department of Transportation (Caltrans)

Caltrans builds, operates, and maintains the State highway system, which includes SR-29 through American Canyon. The department's strategic goals include providing a safe transportation system, enhancing and connecting the multimodal transportation network, efficiently managing the use of transportation funding, and advancing equity and livability.

In its 2020 *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (TISG), Caltrans developed an approach for evaluating the transportation impacts of land use projects and plans on State highway facilities; this document does not address the impacts of transportation projects. In accordance with current California Environmental Quality Act (CEQA) requirements, the TISG does not consider vehicle delay in its evaluation of transportation impacts, instead focusing on Vehicle Miles Traveled (VMT). The purposes of the TISG include providing guidance to lead agencies regarding when they should analyze potential impacts to the State highway system; aiding Caltrans staff in reviewing projects; and ensuring consistency in the assessment of impacts and identification of non-capacity increasing mitigation measures.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, supporting previous climate-focused and transportation legislation, including the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), as well as the Complete Streets Act (AB 1358), which requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users. SB 743 eliminates the use of automobile delay metrics, such as Level of Service (LOS), as the primary metric to evaluate transportation impacts under CEQA. Instead, VMT has been identified as the most appropriate metric to evaluate a project's transportation impacts, as projects that result in lower-than-average VMT support goals of reducing greenhouse gas (GHG) emissions, while projects that result in higher-than-average levels of vehicle travel contribute to an increasing rate of GHG emissions.

In December 2018, the California Governor's Office of Planning and Research (OPR) issued a final advisory to guide lead agencies in implementing SB 743, Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory).[1] Key guidance includes the following.

- VMT is the most appropriate metric to evaluate a project's transportation impact under CEQA.
- VMT for residential and office projects should generally be assessed using efficiency metrics, i.e., on a "per rate" basis.

[1] California Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December. Website: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed October 12, 2023.

- The OPR-recommended threshold of significance for office projects is VMT per employee of 15 percent below the regional average. Applying this threshold, an office project expected to generate VMT per capita that is more than 85 percent of the regional VMT per employee could result in a significant impact. This threshold was developed to support statewide GHG emission reduction targets.
- Lead agencies have the discretion to set or apply their own significance thresholds in lieu of those recommended in the advisory, provided they are based on substantial evidence.
- Cities and counties still have the ability to use metrics such as LOS for other plans, studies, or network monitoring. However, LOS and similar metrics cannot constitute the sole basis for determining CEQA impacts.

As noted in the OPR Technical Advisory, lead agencies have the authority to choose metrics that are appropriate for their jurisdiction to evaluate the potential VMT impacts of land development projects.

Regional

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) serves as the Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area and is responsible for transportation planning, coordination, and establishment of funding priorities. *Plan Bay Area 2050* is the Bay Area's long-range plan that addresses regional transportation, housing, economic development, and environmental resilience. The plan identifies funding priorities for a $1.4 trillion vision over a 30-year period, directed toward addressing the Plan's 35 strategies. *Plan Bay Area 2050* was adopted by MTC and the Association of Bay Area Governments in 2021.

Plan Bay Area 2050 includes the following transportation strategies.

T1 Restore, operate and maintain the existing system. Commit to operate and maintain the Bay Area's roads and transit infrastructure while reversing pandemic-related cuts to total transit service hours.

T2 Support community-led transportation enhancements in Equity Priority Communities. Provide direct funding to historically marginalized communities for locally identified transportation needs.

T3 Enable a seamless mobility experience. Eliminate barriers to multi-operator transit trips by transfer hubs.

T4 Reform regional transit fare policy. Streamline fare payment and replace existing operator-specific discounted fare programs with an integrated fare structure across all transit operators.

T5 Implement per-mile tolling on congested freeways with transit alternatives. Apply a per-mile charge on auto travel on select congested freeway corridors where transit

alternatives exist, with discounts for carpoolers, low-income residents, and off-peak travel; and reinvest excess revenues into transit alternatives in the corridor.

T6 Improve interchanges and address highway bottlenecks. Rebuild interchanges and widen key highway bottlenecks to achieve short- to medium-term congestion relief.

T7 Advance other regional programs and local priorities. Fund regional programs like motorist aid and 511 while supporting local transportation investments on arterials and local streets.

T8 Build a Complete Streets network. Enhance streets to promote walking, biking and other micro-mobility through sidewalk improvements, car-free slow streets, and 10,000 miles of bike lanes or multiuse paths.

T9 Advance regional Vision Zero policy through street design and reduced speeds. Reduce speed limits to between 20 and 35 miles per hour on local streets and 55 miles per hour on freeways, relying on design elements on local streets and automated speed enforcement on freeways.

T10 Enhance local transit frequency, capacity and reliability. Improve the quality and availability of local bus and light rail service, with new bus rapid transit lines, South Bay light rail extensions, and frequency increases focused in lower-income communities.

T11 Expand and modernize the regional rail network. Better connect communities while increasing frequencies by advancing the Link21 new transbay rail crossing, BART to Silicon Valley Phase 2, Valley Link, Caltrain Downtown Rail Extension and Caltrain/High-Speed Rail grade separations, among other projects.

T12 Build an integrated regional express lanes and express bus network. Complete the buildout of the regional express lanes network to provide uncongested freeway lanes for new and improved express bus services, carpools and toll-paying solo drivers.

County

Napa Valley Transportation Authority

Napa Valley Transportation Authority (NVTA) (formerly known as the Napa County Transportation Planning Authority) oversees countywide transportation planning and programming activities in Napa County, including the establishment of the countywide priorities, development of the countywide transportation plan, and provision of project oversight. *Vision 2045: Advancing Mobility*, adopted in 2021, is the current version of the plan and establishes countywide goals, objectives, and policies for improving mobility on Napa County's streets, highways, transit systems, and bicycle/pedestrian facilities, as well as strategies to reduce transportation-related impacts. Projects identified in the countywide plan in the project vicinity include a new industrial collector from the

southern terminus of Commerce Drive to Eucalyptus Drive, widening Eucalyptus Drive to a two-lane collector from Theresa to Wetlands Edge Road, and a multimodal transit station.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan (General Plan) sets forth the following guiding and implementing policies relevant to transportation.

Guiding Policy 1.1 Community Priorities. Safe and convenient access to activities in the community is provided by a well-designed local roadway system. That system serves the community's primary need for mobility and includes a planned hierarchy of roadways to meet that need. The following Community Priorities relate most directly to this Element:

- Encourage and foster a strong sense of community and safety, as well as the "hometown" feeling by creation of a town center through land use and circulation planning.
- Improve a hierarchy of roadway networks to achieve and maintain acceptable traffic LOS and provide a citywide system of bicycle lanes and recreational trails that improve accessibility without the use of an automobile.
- Improve SR-29 so that it serves as a visually attractive gateway into the City while providing access to commercial businesses and serving intra and inter-regional traffic and goods movement.

Guiding Policy 1.2 Implement planned roadway improvements. Use Figure 3: General Plan Circulation System, and Table 3: Major Circulation Improvements, to identify, schedule, and implement roadway and complementary intersection improvements to support General Plan buildout conditions. Planned improvements may be phased as development occurs and need for increased capacity is identified.

Guiding Policy 1.3 Design circulation system to focus regional travel on SR-29. SR-29 is important for both citywide and north–south regional travel. As both City and regional travel grow, design the City circulation system to discourage regional traffic from bypassing SR-29 and impacting City streets. Also, cooperatively work with regional partners, including Caltrans, NCTPA and others explore a Complete Streets approach that will expand the travel capacity of SR-29.

Guiding Policy 1.6 Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak-hours where possible and as long as possible. However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond the control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce

the impact of any development use or density planned for in the Land Use Element of the General Plan.

The following locations that may not achieve or maintain LOS D are as follows and therefore will be exempt from the LOS D policy:

- State Route 29 through the City
- American Canyon Road from SR-29 to Flosden Road–Newell Drive
- Flosden Road south of American Canyon Road

Guiding Policy 1.9 Use of existing facilities. Make efficient use of existing transportation facilities, and improve these facilities as necessary in accordance with the Circulation Map.

Guiding Policy 1.11 Reduce Vehicle Miles Traveled. Through layout of land uses, improved alternate modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by City residents.

Guiding Policy 1.12 Circulation System Enhancements. Achieve, maintain and/or improve mobility in the City by considering circulation system enhancements beyond improvements identified on the Circulation Map, where feasible and appropriate. Improve the circulation system, in accordance with the Circulation Map, at minimum, to support multimodal travel of all users and goods and where feasible, apply creative circulation system enhancements that increase system capacity and that are acceptable to the City and its residents and where applicable, Caltrans.

Implementing Policy 1.14
Work with Caltrans on highway improvements. Continue to work with Caltrans to achieve timely context sensitive design solutions, funding, and construction of programmed highway improvements.

Implementing Policy 1.17
Regional fair-share fee program. Work with Caltrans, NCTPA, Napa County, and other jurisdictions to establish a fair-share fee program for improvements to routes of regional significance and State highways. This fee should reflect traffic generated by individual municipalities/unincorporated communities as well as pass-through traffic.

Implementing Policy 1.24
Impacts of new development. Based upon the findings of a transportation impact analysis, consistent with Guiding Policy 1.26, new development will be responsible for mitigation of transportation-related impacts.

Implementing Policy 1.35

General transit and pedestrian access. In reviewing designs of proposed developments, ensure that provision is made for access to current and future public transit services. In particular, pedestrian access to arterial and collector streets from subdivisions should not be impeded by continuous segments of sound walls.

Guiding Policy 2.1 Promote walking and bicycling. Promote walking and bike riding for transportation, recreation, and improvement of public and environmental health.

Guiding Policy 2.3 Develop a safe and efficient non-motorized circulation system. Provide safe and direct pedestrian routes and bikeways between places.

Implementing Policy 2.7

Universal design. Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts.

Implementing Policy 2.18

Pedestrian connections to employment destinations. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.

Guiding Policy 3.1 Promote safe, efficient, and convenient public transportation. Promote the use of public transportation for daily trips, including to schools and workplaces, as well as other purposes.

Guiding Policy 4.1 Promote safe and efficient goods movement. Promote the safe and efficient movement of goods via truck and rail with minimum disruptions to residential areas.

Guiding Policy 4.6 Location of industrial development. Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements.

Guiding Policy 4.7 Secure truck parking. Encourage high-security off-street parking for tractor-trailer rigs in industrial designated areas.

Performance Standards

The General Plan Circulation Element specifies minimum LOS standards for all streets and intersections in the City's jurisdiction. In Section 4.1.6, the City establishes the following performance standards for acceptable LOS for purposes of compliance with its General Plan:

> Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak-hours where possible for as long as possible. However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce the impact of any development use or VMT planned for in the Land Use Element of the General Plan.

The locations that may not achieve or maintain LOS D are as follows and will be exempt from the LOS D policy:

- SR-29 through the City
- American Canyon Road from SR-29 to Flosden Road–Newell Drive
- Flosden Road south of American Canyon Road

American Canyon Vehicle Miles Traveled (VMT Policy)

On September 5, 2023, the American Canyon City Council adopted a VMT policy for use in analyzing potential transportation impacts under CEQA. This policy included the following elements:

- The baseline for VMT analysis shall be the citywide average as estimated by the City's travel demand model. As estimated using the most recent version of the model, the averages are 16.6 miles per resident and 34.1 miles per employee.
- The VMT threshold of significance shall be 19 percent below the citywide average for the appropriate metric. This threshold applies to land development projects of all land use types, transportation projects, as well as General Plan amendments and other long-range plans. This threshold was selected based on the California Air Resource Board (ARB) 2035 target for reduction of GHG emissions of passenger vehicles in comparison with 2005 emissions.
- Projects that are consistent with a Program EIR for which a VMT analysis has been conducted are presumed to have a less than significant VMT impact.

American Canyon Bicycle Plan

The City of American Canyon Bicycle Plan was prepared in conjunction with the Napa Countywide Bicycle Plan and was adopted into the General Plan in 2020. The following policies were adopted for the countywide plan and incorporated into the City's plan.

- Build and maintain a local and countywide bicycle transportation and recreation network that connects Napa County's incorporated cities/town and unincorporated communities and provides access to public transportation and community destinations.
- Develop and maintain continuous low Level of Traffic Stress (LTS) bicycle facilities of all types to provide accessible intra-city connections that serve as the framework of the Countywide Bikeway System.

- Prioritize coordination and completion of regionally significant primary bikeways including the Napa Valley Vine Trail, the Bay Trail and the Ridge Trail, and local connections to those facilities.
- Provide secure bicycle parking at public and private destinations throughout Napa County.
- Integrate the bicycle network and bicycle facility amenities into land use decisions and developments.
- Implement projects that improve access for disadvantaged and/or underserved communities, particularly those reliant on walking, biking and transit for transportation.
- Work to reduce the number and severity of bicycle collisions.
- Work to reduce bicycle fatalities to zero by 2035.
- Improve locations that have high incidences of bicycle collisions, and/or impediments or conflicts to bicyclists.
- Implement Complete Streets policies that ensure accommodation and enable safe access for users of all ages and abilities.

Implement appropriate, well-designed bicycle facilities using accepted design standards, including intersection and other crossing improvements.

3.13.4 - Methodology

This analysis assesses impacts to the study area's transportation system as a result of implementation of the project. The potential impacts were identified based on the Checklist questions included in Appendix G of the CEQA Guidelines.

Trip Generation

Typically, the trip generation of a project is estimated based on rates published in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition, 2021. However, the Trip Generation Handbook that complements the Manual notes that locally collected data may be used when available. Counts were collected at six wine warehouse and storage facilities in the City of American Canyon and used for the analysis prepared for the SDG 217 project, which is adjacent to SDG 220.[2] Given the geographic proximity of these projects to the proposed SDG 220 project and the similarity in land use type, the trip generation rates from those analyses were applied to the current project. Based on the application of these rates, the proposed project would be expected to generate an average of 372 trips per day, including 35 AM peak-hour trips and 27 trips during the PM peak-hour. These results are summarized in Table 3.13-2.

[2] GHD. 2020. Traffic Impact Analysis Memorandum. SDG 217 Commerce Boulevard Distribution Center Project.

Table 3.13-2: Trip Generation Summary

Land Use	Units	Daily		AM Peak-hour				PM Peak-hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Wine Warehouse	219.834 ksf	1.69	372	0.16	35	21	14	0.125	27	10	17

Notes:
ksf = 1,000 square feet
Source: GHD. 2020. Traffic Impact Analysis Memorandum. SDG 217 Commerce Boulevard Distribution Center Project.

Vehicle Miles Traveled

In accordance with City policy, outputs from the City's travel demand model were used as the metric for evaluating VMT. Since the proposed project is an employment site, the citywide VMT per employee of 34.1 miles was used as the baseline for evaluating potential VMT impacts associated with the proposed project, and the significance threshold was 19 percent below this level, or 27.6 miles. As noted in the City policy, the 19 percent emissions reduction target established by the ARB that was the basis for this threshold was focused on passenger vehicle emissions. The use of passenger vehicle emissions for VMT analysis is supported by the OPR Technical Advisory, which states that in Section 15064.3 of the CEQA Guidelines, "automobiles" refers to "on-road passenger vehicles, specifically cars and light trucks." (Technical Advisory, p. 4);[3] further, the OPR explicitly notes that VMT does not include consideration of heavy-duty trucks. Accordingly, the appropriate source of VMT to analyze for the proposed project is associated with employee commute trips rather than heavy vehicle trips. Note that while heavy-duty trucks are not the focus of transportation-based VMT analyses, truck VMT is still analyzed under other CEQA discipline areas including GHG emission analyses.

To evaluate the proposed project VMT, it was assumed that the VMT per employee would reflect the citywide average of 34.1 miles. Therefore, for the proposed project to have a less than significant VMT impact, the VMT per employee would need to be reduced by 19 percent to a maximum of 27.6 miles.

Traffic Operations Analysis

A traffic operations analysis was previously conducted for the SDG Commerce 217 project, which is similar to the proposed project and located on the adjacent parcel to the north. Commerce Court, formerly known as Commerce Boulevard, has been truncated and redesigned as a cul-de-sac, preventing vehicle traffic to and from the south. As a result, all vehicles entering the project site must pass through the Green Island Road/Commerce Court intersection. The analysis prepared for the SDG Commerce 217 project found that this intersection would operate acceptably under Cumulative Plus Project conditions. Since the current project is consistent with the City's General Plan, the proposed project generated trips were presumably included in the future traffic volume

[3] California Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December. Website: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed October 12, 2023.

projections. Therefore, it was determined that an operational analysis for the proposed project was not necessary, an assessment with which City staff concurred.

It is noted that a traffic operations analysis does not address a CEQA issue. As a result of the passage of SB 743, since July 2020, lead agencies may no longer measure adverse transportation effects for CEQA purposes in terms of "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion" (with an exception not relevant here) (Public Resources Code [PRC] § 21099(b)(2)). Even so, many public agencies still require analyses of proposed projects' potential effects on LOS, but do so under their general police power or General Plan policies, wholly independent of, and separate from, CEQA.

3.13.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to transportation are significant. These questions reflect the input of planning and environmental professionals at the OPR and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect related to transportation if the proposed project would:

a) Conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

d) Result in inadequate emergency access.

3.13.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Impact TRANS-1:	**The proposed project would not conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.**

Impact Analysis

Circulation

General Plan Policy 4.6 indicates that industrial uses should be located in the City's north industrial area to minimize the impacts of truck traffic on residential neighborhoods. The proposed project is located adjacent to similar warehouse projects, and with the redesign of Commerce Court as a cul-de-sac, the roadway connection to the residential neighborhood to south of the project is not available, and truck traffic would be required to access the site via Green Island Road. As the proposed project would minimize truck traffic impacts on residential neighborhoods, the proposed

project would not conflict with this policy. The impacts of the project with respect to circulation would therefore be less than significant.

Transit

As described above, the nearest bus stop to the project is located on Rio del Mar near Eucalyptus Drive and serves Vine Transit Route 11, approximately 1.3 miles south of the project. An acceptable walking distance to a bus stop is generally considered to be 0.5 mile. Should an employee desire to use transit, they could ride a bicycle along the path at the southern terminus of Commerce Court to Waters Edge Court and proceed along Eucalyptus Drive to the nearest bus stop. General Plan Circulation Element Implementing Policy 1.35 calls for the provision of continuous access to existing and future transit service. As there are continuous sidewalks between the proposed project and the nearest bus stop and a route for bicyclists is available between the project site and the bus stop is available, the proposed project would not conflict with this policy. Impacts would therefore be less than significant with regard to transit facilities.

Bicycles

Existing bicycle facilities, including the Class I path connecting to the southern terminus of Commerce Court and linking to other nearby facilities together with shared use of minor streets provide adequate access for bicyclists in the project vicinity. The planned extension of the Class I facility along Eucalyptus Drive and planned Class II bicycle facilities on Green Island Road, Commerce Court, and other streets near the proposed project would improve bicycle connectivity near the project site. General Plan Circulation Element Guiding Policy 2.1 supports development of a safe and efficient non-motorized circulation system. Since the existing bicycle facilities network provides connections to surrounding neighborhoods and destinations and would be further enhanced by the implementation of planned facilities, the proposed project would not conflict with this policy. For this reason, the impacts to bicycle facilities would be less than significant.

Pedestrian

The project site would be accessible to pedestrians approaching from the south due to the presence of the Class I path at the southern terminus of Commerce Court and the connecting path and sidewalk facilities in the residential neighborhood south of Eucalyptus Drive. Employees would also have access to recreational walking opportunities along the unpaved path at Wetlands Edge Park. It is reasonable to assume that few project employees would desire to walk to the project site from the north, given the industrial character of the surrounding area and the incomplete sidewalk network. As a continuous pedestrian network provides access from the project site to the adjacent neighborhoods, nearest transit options, and the SR-29 corridor, the project would not conflict with General Plan Circulation Element Guiding Policy 2.1. Pedestrian facility impacts would thus be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Conflict with CEQA Guidelines Section 15064.3, Subdivision (b)

Impact TRANS-2: The proposed project would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Impact Analysis

The proposed project VMT was evaluated in accordance with the City's adopted VMT policy as described in Section 3.13.4-Methodology, and in response to direction from City staff. For the project's VMT impact to be less than significant, the VMT per employee would need to be reduced by at least 19 percent below current levels. It is noted that Napa County uses a similar approach to analyze VMT impacts for wine warehouses in the project vicinity, although the County applies a different threshold. VMT reductions are typically achieved by applying Transportation Demand Management (TDM) measures which provide incentives to encourage use of alternatives to vehicle transportation.

According to the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, California Air Pollution Control Officers Association (CAPCOA), 2021 (CAPCOA Handbook), a reduction in the VMT of 15 percent is generally considered the maximum feasible mitigation for suburban environments, such as that of the proposed project. If this level of trip reduction could be achieved, that would mitigate most of the project's VMT impact, although not to a level that would be less than significant (19 percent). However, given the lack of transit services within an acceptable walking distance of the project, achieving even this level of mitigation is considered infeasible.

Nonetheless, Mitigation Measure (MM) TRANS-2 requires the implementation of a TDM program to reduce VMT to the extent possible. As noted, the nearest bus stop to the project site is 1.3 miles away and serves only limited destinations; therefore, given the land use context of the project area and per the CAPCOA Handbook, a TDM program is estimated to result in a VMT reduction of approximately 4 percent. As such, even with the implementation of mitigation, impacts related to VMT would remain significant and unavoidable.

Level of Significance Before Mitigation

Significant impact.

Mitigation Measure

MM TRANS-2 Transportation Demand Management Program

The proposed project shall develop a Transportation Demand Management (TDM) program to encourage employees to choose non-personal vehicle modes of transportation for commuting. This includes a commute trip reduction marketing initiative, through which the employer would disseminate information about available transportation options. Strategies would include encouraging ride sharing among project employees and linking them to resources to find rideshare partners working nearby, such as through the Napa Valley Transportation Authority (NVTA) V-Commute program or the regional 511.org program. Marketing materials can also

inform employees of resources such as the Guaranteed Ride Home Program, which provides free rides home in emergency situations for employees using non-personal vehicle transportation modes.

Level of Significance After Mitigation

Significant and unavoidable impact.

Hazards

Impact TRANS-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact Analysis

Site access and sight distance were evaluated for the proposed project.

Site Access

The proposed project would be located between two warehouse facilities, one of which is existing while the second is under construction. The three sites would be connected via internal roadways as shown on the site plan (Chapter 2, Project Description, Exhibit 2-4a and Exhibit 2-4b). Therefore, vehicular access to the project site would be provided via two existing driveways located on adjacent parcels. The internal roadways would need to be designed to current City standards to accommodate heavy vehicles and so can be expected to accommodate the access requirements for both emergency and passenger vehicles. The adequacy of the driveways was assessed as part of the development review process for their respective projects. Impacts with respect to site access would therefore be less than significant.

Sight Distance

A substantially clear line of sight should be maintained between the driver of a vehicle waiting at a driveway and the driver of an approaching vehicle. As noted, access to the proposed project would be provided via two previously approved driveways. The southernmost driveway is at the end of a cul-de-sac, while the second driveway is approximately 500 feet to the north. Approaching vehicle speeds would be slow in this setting. The street is flat with a slight curve that would not impact visibility of approaching vehicles, and it is noted that obstacles would be minimized as on-street parking is prohibited along both sides of the street. As such, there would be a less than significant impact on sight distance.

Parking

Parking is not typically considered a safety issue. However, the lack of adequate parking can result in vehicles being parked in inappropriate and hazardous locations. Given that on-street parking is prohibited along Commerce Court, the adequacy of the proposed parking supply was evaluated. Per Section 19.21.030 of the City's Municipal Code, the required off-street parking for warehouses is one space for the first 20,000 square feet of space plus one space for each additional 2,000 square feet of gross floor area. With a proposed building area of 224,593 square feet, 122 spaces would be

required. As proposed, the project includes 122 spaces; therefore the parking supply meets City requirements and would be adequate to serve the proposed project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Emergency Access

Impact TRANS-4: The proposed project would not result in inadequate emergency access.

Impact Analysis

As previously noted, vehicular access to the proposed project would be provided via two driveways to adjacent properties on Commerce Court. The driveways were included as part of previously approved projects, which included project-level review for compliance with emergency access requirements. In addition, based on the analysis of traffic operations at the Green Island Road/Commerce Boulevard intersection conducted for SDG 217, the proposed project would have a negligible impact on delay and the associated emergency vehicle response times. Regarding site design, the internal roadways of the proposed project would need to be designed to current City standards to accommodate heavy vehicles and so can be expected to accommodate the access requirements for both emergency and passenger vehicles. Impacts to emergency access would therefore be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

3.13.7 - Cumulative Impacts

The geographic scope of the cumulative transportation analysis is the nine-county San Francisco Bay Area region. VMT is evaluated and regulated at a regional level and, thus, the San Francisco Bay Area region is an appropriate geographical area.

Impact TRANS-1 concluded that the proposed project would not have a significant impact on the circulation system and, therefore, no mitigation would be necessary. As such, the proposed project would not have a cumulative considerable contribution in this regard.

Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project's location and lack of access to high-quality transit. MM TRANS-2 would reduce project-related VMT but not to a

level below significance. As such, the proposed project would have a cumulatively considerable contribution on VMT.

With respect to Impact TRANS-3, the potential hazards from design features or incompatible uses are specific to the project site (e.g., site access, sight distance, etc.) and would not combine with other projects. The proposed project and other past, present, and reasonably foreseeable future projects have complied and must comply with local standard requirements for transportation-related design features specifically adopted to avoid and reduce hazards from project design or the location of incompatible uses, thereby reducing potential significant cumulative impacts to less than significant levels. Therefore, no significant impacts would result from the proposed project combined with cumulative projects.

With respect to Impact TRANS-4, the provision of adequate emergency access is site specific and would not combine with other projects. The proposed project and other past, present, and reasonably foreseeable future projects must comply with local standard requirements for adequate emergency access specifically adopted to avoid or reduce the potential for inadequate access. Furthermore, as was determined in the operational analysis conducted for SDG Commerce 217, the proposed project and other projects would not have significant impacts on the performance of the Green Island Road/Commerce Boulevard intersection and, therefore, it can be inferred that it would also not impair emergency response to the project vicinity. Therefore, no significant adverse cumulative impacts would result.

Level of Cumulative Significance Before Mitigation

Significant VMT impact.

Mitigation Measures

MM TRANS-2 as described above.

Level of Cumulative Significance After Mitigation

Significant and unavoidable impact.



Source: W-trans.

FIRSTCARBON SOLUTIONS™

Exhibit 3.13-1
Local Street Network

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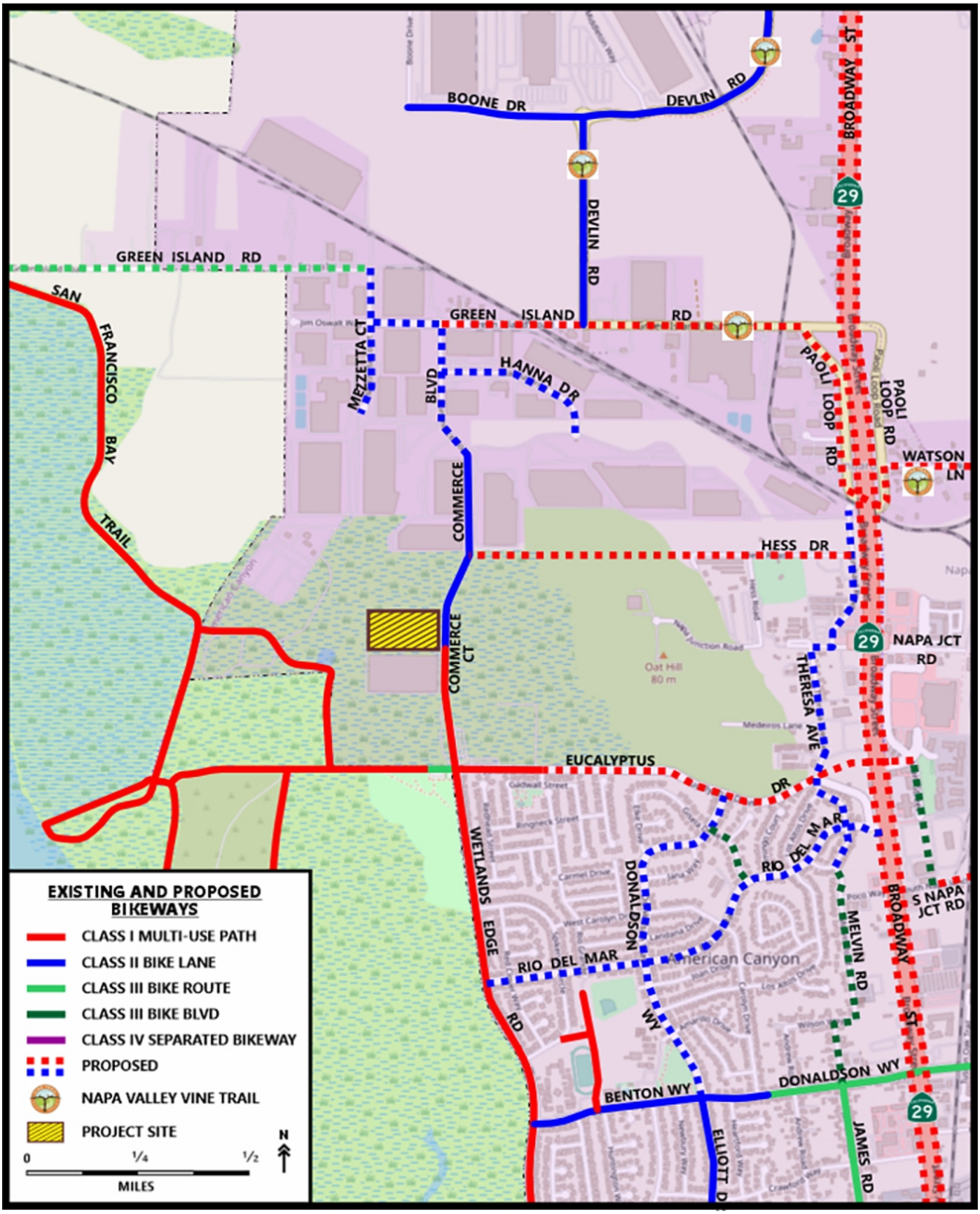

Source: W-trans.

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Exhibit 3.13-2
Existing and Proposed Bikeways

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3.14 - Utilities and Service Systems

3.14.1 - Introduction

This section describes the existing conditions related to utilities and service systems (water, wastewater, stormwater, and solid waste) in the City of American Canyon (City) and project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to such utilities and service systems that could result from implementation of the proposed project. Descriptions and analyses in this section are based, in part, on information provided by the City of American Canyon General Plan, the 2020 Urban Water Management Plan (2020 UWMP), and the City of American Canyon Sewer Master Plan.

No public comments pertaining to utilities or service systems were received in response to the Notice of Preparation (NOP).

3.14.2 - Environmental Setting

Water

The City of American Canyon Public Works Department provides potable and nonpotable water to a service area of approximately 30 square miles. The area encompasses the city limits and its Sphere of Influence (SOI) and extends from the Napa River to the west to the Napa/Solano County line to the east and from the Napa/Solano County line to the south to Soscol Ridge north of the Napa Airport.[1]

Water Supply

The City obtains its water supply from a variety of sources, all of which (except for recycled water) are imported from outside of the City. Imported water is mostly sourced from the State Water Project (SWP) and purchased from the Napa County Flood Control and Water Conservation District (FCWCD) and the City of Vallejo. The City's imported water comes through the North Bay Aqueduct system.[2] Table 3.14-1 identifies the City's sources and volume of water used in 2020. Each source is discussed in detail after the table.

Table 3.14-1: 2020 Sources of Water Supply

Source	Actual Volume (Acre-Feet in 2020)
State Water Project "Table A" Water	29
State Water Project Article 21 Water	191
Article 56 Carryover Water	1,819
Table A Exchange Return Water	12
Vallejo Permit Water	500

[1] City of American Canyon. 2022. 2020 Urban Water Management Plan. Website: https://www.cityofamericancanyon.org/government/maintenance-and-utilities/water Accessed January 18, 2024.
[2] Ibid.

Source	Actual Volume (Acre-Feet in 2020)
Vallejo Treated Water	58
Vallejo Emergency Water	0
Recycled Water	208
Total:	**2,817**

Source: City of American Canyon. 2023. 2020 Urban Water Management Plan, Submittal Table 6-8 Retail: Water Supplies—Actual. Website: https://www.cityofamericancanyon.org/government/maintenance-and-utilities/water. Accessed January 18, 2024.

State Water Project

A significant portion of the City's supply is obtained through various indirect contracts for water from the SWP. The Napa County FCWCD is the State Water Contractor with the California Department of Water Resources (DWR), and the City receives its water through subcontracts with the Napa Flood Control and Water Conservation District.

Table A Allocation

In January 1967, the American Canyon County Water Agency[3] entered into an agreement with the Napa County FCWCD for SWP water ("Table A" allotments) supply from the North Bay Aqueduct. This contract runs through 2035 with provisions for extension and is anticipated to be extended through 2085. The City's current "Table A" allotment is 5,200 acre-feet per year (AFY). The actual amount of SWP water available to the City under the "Table A" allocation process (the method used by the DWR to allocate water in the SWP system) varies from year to year due to hydrologic conditions, water demands of other contractors, SWP facility capacity, and environmental/regulatory requirements.

The 2020 UWMP assumes that "Table A" water allotment would be 56 percent, 5 percent, and 27 percent of the full contracted volume (5,200 AFY) for average, single-dry, and 5-consecutive-year drought water types, respectively.[4]

Article 21 Water

In certain years, the City may also receive additional SWP water known as Article 21 water, which is identified in Article 21 of SWP long-term water supply contracts between DWR and each SWP water contractor. The year-to-year availability of Article 21 water supply varies. Article 21 water becomes available only when the following conditions are met:

- Such deliveries do not interfere with SWP "Table A" allocations and SWP operations.
- Excess water is available in the Delta.
- Capacity is not being used for SWP purposes or scheduled SWP deliveries.
- Contractors can use the SWP Article 21 water directly or can store it in their own system (I.e., the water cannot be stored in the SWP system).

[3] A predecessor agency to the City of American Canyon, which was not incorporated until 1992.
[4] City of American Canyon. 2022. 2020 Urban Water Management Plan. Website: https://www.cityofamericancanyon.org/government/maintenance-and-utilities/water Accessed January 18, 2024.

The 2020 UWMP assumes that Article 21 water allotment would be 568 AFY, 0 AFY, and 216 AFY for average, single-dry, and 5-consecutive-year drought water types, respectively.[5]

Other State Water Project Sources

Article 56 Carryover Water

DWR's Article 56 Carryover Program allows water that is allocated to an SWP contractor but not used by the end of the year to be used in the next year. This water is exported from the Delta by the Banks Pumping Plant and stored in the San Luis Reservoir.[6]

"Table A" Exchange Return Water

DWR's "Table A" Exchange Return Water Program allows interested SWP contractors to receive a portion of another SWP contractors approved "Table A" allotment in exchange for return of future approved SWP "Table A" water at an established exchange ratio.[7]

City of Vallejo

In 1996, the City of American Canyon entered into an agreement with the City of Vallejo to allow the purchase of additional water supply. Vallejo receives its water from a variety of sources, including SWP water and an appropriative water right. The City's agreement with the City of Vallejo allows for the purchase of Vallejo Permit Water (raw water), Vallejo Treated Water (potable water), and Vallejo Emergency Water (raw water).

Vallejo Permit Water

The City of Vallejo holds an appropriative right for Sacramento Bay-Delta water from the California State Water Resources Control Board (State Water Board) that pre-dates the construction of the SWP. The City of American Canyon has an agreement with the City of Vallejo for delivery of up to 500 AFY under this permit. This source of water is more reliable than the City's Table A supply, but the Vallejo Agreement still allows for reductions. Addendum 2 to the 1996 Vallejo Agreement states that "In the event the State Water Resources Control Board, or any other agency, restricts Vallejo's diversion of water [under the appropriative pre-SWP contract] for any reason whatsoever, American Canyon's diversions will be reduced in the same proportion." Since the City began receiving Vallejo Permit Water, it has received 100 percent of the full contracted volume every year with the exception of a supply reduction in 2015.

The 2020 UWMP predicts that the full contract volume of 500 AFY would be available under average, single-dry, and 5-consecutive-year drought water types.[8]

Vallejo Treated Water

In 1996, the City of American Canyon entered into an agreement with the City of Vallejo to purchase up to 628.6 AFY of Vallejo Treated Water. The water is treated at the City of Vallejo's Flemming Hill Water Treatment Plant and delivered via an intertie connection.

[5] A predecessor agency to the City of American Canyon, which was not incorporated until 1992.
[6] Ibid.
[7] Ibid.
[8] Ibid.

The 2020 UWMP assumes that the full contracted volume (628.6 AFY) of Vallejo Treated Water would be available for average year water type and would be reduced by 20 percent for single-dry and consecutive dry-year water types.[9]

Vallejo Emergency Water

When the City's "Table A" water allotment is curtailed, the City of American Canyon has the option to purchase up to 500 acre-feet of emergency raw water supply from Vallejo under an agreement amended in 1996.

The 2020 UWMP assumes that the full contracted volume of 500 AFY would be available for single-dry and consecutive dry years 1 to 2; 400 AFY would be available for consecutive dry years 3 to 5; and 0 AFY for average year water type (i.e., not available when the City's "Table A" allotment is not curtailed).[10]

Other Sources of Potable Supply

Dry Year Purchase Program

The DWR's Dry Year Water Purchase Program allows SWP contractors to purchase emergency water supplies from Sacramento Valley rice farmers during dry years if supply is made available.

Turn-back Water Pool Program

DWR has a program for interested SWP contractors called the Turn-back Water Pool Program. SWP contractors may choose to sell "Table A" water or purchase turn-back pool water that is available through the program. The City has not purchased water through this program since 2015.

Dry Year Transfer Program

During dry years, varying amounts of additional water may be made available to SWP contractors through DWR's Dry Year Transfer Program, which allows for transfers through a combination of crop idling, groundwater substitution, and changes in reservoir operation. The City has not purchased water through this program since 2015.

Yuba Accord

In 2008, the DWR adopted the Lower Yuba River Accord, an agreement to settle issues related to in-stream flows in the Yuba River and fisheries habitat. As part of that agreement, participating SWP contractors are able to purchase water from the Yuba River Water Agency during dry years. The City has not purchased water through this program since 2015.

City of Napa

The City has an agreement with the City of Napa for the purchase of treated (potable) water under emergency conditions or when the North Bay Aqueduct system or the City's Water Treatment Plant (WTP) is off-line for maintenance or other reasons. This water source would be deducted from the City's "Table A" water allotment. The City has not purchased water through this program since 2014.

[9] A predecessor agency to the City of American Canyon, which was not incorporated until 1992.
[10] Ibid.

Groundwater, Surface Water, and Stormwater

The City is located over the Napa-Sonoma Valley Lowlands Subbasin. According to the 2020 UWMP, groundwater productivity in and near the City indicated that usable groundwater resources in the City may be limited. The City does not operate groundwater wells for water supply. The City does not have any surface water sources as part of its water supply and has not identified any stormwater recapture opportunities to offset potable water use.

Recycled Water

American Canyon Recycled Water

The City's Water Reclamation Facility (WRF) produces disinfected tertiary recycled water under the General Water Reuse Order (Order No. 96-011) per the recycled water criteria defined by the Division of Drinking Water (DDW), formerly the California Department of Public Health, under California Administrative Code, Division 4, Title 22, California Code of Regulation. The City currently delivers recycled water to meet demand on an as-needed basis to nine private customers for agricultural and landscape irrigation and 21 City-owned facilities for landscape irrigation and as dust control at construction sites.

Wastewater

The City and the Napa Sanitary District (NSD) provide municipal wastewater collection within the City's water service area. The City's wastewater collection system consists of gravity pipelines, two force mains, and pump stations that convey wastewater to the City's WRF located near the Napa River at the City's northwest limits. The NSD collects wastewater from the residents and businesses in the City of Napa, Silverado Country Club, the Napa County Airport, and several adjacent unincorporated areas, including northeastern portions of the City's water service area. The wastewater is conveyed to NSD's Soscol WRF, located outside of the City's water service area. The 2020 wastewater flows from the City's service area consisted of 1,625 AF collected by the City's wastewater collection agency and diverted to the City's WRF and 139 AF collected by the NSD and diverted to the Soscol WRF for a total of 1,764 AF of wastewater. The American Canyon WRF is owned and operated by the City of American Canyon. The treatment plant has an existing design capacity of 2.5 million gallons per day (mgd) at average dry weather conditions and 5.0 mgd at peak weather flow conditions. The City has plans to expand the WRF's treatment capacity to 4.0 mgd.

Storm Drainage

The City of American Canyon Public Works Department oversees municipal storm drainage within the American Canyon City limits. The municipal storm drainage system consists of ditches, inlets, basins, and underground piping that ultimately discharge flows into the Napa River. The City maintains a Storm Drain Master Plan, adopted in 1996, and engineering standards that guide the development of the municipal storm drainage system.

The City requires stormwater discharges to comply with San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) permit requirements and establishes non-point source pollution control measures as required by federal and State law. Stormwater pollution prevention measures for new development projects, such as bioswales, detention ponds, erosion, and

sedimentation control, are incorporated in the planning, design, construction, and operation of projects with the potential to create pollutants in stormwater runoff.

Project Site Drainage

The project site does not contain any formal storm drainage facilities. The project site frontage with Commerce Court is currently improved with curb and gutter.

Solid Waste

Recology American Canyon (Recology) provides garbage pickup for all residents and businesses pursuant to a franchise waste hauling agreement with the City of American Canyon. Roll-off service is also available.

Devlin Road Transfer Station

Recology transports solid waste to the Devlin Road Transfer Station within the Napa County Airport Industrial Area. The Transfer Station is owned by the Napa-Vallejo Waste Management Authority (NVWMA), a joint-powers agency consisting of the cities of American Canyon, Napa, and Vallejo and the County of Napa. The Transfer Station accepts municipal solid waste and construction and demolition (C&D) debris and incentivizes such activities through pricing. The NVWMA has plans to construct an enclosed C&D Debris Recycling Facility on a vacant parcel it owns immediately south of the Devlin Road Transfer Station. California Environmental Quality Act (CEQA) documentation has been completed and certified for the new facility, but it has yet to be constructed.

Potrero Hills Landfill

Municipal solid waste and demolition debris from the Devlin Road Transfer Station are landfilled at the Potrero Hills Landfill in Solano County. The Potrero Hills Landfill, located approximately 1 mile southeast of Suisun City, is a regional facility that serves numerous jurisdictions within a 150-mile radius.[11] In 2005, the County of Solano approved a 260-acre expansion that increased capacity to 83.1 million cubic yards. In 2010, the San Francisco Bay Conservation and Development Commission (BCDC) issued a permit allowing the expansion to proceed. Following the conclusion of litigation, the expansion was cleared to move forward in 2014. Table 3.14-2 summarizes the Potrero Hills Landfill.

Table 3.14-2: Potrero Hills Landfill Summary

Permitted Area	Permitted Daily Throughput	Permitted Disposal Capacity	Remaining Capacity	Estimated Closure Date
525.7 acres (total)	4,330 tons (single day)	83.1 million cubic yards	13.872 million cubic yards	2/14/2048
340.0 acres (disposal)	4,330 tons (single day)			

[11] California Department of Resources Recycling and Recovery (CalRecycle). 2024. Solid Waste Information System (SWIS) Facility/Site Activity Details – Potrero Hills Landfill (48-AA-0075). Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1194?siteID=3591. January 18, 2024.

Permitted Area	Permitted Daily Throughput	Permitted Disposal Capacity	Remaining Capacity	Estimated Closure Date
Note: Data obtained from Solid Waste Facility Permit No. 48-AA-0075 Source: California Department of Resources Recycling and Recovery (CalRecycle) 2024. SWIS Facility/Site Activity Details. Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1194?siteID=3591. January 18, 2024.				

3.14.3 - Regulatory Framework

Federal

National Pollutant Discharge Elimination System

Pursuant to Section 402 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in Suisun City are regulated under the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, MS4 Order No. 2013-001 (General Permit). In 1987, Congress amended the Clean Water Act to mandate controls on discharges from Municipal Separate Storm Sewer Systems (MS4s). Acting under the federal mandate and the California Water Code, RWQCBs require cities, towns, and counties to regulate activities that can result in pollutants entering their storm drains. All municipalities prohibit non-stormwater discharges to storm drains and require residents and businesses to use Best Management Practices (BMPs) to minimize the amount of pollutants in runoff. The Municipal Regional Permit is overseen by the San Francisco Bay RWQCB. On February 5, 2013, the State Water Board reissued the Phase II Stormwater NPDES Permit for small MS4s. Provision E.12, "Post-Construction Stormwater Management Program," mandates municipalities to require specified features and facilities—to control pollutant sources, to control runoff volumes, rates, and durations, and to treat runoff before discharge from the site—be included in development plans of projects that create or replace 5,000 square feet or more impervious surface as conditions of issuing approvals and permits. The new requirements continue a progression of increasingly stringent requirements since 1989.

Provision E.12 requires all municipal permittees to implement these requirements by June 30, 2015, to the extent allowed by applicable law. This includes projects requiring discretionary approvals that have not been deemed complete for processing and discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals.

In July of 2014, the Bay Area Stormwater Management Agencies Association (BASMAA), through the BASMAA Phase II Committee, created the BASMAA Manual to assist applicants for development approvals to prepare submittals that demonstrate their project complies with the NPDES permit requirements. Applicants who seek development approvals for applicable projects should follow the manual when preparing their submittals. The manual is designed to ensure compliance with the requirements and promote integrated Low Impact Development (LID) design.

Section E.12.c of the General Permit pertains to LID and how it relates to hydromodification management. This permit provision requires that stormwater discharges not cause an increase in the erosion potential of the receiving stream over the existing condition. Increases in runoff flow and

volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code §§ 10610–10656) requires that all urban water suppliers prepare UWMPs and update them every 5 years. In preparing a UWMP, an urban water supplier must describe or identify the following, among other things (as set forth in Water Code § 10631):

- "The service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning."
- "Projected population estimates" based on "data from the State, regional, or local service agency population projections within the service area," in "5-year increments to 20 years or as far as data is available."
- "Past and current water use" and "projected water use."
- "Existing and planned sources of water" for each 5-year increment of the 20-year planning period.
- Specific detailed information about groundwater where it is identified as "an existing or planned source of water available to the supplier."
- "All water supply projects and water supply programs" that may be undertaken to meet "total projected water use," including "specific projects" and the "increase in water supply" expected from each project.
- An estimate of "the implementation timeline for each project or program."
- "Plans to supplement or replace" any "water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors" with "alternative sources or water demand management measures, to the extent practicable."
- "The reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable," for (i) an "average water year," (ii) a "single dry water year," and (iii) "[m]ultiple dry water years."
- "Opportunities for exchanges or transfers of water on a short-term or long-term basis."
- "Opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply."
- "Water demand management measures."

Senate Bill 610: Water Supply Assessments

As revised by Senate Bill (SB) 610 (Stats. 2002, ch. 643), Section 10910, *et seq*. of the California Water Code set forth the circumstances in which CEQA lead agencies must seek preparation of, or prepare themselves, "water supply assessments" for defined proposed "projects." At the time a lead agency determines that a proposed project requires an Environmental Impact Report (EIR), the lead agency shall identify any "public water system" that would serve the project site and shall request that any such entity prepare a Water Supply Assessment (WSA) for the project. In the absence of such a public water system, the city or county lead agency must prepare its own WSA. SB 610 functions together with CEQA, in that a WSA must be included in "any environmental document" for any "project" subject to SB 610 (Water Code Section 10911(b); see also State CEQA Guidelines Section 15155(e); see also *Id*. Section 15361 [defines "environmental documents" to include "Negative Declarations . . . (and) draft and final EIRs"]).

One of the fundamental tasks of a WSA is to determine whether "total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses" (Water Code § 10910 (c)(3), (c)(4)). In making such a determination, the authors of the WSA must address several factors. Specifically, the WSA must contain information regarding existing water supplies, projected water demand, and dry year supply and demand. In *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 433 ("*Vineyard*"), the California Supreme Court briefly summarized the key content requirements as follows:

> With regard to *existing* supply entitlements and rights, a Water Supply Assessment must include assurances such as written contracts, capital outlay programs and regulatory approvals for facilities construction . . . but as to additional *future* supplies needed to serve the project, the assessment need include only the public water system's plans for acquiring the additional supplies, including cost and time estimates and regulatory approvals the system anticipates needing (Water Code §§ 10910, subd. (d)(2), and 10911, subd. (a)). (Original italics.)

"Existing" water supplies can be based on different kinds of legal rights or arrangements, including entitlements, water rights, and water service contracts. In many cases, these supplies are likely already described in detail in the supplier's UWMP (Water Code § 10631(b)). Suppliers are expressly permitted to rely on information contained in the most recently adopted UWMPs, provided that the water needed for proposed development project was accounted for therein (Water Code § 10910(c)(2)).

In preparing a WSA, the public water system must disclose and document the quantity of water received from these various sources. Such supplies must be demonstrated by providing the following:

(A) Written contracts or other proof of entitlement to an identified water supply.

(B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.

(C) Federal, State, and local permits for construction of necessary infrastructure associated with delivering the water supply.

(D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

(*Id*. subd. (d)(2)).

A finding of insufficiency in a WSA does not require a city or county to deny or downsize a proposed development project. Rather, after identifying a shortfall, the public water system must provide its plans for acquiring "additional supplies" (or what the California Supreme Court called "future" supplies) (Water Code § 10911(a)). These plans should include information concerning the following:

(1) The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies.

(2) All federal, State, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.

(3) Based on the considerations set forth in paragraphs (1) and (2), the estimated timeframes within which the public water system, or the city and county . . . expects to be able to acquire additional water supplies.

These particular Water Code requirements for assessments are action-forcing, in that they require the public water system to lay out a roadmap for obtaining new water supplies once it becomes aware that existing supplies are insufficient for the proposed project together with other foreseeable planned growth.

Regardless of the information provided to a city or county in a WSA, SB 610 stops short of preventing cities and counties from approving the "projects" at issue absent "sufficient" water supplies. But where "existing water supply entitlements, water rights, or water service contracts" are "insufficient" to serve proposed projects, SB 610 does require that, in approving projects in the face of insufficient supplies, cities and counties must "include" in their "findings for the project[s]" their "determination[s]" regarding water supply insufficiency. SB 610 functions together with CEQA, in that a WSA must be included in "any environmental document" for any "project" subject to SB 610. (*Id*. subd. (b); Guidelines, § 15155, subd. (e); see also id. § 15361 [defines "environmental documents" to include "Negative Declarations. . . (and) draft and final EIRs"]).

Recycled Water Policy

On February 3, 2009, by Resolution No. 2009-0011, the State Water Board adopted a Recycled Water Policy in an effort to move toward a sustainable water future. The Recycled Water Policy states that "we declare our independence from relying on the vagaries of annual precipitation and move toward sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater."

The following goals were included in the Recycled Water Policy:

- Increase use of recycled water over 2002 levels by at least 1 million AFY by 2020 and at least 2 million AFY by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 AFY by 2020 and at least 1 million AFY by 2030.
- Increase the amount of water conserved in urban and industrial areas by comparison to 2007 by at least 20 percent by 2020.
- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The Recycled Water Policy provides direction to the RWQCBs regarding issuing permits for recycled water projects, addresses the benefits of recycled water, addresses a mandate for use of recycled water, and indicates the State Water Board will exercise its authority to the fullest extent possible to encourage the use of recycled water.

The Recycled Water Policy also indicates that some groundwater basins contain salts and nutrients that exceed or threaten to exceed water quality objectives established in basin plans and states that it is the intent of this Recycled Water Policy that all salts and nutrients be managed on a basin-wide or watershed-wide basis through development of regional or subregional management plans. Finally, the Recycled Water Policy addresses the control of incidental runoff from landscape irrigation projects, recycled water groundwater recharge projects, anti-degradation, control of emerging constituents and chemicals of emerging concern, and incentives for use of recycled water.

In accordance with the provisions of the Recycled Water Policy, a Constituents of Emerging Concerns Advisory Panel was established to address questions about regulating constituents of concern (COCs) with respect to the use of recycled water. The Advisory Panel's primary charge was to provide guidance for developing monitoring programs that assess potential COC threats from various water recycling practices, including groundwater recharge/reuse and urban landscape irrigation. On June 25, 2010, the Advisory Panel provided recommendations to the State Water Board and California Department of Public Health in their Final Report "Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Scientific Advisory Panel." The State Water Board used those recommendations to amend the Recycled Water Policy in 2013 (State Water Board Resolution No. 2013-003).

The April 2013 amendment provides direction to the RWQCBs on monitoring requirements for COCs in recycled water. The monitoring requirements pertain to the production and use of recycled water for groundwater recharge reuse by surface and subsurface application methods and for landscape irrigation. The amendment identifies three classes of constituents to monitor:

- Human health-based COCs: COCs of toxicological relevance to human health.
- Performance indicator COCs: An individual COC used for evaluating removal through treatment of a family of COCs with similar physicochemical or biodegradable characteristics.

- Surrogates: A measurable physical or chemical property, such as chlorine residual or electrical conductivity, that provides a direct correlation with the concentration of an indicator compound. Surrogates are used to monitor the efficiency of COC treatment.

Only groundwater recharge reuse facilities would be required to monitor for COCs and surrogates. Surface application and subsurface application facilities would have different mandatory COCs and a different monitoring schedule. Monitoring is not required for recycled water used for landscape irrigation projects that qualify for streamlined permitting unless monitoring is required under the adopted salt and nutrient management plan. Streamlined permitting projects must meet the criteria specified in the policy, including compliance with Title 22, application at agronomic rates, compliance with any applicable salt and nutrient management plan, and appropriate use of fertilizers.

Water Conservation Act of 2009

Requirements regarding per capita water use targets are defined in the Water Conservation Act of 2009, which was signed into law in November 2009 as part of a comprehensive water legislation package. Known as SB X7-7, the legislation sets a goal of achieving a 20 percent reduction in urban per capita water use Statewide by 2020. SB X7-7 required retail water suppliers to define in their 2010 UWMPs the gallons per capita per day targets for 2020, with an interim 2015 target.

Assembly Bill 1881

Assembly Bill (AB) 1881 expanded previous legislation related to landscape water use efficiency. AB 1881, the Water Conservation in Landscaping Act of 2006, enacted landscape efficiency recommendations of the California Urban Water Conservation Council for improving the efficiency of water use in new and existing urban irrigated landscapes in California. AB 1881 required the DWR to update the existing Model Local Water Efficient Landscape Ordinance and local agencies to adopt the updated model ordinance or an equivalent. The law also requires the California Energy Commission (CEC) to adopt performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Assembly Bill 2882

AB 2882 was passed in 2008 and encourages public water agencies throughout California to adopt conservation rate structures that reward consumers who conserve water. AB 2882 clarifies the allocation-based rate structures and establishes standards that protect consumers by ensuring a lower base rate for those who conserve water.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed AB 939, the California Integrated Waste Management Act of 1989, effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent by 1995 and 50 percent by 2000; established a comprehensive Statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid

waste generated. In 2007, SB 1016, Wiggins, Statutes of 2008, Chapter 343, introduced a new per capita disposal and goal measurement system that moved the emphasis from an estimated diversion measurement number to an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: (1) a jurisdiction's population (or in some cases employment) and (2) its disposal as reported by disposal facilities.

Assembly Bill 341 (75 Percent Solid Waste Diversion)

In 2011, the Legislature implemented a new approach to the management of solid waste. AB 341 (Chesbro, Chapter 476, Statutes of 2011) required that the California Department of Resources Recycling and Recovery (CalRecycle) oversee mandatory commercial recycling and established a new Statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020. This paradigm adds to the policies in AB 939 in several significant ways. First, AB 341 established a Statewide policy goal rather than a jurisdictional mandate. This places the onus for achieving the goal on the State rather than on the cities and counties that are directly responsible for waste disposal and recycling. Under the law, individual jurisdictions are not required to meet the new policy goal.

AB 341 required CalRecycle to issue a report to the Legislature that included strategies and recommendations that would enable the State to divert 75 percent of the solid waste generated in the State from disposal by January 1, 2020, required businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012, and also streamlined various regulatory processes.

California Code of Regulations Title 24

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

Title 24, Part 6, of the California Code of Regulations establishes California's Energy Efficiency Standards for Residential and Nonresidential Buildings. The standards were updated in 2013. The 2013 standards set a goal of reducing growth in electricity use by 561.2 gigawatt-hours per year (GWh/y) and growth in natural gas use by 19 million therms per year. The savings attributable to new nonresidential buildings are 151.2 GWh/y of electricity savings and 3.3 million therms. For nonresidential buildings, the standards establish minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), indoor and outdoor lighting, and illuminated signs.

Part 11 (California Green Building Standards Code)

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The Code is updated on a regular basis, with the most recent update consisting of the 2022 California Green Building Code Standards that became effective January 1, 2023.[12] Local jurisdictions are permitted to adopt more stringent requirements as State law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition

[12] California Energy Commission (CEC). 2023. Building Energy Efficiency Standards. Website: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed April 26, 2024.

ordinances and defers to them as the ruling guidance provided they include a minimum 50 percent diversion requirement. The Code also provides exemptions for areas not served by construction and demolition recycling infrastructure. California Building Standards Code (CBC) provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals and policies relevant to utilities and service systems:

Goal 5 It shall be the goal of American Canyon to establish and maintain a secure water supply and treatment, distribution and storage system to serve the land uses proposed under the general plan.

Policy 5.2.5 In the event that sufficient capacity is not available to serve a proposed project, the City shall not approve the project until additional capacity or adequate mitigation is provided.

Goal 5C Establish and maintain adequate planning, construction, maintenance, and funding for storm drain and flood control facilities to support permitted land uses and preserve the public safety; upgrading existing deficient systems and expanding, where necessary, to accommodate new permitted development and to protect existing development in the City. Pursue public funding sources (i.e., grants) to reduce fiscal impacts of implementation to the City.

Policy 5.10.3 Require that adequate storm drain and flood control facilities be constructed coincident with new development.

Policy 5.10.12 Require that new development be designed to prevent the diversion of floodwaters onto neighboring parcels.

Policy 5.10.18 Require that development projects maximize the use of pervious surface materials (grass, ground cover, and other) that minimize stormwater runoff.

Goal 5D Maintain the quality of surface and subsurface water resources within the City of American Canyon.

Policy 5.12.2 Incorporate features in new drainage detention facilities which enhance the water quality of discharges from the facility.

Policy 5.13.1 Require that development activities comply with the State General Storm Water Permit for Construction Activities with measures that protect surface water quality to the maximum extent practicable.

Municipal Code

Chapter 8.20.030 Requires that commercial businesses shall have separate compost, recycling, and trash containers.

Chapter 8.20.110 Requires compliance with the model water efficient landscaping ordinance of the CalGreen Building Code including design plan submittal to ensure landscaping water use efficiency.

Chapter 13.10 New Water and Sewer Connections and Services. Establishes and requires, among other things, capacity fees, service fees, maximum allowable water use, use of no flow or low flow fixtures, and use of recycled water for irrigation.

Chapter 13.14.065 New or existing non-residential customers whose properties may be served by recycled water are required to connect or convert their property to connect to recycled water for use in irrigation and dual plumbing for toilet flushing**.**

Chapter 19.22.070 Recycled Water. Requires the use of recycled water for irrigation systems.

Zero Water Footprint Policy

The City's Zero Water Footprint Policy requires no loss of water service reliability or increase in water rates to the City of American Canyon's existing water service customers due to a requested increase in demand for water within the City's water service area.

3.14.4 - Methodology

FirstCarbon Solutions (FCS) reviewed relevant City documents, including, but not limited to, the City of American Canyon General Plan, the American Canyon Municipal Code, the City of American Canyon Sewer Master Plan, the 2020 UWMP, as well as actual water consumption data on the existing Commerce Court 330 project.

3.14.5 - Thresholds of Significance

The lead agency utilizes the criteria in CEQA Guidelines Appendix G Environmental Checklist to determine whether impacts to utilities and service systems are significant environmental effects. Would the proposed project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Comply with federal, State, and local statutes and regulations related to solid waste?

3.14.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Facilities Expansion

Impact UTIL-1:	**The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**

Impact Analysis

The proposed project would connect to existing water (both potable and recycled), wastewater, electricity, and telecommunication infrastructure in Commerce Court. Existing service laterals would extend from Commerce Court lines to the proposed building (a minor distance of less than 10 feet). As discussed in Impact UTIL-2 and Impact UTIL-3, sufficient water supply and wastewater capacity is available to serve the proposed project, and, therefore, new or expanded water or wastewater facilities would not be required beyond those constructed on-site. The proposed project's stormwater runoff would be directed via storm drainpipes into an on-site bioretention pond, the construction of which is considered in this Draft EIR. No off-site stormwater infrastructure would be required. Electricity and telecommunication infrastructure would also be extended on-site from connections in Commerce Court and would not require new or expanded facilities. The project does not contemplate the use of natural gas. In summary, the proposed project would not result in the relocation or construction of new or expanded utilities facilities outside the project boundaries. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Water Supply

Impact UTIL-2:	**The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.**

Impact Analysis

Potable water demand for the project was estimated based on actual water consumption from the SDG Commerce 330 project, which is a similarly sized wine distribution warehouse operation located directly adjacent to the project site. Estimates are summarized in Table 3.14-3. Also shown are the

water demands of SDG Commerce 330 as indicated in their approved will-serve letter. As shown, actual water use is far less than the approved will-serve amounts.

Table 3.14-3: SDG Commerce 220 Estimated Water Consumption

Water Type	Estimated Acre-Feet/Year[1]	Will-Serve Acre-Feet/Year[2]
Domestic	0.0635	0.31
Reclaimed	0.0537	1.55

[1]These estimates are based on actual water use rates for the adjacent SDG Commerce 330 wine distribution warehouse recorded at a rate of 94.07 domestic gallons per 1,000 square feet per year or 0.2577 domestic gallons per 1,000 square feet per day, and 0.0053 reclaimed acre-feet per year (AFY) per acre or approximately 0.0000 reclaimed acre-feet per day per acre.
[2]These estimates are based on the approved will-serve letter for the SDG Commerce 330 project.

As shown above, the proposed project is estimated to demand between approximately 0.0635 and 0.31 domestic acre-feet and between 0.0537 and 1.55 reclaimed acre-feet of water per year, for a combined total of between 0.1172 and 1.86 AFY. The project would incorporate Demand Management Measures (DMMs) through compliance with water waste prevention ordinances, including the Municipal Code's Water Waste Prohibitions Ordinance (Section 13.14.060), as well as codes related to water efficient landscaping (Section 16.14 and 19.22).

Tables Table 3.14-4, Table 3.14-5, and Table 3.14-6 demonstrate the City of American Canyon's estimated normal, single dry year, and multiple dry years supply and demand, as indicated by the UWMP.[13]

Table 3.14-4: Normal Year Supply and Demand Comparison (AFY)

	2025	2030	2035	2040	2045
Supply Totals	4,959	4,959	5,575	5,575	5,575
Demand Totals	3,543	3,785	4,580	4,822	5,075
Difference	1,416	1,174	994	753	500
Source: City of American Canyon. 2023. 2020 Urban Water Management Plan.					

As indicated in Table 3.14-4, the City would have a surplus of at least 500 acre-feet of water in normal years through the year 2045. The water demanded by the proposed project is approximately .02 percent of the projected water surplus for the year 2045.[14] As such, the City would be able to serve the proposed project during normal years through the year 2045.

[13] City of American Canyon. 2023. 2020 Urban Water Management Plan.
[14] 0.1172/500*100=0.2344

Table 3.14-5: Single Dry Year Supply and Demand Comparison (AFY)

	2025	2030	2035	2040	2045
Supply Totals	1,897	1,897	2,132	2,132	2,132
Demand Totals	3,543	3,785	4,580	4,822	5,075
Difference	-1,646	-1,888	-2,448	-2,689	-2,943

Notes:
Demand reductions due to water shortage stage rationing measures are not included in the single dry year demand estimates.
Source: City of American Canyon. 2023. 2020 Urban Water Management Plan.

Table 3.14-6: Multiple Dry Year Supply and Demand Comparison (AFY)

Year	Totals	2025	2030	2035	2040	2045
First Year	**Supply Totals**	3,359	3,359	3,776	3,776	3,776
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-184	-426	-804	-1,046	-1,299
Second Year	**Supply Totals**	3,359	3,359	3,776	3,776	3,776
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-184	-426	-804	-1,046	-1,299
Third Year	**Supply Totals**	3,251	3,251	3,655	3,655	3,655
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-291	-534	-925	-1,167	-1,420
Fourth Year	**Supply Totals**	3,251	3,251	3,655	3,655	3,655
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-291	-534	-925	-1,167	-1,420
Fifth Year	**Supply Totals**	3,251	3,251	3,655	3,655	3,655
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-291	-534	-925	-1,167	-1,420

Note:
Demand reductions due to water shortage stage rationing measures are not included in the 5-consecutive-year drought demand estimates.
Source: City of American Canyon. 2023. 2020 Urban Water Management Plan.

The Single Dry Year scenario is the year that represents the lowest water supply available to the City. The Multiple Dry Year scenario, in this case, a 5-consecutive-year drought, is the period that represents the driest 5-year historical sequence for the City.

As shown in Tables 3.14-5 and 3.14-6, for the single and multiple dry year scenarios there is a projected water deficit in all years, beginning in the year 2025. However, the City is expanding the use of local water resources and reducing waste through implementation of DMMs.[15] As indicated in the UWMP, demand reductions due to rationing measures are not included in scenario estimates. Therefore, the deficit could be reduced by implementing the DMMs. In addition, the City's UWMP contains a Water Waste Prohibition Ordinance, Metering, Conservation Pricing, Public Outreach and Education, Water Loss Assessment Programs, Water Conservation Program Coordination and Staffing Support, etc. These initiatives are described in greater detail in the City's UWMP and all contribute to the reduced demand for water supply.

The City also has several planned methods to expand recycled water use. The City's Recycled Water Master Plan identifies 15 capital improvement projects to upgrade the City's recycled water system to serve projected buildout demands of nearly 1,000 AFY.[16] This would be sufficient to meet the City's water deficits in multiple dry years through the year 2035.

Lastly, the City can implement additional supply augmentation methods, including purchasing additional water with existing dry-year agreements, decreasing line flushing, increasing water waste patrols, or employing a moratorium or net zero demand increase on new connections. As indicated in the UWMP, the City anticipates it can supply all its water demands through the 2045 planning horizon by purchasing supplemental imported water through existing agreements for all water year scenarios (without accounting for use reduction savings, therefore making this a conservative conclusion). As indicated in Table 7-5 of the UWMP, shortfalls could adequately be met in each multiple dry year.

In sum, the City is able to meet project demand in all years under the normal year scenario. In the dry and multiple dry year scenarios, the City is projected to have a deficit. However, planned increases in recycled water use would increase supplies to be sufficient through 2035, in dry and multiple dry year scenarios. DMMs, supply augmentation methods, recycled water use, and agreements would further reduce water deficits in the dry and multiple dry year scenarios. Finally, the UWMP concluded that predicted water supply constraints could be resolved through the purchase of "supplemental imported water through existing agreements through the planning horizon (2045) for all water year scenarios."[17] Furthermore, water purchases, both temporary and permanent, are commonly used in California to redirect water resources to areas of greatest need, consistent with the legislative policy of the State to facility water transfers (see California Water Code § 575.480, *et seq*.).

The City has a Zero Water Footprint Policy, which is defined as "no loss in reliability or increases in water rates for existing water service customers due to requested increased demand for water within the City's water service area." Consistent with the policy, the proposed project's estimated water use would be reviewed. This process would ensure that either the proposed project meets the adopted Zero Water Footprint Policy (projects that either require no additional water demand or projects which offset increased water demand by off-site measures) or requires a Water Supply

[15] City of American Canyon. 2023. 2020 Urban Water Management Plan.
[16] City of American Canyon, 2023. 2020 Urban Water Management Plan.
[17] Ibid.

Report. If a Water Supply Report is required it would determine the proposed project's water demand measures needed to reach a zero water footprint. The remaining water footprint of the proposed project would be offset through a method agreed upon by the City and the developer. The proposed project would offset its water footprint by contributing funding to the City's water projects. In either instance, a zero water footprint would be obtained.

Furthermore, per Municipal Code Section 13.10, the proposed project is limited to an average use of 650 gallons of water per day per acre (measured monthly). For the proposed project's 10.45-acre site, this would equate to 6,792.5 gallons of water per day. As indicated in Table 3.14-3, the proposed project's estimated domestic water consumption would be between 0.0635 and 0.31 acre feet per year or 20,691 to 101,014 gallons per year. This equates to less than 57 to 277 gallons of water per day, far below the allowable amount.

Finally, the proposed project would be consistent with Municipal Code Section 19.22.070 by using recycled water for landscaping irrigation, thus eliminating the use of potable water for landscaping purposes. The proposed project would also be required to submit landscaping plans to the City as part of project applicant and approval process demonstrating compliance with the City's Model Water Efficient Landscape Ordinance (Municipal Code 8.20.110).

In summary, the City's ability to purchase additional water in all dry year scenarios, along with DMMs, the Zero Water Footprint Policy, water use reduction, and use of recycled water, ensures that sufficient water would be available to serve existing, planned, and future buildout, including the proposed project. Furthermore, the proposed project's water demand would be far below average allowable use. Therefore, for the reasons discussed herein, there would be sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Wastewater Treatment Capacity

Impact UTIL-3:	**The proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

Impact Analysis

The proposed project would be served by the City of American Canyon for wastewater collection and treatment. Table 3.14-7 provides the proposed project's estimated wastewater generation based on estimated water consumption. For the purposes of a conservative analysis, it is assumed that 100 percent of water consumed becomes wastewater. Note that it is standard industry assumption that wastewater represents only 90 percent of water consumption.

Table 3.14-7: Wastewater Generation Estimate

Water Consumption Estimate Source	Anticipated Daily Water Consumption	Wastewater Generation Calculation	Daily Wastewater Generation
SDG Commerce 330–Actual Use	57 gallons[1]	57 gallons x 1	57 gallons (0.000057 mgd)
SDG Commerce 330–Will-Serve Letter	275 gallons[2]	275 gallons x 1	275 gallons (.000275 mgd)

Notes:
MGD = million gallons per day
[1] 0.0635 acre-feet per year (AFY) (as indicated in Table 3.13-3) = 20,691.5349 gallons per year = ~57 gallons per day
[2] 0.31 acre-feet per year (AFY) (as indicated in Table 3.13-3) = 101,013 gallons per year = ~275 gallons per day
Source: FirstCarbon Solutions (FCS), 2024; City of American Canyon, 2024.

As shown in Table 3.14-7, the proposed project would produce between approximately 57 and 275 gallons of effluent per day (0.000057 to 0.000275 mgd). The City's WTP has a maximum capacity of 2.5 mgd at dry weather flow conditions and 5.0 mgd at peak wet weather flow conditions. In the year 2020, the WRF treated 1,625 acre-feet in total, which is approximately 529 million gallons.[18] This is approximately 1.5 mgd per day, meaning there was 1 mgd of additional capacity in the year 2020. The proposed project would produce between 0.000057 and 0.000275 mgd, which is approximately 0.0057 to .0275 percent of the remaining daily capacity of the WTP. As such, existing treatment capacity would be sufficient to serve the proposed project in addition to existing commitments. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Solid Waste

Impact UTIL-4: **The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.**

Impact Analysis

This impact discussion assesses whether the proposed project would be served by a landfill with adequate capacity or comply with federal, State, and local statutes and regulations related to solid waste. Solid waste would be generated by construction and operational activities. Each is discussed as follows.

[18] City of American Canyon. 2023. 2020 Urban Water Management Plan. Table 6-2 Retail: Wastewater Collected Within Service Area in 2020.

Construction Waste

The proposed project would result in the construction of a 219,834-square-foot wine distribution warehouse. Using a nonresidential construction waste generation rate published by the United States Environmental Protection Agency (EPA), an estimate of the total construction debris generated by the proposed project is provided in Table 3.14-8.

Table 3.14-8: Construction Solid Waste Generation

Waste Generation Rate	Square Feet	Construction Waste Generation	
		Tons	Cubic Yards
3.89 pounds/square foot	219,834	428	599

Notes:
1 ton = 2,000 pounds; 1 ton = approximately 1.4 cubic yards
Sources:
United States Environmental Protection Agency (EPA). 1998.
FirstCarbon Solutions (FCS). 2024.

Development of the proposed project would generate an estimated 599 cubic yards of construction debris. This waste volume represents less than 0.01 percent of the 13.872 million cubic yards of remaining capacity at the Potrero Hills Landfill. Moreover, the values shown in the table do not adjust construction solid waste generation to account for C&D debris recycling that would serve to divert waste from the landfill. The Napa Valley Waste Management Authority provides C&D debris recycling at the nearby Devlin Road Transfer Station. The proposed project would be required to dispose of C&D debris in compliance with the City's C&D Ordinance.

Therefore, short-term construction impacts on landfill capacity would be less than significant.

Operational Waste

Table 3.14-9 summarizes the proposed project's annual operational waste generation based on a rate provided by CalRecycle.

Table 3.14-9: Annual Operational Solid Waste Generation

Waste Generation Rate	Square Feet	Operational Waste Generation	
		Tons	Cubic Yards
4.8 pounds/square foot	219,834	528	739

Notes:
1 ton = 2,000 pounds; 1 ton = 1.4 cubic yards
Sources:
California Department of Resources Recycling and Recovery (CalRecycle).
FirstCarbon Solutions (FCS). 2022.

The proposed project would generate an estimated 739 cubic yards of operational solid waste on an annual basis at buildout. This waste volume represents less than 0.01 percent of the 13.872 million

cubic yards of remaining capacity at the Potrero Hills Landfill. Moreover, the values shown in the table are conservative because, for example, they do not adjust operational solid waste generation to account for recycling and waste reduction activities that would serve to divert waste from the landfill such as, but not limited to, Section 8.20.030 of the Municipal Code, which requires that commercial business shall have separate compost, recycling, and trash containers. Therefore, long-term operational impacts on landfill capacity would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.14.7 - Cumulative Impacts

The cumulative utilities analysis' geographic scope is the service area of each provider serving the proposed project. Because of differences in the nature of the utility topical areas, they are discussed separately.

Water

The geographic scope of the cumulative potable water analysis is the City of American Canyon Public Works Department service area, which encompasses the American Canyon city limits.

Cumulative projects, including those listed in Table 3-1 (refer to Chapter 3, Environmental Impact Analysis, Table 3-1, Cumulative Projects) are located within areas of the City of American Canyon and Napa County. As discussed under Impact UTIL-2, the City has available water supplies to serve the proposed project under normal hydrologic conditions. Furthermore, the City would be able to serve the proposed project during the single dry or multiple dry year scenario with the use of DMMs, recycled water, supply augmentation methods, and agreements with other agencies. The proposed project would be required to comply with the City's Zero Water Footprint Policy, Municipal Code Chapter 13.10 and Section 19.22.070. Developers of other cumulative projects would be required to comply with the Zero Water Footprint Policy as well as Municipal Code requirements related to water usage. Additionally, the proposed project and other pending projects are accounted for in the UWMP and would not create the need for any new or expanded facilities that could have significant cumulative impacts. Therefore, cumulative impacts would be less than significant. Because the proposed project would comply with these requirements as well, the proposed project would not have a cumulatively considerable contribution toward the less than significant cumulative impacts related to water supply.

Wastewater

The geographic scope of the cumulative wastewater analysis is the American Canyon WRF service area, which encompasses the American Canyon City limits and areas within the Napa County Airport Industrial Park south of Fagan Creek. The cumulative projects, including those listed in Table 3-1, located in the City are within the service area and would generate volumes of wastewater conveyed

to the WRF. All future projects that are tributary to the Reclamation Facility would be required to demonstrate that sewer service is available to ensure that adequate sanitation can be provided.

The WRF has an existing design capacity of 2.5 mgd and the City has plans to increase that to 4.0 mgd over time. The proposed project is estimated to generate 57 gallons of wastewater on a daily basis (0.00005 mgd) at buildout. The proposed project's estimated wastewater generation of 0.005 mgd per day would represent about 0.005 percent of the average daily flow treated by the expanded WRF. As such, cumulative impacts would be less than significant.

Additionally, the proposed project's contribution to this less than significant impact would not be cumulatively considerable. Each applicant for individual development proposals in the service area would be required to comply with applicable wastewater requirements. Therefore, the proposed project's contribution to this less than significant impact related to wastewater generation and treatment would not be cumulatively considerable.

Storm Drainage

The City of American Canyon Public Works Department oversees municipal storm drainage within the American Canyon City limits. The municipal storm drainage system consists of ditches, inlets, basins, and underground piping that ultimately discharges flows into the Napa River. The City maintains a Storm Drainage Master Plan and engineering standards that guide development of the municipal storm drainage system.

All future development projects in the City are required to provide storm drainage facilities that collect and detain stormwater. The storm drainage facility shall include provisions for future upstream development and no development shall discharge at a rate that exceeds the capacity of any portion of the existing downstream system. Runoff from storms up to the 100-year return frequency are conveyed through storm facilities and disposed of in a manner that protects public and private improvements from flood hazards.

During project construction, the proposed project would implement standard stormwater pollution prevention measures to ensure downstream water quality impacts are minimized to the greatest extent possible.

As described in Section 3.9, Hydrology, the proposed project would install an on-site storm drainage system consisting of inlets, piping, and a series of detention basins that would result in a net decrease in peak stormwater runoff rates. As such, the proposed project would ensure no net increase in stormwater would leave the project site during a peak storm event and would avoid cumulatively significant stormwater impacts to downstream waterways at times when capacity is most constrained.

Cumulative projects would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) for project construction. Cumulative projects would be required to incorporate a stormwater control plan and stormwater collection systems into the development that would reduce the volume of stormwater runoff that cumulative projects would generate. Therefore, cumulative impacts in this regard would be less than significant.

The proposed project would incorporate a detention basin that would reduce runoff at the project site. Therefore, the proposed project's contribution to this less than significant impacts related to storm drainage would not be cumulatively considerable.

Solid Waste

The geographic scope of the cumulative solid waste analysis is the City of American Canyon. Recology provides solid waste and recycling collection services to commercial customers in the City of American Canyon.

Many past and all present and reasonably foreseeable future development projects that have or would generate construction and operational solid waste, depending on the volumes and end uses, have been or would be required to implement recycling and waste reduction measures. The proposed project is anticipated to generate 599 cubic yards of solid waste during construction and 739 cubic yards annually during operations. For comparison purposes, the Potrero Hills Landfill has a remaining capacity of 13.872 million cubic yards. As such, it appears that sufficient capacity would be available to serve the proposed project as well as existing and planned land uses in the City of American Canyon for the foreseeable future.

Additionally, the nearby Devlin Road Transfer Station offers C&D debris recycling and incentivizes such activities through pricing. Thus, it would be expected that some of the projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1 would take advantage of C&D debris recycling, which would divert materials from the solid waste stream and contribute to conserving landfill capacity, thereby extending the operational life of Potrero Hills Landfill. For these reasons, cumulative impacts to solid waste would be less than significant.

The proposed project's construction and operational solid waste generation would represent less than 0.01 percent of the remaining capacity at the Potrero Hillas Landfill facility. Therefore, the proposed project, in conjunction with other cumulative projects, would result in a less than significant cumulative impact related to solid waste generation and landfill capacity.

Level of Cumulative Significance Before Mitigation

Water–Less than significant impact.

Wastewater–Less than significant impact.

Storm Drainage–Less than significant impact.

Solid Waste–Less than significant impact.

Mitigation Measures

No mitigation is necessary.

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CHAPTER 4: EFFECTS FOUND NOT TO BE SIGNIFICANT

4.1 - Introduction

This chapter is based on the Notice of Preparation (NOP), dated October 27, 2023, and contained in Appendix A of this EIR. The NOP was prepared to identify the potentially significant effects of the project and was circulated for public review between October 27, 2023 and November 27, 2023. In the course of the NOP evaluation, certain impacts were found to be less than significant because construction and operation of the proposed project would not result in such impacts. This chapter provides a brief description of effects found not to be significant or less than significant, based on the NOP, NOP public comments received, or more detailed analysis conducted as part of the EIR preparation process. Note that a number of impacts that are found to be less than significant are addressed in the various EIR topical sections (Sections 3.1 through 3.14) to provide more comprehensive discussion of why impacts are less than significant, in order to better inform decision-makers and the general public.

4.2 - Environmental Effects Found not to be Significant

4.2.1 - Aesthetics, Light, and Glare

Scenic Vistas

The project site is surrounded by eucalyptus groves (west and east) and existing industrial buildings (north and south). Because of these characteristics, the project site is not visible from a scenic vista. Furthermore, the project site is flat and does not contain any features that would be characterized as a scenic vista (e.g., ridgeline, overlook, etc.). This precludes the possibility of the proposed project having an adverse impact on a scenic vista. No impact would occur.

State Scenic Highways

State Route (SR) 29 is located more than 1 mile to the east of the project site. SR-29 is an “Eligible” State Scenic Highway. SR-29 is not visible from the project site due to the presence of intervening topography and vegetation. No impact would occur.

4.2.2 - Agriculture Resources and Forestry Resources

Loss of Important Farmland

The project site contains undeveloped land and is not used for agricultural land use activities. The California Department of Conservation maps the project site as “Other Land,” which does not fall under the Important Farmland umbrella. No impact would occur.

Williamson Act Contracts or Agricultural Zoning

The project site contains undeveloped land and is not used for agricultural land use activities. The project site is not encumbered by an active Williamson Act Contract. The project site is zoned for industrial use; thus, no conflicts with agricultural zoning would occur. No impact would occur.

Forest Zoning

The project site contains undeveloped land and does not have any commercially harvestable stands of trees. The project site is zoned for commercial recreational and winery use; thus, no conflicts with forest zoning would occur. No impact would occur.

Loss of Forest Land

The project site contains undeveloped land and does not have any commercially harvestable stands of trees. Thus, the proposed project would not convert forestland to non-forest use. No impact would occur.

Pressures to Convert Surrounding Agricultural Land or Forest Land

The California Department of Conservation maps the areas immediately adjacent to the project site as "Other Land." Furthermore, the eucalyptus groves to the west and east of the project site are not considered commercially harvestable timer. For these reasons, the proposed project would not create pressures to convert surrounding agricultural or forest land to other use. No impact would occur.

4.2.3 - Biological Resources

Sensitive Natural Communities or Riparian Habitat.

Seasonal wetland communities are typically considered sensitive under the California Environmental Quality Act (CEQA). The wetland features on-site would be avoided by the proposed project through the implementation of 25-foot buffers (Section 3.3, Biological Resources, Exhibit 3.3-4). The wetland buffer avoidance area would ensure that construction activities do not impact the on-site jurisdictional wetland features. Upon operation, the project's stormwater would be directed away from the features, as required by the proposed project's Storm Water Pollution Prevention Plan (SWPPP). No other sensitive communities occur on-site. Therefore, no impacts on sensitive natural communities would occur.

Conservation Plans

No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan is applicable to the project site. Therefore, the proposed project would not conflict with the provisions of such a document. No impacts would occur.

4.2.4 - Geology, Soils, and Seismicity

Septic or Alternative Wastewater Disposal Systems

The proposed project would be served with wastewater collection and treatment service provided by the City of American Canyon. No septic or alternative wastewater disposal systems would be employed. No impact would occur.

4.2.5 - Hazards and Hazardous Materials

Wildfires

The project site is located within an urbanized area of the City of American Canyon. The eucalyptus groves to the west and east of the project site are small in size and surrounded by urban uses or marshland, making the susceptibility to wildland fires low. As such, the proposed project would not expose persons or properties to wildland fire hazards. No impact would occur.

4.2.6 - Hydrology and Water Quality

100-Year Flood Hazards

The Napa County Geographic Information System (GIS) online mapping tool indicates that the project site is not within a 100-year flood hazard zone. This condition precludes the possibility of the proposed project being exposed to 100-year food hazards. No impact would occur.

Levee or Dam Failure

The project site is not protected by a levee, a condition that precludes flooding from levee failure. Napa County General Plan Safety Element Figure SAF-5 indicates that the project site is not within a dam failure inundation zone for any impounded bodies of water. No impact would occur.

Seiches, Tsunamis, or Mudflows

The project site is not near any inland bodies of water that may be susceptible to a seiche. The project site is more than 25 miles from the Pacific Ocean. The project site is not with an area of volcanic activity or at the base of any slopes that are susceptible to mudflows. No impact would occur.

4.2.7 - Land Use

Division of an Established Community

The project site is vacant and does not contain any dwelling units or other structures that would constitute an established community. As such, the development of the proposed project would not divide an established community. No impact would occur.

4.2.8 - Mineral Resources

Loss of Mineral Resources of Statewide or Local Importance

The project site contains undeveloped land. No mineral extraction occurs on-site and there are no mineral resources of statewide or local importance at the project site. This precludes the possibility of conflicts in this regard. No impact would occur.

4.2.9 - Population and Housing

Growth Inducement

The proposed project would develop 219,834 square feet of light industrial uses on an undeveloped site. No direct residential growth would occur. The proposed project would employ an estimated 35

full-time employees and 25 part-time employees when fully operational at buildout. The California Employment Development Department (EDD) estimated Napa and Solano County's combined labor force at 267,800 in November 2022. As such, the local labor force is sufficiently large enough to allow the project's employment opportunities to be filled locally such that unplanned growth would not occur. Lastly, roadways and infrastructure exists adjacent to the project site and, therefore, no impacts would occur.

Displacement of Persons or Housing

The project site is vacant and does not contain any dwelling units. As such, the development of the proposed project would not displace persons or housing. No impact would occur.

4.2.10 - Public Services and Utilities

Schools

The proposed project would not involve construction of dwelling units and, thus, would not result in direct enrollment growth in public schools. Therefore, no new or expanded school facilities would be required. No impact would occur.

Parks

The proposed project would not involve construction of dwelling units and, thus, would not result in increased demand for parks. Therefore, no new or expanded park facilities would be required. No impact would occur.

Other Public Facilities

The proposed project would not involve construction of dwelling units and, thus, would not result in increased demand for libraries or community facilities. Therefore, no new or expanded libraries or community facilities would be required. No impact would occur.

4.2.11 - Recreation

The proposed project would not involve construction of dwelling units and, thus, would not result in direct population growth. As such, it would not increase use of existing recreational facilities or require construction or expansion of new recreational facilities. No impact would occur.

4.2.12 - Wildfire

Emergency Evacuation

The proposed project would take vehicular access from two driveways on Commerce Court. Accordingly, the proposed project would provide two points of emergency access and, thus, would comply with California Fire Code requirements.

The Commerce Court cul-de-sac has a gated Emergency Vehicle Access connection to Eucalyptus Drive to the south. This would be available for emergency response and evacuation to and from the project site.

For these reasons, the proposed project would enhance access by emergency responders and would not impair emergency response or evacuation in the project vicinity. No impact would occur.

Wildfire Risks

The project site is located within a Local Responsibility Area and is not located in a very high fire hazard severity zone. The project site is flat and located in an urbanized area. The eucalyptus groves to the west and east of the project site are small in size and surrounded by urban uses or marshland, making the susceptibility to wildland fires low. As such, the proposed project would not expose persons or properties to wildland fire hazards. No impact would occur.

Fire Infrastructure

The proposed project would connect to existing utilities infrastructure. The project site is surrounded and has development on two sides and Commerce Court on the east side. No impact would occur.

Post-Fire Hazards

The project site is flat and would not be at risk of a landslide. As explained in Section 3.9, Hydrology and Water Quality, the proposed project would result in a net decrease in peak stormwater runoff rates because of the proposed detention and treatment system. The proposed project would not substantially alter the existing drainage pattern. No impact would occur.

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CHAPTER 5: OTHER CEQA CONSIDERATIONS

5.1 - Significant Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(a)(c) requires an Environmental Impact Report (EIR) to identify and focus on the significant environmental effects of the proposed project, including effects that cannot be avoided if the proposed project were implemented.

Based on the analyses contained in this Draft EIR, the City of American Canyon (City) has determined that the proposed project in conjunction with other cumulative development in the southeast portion of the City of American Canyon would result in the following a significant and unavoidable impacts:

- **Inconsistency with CEQA Guidelines Section 15064.3, subdivision (b):** The City's travel demand model establishes 34.1 miles per employee as the baseline for evaluating potential Vehicle Miles Traveled (VMT) impacts associated with the proposed project, and the significance threshold was 19 percent below this level, or 27.6 miles. The 19 percent emissions reduction target established by the California Air Resources Board (ARB) was the basis for this threshold. Given the lack of transit services within an acceptable walking distance of the project, a 19 percent reduction was determined infeasible. Mitigation is proposed to require the preparation and implementation of a transportation demand management program; however, these measures would not sufficiently reduce VMT. Therefore, the significance after mitigation is significant and unavoidable.
- **Cumulative Transportation:** Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project's location and lack of access to high-quality transit. MM TRANS-2 would reduce project-related VMT but not to a level below significance. As such, the proposed project would also have a cumulatively considerable contribution on VMT.

5.2 - Growth-inducing Impacts

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the proposed project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines § 15126.2(e)). CEQA Guidelines, as interpreted by the City, state that a significant growth-inducing impact may result if the project would:

- Induce substantial population growth in an area (for example, by proposing new homes and commercial or industrial businesses beyond the land use density/intensity envisioned in the general plan);

- Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
- Include extensions of roads or other infrastructure not assumed in the general plan or adopted capital improvements project list, when such infrastructure exceeds the needs of the project and could accommodate future developments.

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing unplanned population growth or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, may provide a catalyst for future unrelated development in an area, such as a new residential community that requires additional commercial uses to support residents.

The proposed project does not include residential uses and therefore would not directly induce population growth. As discussed in Chapter 2, Project Description, the proposed project would develop a 219,834-square-foot wine storage and distribution center on a 443,005-square-foot undeveloped project site. The proposed project would employ an estimated 35 full-time employees and 20 part-time employees when fully operational at buildout.

The California Employment Development Department estimated Napa and Solano County's combined labor force at 267,800 in November 2022. As such, the local labor force is sufficiently large enough to allow the project's employment opportunities to be filled locally such that unplanned growth would not occur.

At the time of this writing, no prospective employees have been identified and, thus, it would be speculative to make any statements about where they would reside. Nonetheless, the City of American Canyon has more than 2,400 dwelling units in the pipeline (refer to Table 3-1 in Chapter 3, Environmental Impact Analysis). For comparison purposes, American Canyon's population was estimated to be 20,837. Thus, the addition of more than 2,400 dwelling units to the City's housing inventory would more than offset the employment growth attributable to the proposed project.

The proposed project would be served by connections to existing water, wastewater, storm drainage, and electricity lines that exist in Commerce Court. No extension of infrastructure into unserved areas would be required, and, therefore, no removal of physical barriers to growth would occur.

As such, the proposed project would not indirectly induce substantial population growth. No impacts would occur.

5.3 - Mandatory Findings of Significance

Public Resources Code Section 21083 requires lead agencies to make a finding that a project may have a "significant effect on the environment" if one or more of the following conditions exist:

1) A proposed project has the potential to degrade the quality of environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife species to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare, or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.
2) The possible effects of a project are individually limited but cumulatively considerable.
3) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

Finding No. 1: Less than significant impact with mitigation incorporated.

The proposed project would develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. As described previously in Section 3.3, Biological Resources, the proposed project would not result in significant impacts to wildlife or plant species with mitigation incorporated. The analysis provides mitigation of pre-construction surveys, construction monitoring, and avoidance measures in order to protect Swainson's hawk, burrowing owl, nesting birds, roosting bats, western pond turtle, and monarch butterfly.

Additionally, the proposed project includes mitigation and avoidance measures to reduce construction-related impacts to historical and archaeological resources as well as the accidental discovery of human remains. These include required Worker Environmental Awareness Program (WEAP) training, archaeological monitoring, and procedures in the event of accidental discovery of cultural resources and human remains.

Based on the discussion provided above, with implementation of the listed mitigation measures, the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare of endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

Therefore, impacts would be less than significant with implementation of Mitigation Measure (MM) BIO-1a through MM BIO-1g, MM CUL-1a through MM CUL-1c, and MM CUL-3.

Finding No. 2: Significant and unavoidable impact.

The analysis presented in this Draft EIR includes a review of proposed project's potential impacts related to air quality, biological resources, cultural resources, noise, and transportation, among other environmental issue areas. As presented throughout this Draft EIR, the proposed project's

cumulative impacts would either be significant and unavoidable, less than significant with mitigation incorporated, less than significant, or there would be no impact.

The proposed project would develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. There would be a less than significant cumulative impact with regard to aesthetics, light, and glare; air quality; energy; hazards and hazardous materials; public services; noise; and utilities and service systems.

Potentially significant impacts related to biological resources, cultural and tribal cultural resources, geology and soils, and hydrology and water quality would be mitigated to less than significant levels with the implementation of MM BIO-1a through MM BIO-1g, MM CUL-1a through MM CUL-1c, MM CUL-3, MM GEO-1, MM GEO-5, and MM HYD-1.

Significant and unavoidable impacts would occur related to transportation. While implementation of MM TRANS-2 would reduce impacts to this topical section, there is no feasible mitigation available that would fully bring these impacts to less than significant levels. Potential cumulative impacts are discussed in detail in each topical section of this Draft EIR.

Finding No. 3: Significant and unavoidable impact.

Potential human-related impacts are discussed and evaluated throughout this Draft EIR. Compliance with and implementation of project-specific mitigation measures and existing regulations would ensure that the proposed project would not result in substantial adverse effects on human beings for direct, indirect, or cumulative impacts related to air quality, seismic and geologic hazards, hazards and hazardous materials, flooding and natural disasters, and noise and vibration. Impacts with respect to these topical areas would be less than significant with mitigation incorporated and application of all relevant regulations.

CHAPTER 6: ALTERNATIVES TO THE PROPOSED PROJECT

6.1 - Introduction

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this Draft Environmental Impact Report (Draft EIR) contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of this section is to provide decision makers and the general public with a reasonable number of feasible project alternatives that could attain most of the basic project objectives while avoiding or reducing any of the proposed project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in CEQA Guidelines § 15126.6).

- An EIR need not consider every conceivable alternative to a project.
- An EIR should identify alternatives that were considered by the lead agency but rejected as infeasible during the scoping process.
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

6.1.1 - Significant Unavoidable Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Inconsistency with CEQA Guidelines Section 15064.3, subdivision (b):** The proposed project's VMT was evaluated in accordance with the City's adopted VMT policy. For the project's VMT impact to be less than significant, the VMT per employee would need to be reduced by at least 19 percent below current levels. However, according to the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA Handbook), a reduction in the VMT of 15 percent is generally considered the maximum feasible mitigation for suburban environments such as that of the proposed project. If this level of trip reduction could be achieved, that would mitigate most of the project's VMT impact, although not to a level that would be less than significant (19 percent); however, given the lack of transit services within an acceptable walking distance of the proposed project, achieving this level of mitigation is considered infeasible. Even with implementation of a TDM Plan as required by MM TRANS-2, the significance after mitigation is still significant and unavoidable.
- **Cumulative Transportation:** Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project's location and lack of access to high-quality transit. MM TRANS-2

would reduce project-related VMT but not to a level below significance. As such, the proposed project would also have a cumulatively considerable contribution on VMT.

6.1.2 - Alternatives to the Proposed Project

The two alternatives to the proposed project analyzed in this section are as follows:

- **No Project Alternative:** The project site would remain undeveloped for the foreseeable future and no development would occur.
- **Reduced Density Alternative:** A 164,875-square-foot wine warehouse would be developed on the project site, which represents a 25 percent reduction in square footage.

Two alternatives to the proposed project are analyzed in the following section. These analyses compare the proposed project and each individual project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the CEQA Thresholds of Significance (i.e., both the proposed project and the alternative would result in a less than significant impact). The actual degree of impact may be slightly different between the proposed project and each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts.

6.2 - Project Objectives

As stated in Chapter 2, Project Description, the objectives of the proposed project are to:

1. Positively contribute to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base.
2. Develop land to its highest and best use.
3. Continue the buildout of the City of American Canyon in accordance with the General Plan.
4. Meet regional demand for wine warehouse uses by adding to the inventory of this space.
5. Develop nonresidential uses on the project site that are compatible with the City of American Canyon's Water Reclamation Facility and the Napa County Airport.
6. Maximize the efficient use of land by developing an industrial project at the upper end of the allowable Floor Area Ratio range.
7. Complete the buildout of the SDG Commerce development.
8. Protect North Slough by employing stormwater pollution prevention measures during construction and operation.
9. Provide development fees to the American Canyon Fire Protection District to fund the development of a new fire station.

6.3 - Alternative 1—No Project Alternative

CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a "No Project Alternative," which is intended to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. In cases where the proposed project constitutes a land development project, the No Project Alternative is the "circumstance under which the project does not proceed." For many projects, the No Project Alternative represents a "No Development" scenario, in which the project site remains in its existing condition and no development occurs for the foreseeable future. However, CEQA Guidelines Section 15126.6(e)(3)(B) establishes that "If disapproval of the project under consideration would result in predictable actions by others such as the proposal of some other project, this 'no project' consequence should be discussed."

Because the project site has not been previously entitled for development, the No Project Alternative consists of the project site remaining undeveloped for the foreseeable future.

6.3.1 - Impact Analysis

The project site would remain undeveloped for the foreseeable future. Accordingly, this alternative would avoid all of the proposed project's significant impacts (including significant and unavoidable impacts), as well as the need to implement any mitigation measures.

6.3.2 - Conclusion

The No Project Alternative would avoid the proposed project's significant and unavoidable impacts and would avoid any potential impacts related to all environmental topical areas. However, this alternative would not advance any of the project objectives, including those related to facilitating the development of land to its highest and best use; positively contributing to the local economy; and meeting regional demand for wine warehouse uses. Finally, it should be noted that the project site is zoned for wine storage and distribution warehouse use, borders two neighboring wine storage and distribution warehouses, and is currently served with infrastructure suitable for this type of development. Thus, should the proposed project not advance, it would be expected that another industrial development proposal would be submitted, resulting in development similar to what is already being proposed by the proposed project.

6.4 - Alternative 2—Reduced Density Alternative

Under the Reduced Density Alternative, a 164,875 square-foot wine warehouse would be developed on the project site, which represents a 54,958-square-foot reduction (25 percent reduction) in the proposed project's square footage and buildout potential. The reduction in building square footage would allow for approximately 1.26 additional acres of the site to be assigned to another use, such as a larger wetland buffer. Connectivity to the adjacent warehouses to the north and south would still be constructed.

Aside from the square footage, all other aspects of this alternative would be identical to the proposed project. This includes project boundaries, layout, design, and vehicular access points.

Table 6-1 summarizes the Reduced Density Alternative. The purpose of this alternative is to evaluate a smaller project with end uses identical to the proposed project that may avoid or substantially lessen the severity of significant project impacts.

Table 6-1: Reduced Density Alternative Summary

Scenario	Total Acres	End Use	Square Feet
Proposed Project	10.45	Wine Warehouse	219,834
Reduced Density Alternative	10.45	Wine Warehouse	164,875
Difference	—	—	**-54,959**

6.4.1 - Impact Analysis

Aesthetics, Light, and Glare

The Reduced Density Alternative consists of a 164,875-square-foot wine warehouse and associated infrastructure on the project site. The building developed under this alternative would retain a similar appearance to the proposed project's structure and similar exterior light fixtures would be installed, although the 54,958-square-foot reduction in warehouse building space would result in a corresponding reduction in the visual appearance of the project site. Therefore, the Reduced Density Alternative would have slightly less impact on aesthetics, light, and glare than the proposed project.

Air Quality

The Reduced Density Alternative would result in less construction activity and 93 fewer daily vehicle trips, which would correspond to an approximately 25 percent reduction in construction and operational criteria pollutant and toxic air contaminant (TAC) emissions. Implementation of MM AIR-1 would still be required to reduce construction impacts related to fugitive dust. Therefore, this alternative would have slightly reduced potential for impacts to air quality compared to the proposed project.

Biological Resources

The reduction in square footage would allow for up to 1.26 acres to be available for other uses, such as a greater wetland buffer. However, MM BIO-1a through MM BIO-1g would still be required to protect species that have potential to occur on-site. Based on the reduced project footprint, the Reduced Density Alternative would have slightly reduced potential for impacts to biological resources compared to the proposed project.

Cultural Resources

Under the Reduced Density Alternative, there would be a slightly reduced area of ground disturbance due to the increased wetland buffer. However, MM CUL-1a through MM CUL 1c and MM CUL-3 would be still required. Therefore, the Reduced Density Alternative would have slightly reduced potential for impacts to cultural resources relative to the proposed project.

Energy

The Reduced Density Alternative would result in a smaller facility and, as such, would use less electricity and fuel during construction and operation. This alternative would result in 93 fewer daily vehicle trips, which would have a corresponding reduction in energy usage. Therefore, this alternative would have a reduced potential for impacts related to energy compared to the proposed project.

Geology, Soils, and Seismicity

The Reduced Density Alternative would result in a smaller facility, although MM GEO-1a, MM GEO-1b, MM HYD-1a, and MM GEO-5 would still be required to be implemented. Therefore, the Reduced Density Alternative would have similar geology, soils, and seismicity resources impacts as the proposed project.

Greenhouse Gas Emissions

The Reduced Density Alternative would result in less construction activity and 93 fewer daily vehicle trips, which would have a corresponding reduction construction and operational GHG emissions. Therefore, this alternative would have less GHG impacts than the proposed project.

Hazards and Hazardous Material

As with the proposed project, no hazardous conditions exist on-site; therefore, impacts would also be less than significant under this alternative. This alternative would result in a 54,958-square-foot reduction in warehouse development, which would reduce the potential for hazardous material releases during construction and operations. Therefore, this alternative would have less potential for impacts related to hazards and hazardous materials than the proposed project.

Hydrology and Water Quality

The Reduced Density Alternative would result in a smaller facility, although MM HYD-1 would still be required to be implemented. This alternative would create a smaller extent of impervious surfaces, which would result in a slightly reduced potential for impacts related to hydrology and water quality relative to the proposed project.

Land Use

This alternative would develop a similar use as the proposed project; therefore, it would yield similar conclusions related to consistency with the City of American Canyon General Plan, American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan. Therefore, the Reduced Density Alternative would have land use impacts similar to the proposed project.

Noise

The Reduced Density Alternative would result in less construction activity and 93 fewer daily vehicle trips, which would have a corresponding reduction in the severity of construction and operational noise impacts. The reduction in development potential and vehicle trips would slightly reduce the

severity of noise impacts. Therefore, this alternative would have a reduced potential for impacts related to noise than the proposed project.

Public Services

End uses would be similar to the proposed project. Although the proposed project's public services impacts were found to be less than significant and did not require mitigation, this alternative would result in less demand for fire protection and police protection through the 54,958-square-foot reduction in development potential. Therefore, the Reduced Density Alternative would have less impact on public services than the proposed project.

Transportation

Table 6-2 summarizes the daily and peak-hour trip generation associated with the Reduced Density Alternative. As shown in the table, this alternative would yield a reduction of 93 daily vehicle trips, 9 AM peak-hour vehicle trips, and 7 PM peak-hour vehicle trips.

Table 6-2: Reduced Density Alternative Trip Generation Comparison

Scenario	Daily	AM Peak-hour	PM Peak-hour
Proposed Project	372	35	27
Reduced Density Alternative[1]	279	26	20
Difference	-93	-9	-7

Source: W-Trans. 2023.
[1] Reduced Density Alternative Trip Generation was calculated by FCS by taking 75 percent of Trip Generation numbers calculated by W-Trans.

Despite reducing the number of trips to the project site, this alternative would generate the same VMT per employee of 34.1 miles. While transportation demand management (TDM) measures (MM TRANS-2) could provide approximately a 4 percent reduction in VMT, a 19 percent reduction would be required to bring impacts to a less than significant level. As such, while impacts would be reduced under this alternative, they would remain significant and unavoidable.

Utilities and Service Systems

End uses would be similar to the proposed project. Although the proposed project's utilities and service system impacts were found to be less than significant and did not require mitigation, this alternative would result in an approximately 25 percent reduction in demand for water and energy and an approximately 25 percent reduction in generation of wastewater and solid waste through the 54,958-square-foot reduction in development potential. Therefore, the Reduced Density Alternative would have less impact on utilities and service systems than the proposed project.

6.4.2 - Conclusion

The Reduced Density Alternative would lessen the severity of, but would not avoid, the significant and unavoidable transportation impacts associated with the proposed project. Additionally, the

Reduced Density Alternative would lessen the severity of several of the significant impacts that can be reduced to a level of less than significant with mitigation (e.g., air quality, biological resources, cultural resources, geology and soils, and hydrology and water quality).

The Reduced Density Alternative would advance several of the project objectives, although several of the objectives would be advanced to a lesser degree than the proposed project. This alternative would not meet the objective to develop the land to its highest and best use and would not maximize the efficient use of land. Furthermore, the reduction in square footage would result in fewer positive economic benefits and, thus, would advance economic benefits to a lesser degree than the proposed project. This includes objectives related to facilitating the development of land planned for business park/industrial uses to its highest and best use; positively contributing to the local economy; providing the City of American Canyon with a high-quality, employment-generating industrial development; and serving local and regional demand for wine warehouse uses.

6.5 - Environmentally Superior Alternative

CEQA Guidelines Section 15126(e)(2) requires identification of an environmentally superior alternative. If the No Project Alternative is environmentally superior, CEQA requires selection of the "environmentally superior alternative other than the No Project Alternative" from among the project and the alternatives evaluated.

The qualitative environmental effects of each alternative in relation to the proposed project are summarized in Table 6-3.

Table 6-3: Summary of Alternatives

Environmental Topic Area	Proposed Project	No Project Alternative	Reduced Density Alternative
Aesthetics, Light, and Glare	Less than significant impact	Less impact	Less impact
Air Quality	Less than significant impact with mitigation incorporated	Less impact	Less impact
Biological Resources	Less than significant impact with mitigation incorporated	Less impact	Less impact
Cultural Resources and Tribal Cultural Resources	Less than significant impact with mitigation incorporated	Less impact	Less impact
Energy	Less than significant impact	Less impact	Less impact
Geology and Soils	Less than significant impact with mitigation incorporated	Less impact	Similar impact

Environmental Topic Area	Proposed Project	No Project Alternative	Reduced Density Alternative
Greenhouse Gas Emissions	Less than significant impact	Less impact	Less impact
Hazards and Hazardous Materials	Less than significant impact	Less impact	Less impact
Hydrology and Water Quality	Less than significant impact with mitigation incorporated	Less impact	Less impact
Land Use	Less than significant impact	Less impact	Similar impact
Noise	Less than significant impact	Less impact	Less impact
Public Services	Less than significant impact	Less impact	Less impact
Transportation	Significant and unavoidable impact	Less impact	Less impact
Utilities and Service Systems	Less than significant impact	Less impact	Less impact

The No Project Alternative reduces impacts on all categories and, thus, would be the environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the Draft EIR must also identify an environmentally superior alternative from among the other alternatives.

The Reduced Density Alternative was the only other alternative considered and it reduces impacts on all categories and, thus, would be the environmentally superior alternative. However, as previously noted, the Reduced Density Alternative would not advance the project objectives to the same degree of the proposed project and would not eliminate the significant and unavoidable impacts of the proposed project.

6.6 - Alternatives Rejected From Further Consideration

The following alternatives were initially considered but were rejected from further consideration for the reasons described below.

6.6.1 - Greater Reduced Density

The Greater Reduced Density Alternative would reduce the proposed project's square footage by 50 percent, resulting in the development of a 109,917-square-foot warehouse. The reduction in square footage would allow for an additional 2.52 additional acres of the site to be assigned to another use, such as a larger wetland buffer.

Aside from the square footage, all other aspects of this alternative would be identical to the proposed project. This includes project boundaries, layout, design, and vehicular access points.

This alternative was considered but ultimately rejected because it would not meet project objectives to develop the land to its highest and best use and to maximize the efficient use of land. Furthermore, it would meet all other objectives to a lesser extent than the Reduced Density Alternative and it would still would not avoid significant transportation impacts.

Therefore, this alternative was not considered feasible and, thus, it was rejected from further consideration.

6.6.2 - Alternative Location

CEQA Guidelines Section 15126.6(f)(2) sets forth considerations to be used in evaluating an alternative location. The section states that the "key question" is whether any of the significant effects of the proposed project would be avoided or substantially lessened by relocating the proposed project. The CEQA Guidelines identify the following factors that may be taken into account when addressing the feasibility of an alternative location:

1. Site suitability
2. Economic viability
3. Availability of infrastructure
4. General Plan consistency
5. Other plans or regulatory limitations
6. Jurisdictional boundaries
7. Whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site

Here, "General Plan consistency" is an important factor. CEQA case law is clear that EIRs for proposed private projects consistent with governing General Plan designations generally need not address alternative sites, given that such existing General Plan designations embody policy decisions already made by governing city councils and boards of supervisors. "[T]he keystone of regional planning is consistency—between the general plan, its internal elements, subordinate ordinances, and all derivative land use decisions" (*Citizens of Goleta Valley v. Board of Supervisors* [1990] 52 Cal.3d 553, 572). "Case-by-case reconsideration of regional land use policies, in the context of a project-specific EIR, is the very antithesis of that goal." (*Id*. at p. 573.) "[A]n EIR is not ordinarily an occasion for the reconsideration or overhaul of fundamental land use policy" (*Ibid*.).

Table 6-4 evaluates the feasibility of three alternative locations located within 1.5 miles of the project site in either the City of American Canyon or unincorporated Napa County (Exhibit 6-1). As indicated in Table 6-4, none of the sites would meet CEQA Guidelines criteria for a feasible alternative location. Furthermore, utilization of a different project site would not meet the project objective of building out the SDG Commerce complex. Therefore, this alternative was not considered feasible and, thus, it was rejected from further consideration.

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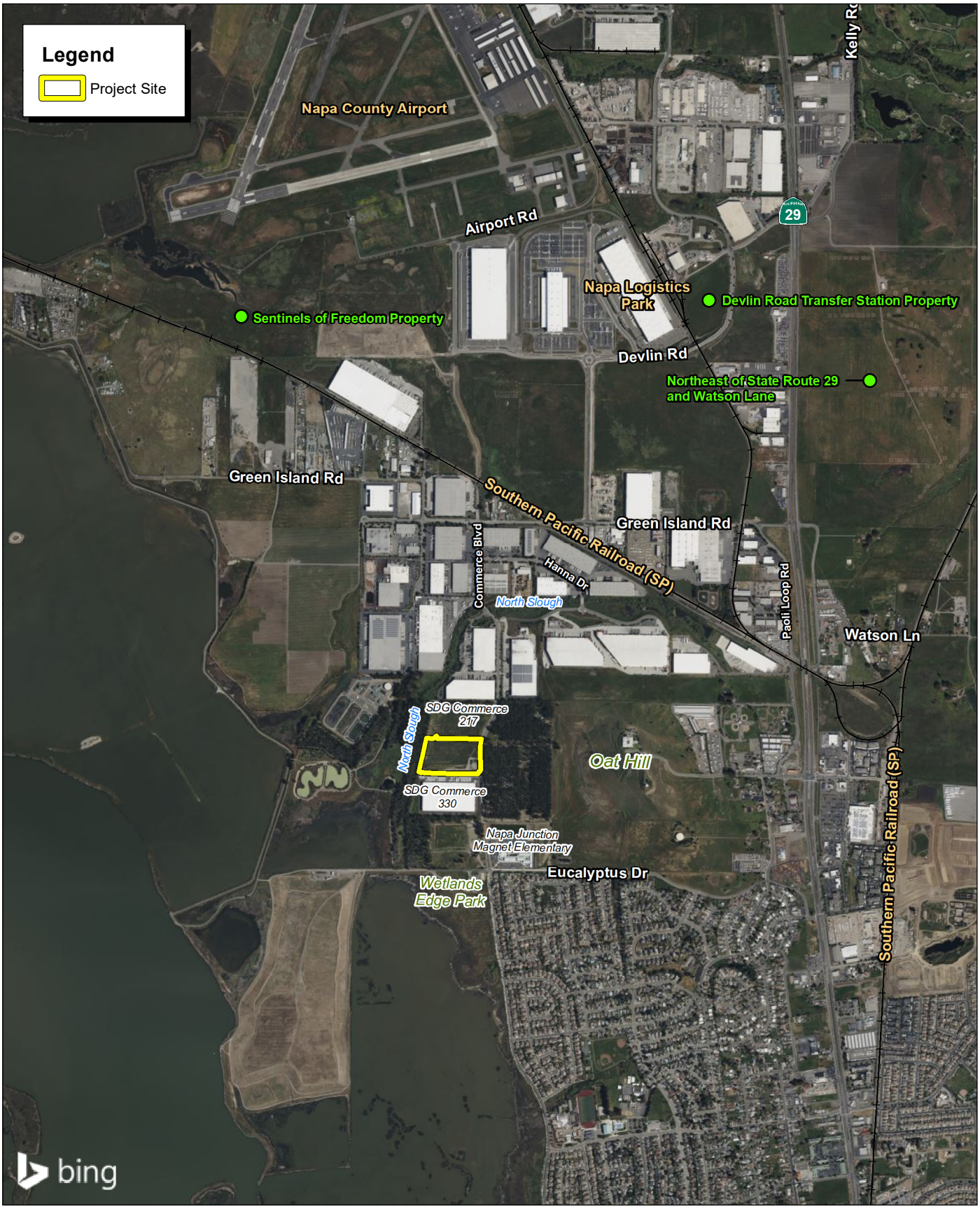

Source: Bing Aerial Imagery.

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Exhibit 6-1
Alternative Locations

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Table 6-4: Alternative Location Analysis

Name	Description	Analysis
Sentinels of Freedom Property	Approximately 25 acres located west of Napa Logistics Park and south of Napa County Airport in unincorporated Napa County and within the City of American Canyon Sphere of Influence. This site contains undeveloped land, is bisected by No Name Creek, and parts are within a 100-year flood hazard area. This site is designated "Industrial" by the Napa County General Plan and zoned "Business/Industrial" by the Napa County Airport Industrial Area Specific Plan.	**Not Feasible:** This site is controlled by the Sentinels of Freedom and is not owned, controlled, or otherwise accessible to the project applicant. The Sentinels of Freedom have conceptually proposed developing two warehouses on the property with vehicular access coming from Napa County Airport. Furthermore, this property site is not located closer to any public transit. As such, locating the proposed project at this site would not reduce impacts to a less than significant level.
Devlin Road Transfer Station Property	Approximately 12 acres located east of Napa Logistics Park and south of the Devlin Road Transfer Station. This site contains undeveloped land. This site is designated "Industrial" by the Napa County General Plan and zoned "Business/Industrial" by the Napa County Airport Industrial Area Specific Plan.	**Not Feasible:** This site is not owned, controlled, or otherwise accessible to the project applicant. The Napa Recycling and Transfer Facility has conceptually proposed developing a construction and demolition debris sorting facility on the property. Furthermore, this property is not located closer to any public transit. As such, locating the proposed project at this site would not reduce impacts to a less than significant level.
Northeast of State Route 29 and Watson Lane	The project site is located in unincorporated Napa County and is designated for agricultural uses in the Napa County General Plan.	**Not Feasible:** This site is not owned, controlled, or otherwise accessible to the project applicant. It is designated for agricultural uses and the proposed project would not be permitted at the site.
Source: FirstCarbon Solutions (FCS). 2024.		

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CHAPTER 7: PERSONS AND ORGANIZATIONS CONSULTED/LIST OF PREPARERS

7.1 - Persons and Organizations Consulted

7.1.1 - Lead Agency - City of American Canyon

Community Development Department

Community Development Director ..... Brent Cooper, AICP
Senior Planner ..... William He, AICP
Administrative Technician ..... Nicolle Hall
City Attorney ..... Bill Ross

Public Works Department

Public Works Director ..... Erica Ahmann Smithies
Senior Civil Engineer ..... Edison C. Bisnar, Jr. PE

Police Department

Police Chief ..... Rick Greenberg

Fire Protection District

Fire Chief ..... Geoff Belyea

7.1.2 - Public Agencies

State Agencies

California Department of Fish and Wildlife

Regional Manager ..... Erin Chappell

California Department of Justice

Supervising Deputy Attorney General ..... Christie Vosburg

California Department of Transportation

Branch Chief, Local Development Review ..... Yunsheng Luo

Native American Heritage Commission

Cultural Resources Analyst ..... Cameron Vela

7.1.3 - Private Parties and Organizations

Public Comment Letters

City of Napa Resident ..... Yvonne Baginski
City of American Canyon Resident ..... Jeannette Goyetche

City of American Canyon Resident ..... Jerry Hoffman

7.2 - List of Preparers

7.2.1 - City of American Canyon

Community Development Department

Community Development Director ..... Brent Cooper, AICP
Senior Planner ..... William He, AICP

7.2.2 - Lead Consultant

FirstCarbon Solutions

Project Director ..... Mary Bean
Project Manager ..... Janna Waligorski
Assistant Project Manager ..... Madelyn Dolan
Legal Counsel ..... Megan Starr, JD
Biological Resources Manager ..... Robert Carroll
Biologist ..... Kelly Evans
Biological Resource Analyst ..... Hannah Carney
Director of Cultural Resources ..... Dana DePietro, PhD, RPA
Cultural Resources Analyst ..... Ti Ngo
Director of Noise and Air Quality ..... Phil Ault, LEED® AP
Air Quality Analyst ..... Marianne Aydil
Air Quality Analyst ..... Tsui Lee
Senior Managing Editor ..... Susie Harris
Publications Coordinator ..... Alec Harris
Document Specialist ..... Melissa Ramirez
GIS/Graphics ..... Karlee McCracken

7.2.3 - Technical Subconsultants

Cameron Cole

Principal Scientist ..... Michael Stephenson
Geologist II ..... Amy Robson
Environmental Scientist II ..... Angela Mattmiller

W-Trans

President ..... Mark Spencer
Principal ..... Zack Matley
Senior Planner ..... Barry Bergman

Pinecrest Research Corporation

Director ..... Chris DiVittorio

Krazan & Associates

Managing Engineer..... David R. Jarosz, II

RSA+

Director..... Paul S. Warnock

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Appendix A:
Notice of Preparation/Comments

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City of American Canyon
Notice of Preparation and Notice of Public Scoping Meeting
SDG Commerce 220 Distribution Center Project

Date: October 27, 2023

To: Public Agencies and Private Parties

From: William He, AICP, Senior Planner, City of American Canyon

Subject: Notice of Preparation of an Environmental Impact Report and Public Scoping Meeting

The City of American Canyon will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified herein. The project description, location, and probable environmental effects of the SDG Commerce 220 Distribution Center Project are described in the attached materials. The project applicant is SDG Commerce 220, LLC.

The City of American Canyon is soliciting comments from public agencies, organizations, and members of the public regarding the scope and content of the EIR, and the environmental issues and alternatives to be addressed in the document. Public agencies may need to use the EIR when considering permitting or other approvals that are germane to the agencies' responsibilities in connection with the projects.

Because of time limits mandated by state law, public agencies must submit any comments in response to this notice at the earliest possible date but not later than 30 days after receipt of this notice. The City of American Canyon also will accept comments from other interested parties regarding this notice during this time period. Accordingly, please provide your written response to the address shown below by **5 p.m. November, 27, 2023**. If you wish to be placed on the notification list for this project, or if you have any questions or need additional information, please contact the person below.

William He, AICP, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Phone: (707) 647-4337
Email: whe@cityofamericancanyon.org

Public Scoping Meeting

A virtual public scoping meeting will be held at Friday, November 17 at 2:00 PM. Refer to the 'Scoping Meeting' portion of this NOP for details. At this meeting, public agencies, organizations, and members of the public will be able to review the proposed project and provide comments on the scope of the environmental review process.

SDG COMMERCE 224 PROJECT

Project Location

The 10.45-acre project site is located at 1055 Commerce Court in the City of American Canyon, Napa County, California; refer to Exhibit 1. The rectangular project site is bounded by a Eucalyptus grove and North Slough (west), a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 (north), Commerce Court (east), beyond which is a paintball recreation area, and a wine distribution warehouse known as SDG Commerce 330 (south); refer to Exhibit 2. The project site is located on the *Cuttings Wharf, California*, United States Geological Survey 7.5-minute topographic quadrangle, Township 4 North, Range 4 West, Section 14 (Latitude 38° 11' 22" North; Longitude 122° 16' 19" West).

Existing Conditions

1.1.1 - Land Use Activities

The project site contains undeveloped land, which slopes downward from east to west and is approximately 13 to 25 feet above mean sea level. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk.

The southern portion of the project site contains several soil stockpiles that are intended for use at the SDG Commerce 217 property. A young Euctalyptus tree is located near Commerce Court, and a linear wetland and an isolated wetland are located within the northern portion of the property.

1.1.2 - Land Use Designations

The project site is designated "Commercial Recreation (CR)" by the City of American Canyon General Plan and is zoned Recreation (REC).

A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zone district.

The project site is within Compatibility Zone D (Common Traffic Pattern) of the Napa County Airport's Land Use Compatibility Plan.

Project Description

1.1.3 - Project Summary

The applicant, SDG Commerce, is proposing to develop a 219,834 square-foot wine storage and distribution center on the 10.45-acre (443,005-square-foot) project site. The warehouse would provide 23 truck doors and up to 4,400 square feet of office space. It would have perimeter concrete tilt wall panels with varying parapet heights and accent spandrel glass/metal canopy features around offices and corners of the building. The average roof height would be approximately 35 feet, and

portions of the building exterior walls would have varied heights to provide architectural relief. The building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized. Table 1 summarizes the project characteristics. Exhibit 3 depicts the site plan.

Table 1: SDG Commerce 220 Project Summary

Acres	Building Square Feet	Floor Area Ratio	Building Height	End Use/Characteristics
10.45[1]	219,834	0.5	35 feet	Wine Distribution Warehouse/23 truck doors

[1]Project site consists of assessor's parcel number 058-030-069 (10.17 acres) plus small additional improvement areas for a total of 10.45 acres.
Source: SDG Commerce 220, LLC. 2023.

Operation and Employment

The building would be designed to accommodate approximately three tenants. Typical hours of operation for wine distribution and storage are generally 6:00 a.m. to 6:00 p.m., Monday through Friday; during the peak seasonal months, typically June through November, hours are extended from 6:00 a.m. to 12:00 a.m., Monday through Friday. It is anticipated that the project would employ approximately 35 full-time employees and 20 part-time employees, working in up to three overlapping shifts.

Warehousing and storage of wine and other wine-related industries are not labor intensive, and the proposed uses for the building do not demand frequent client or user trips to the site. It is estimated that the proposed project would generate approximately 2 to 4 client or visitor trips per day, likely during off-peak season and during normal working hours. Forklifts used within the building would be electrically powered.

Site Access, Circulation, and Parking

Vehicular and truck access would be taken from one driveway on Commerce Court that would be shared with the SDG Commerce 330 project. Drive aisles would be provided around the full perimeter of the building to support emergency ingress and egress.

A total of 134 car spaces and 23 truck parking stalls would be provided. Of the parking spaces, five would be designated for handicap access and one would be a compact space. There would be five electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE stall, and 19 electric vehicle (EV) capable stalls. Per the 2022 California Green Building Standards Code (CALGreen), nonresidential developments with 101–150 parking spaces must provide at least 17 EV capable spaces and at least four EV capable spaces provided with EVSE (Title 24, Part 11, Chapter 5, Table 5.106.5.3.1). The proposed project would meet these requirements.

Pedestrian circulation throughout the project site would be provided in accordance with CalDAG and ADA recommendations and standards. The proposed project would also provide three bicycle

lockers, each of which would accommodate up to four bicycles, for a total of 12 bicycle parking spaces. The proposed 12 bicycle parking spaces would be five more than required per the City's Zoning Ordinance Chapter 19.14.090 (A), Bicycle Parking Requirements.

Lighting

Exterior lighting for the proposed project would include lighting on the building and on parking lot poles on the north side of the property. Parking lot lighting would be consistent with City of American Canyon municipal code requirements Section 19.21.030(M). The 30-foot-tall lights would be "shoebox" dimmable light-emitting diode (LED) fixtures designed to be dark-sky friendly by directing the light toward the ground and reducing glare to surrounding properties.

Signage

One monument sign is proposed, (approximately 8 feet wide by 5 feet tall) located at the entry to the site from Commerce Court.

Landscaping

Landscaping would be provided around the site perimeter on the east, north and partial west sides and within parking islands throughout. Mechanical equipment would be placed on the north side of the building behind a 6-foot-high color slatted chain link fence. The irrigation system would be connected to the City's reclaimed water system, thus eliminating the use of the City's potable water for landscape purposes.

Storm Drainage

Stormwater runoff would be directed via an onsite storm drain system into a detention/bioretention pond located on the western side of the site. Roof drainage would be connected to the proposed detention/bioretention pond via the onsite storm drain system surrounding the building by way of down spouts on the exterior of the building, which would be painted to blend-in with the building façade.

Wetland Areas

The two existing, on-site wetland areas would be preserved in place.

Utilities

Water

The City of American Canyon would provide potable and recycled water service to the proposed project. Potable and recycled water infrastructure currently exists within Commerce Court, and service laterals would be extended to the project building. The warehouse would be dual plumbed to allow use of recycled water for non potable water use within the building.

Wastewater

The City of American Canyon would provide wastewater collection and treatment service to the proposed project. Sewer infrastructure currently exists within Commerce Court. Connection back to

the existing City sewer infrastructure in Commerce Court will be made through the existing sanitary sewer system and lift station that was previously designed and constructed on the Commerce 330 site for future shared use with the SDG Commerce 220 project.

Electricity

Pacific Gas and Electric Company (PG&E) would deliver electricity to the proposed project. Electric infrastructure currently exists within Commerce Court. Service laterals would extend from the Commerce Court facilities to project buildings. No natural gas would be used. Solar would be installed on the building roof top and would produce an estimated 235,204 kilowatt-hour (kWh) per year.

Telecommunications Services

Telephone service provided by AT&T would be extended from the existing underground infrastructure in the Commerce Court right-of-way (ROW) to the electrical room located in the northeast corner of the building.

Off-site Improvements

A small portion of the development extends beyond the parcel boundaries to the north and south of the project site to provide connection to the adjacent parking lots and to enhance internal circulation between the sites. The properties to the north and south of the project site are under related ownership as the proposed project and the potential impacts associated with development and site disturbance on those parcels was analyzed in previous California Environmental Quality Act (CEQA) documentation.[1,2] Long-term reciprocal access would be ensured through recorded easements between the two properties.

Construction

Construction would occur in a single phase, lasting approximately 9.5 months. For this analysis, construction is assumed to start in September 2024. During the construction phase, an average of 12 to 24 workers would be at the site, with a maximum of up to 80 workers and a minimum of one. Construction hours would be from 7:00 a.m. to 6:00 p.m. Monday through Friday.

Construction of the concrete building slab, wall panels and large concrete paving pours would be required to be performed during nighttime hours starting no earlier than 12:00 a.m. Pre-notification of these night pour dates and times would be provided to the City and property owners in the vicinity. Typical construction equipment that would be used at the site would include self-loading dirt scraper, bulldozer, motor grader, compactor, roller, water truck, backhoe, excavator, trencher, drilling auger, front end loader, paving machine, laser screed, concrete finishing trowels, tractor, crane, forklift, generator, man lift, scissor lift, welding machine, and light tower. Imported soil would be required for grading but would be less than 1,000 cubic yards.

[1] City of American Canyon. 2021. Commerce 217 Distribution Center Project Initial Study/Mitigated Negative Declaration. Website: https://ceqanet.opr.ca.gov/2020120302/2. Accessed August 16, 2023.

[2] City of American Canyon. 2018. SDG 330 Wine Warehouse Project Initial Study/Mitigated Negative Declaration. Website: https://ceqanet.opr.ca.gov/2018112067. Accessed August 16, 2023.

Required Discretionary Approvals

The proposed project requires the following discretionary approvals from the City of American Canyon:

- Conditional Use Permit

Subsequent ministerial actions would be required for the implementation of the proposed project, including issuance of grading and building permits.

The following parties would act as responsible agencies for the proposed project:

- United States Army Corps of Engineers (USACE)
- California Department of Fish and Wildlife (CDFW)
- San Francisco Bay Regional Water Quality Board (RWQCB)
- County of Napa
- Napa County Airport Land Use Commission (ALUC)

Environmental Review

1.1.4 - Potential Environmental Effects

The EIR will evaluate whether the proposed project may potentially result in one or more significant environmental effects, which will be evaluated in the relevant sections listed below.

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions/Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

1.1.5 - Effects Found not to be Significant

Unless specific comments are received during the NOP public comment period that indicate a potential for the project to result in significant impacts, the following issues will be addressed in the Effects Found not to be Significant section of the EIR.

Agriculture and Forest Resources

The project site contains undeveloped land and is not used for agricultural land use activities. The California Department of Conservation maps the project site as 'Other Land,' which does not fall under the Important Farmland umbrella. The project site is not encumbered by an active Williamson Act contract. The project site is zoned for industrial use; thus, no conflicts with agricultural or forest zoning would occur. The project site does not contain any stands of commercially harvestable trees and, thus, would not convert forestland to non-forest use. No impact would occur.

Mineral Resources

The project site contains undeveloped land. No mineral extraction occurs onsite. This precludes the possibility of conflicts in this regard. No impact would occur.

Population and Housing

The proposed project would develop a 224,539 square-foot wine warehouse on an undeveloped site. No direct residential growth would occur, and no existing dwelling units would be removed. The proposed project would employ an estimated 225 workers when fully operational at buildout. The California Employment Development Department estimated Napa and Solano County's combined labor force at 267,800 in November 2022. As such, the local labor force is sufficiently large enough to allow the project's employment opportunities to be filled locally such that unplanned growth would not occur. Lastly, roadways and infrastructure exist adjacent to the project site and, therefore, no impacts would occur.

Recreation

The proposed project would not involve construction of dwelling units and, thus, would not result in direct population growth. As such, it would not increase use of existing recreational facilities. No impact would occur.

Wildfire

The project site contains undeveloped land. There are no wildlands or other areas susceptible to wildfire within or near the project site. No impact would occur.

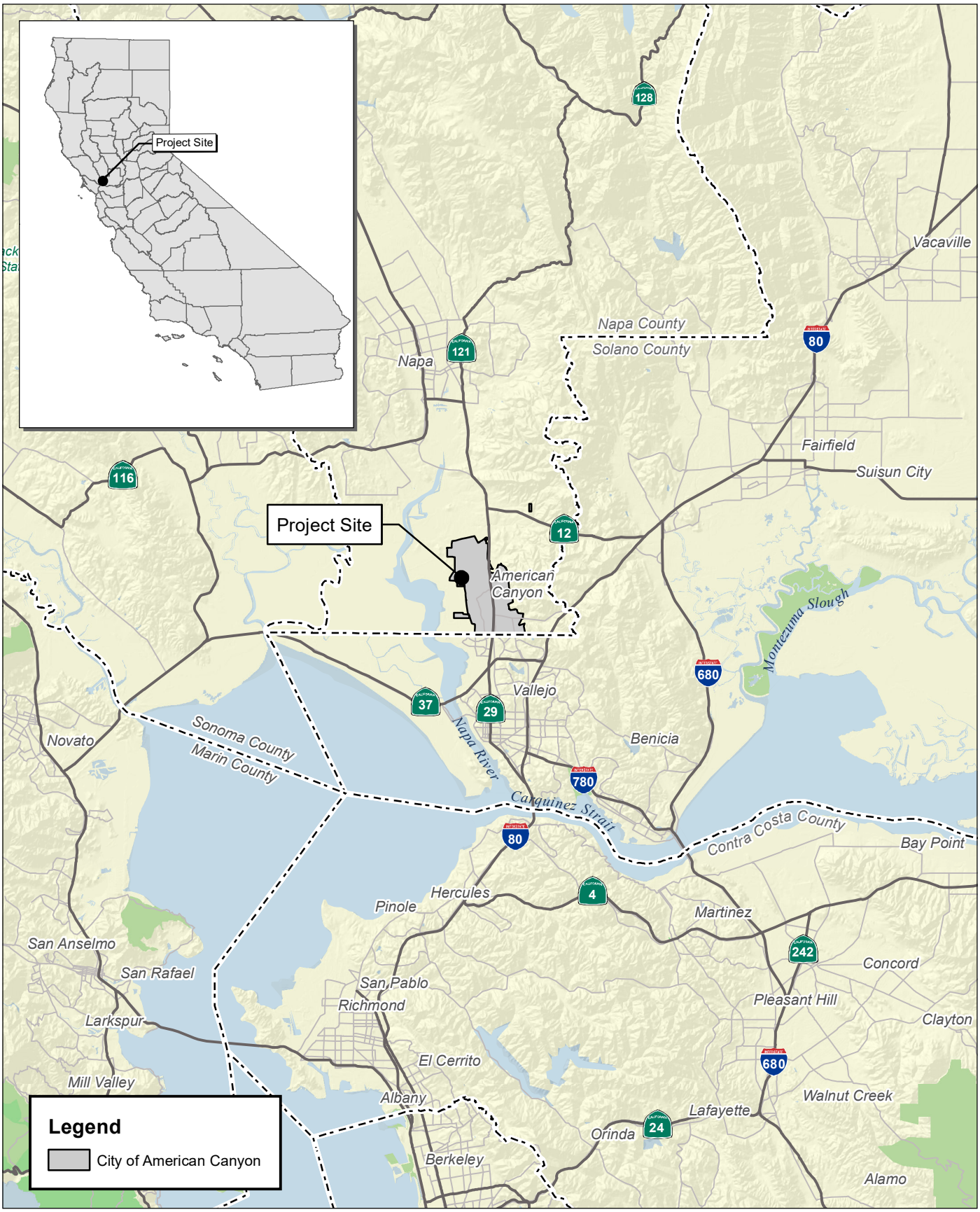
Scoping Meeting

A public scoping meeting will be held Friday, November 17 at 2:00 p.m. at American Canyon City Hall, 4381 Broadway, Suite 201, American Canyon, CA 94503.

The meeting will also be streamed virtually:

https://zoom.us/join
Meeting ID: 847 0393 6328
Passcode: 418059
Phone: (408) 638-0968

At this meeting, agencies, organizations, and members of the public will be able to review the proposed project and provide comments on the scope of the environmental review process.



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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Exhibit 1
Regional Location Map



Source: Bing Aerial Imagery.

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1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map

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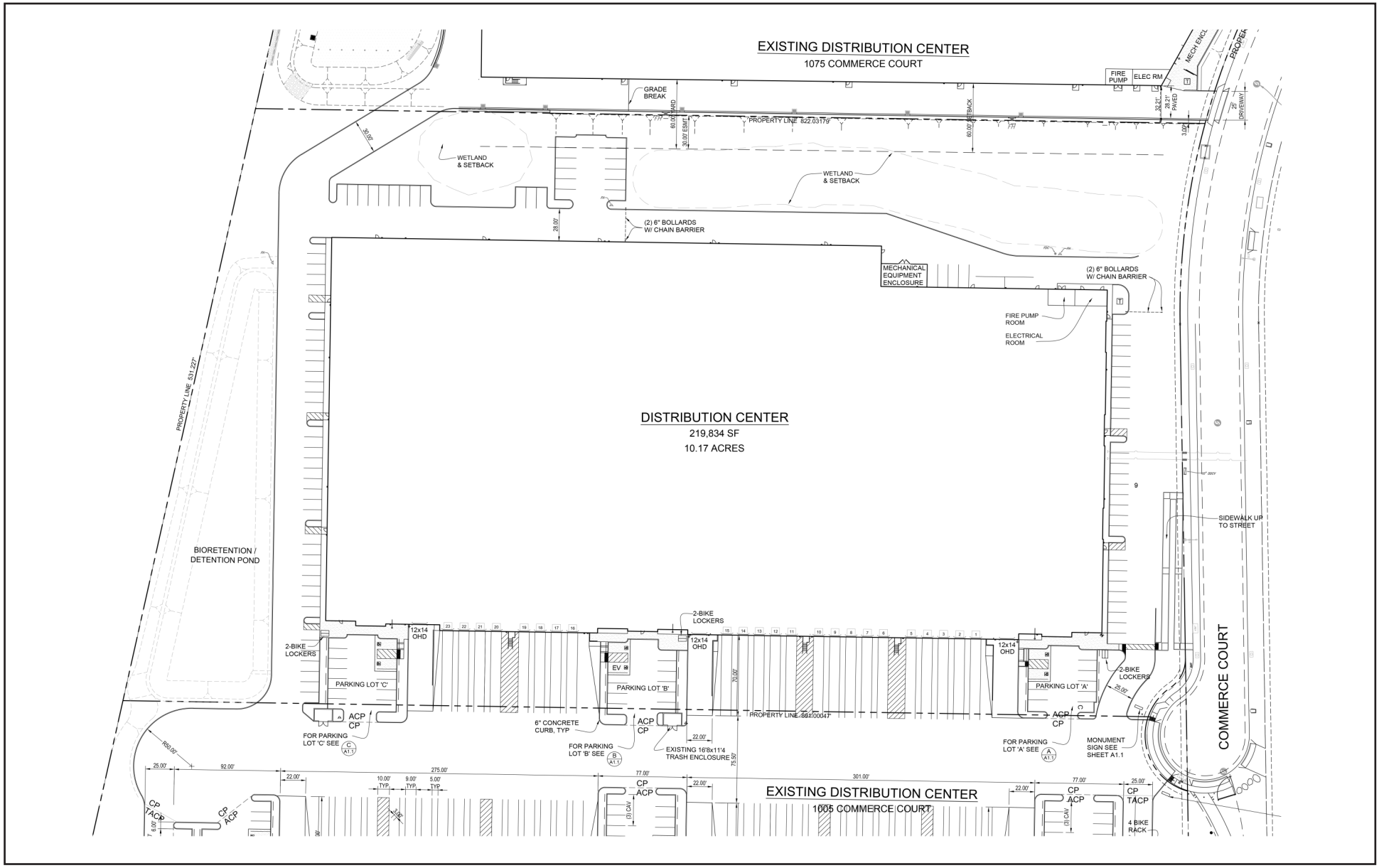

Source: Ward Architects, Inc. 08/01/2023.

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Exhibit 3
Site Plan

SDG 220 Distribution Center Conditional Use Permit

Date * 11/21/2023

Name * Yvonne Baginski

Company

Email * yvonnebaginski@gmail.com

Phone Number * 7076945486

Please check all that apply *

- [ ] I own a home in American Canyon
- [ ] I rent a home in American Canyon
- [ ] I own a business in American Canyon
- [ ] I work in American Canyon
- [x] None of the above

Address *

Street Address
3205 Montclair Ave.
Address Line 2

City
Napa

State / Province / Region
CA

Postal / Zip Code
94558

Country
USA

Comments *

If comments are being provided through the upload of a document, please indicate so.

While awaiting environmental review, this property has already been cleared and graded. It currently is being used as a parking lot for the labor constructing the two warehouses on either side. How is it possible to determine a biological review when the soil is cleared and vegetation removed? Is it even legal to move forward on an environmental review when the land has already been significantly altered? There is nothing but flattened dirt over most of the property. The only part of the property not already contaminated by bulldozers and other earth-moving machines is fenced off on the north side. It is very small, hardly large to notice or utilize by animals, It's about the size of a small backyard. We couldn't imagine that such a minuscule piece of land would be cordoned off as wetland preservation. This wetland will be surrounded by asphalt parking lots and driveways and driven on by hundreds of cars and enormous trucks. Any animal attempting to use this wetland would be in peril. Please explain what animals will have access to, or be able to use, these tiny pieces of "conserved" wetland. There is no access corridor, nothing. How will the wetland be maintained, protected? Who will monitor the wetland? Is there any possibility of making it larger, and connecting it to the a larger wildlife area? Has a wildlife biologist studied this location and offered any suggestions? It seems as if the project has jumped ahead without following protocols. Asking for an environmental review after all the vegetation has been removed, doesn't make sense. Please advise.

I am concerned that this property is so near the bay wetlands and walking trail. That small line of trees in the back does little to protect wildlife from the lighting and noise of these warehouses, which it seems, will be operational 24/7. There is no information on how many trucks will be lumbering up to those 23 ramps every day, and how often. This is going to be a very busy court. Three warehouses and all bringing in noise and traffic alongside the wetland trail.

Especially confusing are the estimates of the number of people who will be working on site. There are different numbers bandied about in the NOP. Specifically, that 250 employees will be employed (yet, only 132 parking places), then only 2-4 visitors a day, and finally that there will be 35 fulltime and 30 part-time employee working three different shifts...which, still adds up to only 195 employees. So, it seems that the numbers are inconsistent with one another. Plus, the three tenants are not identified, and I am supposing that this is all guesswork for now. A comment is also made about the employees being local, and not having to drive in from other localities, yet there is no substantive evidence to this statement. Is there going to be a mandate for the employer to hire a certain percentage of local people? (And, then require them to all ride their bikes to work?) How will you be able to regulate who employers hire based on location or miles driven into work? This statement is inaccurate unless it is backed up with substantive, enforceable regulations. There is no way to guess how many people hired will be living in American Canyon. Right now, 80 percent of American Canyon residents who work, commute to other cities/counties to work. Warehouse work is not professional work. It is low-paying labor, and the rate of pay is still under $20/hour. These are not the people who will be purchasing Watson Ranch homes. I wonder whether the City has ever surveyed the other warehouses in American Canyon and determined what percentage of people working in those warehouses are actually residents of American Canyon. (And, how many are riding their bikes to work?) From what I see on the streets and in the driveways of American Canyon homes, I am willing to surmise that the most favored car is an SUV, and it is driven to work, to pick up kids, and on errands, daily.

The lighting and noise of this area, so near the wetlands and the tree foliage across the street, will be disruptive to the birds and wildlife. It will change their mating and sleeping patterns. Already, it has destroyed their habitat and will force them to leave the area, or die. What, if any, safeguards are being put in place to protect and safeguard wildlife?

The NOP hearing was held on a Friday afternoon before Thanksgiving week. Even with notice, it was unattendable by many who were heading off on vacation travels. Now, all of the comments are to be submitted and written over Thanksgiving Week, when many people are with family and not working. I believe the timing of this public hearing puts the public at a disadvantage in being able to respond to this project's environmental toll on this community. We cannot even view the meeting until after November 27, the dates all the comments are due. This doesn't give those of us missing the meeting a chance to review what was said before comments are submitted.

And, finally, the increase of greenhouse gas emissions will be considerable with this project. How many trips a day from the trucking traffic alone? And, the diesel fumes will further pollute the bayside air, and the noise and traffic will disrupt the peace of

will further pollute the bayside air, and the noise and traffic will disrupt the peace of recreational walkers along the trail just feet away from the furthest edge of the property. Using electric forklifts inside the facility may keep the air cleaner inside, but there's no doubt that the diesel truck engines will be emitting harmful carbon and destructive gases outdoors, contributing significantly the GHG emissions.

Now, in 2023, it's time to start looking at all these proposed projects through the lens of the climate crisis. Each project needs to be re-scrutinized and upgraded to the new reality. This property is zoned open space/recreational, but the city council voted to allow this warehouse build back in 2018. Now, five years later, we are facing a different world. We need to keep certain lands free from development, especially lands near the bay. There will be rising seas affecting this area in the very near future. Pay attention.

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California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

November 27, 2023

SCH #: 2023100842
GTS #: 04-NAP-2023-00338
GTS ID: 31389
Co/Rt/Pm: Napa/29/2.907

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: SDG Commerce 220 Distribution Center Project – Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR)

Dear William He:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the SDG Commerce 220 Distribution Center Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system.

The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the October 2023 NOP.

Project Understanding
The proposed project is to develop a 219,834 square-foot wine storage and distribution center that would provide 23 truck doors and 4,400 square-foot of office space.

Travel Demand Analysis
With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide (*link*).

If the project meets the screening criteria established in the City's adopted Vehicle Miles Traveled (VMT) policy to be presumed to have a less-than-significant VMT impact and exempt from detailed VMT analysis, please provide justification to support the exempt status in alignment with the City's VMT policy. Projects that do not meet the screening criteria should include a detailed VMT analysis in the DEIR, which should include the following:

- VMT analysis pursuant to the City's guidelines. Projects that result in automobile VMT per capita above the threshold of significance for existing (i.e. baseline) city-wide or regional values for similar land use types may indicate a significant impact. If necessary, mitigation for increasing VMT should be identified. Mitigation should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.

- A schematic illustration of walking, biking and auto conditions at the project site and study area roadways. Potential traffic safety issues to the State Transportation Network (STN) may be assessed by Caltrans via the Interim Safety Guidance (*link*).

- The project's primary and secondary effects on pedestrians, bicycles, travelers with disabilities and transit performance should be evaluated, including countermeasures and trade-offs resulting from mitigating VMT increases. Access to pedestrians, bicycle, and transit facilities must be maintained.

Construction-Related Impacts
Potential impacts to the State Right-of-Way (ROW) from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified. Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, please visit Caltrans Transportation Permits (*link*). Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the STN.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Marley Mathews, Transportation Planner, via LDR-D4@dot.ca.gov. For future early coordination opportunities or project referrals, please contact LDR-D4@dot.ca.gov.

Sincerely,

YUNSHENG LUO
Branch Chief, Local Development Review
Office of Regional and Community Planning

c: State Clearinghouse

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

November 17, 2023

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon CA, 94503
WHe@cityofamericancanyon.org

Subject: SDG Commerce 220 Distribution Center Project, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2023100842, City of American Canyon, Napa County

Dear Mr. He:

The California Department of Fish and Wildlife (CDFW) reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the SDG Commerce 220 Distribution Center Project (Project).

CDFW is providing the City of American Canyon (City) as the Lead Agency, with specific detail about the scope and content of the environmental information related to CDFW's area of statutory responsibility that must be included in the EIR (Cal. Code Regs., tit. 14, § 15082, subd. (b)).

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under the California Environmental Quality Act (CEQA) for commenting on projects that could impact fish, plant, and wildlife resources (Pub. Resources Code, § 21000 et seq.; Cal. Code Regs., tit. 14, § 15386). CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as a permit pursuant to the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA), the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources. Pursuant to our authority, CDFW has the following concerns, comments, and recommendations regarding the Project.

PROJECT DESCRIPTION AND LOCATION

The Project objective is the construction of a 219,834-square-foot wine storage and distribution center, including the construction of vehicular access areas and drive isles and sharing a driveway with a neighboring facility. Additional vehicle parking spaces will be built, including 134 car spaces, 23 truck parking stalls,19 electric vehicle stalls, and three bicycle storage lockers with room for 12 bicycles. Construction activities are

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expected to span 9.5 months and will include landscaping and the construction of large concrete slabs and wall panels using typical construction equipment. The Project site is located on 1055 Commerce Court in the City of American Canyon, Napa County; Latitude 38.185969 North, Longitude -122.274294 West; and encompasses approximately 10.45 acres.

The CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) require that the EIR incorporate a full Project description, including reasonably foreseeable future phases of the Project, that contains sufficient information to evaluate and review the Project's environmental impact (CEQA Guidelines, §§ 15124 & 15378). Please include a complete description of the following Project components in the Project description:

- Footprints of permanent Project features and temporarily impacted areas, such as staging areas and access routes;
- Area and plans for any proposed buildings/structures, ground-disturbing activities, fencing, paving, stationary machinery, landscaping, and stormwater systems;
- Operational features of the Project, including level of anticipated human presence (describe seasonal or daily peaks in activity, if relevant), artificial lighting/light reflection, noise, traffic generation, and other features; and
- Construction schedule, activities, equipment, and crew sizes.

REGULATORY REQUIREMENTS

California Endangered Species Act and Native Plant Protection Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA or NPPA, either during construction or over the life of the Project. Issuance of a CESA ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, such as those identified in **Attachment 1**, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, and 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration

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(FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with CESA.

Lake and Streambed Alteration

An LSA Notification, pursuant to Fish and Game Code section 1600 et seq., is required for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to LSA Notification requirements. CDFW, as a Responsible Agency under CEQA, would consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

Nesting Birds

CDFW has authority over actions that may disturb or destroy active nest sites or take birds. Fish and Game Code sections 3503, 3503.5, and 3513 protect birds, their eggs, and nests. Migratory birds are also protected under the federal Migratory Bird Treaty Act.

Fully Protected Species

Fully Protected species, including those listed in **Attachment 1**, may not be taken or possessed at any time (Fish & G. Code, §§ 3511, 4700, 5050, & 5515) except for: 1) collecting these species for necessary scientific research, including efforts to recover fully protected species; 2) relocation of the bird species for the protection of livestock; 3) if they are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan, or 4) certain projects pursuant to Fish and Game Code section 2081.15.

ENVIRONMENTAL SETTING

The EIR should provide sufficient information regarding the environmental setting ("baseline") to understand the Project's, and its alternative's (if applicable), potentially significant impacts on the environment (CEQA Guidelines, §§ 15125 & 15360).

CDFW recommends that the CEQA document prepared for the Project provide baseline habitat assessments for special-status plant, fish and wildlife species located and potentially located within the Project area and surrounding lands, including, but not limited to, all rare, threatened, or endangered species (CEQA Guidelines, § 15380). The EIR should describe aquatic habitats, such as wetlands or waters of the U.S. or state,

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and any sensitive natural communities or riparian habitat occurring on or adjacent to the Project site (for sensitive natural communities see:https://wildlife.ca.gov/Data/VegCAMP/NaturalCommunities#sensitive%20natural%20communities), and any stream or wetland set back distances the City may require. Fully protected, threatened or endangered, candidate, and other special-status species and sensitive natural communities that are known to occur, or have the potential to occur in or near the Project site, include, but are not limited to, those listed in **Attachment 1**.

Habitat descriptions and the potential for species occurrence should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, U.S. Fish and Wildlife Service's (USFWS) Information, Planning, and Consultation System, and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Based on the data and information from the habitat assessment, the EIR should adequately assess which special-status species are likely to occur on or near the Project site, and whether they could be impacted by the Project.

CDFW recommends that prior to Project implementation, surveys be conducted for special-status species with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocol.

Botanical surveys for special-status plant species, including those with a California Rare Plant Rank (http://www.cnps.org/cnps/rareplants/inventory/), must be conducted during the blooming period within the Project area and adjacent habitats that may be indirectly impacted by, for example, changes to hydrological conditions, and require the identification of reference populations[1]. More than one year of surveys may be necessary based on environmental conditions. Please refer to CDFW protocols for surveying and evaluating impacts to special-status plants available at: https://www.wildlife.ca.gov/Conservation/Plants.

IMPACT ANALYSIS AND MITIGATION MEASURES

The EIR should discuss all direct and indirect impacts (temporary and permanent) that may occur with implementation of the Project (CEQA Guidelines, § 15126.2). This includes evaluating and describing impacts such as:

[1]CRPR 1B plants are considered rare, threatened, or endangered in California and elsewhere. Further information on CRPR ranks is available in CDFW's Special Vascular Plants, Bryophytes, and Lichens List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline) and on the California Native Plant Society website (https://www.cnps.org/rare-plants/california-rare-plant-ranks).

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- Encroachments into riparian habitats, wetlands or other sensitive areas;
- Potential for impacts to special-status species;
- Loss or modification of breeding, nesting, dispersal and foraging habitat, including vegetation removal, alternation of soils and hydrology, and removal of habitat structural features (e.g., snags, roosts, vegetation overhanging banks);
- Permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic or human presence; and
- Obstruction of movement corridors, fish passage, or access to water sources and other core habitat features.

The CEQA document should also identify reasonably foreseeable future projects in the Project vicinity, disclose any cumulative impacts associated with these projects, determine the significance of each cumulative impact, and assess the significance of the Project's contribution to the impact (CEQA Guidelines, §15355). Although a project's impacts may be insignificant individually, its contributions to a cumulative impact may be considerable; a contribution to a significant cumulative impact – e.g., reduction of available habitat for a special-status species – should be considered cumulatively considerable without mitigation to minimize or avoid the impact.

Based on the comprehensive analysis of the direct, indirect, and cumulative impacts of the Project, the CEQA Guidelines direct the Lead Agency to consider and describe all feasible mitigation measures to avoid potentially significant impacts in the EIR, and/or mitigate significant impacts of the Project on the environment (CEQA Guidelines, §§ 15021, 15063, 15071, 15126.2, 15126.4 & 15370). This includes a discussion of impact avoidance and minimization measures for special-status species, which are recommended to be developed in early consultation with CDFW, USFWS, and the National Marine Fisheries Service. These measures can then be incorporated as enforceable Project conditions to reduce potential impacts to biological resources to less-than-significant levels.

ENVIRONMENTAL DATA

CEQA requires that information developed in EIRs and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNDDB online field survey form and other methods for submitting data can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/

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Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plantsand-Animals.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

If you have any questions, please contact Melanie Day, Senior Environmental Scientist (Supervisory), at (707) 210-4415 or Melanie.Day@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

Attachment 1: Special-Status Species and Sensitive Natural Communities

ec: Office of Planning and Research, State Clearinghouse (SCH No 2023100842)

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ATTACHMENT 1: Special-Status Species and Sensitive Natural Communities

Scientific Name	Common Name	Status
Amphibians & Reptiles		
Rana draytonii	California red-legged frog	FT, SSC
Emys marmorata	western pond turtle	SSC
Birds		
Rallus obsoletus obsoletus	California Ridgeway's rail	SE, FE, FP
Laterallus jamaicensis coturniculus	California black rail	ST, FP
Buteo swainsoni	Swainson's hawk	ST
Agelaius tricolor	tricolored blackbird	ST
Melospiza melodia samuelis	San Pablo song sparrow	SSC
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	SSC
Athene cunicularia	burrowing owl	SSC
Circus hudsonius	northern harrier	SSC
Aquila chrysaetos	golden eagle	FP, BGEPA, WL
Elanus leucurus	white-tailed kite	FP
Buteo regalis	ferruginous hawk	WL
Pandion haliaetus	osprey	WL
Fishes		
Hypomesus transpacificus	Delta smelt	FT, SE
Spirinchus thaleichthys	longfin smelt	FC, ST
Oncorhynchus mykiss irideus	steelhead - central California coast DPS	FT
Acipenser medirostris	green sturgeon - southern DPS	FT

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Pogonichthys macrolepidotus	Sacramento splittail	SSC
Mammals		
Reithrodontomys raviventris	salt-marsh harvest mouse	FE, SE, FP
Taxidea taxus	American badger	SSC
Plants		
Chloropyron molle ssp. *molle*	soft salty bird's-beak	FE, SR
Lilaeopsis masonii	Mason's lilaeopsis	SR
Trifolium amoenum	two-fork clover	FE, CRPR 1B.1
Trifolium hydrophilum	saline clover	CRPR 1B.2
Lathyrus jepsonii var. *jepsonii*	Delta tule pea	CRPR 1B.2
Carex lyngbyei	Lyngbye's sedge	CRPR 2B.2
Astragalus tener var. *tener*	alkali milk-vetch	CRPR 1B.2
Balsamorhiza macrolepis	big-scale balsamroot	CRPR 1B.2
Extriplex joaquinana	San Joaquin spearscale	CRPR 1B.2
Sensitive Natural Communities		
Baccharis pilularis / Carex obnupta – Juncus patens	coyote brush/slough sedge – spreading rush	S3?
Sarcocornia pacifica or *Schoenoplectus* spp. alliance	Coastal salt marsh	Sensitive coastal salt marsh natural community may occur on or adjacent to Project site

FE = federally listed as endangered under the Endangered Species Act (ESA); FT = federally listed as threatened under ESA; FC = federally listed as candidate under ESA; SE = state listed as endangered under CESA; ST = state listed as threatened under CESA; SSC = state Species of Special Concern; FP = state fully protected; BGEPA = federal Bald and Golden Eagle Protection Act; WL = CDFW Watch List; CRPR = California Rare Plant Rank; S3? = sensitive natural community state ranked as Vulnerable, with '?' denoting insufficient samples over full expected range; DPS = distinct population segment; SR = state listed as Rare pursuant to Native Plant Protection Act of 1977

ROB BONTA
Attorney General

State of California
DEPARTMENT OF JUSTICE

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act

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In carrying out its duty to enforce laws across California, the California Attorney General's Bureau of Environmental Justice (Bureau)[1] regularly reviews proposed warehouse projects for compliance with the California Environmental Quality Act (CEQA) and other laws. When necessary, the Bureau submits comment letters to lead agencies regarding warehouse projects, and in rare cases the Bureau has filed litigation to enforce CEQA.[2] This document builds upon the Bureau's work on warehouse projects, collecting information gained from the Bureau's review of hundreds of warehouse projects across the state.[3] It is meant to help lead agencies pursue CEQA compliance and promote environmentally-just development as they confront warehouse project proposals.[4] While CEQA analysis is necessarily project-specific, this document provides information on feasible best practices and mitigation measures, nearly all of which have been adapted from actual warehouse projects in California.

I. Background

In recent years, the proliferation of e-commerce and rising consumer expectations of rapid shipping have contributed to a boom in warehouse development.[5] California, with its ports, population centers, and transportation network, has found itself at the center of this trend. In 2020, the Ports of Los Angeles, Long Beach, and Oakland collectively accounted for over 34% of all United States international container trade.[6] The Ports of Los Angeles and Long Beach alone generate about 35,000 container truck trips every day.[7] Accordingly, the South Coast Air Basin now contains approximately 3,000 warehouses of over 100,000 square feet each, with a total warehouse capacity of approximately 700 million square feet, an increase of 20 percent over the last five years.[8] This trend has only accelerated, with e-commerce growing to

[1] https://oag.ca.gov/environment/justice.
[2] https://oag.ca.gov/environment/ceqa; *People of the State of California v. City of Fontana* (Super. Ct. San Bernardino County, No. CIVSB2121829); *South Central Neighbors United et al. v. City of Fresno et al.* (Super. Ct. Fresno County, No. 18CECG00690).
[3] This September 2022 version revises and replaces the prior March 2021 version of this document.
[4] Anyone reviewing this document to determine CEQA compliance responsibilities should consult their own attorney for legal advice.
[5] As used in this document, "warehouse" or "logistics facility" is defined as a facility consisting of one or more buildings that stores cargo, goods, or products on a short- or long-term basis for later distribution to businesses and/or retail customers.
[6] Data from the Bureau of Transportation Statistics, Container TEUs (Twenty-foot Equivalent Units) (2020), https://data.bts.gov/stories/s/Container-TEU/x3fb-aeda/ (Ports of Los Angeles, Long Beach, and Oakland combined for 14.157 million TEUs, 34% of 41.24 million TEUs total nationwide) (last accessed September 18, 2022).
[7] U.S. Dept. of Transportation, Federal Highway Administration, *FHWA Operations Support – Port Peak Pricing Program Evaluation* (2020), available at https://ops.fhwa.dot.gov/publications/fhwahop09014/sect2.htm (last accessed September 18, 2022).
[8] South Coast Air Qual. Mgmt. Dist., *Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305*, at 7-8, 41 (May 2021).

13% of all retail sales and 2021 being a second consecutive record year for new warehouse space leased.[9] The latest data and forecasts predict that the next wave of warehouse development will be in the Central Valley.[10]

When done properly, these activities can contribute to the economy and consumer welfare. However, imprudent warehouse development can harm local communities and the environment. Among other pollutants, diesel trucks visiting warehouses emit nitrogen oxide (NO_x)—a primary precursor to smog formation and a significant factor in the development of respiratory problems like asthma, bronchitis, and lung irritation—and diesel particulate matter (a subset of fine particular matter that is smaller than 2.5 micrometers)—a contributor to cancer, heart disease, respiratory illnesses, and premature death.[11] Trucks and on-site loading activities can also be loud, bringing disruptive noise levels during 24/7 operation that can cause hearing damage after prolonged exposure.[12] The hundreds, and sometimes thousands, of daily truck and passenger car trips that warehouses generate contribute to traffic jams, deterioration of road surfaces, and traffic accidents.

These environmental impacts also tend to be concentrated in neighborhoods already suffering from disproportionate health impacts and systemic vulnerability. For example, a comprehensive study by the South Coast Air Quality Management District found that communities located near large warehouses scored far higher on California's environmental justice screening tool, which measures overall pollution and demographic vulnerability.[13] That

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[9] U.S. Census Bureau News, Quarterly Retail E-Commerce Sales 4th Quarter 2021 (February 22, 2022), https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf (last accessed September 18, 2022); CBRE Research, *2022 North America Industrial Big Box Report: Review and Outlook*, at 2-3 (March 2022), *available at* https://www.cbre.com/insights/reports/2022-north-america-industrial-big-box#download-report (last accessed September 18, 2022).

[10] CBRE Research, *supra note* 9, at 4, 36; New York Times, *Warehouses Are Headed to the Central Valley, Too* (Jul. 22, 2020), *available* at https://www.nytimes.com/2020/07/22/us/coronavirus-ca-warehouse-workers.html.

[11] California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health (last accessed September 18, 2022) (NOx); California Air Resources Board, Summary: Diesel Particular Matter Health Impacts, https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts (last accessed September 18, 2022); Office of Environmental Health Hazard Assessment and American Lung Association of California, Health Effects of Diesel Exhaust, https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf (last accessed September 18, 2022) (DPM).

[12] Noise Sources and Their Effects, https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm (last accessed September 18, 2022) (a diesel truck moving 40 miles per hour, 50 feet away, produces 84 decibels of sound).

[13] South Coast Air Quality Management District, "Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305" (May 2021), at 4-5.

study concluded that, compared to the South Coast Air Basin averages, communities in the South Coast Air Basin near large warehouses had a substantially higher proportion of people of color; were exposed to more diesel particulate matter; had higher rates of asthma, cardiovascular disease, and low birth weights; and had higher poverty and unemployment rates.[14] Each area has its own unique history, but many of these impacts and vulnerabilities reflect historic redlining practices in these communities, which devalued land and concentrated poverty, racial outgroups, and pollution into designated areas.[15]

II. Proactive Planning: General Plans, Local Ordinances, and Good Neighbor Policies

To systematically guide warehouse development, we encourage local governing bodies to proactively plan for logistics projects in their jurisdictions. Proactive planning allows jurisdictions to prevent land use conflicts before they materialize and direct sustainable development. Benefits also include providing a predictable business environment, protecting residents from environmental harm, and setting consistent expectations jurisdiction-wide.

Proactive planning can take many forms. Land use designation and zoning decisions should channel development into appropriate areas. For example, establishing industrial districts near major highway and rail corridors but away from sensitive receptors[16] can help attract investment while avoiding conflicts between warehouse facilities and residential communities. Transition zones with lighter industrial and commercial land uses may also help minimize conflicts between residential and industrial uses.

In addition, general plan policies, local ordinances, and good neighbor policies should set minimum standards for logistics projects. General plan policies can be incorporated into existing economic development, land use, circulation, or other related general plan elements. Many jurisdictions alternatively choose to consolidate policies in a separate environmental justice element. Adopting general plan policies to guide warehouse development may also help

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[14] *Id*. at 5-7.

[15] Beginning in the 1930s, federal housing policy directed investment away from Black, immigrant, and working-class communities by color-coding neighborhoods according to the purported "riskiness" of loaning to their residents. In California cities where such "redlining" maps were drawn, nearly all of the communities where warehouses are now concentrated were formerly coded "red," signifying the least desirable areas where investment was to be avoided. *See* University of Richmond Digital Scholarship Lab, Mapping Inequality, https://dsl.richmond.edu/panorama/redlining/#loc=12/33.748/-118.272&city=los-angeles-ca (Los Angeles), https://dsl.richmond.edu/panorama/redlining/#loc=13/32.685/-117.132&city=san-diego-ca (San Diego), https://dsl.richmond.edu/panorama/redlining/#loc=11/37.81/-122.38&city=oakland-ca (Oakland), https://dsl.richmond.edu/panorama/redlining/#loc=13/37.956/-121.326&city=stockton-ca (Stockton), https://dsl.richmond.edu/panorama/redlining/#loc=12/36.751/-119.86&city=fresno-ca (Fresno) (all last accessed September 18, 2022).

[16] In this document, "sensitive receptors" refers to residences, schools, public recreation facilities, health care facilities, places of worship, daycare facilities, community centers, or incarceration facilities.

jurisdictions comply with their obligations under SB 1000, which requires local government general plans to identify objectives and policies to reduce health risks in disadvantaged communities, promote civil engagement in the public decision making process, and prioritize improvements and programs that address the needs of disadvantaged communities.[17]

Local ordinances and good neighbor policies that set development standards for all warehouses in the jurisdiction are a critical and increasingly common tool that serve several goals. When well-designed, these ordinances direct investment to local improvements, provide predictability for developers, conserve government resources by streamlining project review processes, and reduce the environmental impacts of industrial development. While many jurisdictions have adopted warehouse-specific development standards, an ordinance in the City of Fontana provides an example to review and build upon.[18] Good neighbor policies in Riverside County and by the Western Riverside Council of Government include additional measures worth consideration.[19]

The Bureau encourages jurisdictions to adopt their own local ordinances that combine the strongest policies from those models with measures discussed in the remainder of this document.

III. Community Engagement

Early and consistent community engagement is central to establishing good relationships between communities, lead agencies, and warehouse developers and tenants. Robust community engagement can give lead agencies access to community residents' on-the-ground knowledge and information about their concerns, build community support for projects, and develop creative solutions to ensure new logistics facilities are mutually beneficial. Examples of best practices for community engagement include:

- Holding a series of community meetings at times and locations convenient to members of the affected community and incorporating suggestions into the project design.
- Posting information in hard copy in public gathering spaces and on a website about the project. The information should include a complete, accurate project description, maps and drawings of the project design, and information about how the public can provide input and be involved in the project approval process. The

[17] For more information about SB 1000, *see* https://oag.ca.gov/environment/sb1000.
[18] https://oag.ca.gov/system/files/attachments/press-docs/Final%20Signed%20Fontana%20Ordinance.pdf (last accessed September 18, 2022).
[19] For example, the Riverside County policy requires community benefits agreements and supplemental funding contributions toward additional pollution offsets, and the Western Riverside Council of Governments policy sets a minimum buffer zone of 300 meters between warehouses and sensitive receptors. https://www.rivcocob.org/wp-content/uploads/2020/01/Good-Neighbor-Policy-F-3-Final-Adopted.pdf (last accessed September 18, 2022) (Riverside County); http://www.wrcog.cog.ca.us/DocumentCenter/View/318/Good-Neighbor-Guidelines-for-Siting-Warehouse-Distribution-Facilities-PDF?bidId= (last accessed September 18, 2022) (Western Riverside Council of Governments).

information should be in a format that is easy to navigate and understand for members of the affected community.

- Providing notice by mail to residents and schools within a certain radius of the project and along transportation corridors to be used by vehicles visiting the project, and by posting a prominent sign on the project site. The notice should include a brief project description and directions for accessing complete information about the project and for providing input on the project.
- Providing translation or interpretation in residents' native language, where appropriate.
- For public meetings broadcast online or otherwise held remotely, providing for access and public comment by telephone and supplying instructions for access and public comment with ample lead time prior to the meeting.
- Partnering with local community-based organizations to solicit feedback, leverage local networks, co-host meetings, and build support.
- Considering adoption of a community benefits agreement, negotiated with input from affected residents and businesses, by which the developer provides benefits to the affected community.
- Creating a community advisory board made up of local residents to review and provide feedback on project proposals in early planning stages.
- Identifying a person to act as a community liaison concerning on-site construction activity and operations, and providing contact information for the community liaison to the surrounding community.
- Requiring signage in public view at warehouse facilities with contact information for a local designated representative for the facility operator who can receive community complaints, and requiring any complaints to be answered by the facility operator within 48 hours of receipt.

IV. Warehouse Siting and Design Considerations

The most important consideration when planning a logistics facility is its location. Warehouses located in residential neighborhoods or near sensitive receptors expose community residents and those using or visiting sensitive receptor sites to the air pollution, noise, traffic, and other environmental impacts they generate. Therefore, placing facilities away from sensitive receptors significantly reduces their environmental and quality of life harms on local communities. The suggested best practices for siting and design of warehouse facilities does not relieve lead agencies' responsibility under CEQA to conduct a project-specific analysis of the project's impacts and evaluation of feasible mitigation measures and alternatives; lead agencies' incorporation of the best practices must be part of the impact, mitigation and alternatives analyses to meet the requirements of CEQA. Examples of best practices when siting and designing warehouse facilities include:

- Per California Air Resources Board (CARB) guidance, siting warehouse facilities so that their property lines are at least 1,000 feet from the property lines of the nearest sensitive receptors.[20]
- Providing adequate amounts of on-site parking to prevent trucks and other vehicles from parking or idling on public streets and to reduce demand for off-site truck yards.
- Establishing setbacks from the property line of the nearest sensitive receptor to warehouse dock doors, loading areas, and truck drive aisles, and locating warehouse dock doors, loading areas, and truck drive aisles on the opposite side of the building from the nearest sensitive receptors—e.g., placing dock doors on the north side of the facility if sensitive receptors are near the south side of the facility.
- Placing facility entry and exit points from the public street away from sensitive receptors—e.g., placing these points on the north side of the facility if sensitive receptors are adjacent to the south side of the facility.
- Ensuring heavy duty trucks abide by the on-site circulation plans by constructing physical barriers to block those trucks from using areas of the project site restricted to light duty vehicles or emergency vehicles only.
- Preventing truck queuing spillover onto surrounding streets by positioning entry gates after a minimum of 140 feet of space for queuing, and increasing the distance by 70 feet for every 20 loading docks beyond 50 docks.
- Locating facility entry and exit points on streets of higher commercial classification that are designed to accommodate heavy duty truck usage.
- Screening the warehouse site perimeter and onsite areas with significant truck traffic (e.g., dock doors and drive aisles) by creating physical, structural, and/or vegetative buffers that prevent or substantially reduce pollutant and noise dispersion from the facility to sensitive receptors.
- Planting exclusively 36-inch box evergreen trees to ensure faster maturity and four-season foliage.
- Requiring all property owners and successors in interest to maintain onsite trees and vegetation for the duration of ownership, including replacing any dead or unhealthy trees and vegetation.
- Posting signs clearly showing the designated entry and exit points from the public street for trucks and service vehicles.
- Including signs and drive aisle pavement markings that clearly identify onsite circulation patterns to minimize unnecessary onsite vehicle travel.
- Posting signs indicating that all parking and maintenance of trucks must be conducted within designated on-site areas and not within the surrounding community or public streets.

[20] CARB, Air Quality and Land Use Handbook: A Community Health Perspective (April 2005), at ES-1. CARB staff has released draft updates to this siting and design guidance which suggests a greater distance may be warranted in some scenarios. CARB, Concept Paper for the Freight Handbook (December 2019), *available at* https://ww2.arb.ca.gov/sites/default/files/2020-03/2019.12.12%20-%20Concept%20Paper%20for%20the%20Freight%20Handbook_1.pdf (last accessed September 18, 2022).

V. Air Quality and Greenhouse Gas Emissions Analysis and Mitigation

Emissions of air pollutants and greenhouse gases are often among the most substantial environmental impacts from new warehouse facilities. CEQA compliance demands a proper accounting of the full air quality and greenhouse gas impacts of logistics facilities and adoption of all feasible mitigation of significant impacts. Although efforts by CARB and other authorities to regulate the heavy-duty truck and off-road diesel fleets have made excellent progress in reducing the air quality impacts of logistics facilities, the opportunity remains for local jurisdictions to further mitigate these impacts at the project level. Lead agencies and developers should also consider designing projects with their long-term viability in mind. Constructing the necessary infrastructure to prepare for the zero-emission future of goods movement not only reduces a facility's emissions and local impact now, but it can also save money as demand for zero-emission infrastructure grows. In planning new logistics facilities, the Bureau strongly encourages developers to consider the local, statewide, and global impacts of their projects' emissions.

Examples of best practices when studying air quality and greenhouse gas impacts include:

- Fully analyzing all reasonably foreseeable project impacts, including cumulative impacts. In general, new warehouse developments are not ministerial under CEQA because they involve public officials' personal judgment as to the wisdom or manner of carrying out the project, even when warehouses are permitted by a site's applicable zoning and/or general plan land use designation.[21]
- When analyzing cumulative impacts, thoroughly considering the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds.
- Preparing a quantitative air quality study in accordance with local air district guidelines.
- Preparing a quantitative health risk assessment in accordance with California Office of Environmental Health Hazard Assessment and local air district guidelines.
- Refraining from labeling compliance with CARB or air district regulations as a mitigation measure—compliance with applicable regulations is required regardless of CEQA.
- Disclosing air pollution from the entire expected length of truck trips. CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations, rather than the distance from the facility to the edge of the air basin, local jurisdiction, or other truncated endpoint. All air pollution associated with the project must be considered, regardless of where those impacts occur.

[21] CEQA Guidelines § 15369.

- Accounting for all reasonably foreseeable greenhouse gas emissions from the project, without discounting projected emissions based on participation in California's Cap-and-Trade Program.

Examples of measures to mitigate air quality and greenhouse gas impacts from construction are below. To ensure mitigation measures are enforceable and effective, they should be imposed as permit conditions on the project where applicable.

- Requiring off-road construction equipment to be hybrid electric-diesel or zero-emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Forbidding idling of heavy equipment for more than three minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.

Examples of measures to mitigate air quality and greenhouse gas impacts from operation include:

- Requiring all heavy-duty vehicles engaged in drayage[22] to or from the project site to be zero-emission beginning in 2030.

[22] "Drayage" refers generally to transport of cargo to or from a seaport or intermodal railyard.

- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.
- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance)
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of

trucks.

- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

VI. Noise Impacts Analysis and Mitigation

The noise associated with logistics facilities can be among their most intrusive impacts to nearby sensitive receptors. Various sources, such as unloading activity, diesel truck movement, and rooftop air conditioning units, can contribute substantial noise pollution. These impacts are exacerbated by logistics facilities' typical 24-hour, seven-days-per-week operation. Construction noise is often even greater than operational noise, so if a project site is near sensitive receptors, developers and lead agencies should adopt measures to reduce the noise generated by both construction and operation activities.

Examples of best practices when studying noise impacts include:

- Preparing a noise impact analysis that considers all reasonably foreseeable project noise impacts, including to nearby sensitive receptors. All reasonably foreseeable project noise impacts encompasses noise from both construction and operations, including stationary, on-site, and off-site noise sources.
- Adopting a lower significance threshold for incremental noise increases when baseline noise already exceeds total noise significance thresholds, to account for the cumulative impact of additional noise and the fact that, as noise moves up the decibel scale, each decibel increase is a progressively greater increase in sound

pressure than the last. For example, 70 dBA is ten times more sound pressure than 60 dBA.

- Disclosing and considering the significance of short-term noise levels associated with all aspects of project operation (i.e. both on-site noise generation and off-site truck noise). Considering only average noise levels may mask noise impacts sensitive receptors would consider significant—for example, the repeated but short-lived passing of individual trucks or loading activities at night.

Examples of measures to mitigate noise impacts include:

- Constructing physical, structural, or vegetative noise barriers on and/or off the project site.
- Planning and enforcing truck routes that avoid passing sensitive receptors.
- Locating or parking all stationary construction equipment as far from sensitive receptors as possible, and directing emitted noise away from sensitive receptors.
- Verifying that construction equipment has properly operating and maintained mufflers.
- Requiring all combustion-powered construction equipment to be surrounded by a noise protection barrier
- Limiting operation hours to daytime hours on weekdays.
- Paving roads where truck traffic is anticipated with low noise asphalt.
- Orienting any public address systems onsite away from sensitive receptors and setting system volume at a level not readily audible past the property line.

VII. Traffic Impacts Analysis and Mitigation

Warehouse facilities inevitably bring truck and passenger car traffic. Truck traffic can present substantial safety issues. Collisions with heavy-duty trucks are especially dangerous for passenger cars, motorcycles, bicycles, and pedestrians. These concerns can be even greater if truck traffic passes through residential areas, school zones, or other places where pedestrians are common and extra caution is warranted.

Examples of measures to mitigate traffic impacts include:

- Designing, clearly marking, and enforcing truck routes that keep trucks out of residential neighborhoods and away from other sensitive receptors.
- Installing signs in residential areas noting that truck and employee parking is prohibited.
- Requiring preparation and approval of a truck routing plan describing the facility's hours of operation, types of items to be stored, and truck routing to and from the facility to designated truck routes that avoids passing sensitive receptors. The plan should include measures for preventing truck queuing, circling, stopping, and parking on public streets, such as signage, pavement markings, and queuing analysis and enforcement. The plan should hold facility operators responsible for violations of the truck routing plan, and a revised plan should be required from any new tenant that occupies the property before a business license

is issued. The approving agency should retain discretion to determine if changes to the plan are necessary, including any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility.
- Constructing new or improved transit stops, sidewalks, bicycle lanes, and crosswalks, with special attention to ensuring safe routes to schools.
- Consulting with the local public transit agency and securing increased public transit service to the project area.
- Designating areas for employee pickup and drop-off.
- Implementing traffic control and safety measures, such as speed bumps, speed limits, or new traffic signs or signals.
- Placing facility entry and exit points on major streets that do not have adjacent sensitive receptors.
- Restricting the turns trucks can make entering and exiting the facility to route trucks away from sensitive receptors.
- Constructing roadway improvements to improve traffic flow.
- Preparing a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.

VIII. Other Significant Environmental Impacts Analysis and Mitigation

Warehouse projects may result in significant environmental impacts to other resources, such as to aesthetics, cultural resources, energy, geology, or hazardous materials. All significant adverse environmental impacts must be evaluated, disclosed and mitigated to the extent feasible under CEQA. Examples of best practices and mitigation measures to reduce environmental impacts that do not fall under any of the above categories include:

- Appointing a compliance officer who is responsible for implementing all mitigation measures, and providing contact information for the compliance officer to the lead agency, to be updated annually.
- Creating a fund to mitigate impacts on affected residents, schools, places of worship, and other community institutions by retrofitting their property. For example, retaining a contractor to retrofit/install HVAC and/or air filtration systems, doors, dual-paned windows, and sound- and vibration-deadening insulation and curtains.
- Sweeping surrounding streets on a daily basis during construction to remove any construction-related debris and dirt.
- Directing all lighting at the facility into the interior of the site.
- Using full cut-off light shields and/or anti-glare lighting.
- Requiring submission of a property maintenance program for agency review and approval providing for the regular maintenance of all building structures, landscaping, and paved surfaces.
- Using cool pavement to reduce heat island effects.

- Planting trees in parking areas to provide at least 35% shade cover of parking areas within fifteen years to reduce heat island impacts.
- Using light colored roofing materials with a solar reflective index of 78 or greater.
- Including on-site amenities, such as a truck operator lounge with restrooms, vending machines, and air conditioning, to reduce the need for truck operators to idle or travel offsite.
- Designing skylights to provide natural light to interior worker areas.
- Installing climate control and air filtration in the warehouse facility to promote worker well-being.

IX. Conclusion

California's world-class economy, ports, and transportation network position it at the center of the e-commerce and logistics industry boom. At the same time, California is a global leader in environmental protection and environmentally just development. The guidance in this document furthers these dual strengths, ensuring that all can access the benefits of economic development. The Bureau will continue to monitor proposed projects for compliance with CEQA and other laws. Lead agencies, developers, community advocates, and other interested parties should feel free to reach out to us as they consider how to guide warehouse development in their area.

Please do not hesitate to contact the Environmental Justice Bureau at ej@doj.ca.gov if you have any questions.

SDG 220 Distribution Center Conditional Use Permit

Date * 11/21/2023

Name * Jeannette Goyetche

Company

Email * hoffgoy@gmail.com

Phone Number * 7073195976

Please check all that apply *

- [x] I own a home in American Canyon
- [ ] I rent a home in American Canyon
- [ ] I own a business in American Canyon
- [ ] I work in American Canyon
- [ ] None of the above

Address *

Street Address
216 Knightsbridge Way
Address Line 2

City
American Canyon

State / Province / Region
CA

Postal / Zip Code
94503

Country
United States

Comments *

If comments are being provided through the upload of a document, please indicate so.

I am trying to understand how the warehouse can be built on Open Space and Recreational land, very close to a wetlands area? How can an accurate EIR report be done if the land at 1055 Commerce Ct. has been leveled? The meeting on November17th at 2pm ,a Friday before a major holiday week, was attended by 3 people on line. How is that an invitation for the public to attend?There were so much conflicting information on the NOP report as to how many people would be employed, hours of operation etc.If the proposed warehouse is being built on Open Space and Rec land, are the two warehouses on either side of 1055 also on Open Space and Rec land? I oppose construction of this warehouse especially because it's impact on our environment in American Canyon.

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SDG 220 Distribution Center Conditional Use Permit

Date * 11/25/2023

Name * Jerry Hoffman

Company

Email * hoffmanjxx@gmail.com

Phone Number * 7073195976

Please check all that apply *

- [x] I own a home in American Canyon
- [ ] I rent a home in American Canyon
- [ ] I own a business in American Canyon
- [ ] I work in American Canyon
- [ ] None of the above

Address *

Street Address
216 KNIGHTSBRIDGE WAY
Address Line 2

City
AMERICAN CANYON

State / Province / Region
CA

Postal / Zip Code
94503-4127

Country
US

Comments *

If comments are being provided through the upload of a document, please indicate so.

Why are warehouses being built in an area that is zoned recreation and open space when it should be used for what its zoned for. There are already too many warehouses in AC. This must stop!

File Upload

NATIVE AMERICAN HERITAGE COMMISSION

RECEIVED
NOV 17 2023
City of American Canyon
Community Development Department

October 31, 2023

William He
City of American Canyon
4381 Broadway Street, Suite 250
American Canyon, CA 94503

Re: 2023100842, SDG Commerce 220 Distribution Center Project, Napa County

Dear Mr. He:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Cameron.Vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

cc: State Clearinghouse

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Appendix B:
Air Quality and Greenhouse Gas Emissions Supporting Information

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Commerce 220 Warehouse Distribution Project
Construction Start Date	9/2/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	38.4
Location	38.18584945234676, -122.27409415319988
County	Napa
City	American Canyon
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	820
EDFZ	2
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Refrigerated Warehouse-No Rail	220	1000sqft	7.78	219,834	107,057	78,361	—	Includes Landscaping/Pond/Wetla
User Defined Industrial	220	User Defined Unit	0.00	0.00	0.00	1.00	—	1,000 sqft unit
Other Asphalt Surfaces	116	1000sqft	2.67	116,114	0.00	0.00	—	Impermeable Surfaces

2. Emissions Summary

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.64	3.81	38.6	36.7	0.08	1.60	7.81	9.41	1.47	3.97	5.45	—	9,912	9,912	0.41	0.43	5.72	10,057
2025	2.09	29.1	12.9	20.4	0.03	0.45	1.55	2.01	0.42	0.38	0.80	—	5,107	5,107	0.18	0.29	9.15	5,208
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.63	3.81	38.8	36.6	0.08	1.57	4.33	5.90	1.44	1.62	3.06	—	9,900	9,900	0.41	0.43	0.25	10,040
2025	2.07	1.74	13.2	19.8	0.03	0.45	1.55	2.01	0.42	0.38	0.80	—	5,024	5,024	0.19	0.29	0.24	5,116
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.72	0.60	5.33	6.11	0.01	0.21	0.69	0.90	0.19	0.26	0.45	—	1,497	1,497	0.06	0.07	0.80	1,520
2025	0.87	2.27	5.58	8.33	0.01	0.20	0.61	0.81	0.18	0.15	0.33	—	2,086	2,086	0.08	0.12	1.59	2,125
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.13	0.11	0.97	1.12	< 0.005	0.04	0.13	0.16	0.04	0.05	0.08	—	248	248	0.01	0.01	0.13	252
2025	0.16	0.41	1.02	1.52	< 0.005	0.04	0.11	0.15	0.03	0.03	0.06	—	345	345	0.01	0.02	0.26	352

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.66	0.97	19.5	13.2	0.16	0.24	5.82	6.06	0.23	1.53	1.77	—	17,458	17,458	0.66	2.50	43.0	18,262
Area	2.60	7.26	0.12	14.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.1	60.1	< 0.005	< 0.005	—	60.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	177	177	0.00	0.00	—	177
Water	—	—	—	—	—	—	—	—	—	—	—	0.08	0.32	0.40	0.01	< 0.005	—	0.65
Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	390
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,119	3,119
Total	4.26	8.23	19.6	27.8	0.16	0.27	5.82	6.09	0.25	1.53	1.79	111	17,696	17,807	11.8	2.50	3,162	22,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.64	0.94	20.7	12.6	0.16	0.24	5.82	6.06	0.23	1.53	1.77	—	17,342	17,342	0.67	2.51	1.12	18,107
Area	—	4.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	177	177	0.00	0.00	—	177
Water	—	—	—	—	—	—	—	—	—	—	—	0.08	0.32	0.40	0.01	< 0.005	—	0.65
Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	390
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,119	3,119
Total	1.64	5.81	20.7	12.6	0.16	0.24	5.82	6.06	0.23	1.53	1.77	111	17,519	17,630	11.8	2.51	3,120	21,793
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	0.93	20.3	12.3	0.16	0.24	5.70	5.94	0.23	1.50	1.74	—	17,356	17,356	0.67	2.50	18.6	18,137
Area	1.28	6.05	0.06	7.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.6	29.6	< 0.005	< 0.005	—	29.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	177	177	0.00	0.00	—	177
Water	—	—	—	—	—	—	—	—	—	—	—	0.08	0.32	0.40	0.01	< 0.005	—	0

Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	390
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,119	3,119
Total	2.91	6.98	20.4	19.5	0.16	0.26	5.70	5.95	0.24	1.50	1.75	111	17,563	17,674	11.8	2.50	3,138	21,853
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.30	0.17	3.71	2.25	0.03	0.04	1.04	1.08	0.04	0.27	0.32	—	2,873	2,873	0.11	0.41	3.08	3,003
Area	0.23	1.10	0.01	1.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.91	4.91	< 0.005	< 0.005	—	4.92
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	29.3	29.3	0.00	0.00	—	29.3
Water	—	—	—	—	—	—	—	—	—	—	—	0.01	0.05	0.07	< 0.005	< 0.005	—	0.11
Waste	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	516	516
Total	0.53	1.27	3.72	3.57	0.03	0.05	1.04	1.09	0.04	0.27	0.32	18.5	2,908	2,926	1.96	0.41	519	3,618

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.87	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	155	155	0.01	0.01	0.69	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.99	3.99	< 0.005	< 0.005	0.01	4.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.38	3.68	35.4	34.7	0.07	1.53	—	1.53	1.41	—	1.41	—	7,433	7,433	0.30	0.06	—	7,459
Dust From Material Movement	—	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.38	3.68	35.4	34.7	0.07	1.53	—	1.53	1.41	—	1.41	—	7,433	7,433	0.30	0.06	—	7,459
Dust From Material Movement	—	—	—	—	—	—	3.60	3.60	—	1.43	1.43	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.94	1.90	< 0.005	0.08	—	0.08	0.08	—	0.08	—	407	407	0.02	< 0.005	—	409
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.35	0.35	< 0.005	0.02	—	0.02	0.01	—	0.01	—	67.4	67.4	< 0.005	< 0.005	—	67.7
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	0.99	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	177	177	0.01	0.01	0.79	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.16	0.05	3.10	0.99	0.01	0.04	0.57	0.61	0.03	0.16	0.19	—	2,302	2,302	0.10	0.37	4.93	2,418
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.90	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	165	165	0.01	0.01	0.02	167
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.16	0.04	3.27	1.00	0.01	0.04	0.57	0.61	0.03	0.16	0.19	—	2,302	2,302	0.10	0.37	0.13	2,414
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	0.02	9.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.18	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	126	126	0.01	0.02	0.12	132
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.51	1.51	< 0.005	< 0.005	< 0.005	1.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.9	20.9	< 0.005	< 0.005	0.02	21.9

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.78	2.08	< 0.005	0.08	—	0.08	0.07	—	0.07	—	380	380	0.02	< 0.005	—	381
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.32	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.9	62.9	< 0.005	< 0.005	—	63.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.58	0.57	6.37	0.00	0.00	1.17	1.17	0.00	0.27	0.27	—	1,162	1,162	0.04	0.05	0.15	1,178
Vendor	0.12	0.05	2.31	0.89	0.01	0.02	0.39	0.41	0.02	0.11	0.13	—	1,509	1,509	0.06	0.22	0.10	1,577
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.97	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	0.01	0.01	0.38	189
Vendor	0.02	0.01	0.36	0.14	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	239	239	0.01	0.04	0.27	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.8	30.8	< 0.005	< 0.005	0.06	31.3
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.6	39.6	< 0.005	0.01	0.04	41.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	4.07	5.08	0.01	0.17	—	0.17	0.15	—	0.15	—	934	934	0.04	0.01	—	937
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.74	0.93	< 0.005	0.03	—	0.03	0.03	—	0.03	—	155	155	0.01	< 0.005	—	155
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.58	0.39	6.52	0.00	0.00	1.17	1.17	0.00	0.27	0.27	—	1,224	1,224	0.03	0.05	5.19	1,244
Vendor	0.11	0.06	2.08	0.81	0.01	0.02	0.39	0.41	0.02	0.11	0.13	—	1,485	1,485	0.06	0.22	3.95	1,557
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.56	0.53	5.92	0.00	0.00	1.17	1.17	0.00	0.27	0.27	—	1,141	1,141	0.04	0.05	0.13	1,156
Vendor	0.11	0.05	2.21	0.84	0.01	0.02	0.39	0.41	0.02	0.11	0.13	—	1,486	1,486	0.06	0.22	0.10	1,554
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.21	0.19	2.21	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	448	448	0.01	0.02	0.87	455
Vendor	0.04	0.02	0.84	0.32	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	579	579	0.02	0.09	0.66	606
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.40	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	74.2	74.2	< 0.005	< 0.005	0.14	75.4
Vendor	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.8	95.8	< 0.005	0.01	0.11	100
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.69	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	130	130	< 0.005	0.01	0.55	132
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.38	0.13	< 0.005	0.01	0.07	0.08	< 0.005	0.02	0.02	—	290	290	0.01	0.05	0.63	305
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.71	6.71	< 0.005	< 0.005	0.01	6.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	0.01	16.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	–

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.63	2.63	< 0.005	< 0.005	< 0.005	2.76

3.11. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	27.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.08	1.30	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	245	245	0.01	0.01	1.04	249
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.95	0.31	19.1	5.94	0.14	0.23	4.07	4.31	0.22	1.09	1.32	—	15,641	15,641	0.61	2.45	36.0	16,422
User Defined Industrial	0.71	0.66	0.45	7.22	0.02	0.01	1.74	1.75	0.01	0.44	0.45	—	1,817	1,817	0.05	0.05	7.07	1,840
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.66	0.97	19.5	13.2	0.16	0.24	5.82	6.06	0.23	1.53	1.77	—	17,458	17,458	0.66	2.50	43.0	18,262
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.94	0.30	20.1	5.96	0.14	0.24	4.07	4.31	0.23	1.09	1.32	—	15,643	15,643	0.61	2.45	0.93	16,390
User Defined Industrial	0.70	0.65	0.58	6.68	0.02	0.01	1.74	1.75	0.01	0.44	0.45	—	1,698	1,698	0.07	0.06	0.18	1,717
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.64	0.94	20.7	12.6	0.16	0.24	5.82	6.06	0.23	1.53	1.77	—	17,342	17,342	0.67	2.51	1.12	18,107
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigera Warehouse-No Rail	0.17	0.05	3.62	1.09	0.03	0.04	0.73	0.77	0.04	0.20	0.24	—	2,590	2,590	0.10	0.41	2.57	2,716
User Defined Industrial	0.12	0.12	0.10	1.17	< 0.005	< 0.005	0.31	0.31	< 0.005	0.08	0.08	—	284	284	0.01	0.01	0.51	287
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.30	0.17	3.71	2.25	0.03	0.04	1.04	1.08	0.04	0.27	0.32	—	2,873	2,873	0.11	0.41	3.08	3,003

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	177	177	0.00	0.00	—	177
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	177	177	0.00	0.00	—	177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigera Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	177	177	0.00	0.00	—	177
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	177	177	0.00	0.00	—	177
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	29.3	29.3	0.00	0.00	—	29.3
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	29.3	29.3	0.00	0.00	—	29.3

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.60	2.40	0.12	14.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.1	60.1	< 0.005	< 0.005	—	60.3
Total	2.60	7.26	0.12	14.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.1	60.1	< 0.005	< 0.005	—	60.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.23	0.22	0.01	1.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.91	4.91	< 0.005	< 0.005	—	4.92
Total	0.23	1.10	0.01	1.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.91	4.91	< 0.005	< 0.005	—	4.92

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.08	0.32	0.40	0.01	< 0.005	—	0.65
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.08	0.32	0.40	0.01	< 0.005	—	0.65

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.08	0.32	0.40	0.01	< 0.005	—	0.65
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.08	0.32	0.40	0.01	< 0.005	—	0.65
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.01	0.05	0.07	< 0.005	< 0.005	—	0.11
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.01	0.05	0.07	< 0.005	< 0.005	—	0.11

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
																		1543

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	390
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	390
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	390
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	390
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5

1544

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	9/2/2024	9/13/2024	5.00	10.0	—
Grading	Grading	9/14/2024	10/11/2024	5.00	20.0	—
Building Construction	Building Construction	10/12/2024	7/18/2025	5.00	200	—
Paving	Paving	7/19/2025	8/15/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	7/19/2025	8/15/2025	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	158	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48

Grading	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	31.3	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	141	11.7	LDA,LDT1,LDT2

Building Construction	Vendor	55.1	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	4.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	28.2	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	74,755	6,967

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	12.0	0.00	—
Grading	5,000	0.00	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.67

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	0.00	0%
—	0.00	0%
User Defined Industrial	0.00	0%
Other Asphalt Surfaces	2.67	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	98.0	0.00	0.00
2025	0.00	98.0	0.00	0.00

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Refrigerated Warehouse-No Rail	128	128	128	46,539	4,539	4,539	4,539	1,656,783
User Defined Industrial	244	244	244	89,066	2,497	2,497	2,497	911,332
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	74,755	6,967

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	659,500	98.0	0.0000	0.0000	0.00
User Defined Industrial	0.00	98.0	0.0000	0.0000	0.00

Other Asphalt Surfaces	0.00	98.0	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	40,515	187,610
User Defined Industrial	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	207	—
User Defined Industrial	0.00	—
Other Asphalt Surfaces	0.00	—

8. User Changes to Default Data

Screen	Justification
Land Use	Project Plans for Square Footage: Bldg =219,834 SF, non-Permeable=116,114 SF, Landscape Area = 40,893 SF, Pond Areas=37,957 SF, Wetlands/Setback=28,207 +12,197 SF User Defined Industrial Land Use defined to separate Truck Trips from Passenger Vehicle Trips
Construction: Construction Phases	Project Description
Operations: Vehicle Data	Warehouse Trips are Truck Trips, User Defined Industrial are Passenger Vehicle Trips
Operations: Fleet Mix	Adjusted Fleet Mixes for Trucks and Passenger Vehicles

Construction: Architectural Coatings	No Interior Coating. Exterior Coating 74,755 SF Information provided by applicant.
Construction: Paving	User-Defined Industrial Has No Square Footage parking based on Impervious Surface SF = 116,114 SF = 2.67 acres
Operations: Water and Waste Water	Utilities from application
Construction: Off-Road Equipment	Excavator Updated to match higher HP value used in CalEEMod2020
Construction: Electricity	PGE 2021 Power Content Label Used for 2024 and 2025
Operations: Energy Use	Energy Usage Extrapolated from SDG 217 Commerce 217 ISMND based on energy consumption of 3.0 kw-hr/ft2. All Usage, including House and Lighting are accounted for in this factor. Therefore parking does not have energy usage associated with it.
Operations: Refrigerants	Per Applicant.
Characteristics: Utility Information	2021 Power Content Label for Base Plan
Construction: Dust From Material Movement	Applicant provided information.
Operations: Architectural Coatings	Exterior SF provided by applicant. Same as for construction.
Construction: Trips and VMT	Additional Haul Trips for Paving
Soil Import	At the time of analysis, the amount of soil import was assumed to be 5,000 cubic yards per applicant-provided information. Subsequently, latest information from the applicant shows the amount of import soil is reduced to 1,000 cubic yards. Therefore, a conservative analysis is presented here since it evaluated a higher amount of soil import (5,000cy) and associated haul trips.

SDG 220 Commerce Distribution Center
Asphalt Paving Trip Estimates

Paved area (sf)	**49,200**
Asphalt volume (ft3)	14,350
Asphalt volume (cy)	531
Asphalt Density (ton/CY)	2
Asphalt weight (ton)	1,076
Capacity per asphalt truck (ton per truck)	14
Trips Total	**76.88**
Days in grading phase	**20**
Asphalt Haul Trip per day	**4**

SDG Commerce 220 Warehouse Distribution Project
Operational Vehicle Trip Generation Rate Adjustments

Trip-Generating CalEEMod Land Use	Size Metric	Size	Trip Generation Rates[a]	Fleet Mix[b]												
			Daily	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Warehouse - Unrefrigerated	1000 sf	219.834	1.69													
Trucks	1000 sf	219.834	0.58	85.1%									14.9%			
Passenger Vehicles	1000sf	219.834	1.11		51.6%	5.6%	24.9%				17.9%					

a) Trip Rate of 1.69 Trip/1000 sf from Reference (2) below apportioned to passenger vehicle and medium and heavy duty truck percentages from Study in Reference (1). The average daily trip generation per KSF of warehousing building space is 0.078 medium-duty truck trips, 0.447 heavy-duty truck trips, 0.995 auto trips, and 1.52 total vehicle trips

b) Passenger vehicle - light duty vehicle fleet mix based on EMFAC2021 Napa County Defaults for 2025 reapportioned with only LDV included

References:

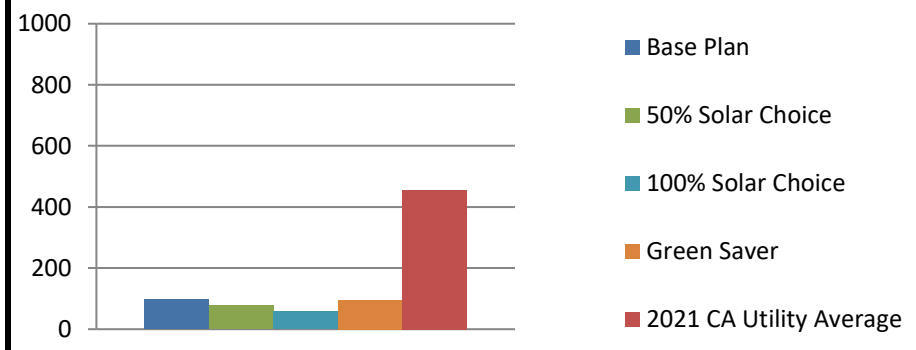
[1] Fehr and Peers, 2022. Memorandum, American Canyon Industrial Warehouse Travel Behavior Data, from Joe Livaich, Buzz Oates Construction, Inc, June 16, 2022

[2] W Trans, 2023. 1055 Commerce Court Assumptions, Memorandum from Barry Bergman and Dalene Whitman to William He, American Canyon, April 26,2023.

2021 POWER CONTENT LABEL
Pacific Gas and Electric Company
www.pge.com/billinserts

Greenhouse Gas Emissions Intensity (lbs CO_2e/MWh)

Base Plan	50% Solar Choice	100% Solar Choice	Green Saver	2021 CA Utility Average
98	**78**	**58**	**95**	**456**



Energy Resources	Base Plan	50% Solar Choice	100% Solar Choice	Green Saver	2021 CA Power Mix
Eligible Renewable[1]	**47.7%**	**70.9%**	**93.9%**	**89.9%**	**33.6%**
Biomass & Biowaste	4.2%	2.1%	0.0%	0.0%	2.3%
Geothermal	5.2%	2.6%	0.0%	0.0%	4.8%
Eligible Hydroelectric	1.8%	0.9%	0.0%	0.0%	1.0%
Solar	25.7%	59.8%	93.9%	89.9%	14.2%
Wind	10.9%	5.5%	0.0%	0.0%	11.4%
Coal	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**3.0%**
Large Hydroelectric	**4.0%**	**2.0%**	**0.0%**	**0.0%**	**9.2%**
Natural Gas	**8.9%**	**7.4%**	**0.0%**	**0.0%**	**37.9%**
Nuclear	**39.3%**	**19.7%**	**0.0%**	**0.0%**	**9.3%**
Other	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.2%**
Unspecified Power[2]	**0.0%**	**0.0%**	**6.1%**	**10.1%**	**6.8%**
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Percentage of Retail Sales Covered by Retired Unbundled RECs[3]**:**	**4%**	**0%**	**0%**	**0%**	

[1]The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.

[2]Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

[3]Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled renewable energy credits (RECs) represent renewable generation that was not delivered to serve retail sales. Unbundled RECs are not reflected in the power mix or GHG emissions intensities above.

For specific information about this electricity portfolio, contact:	**Pacific Gas and Electric Company** **1-800-743-5000**
For general information about the Power Content Label, visit:	http://www.energy.ca.gov/pcl/
For additional questions, please contact the California Energy Commission at:	Toll-free in California: 844-454-2906 Outside California: 916-653-0237

SDG Commerce 220 Distribution Center Project
Modeling Parameters for Construction and Operation

Phase	Source	Description	Source Type	Size	Units	Release Height	Initial Lateral Dimension	Initial Vertical Dimension
						m	m	m
Construction	Off-Road Construction Equipment[1]	Construction Site	Area	42266.5	m2	5	—	1.4
	On-Road Construction Trucks[2,3]	Inbound & Outbound Route- Commerce Ct.	Line-Volume	467.6	meters	3.4	6.98	3.16

1 Construction exhaust modeled as an area source. Release parameters for construction equipment exhaust modeling from SCAQMD (2008) for gaseous exhaust from construction equipment.

2 Only segments within 1,000 ft of site boundary were modeled.

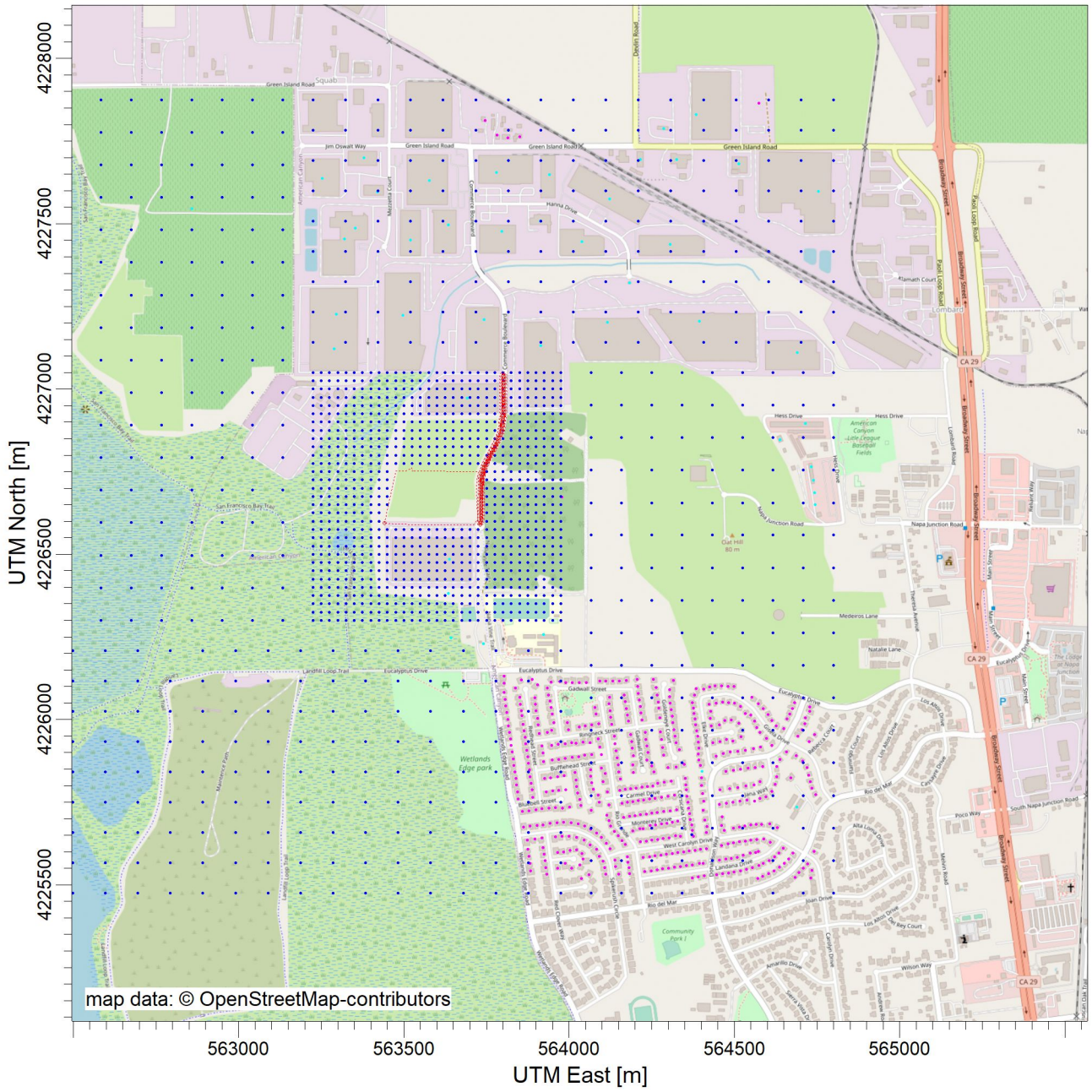
3 On-Road construction trucks are Vendor and Haul Trucks, as estimated in CalEEMod.

Trucks were modeled as adjacent volume sources following BAAQMD CEQA Guidelines Appendix E (April 2023). Roadway width -= physical width plus 3 meters on each side for mixing., Truck Height = 4 meters.

Parameters calculatred as per US EPA Haul Road Workgroup Final Report released on March 2, 2012 which suggests the use of Adjacent Volume Sources to represent the haul road.

PROJECT TITLE:

SDG Commerce 220 Distribution Center
Health Risk Assessment



COMMENTS:	SOURCES: **2**	COMPANY NAME:	
	RECEPTORS: **2052**	MODELER:	
		SCALE: 1:19,332 0 0.5 km	
		DATE: **11/21/2023**	PROJECT NO.:

Control Pathway

Dispersion Options

Titles

SDG Commerce 220 Distribution Center
Health Risk Assessment

Dispersion Options

☐ Regulatory Default ☒ Non-Default Options

☒ Elevated Terrain
☐ No Stack-Tip Downwash (NOSTD)
☐ Run in Screening Mode
☐ Conversion of NOx to NO2 (OLM or PVMRM)
☐ No Checks for Non-Sequential Met Data
☐ Fast All Sources (FASTALL)
☐ Fast Area Sources (FASTAREA)
☐ Optimized Area Source Plume Depletion
☐ Gas Deposition

BETA Options:

☐ Capped and Horizontal Stack Releases
☐ Adjusted Friction Velocity (u*) in AERMET (ADJ_U*)
☐ Low Wind Options

☐ SCIM (Sampled Chronological Input Model)
☐ Ignore Urban Night / Daytime Transition (NOURBTRAN)

Dispersion Coefficient

Rural

Output Type

☒ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☒ Period ☐ Annual

Exponential Decay

☐ Yes ☒ No

Terrain Height Options

☐ Flat ☒ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☒ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: 56390001.err

Source Pathway - Source Inputs

Polygon Area Sources

Source Type: AREA POLY

Source: SITE (SITE)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
3.09	5.00	0.00002	1.00	20	563441.93	4226594.12
		0.00002			563475.60	4226751.37
		0.00002			563506.25	4226751.97
		0.00002			563516.54	4226757.29
		0.00002			563521.49	4226762.90
		0.00002			563528.46	4226752.59
		0.00002			563524.22	4226751.27
		0.00002			563726.84	4226750.05
		0.00002			563721.02	4226727.57
		0.00002			563719.53	4226695.28
		0.00002			563720.54	4226657.87
		0.00002			563722.14	4226609.46
		0.00002			563721.92	4226602.98
		0.00002			563715.54	4226597.85
		0.00002			563710.77	4226588.99
		0.00002			563556.46	4226590.31
		0.00002			563468.54	4226590.76
		0.00002			563459.55	4226593.59
		0.00002			563452.68	4226591.92
		0.00002			563446.79	4226594.40

Source Pathway - Source Inputs

Line Volume Sources

Source Type: LINE VOLUME

Source: HAUL (TRUCK ROUTE)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
10.00	1.00000		563730.73	4226589.42	8.56	3.40
			563734.37	4226606.74	8.74	3.40
			563734.37	4226646.84	8.95	3.40
			563735.28	4226730.68	9.43	3.40
			563743.49	4226765.32	9.78	3.40
			563779.94	4226834.58	10.77	3.40
			563795.43	4226871.94	11.33	3.40
			563801.81	4226932.09	11.80	3.40
			563801.81	4227043.28	12.30	3.40

Source Pathway - Source Inputs

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
HAUL	L0000001	563731.76	4226594.31	8.61	3.40	0.02128	10.00		4.65	3.16
	L0000002	563733.82	4226604.10	8.71	3.40	0.02128	10.00		4.65	3.16
	L0000003	563734.37	4226614.04	8.78	3.40	0.02128	10.00		4.65	3.16
	L0000004	563734.37	4226624.04	8.83	3.40	0.02128	10.00		4.65	3.16
	L0000005	563734.37	4226634.04	8.88	3.40	0.02128	10.00		4.65	3.16
	L0000006	563734.37	4226644.04	8.94	3.40	0.02128	10.00		4.65	3.16
	L0000007	563734.45	4226654.04	8.99	3.40	0.02128	10.00		4.65	3.16
	L0000008	563734.56	4226664.04	9.05	3.40	0.02128	10.00		4.65	3.16
	L0000009	563734.67	4226674.04	9.11	3.40	0.02128	10.00		4.65	3.16
	L0000010	563734.78	4226684.04	9.16	3.40	0.02128	10.00		4.65	3.16
	L0000011	563734.89	4226694.04	9.22	3.40	0.02128	10.00		4.65	3.16
	L0000012	563734.99	4226704.04	9.28	3.40	0.02128	10.00		4.65	3.16
	L0000013	563735.10	4226714.04	9.33	3.40	0.02128	10.00		4.65	3.16
	L0000014	563735.21	4226724.04	9.39	3.40	0.02128	10.00		4.65	3.16
	L0000015	563736.06	4226733.95	9.46	3.40	0.02128	10.00		4.65	3.16
	L0000016	563738.36	4226743.68	9.56	3.40	0.02128	10.00		4.65	3.16
	L0000017	563740.67	4226753.41	9.66	3.40	0.02128	10.00		4.65	3.16
	L0000018	563742.97	4226763.14	9.76	3.40	0.02128	10.00		4.65	3.16
	L0000019	563747.10	4226772.19	9.88	3.40	0.02128	10.00		4.65	3.16
	L0000020	563751.76	4226781.03	10.00	3.40	0.02128	10.00		4.65	3.16
	L0000021	563756.42	4226789.88	10.13	3.40	0.02128	10.00		4.65	3.16
	L0000022	563761.07	4226798.73	10.26	3.40	0.02128	10.00		4.65	3.16
	L0000023	563765.73	4226807.58	10.38	3.40	0.02128	10.00		4.65	3.16
	L0000024	563770.39	4226816.43	10.51	3.40	0.02128	10.00		4.65	3.16

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
HAUL	L0000025	563775.05	4226825.28	10.64	3.40	0.02128	10.00		4.65	3.16
	L0000026	563779.70	4226834.13	10.76	3.40	0.02128	10.00		4.65	3.16
	L0000027	563783.58	4226843.35	10.90	3.40	0.02128	10.00		4.65	3.16
	L0000028	563787.41	4226852.59	11.04	3.40	0.02128	10.00		4.65	3.16
	L0000029	563791.24	4226861.82	11.18	3.40	0.02128	10.00		4.65	3.16
	L0000030	563795.07	4226871.06	11.32	3.40	0.02128	10.00		4.65	3.16
	L0000031	563796.39	4226880.94	11.40	3.40	0.02128	10.00		4.65	3.16
	L0000032	563797.44	4226890.88	11.48	3.40	0.02128	10.00		4.65	3.16
	L0000033	563798.50	4226900.82	11.56	3.40	0.02128	10.00		4.65	3.16
	L0000034	563799.55	4226910.77	11.63	3.40	0.02128	10.00		4.65	3.16
	L0000035	563800.61	4226920.71	11.71	3.40	0.02128	10.00		4.65	3.16
	L0000036	563801.66	4226930.66	11.79	3.40	0.02128	10.00		4.65	3.16
	L0000037	563801.81	4226940.65	11.84	3.40	0.02128	10.00		4.65	3.16
	L0000038	563801.81	4226950.65	11.88	3.40	0.02128	10.00		4.65	3.16
	L0000039	563801.81	4226960.65	11.93	3.40	0.02128	10.00		4.65	3.16
	L0000040	563801.81	4226970.65	11.97	3.40	0.02128	10.00		4.65	3.16
	L0000041	563801.81	4226980.65	12.02	3.40	0.02128	10.00		4.65	3.16
	L0000042	563801.81	4226990.65	12.06	3.40	0.02128	10.00		4.65	3.16
	L0000043	563801.81	4227000.65	12.11	3.40	0.02128	10.00		4.65	3.16
	L0000044	563801.81	4227010.65	12.15	3.40	0.02128	10.00		4.65	3.16
	L0000045	563801.81	4227020.65	12.20	3.40	0.02128	10.00		4.65	3.16
	L0000046	563801.81	4227030.65	12.24	3.40	0.02128	10.00		4.65	3.16
	L0000047	563801.81	4227040.65	12.29	3.40	0.02128	10.00		4.65	3.16

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Source Groups

Source Group ID: SITE	List of Sources in Group (Source Range or Single Sources)
	SITE

Source Group ID: HAUL	List of Sources in Group (Source Range or Single Sources)
	HAUL

Source Group ID: ALL	List of Sources in Group (Source Range or Single Sources)
	All Sources Included

Variable Emissions

Hour-of-Day / Day-of-Week Emission Rate Variation

Scenario: Scenario 2

Source ID:	**HAUL**							
Weekdays								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00	
	7 - 12	0.00	0.00	4.20	4.20	4.20	4.20	
	13 - 18	4.20	4.20	4.20	4.20	0.00	0.00	
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00	
Saturday								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00	
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00	
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00	
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00	
Sunday								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00	
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00	
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00	
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00	
Source ID:	**SITE**							
Weekdays								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00	
	7 - 12	0.00	0.00	4.20	4.20	4.20	4.20	
	13 - 18	4.20	4.20	4.20	4.20	0.00	0.00	
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00	
Saturday								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00	
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00	
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00	
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00	
Sunday								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00	
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00	
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00	
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00	

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	564002.97	4225604.75	RES	5.04	
2	564234.82	4225878.14	RES	15.95	
3	563950.16	4225783.72	RES	5.17	
4	564471.17	4225997.94	RES	38.20	
5	564028.53	4225888.22	RES	6.49	
6	564072.84	4225788.63	RES	6.61	
7	564333.01	4225908.92	RES	23.64	
8	564734.06	4225543.91	RES	12.85	
9	564375.31	4225647.71	RES	11.82	
10	563319.60	4227454.24	NON-RES	6.44	
11	564405.53	4225726.18	RES	17.54	
12	564406.85	4225752.69	RES	21.31	
13	563642.91	4226247.53	NON-RES	4.98	
14	564403.46	4225776.49	RES	24.24	
15	564647.59	4225611.75	RES	13.63	
16	564318.79	4225770.59	RES	15.91	
17	564400.55	4225800.87	RES	27.57	
18	564399.83	4225823.82	RES	29.72	
19	564220.66	4225998.63	RES	15.54	
20	564396.78	4225860.78	RES	34.02	
21	564308.23	4225813.65	RES	16.65	
22	564370.63	4225652.46		11.86	
23	564401.92	4225843.46	NON-RES	33.51	
24	564179.35	4225995.08	RES	15.51	
25	564443.91	4225889.56	RES	34.49	
26	564473.40	4225843.32	RES	36.66	
27	564466.04	4225897.56	RES	39.17	
28	564497.59	4225846.25	RES	39.78	
29	564487.46	4225901.59	RES	40.15	
30	564373.02	4225664.78	RES	12.36	

31	564518.70	4225849.27	RES	41.45
32	564509.55	4225904.67	RES	41.81
33	564541.03	4225852.45	RES	42.26
34	564532.70	4225907.96	RES	42.62
35	564298.44	4225767.67	RES	14.01
36	564635.08	4225596.89	RES	13.42
37	564745.22	4225773.13	RES	15.44
38	563353.19	4227487.38	NON-RES	7.36
39	564563.35	4225855.63	RES	41.87
40	564556.86	4225911.41	RES	42.33
41	564584.86	4225858.73	RES	40.93
42	564578.92	4225916.91	RES	39.83
43	563634.35	4226381.80	NON-RES	6.02
44	564217.70	4226019.96	RES	15.41
45	564393.01	4225877.98	RES	34.16
46	564287.87	4225810.78	RES	14.65
47	564638.51	4225879.64	RES	35.50
48	564658.14	4225901.82	RES	32.81
49	564176.02	4226014.03	RES	15.47
50	564648.59	4225972.04	RES	31.41
51	564691.55	4225950.09	RES	30.05
52	563636.98	4226485.36	NON-RES	6.46
53	564704.49	4225969.02	RES	29.80
54	564659.34	4226001.54	RES	30.37
55	564370.29	4225680.63	RES	12.61
56	564713.50	4225987.30	RES	29.47
57	564667.04	4226017.47	RES	29.35
58	564715.18	4226005.20	RES	29.31
59	564674.97	4226033.56	RES	29.62
60	564727.45	4226024.54	RES	29.55
61	564682.51	4226051.75	RES	30.04
62	564734.91	4225793.34	RES	17.17
63	564278.83	4225764.87	RES	12.16
64	564621.89	4225584.60	RES	13.02
65	564727.15	4226038.16	RES	29.51
66	564008.21	4225549.65	RES	4.99
67	564031.55	4225758.63	RES	6.70
68	563884.88	4225807.71	RES	4.98

69	564194.80	4225891.43	RES	16.05
70	564476.11	4225940.52	RES	38.17
71	564282.46	4225915.23	RES	23.50
72	563959.00	4225734.55	RES	5.08
73	564725.86	4225932.84	RES	26.64
74	564214.94	4226039.87	RES	15.33
75	564390.51	4225895.47	RES	34.32
76	564268.26	4225807.99	RES	12.65
77	563519.29	4227450.68	NON-RES	8.66
78	564608.45	4225629.06	RES	15.55
79	564173.26	4226033.95	RES	15.38
80	564366.83	4225698.45	RES	12.89
81	564729.61	4225812.21	RES	18.94
82	564259.98	4225762.19	RES	10.68
83	564604.82	4225573.66	RES	12.67
84	564212.19	4226059.79	RES	15.23
85	564392.80	4225913.82	RES	34.42
86	564253.67	4225800.01	RES	11.26
87	564587.92	4225638.67	RES	16.31
88	564170.51	4226053.87	RES	15.26
89	563691.13	4226972.88	NON-RES	9.60
90	564628.95	4225673.76	RES	16.36
91	564364.42	4225715.34	RES	13.28
92	563915.17	4227130.97	NON-RES	15.91
93	564724.78	4225831.80	RES	20.41
94	564586.82	4225565.43	RES	12.36
95	564242.64	4225759.72	RES	10.05
96	563742.26	4227209.89	NON-RES	9.84
97	564573.18	4225601.66	RES	12.43
98	564209.18	4226079.67	RES	15.02
99	564390.78	4225931.64	RES	34.51
100	564150.49	4225532.48	RES	5.43
101	564236.33	4225797.54	RES	10.39
102	564567.52	4225637.83	RES	15.86
103	564166.53	4226073.59	RES	15.12
104	564285.59	4225721.82	RES	10.66
105	564607.28	4225684.19	RES	16.56
106	564361.97	4225732.53	RES	14.10

107	564563.42	4225598.60	RES	12.22
108	563496.75	4227223.68	NON-RES	8.31
109	564720.41	4225854.15	RES	23.26
110	564574.60	4225558.90	RES	12.16
111	564226.05	4225757.36	RES	9.69
112	564111.15	4225532.14	RES	5.45
113	564388.28	4225949.13	RES	34.56
114	564219.74	4225795.18	RES	9.85
115	564548.33	4225596.51	RES	12.04
116	564206.59	4226099.62	RES	14.84
117	564141.08	4225555.75	RES	5.26
118	564550.03	4225635.33	RES	15.40
119	564582.25	4225682.66	RES	16.24
120	564359.48	4225750.03	RES	15.34
121	564385.80	4225966.63	RES	34.66
122	563634.42	4227497.02	NON-RES	8.36
123	564209.46	4225754.99	RES	9.41
124	564554.00	4225552.24	RES	11.73
125	564706.77	4225875.30	RES	25.92
126	564107.37	4225551.81	RES	5.40
127	563295.72	4227226.04	NON-RES	5.44
128	564205.78	4226121.65	RES	15.03
129	564383.31	4225984.12	RES	34.71
130	564203.15	4225792.82	RES	9.44
131	564138.12	4225575.32	RES	5.41
132	564532.54	4225632.83	RES	14.95
133	563577.62	4227631.37	NON-RES	7.78
134	564526.29	4225589.38	RES	11.67
135	564356.84	4225768.58	RES	16.91
136	564565.85	4225683.48	RES	16.05
137	564687.45	4225890.16	RES	28.18
138	564193.19	4225752.32	RES	9.10
139	564103.10	4225571.93	RES	5.16
140	564537.11	4225546.80	RES	11.55
141	564296.08	4225686.43	RES	10.40
142	564380.82	4226001.62	RES	34.84
143	564186.55	4225791.09	RES	9.07
144	564124.23	4225608.57	RES	4.97

145	564172.64	4226118.25	RES	14.35
146	564425.99	4226003.62	RES	34.93
147	564515.11	4225629.91	RES	14.58
148	564354.09	4225787.89	RES	18.75
149	564548.99	4225680.54	RES	15.82
150	564176.60	4225749.95	RES	8.81
151	564090.90	4225586.93	RES	5.03
152	564518.12	4225541.65	RES	11.24
153	564112.58	4225626.03	RES	4.91
154	564508.19	4225582.63	RES	11.29
155	564378.32	4226019.11	RES	34.99
156	564169.96	4225788.73	RES	9.00
157	564151.74	4226117.29	RES	14.04
158	564428.17	4226024.65	RES	35.21
159	564497.69	4225626.91	RES	14.36
160	564531.87	4225677.55	RES	15.16
161	564353.25	4225803.18	RES	20.23
162	564159.26	4225747.46	RES	8.52
163	564499.45	4225538.96	RES	10.92
164	564082.43	4225608.32	RES	4.76
165	564375.85	4226035.46	RES	35.07
166	564152.62	4225786.29	RES	8.80
167	564131.63	4226117.27	RES	13.76
168	564097.28	4225643.05	RES	4.88
169	564480.20	4225624.41	RES	14.03
170	564322.78	4225930.20	RES	23.26
171	564023.23	4225606.45	RES	5.11
172	564036.68	4225519.73	RES	5.18
173	564067.71	4225808.82	RES	6.42
174	563931.25	4225781.15	RES	4.82
175	564491.23	4225998.16	RES	39.75
176	564008.61	4225885.46	RES	6.10
177	564237.72	4225900.01	RES	16.01
178	564730.79	4225520.45	RES	13.14
179	564491.04	4225580.01	RES	11.00
180	564514.76	4225674.55	RES	14.94
181	564351.58	4225822.74	RES	21.91
182	564481.95	4225536.47	RES	10.71

183	564064.03	4225621.49	RES	4.73
184	564373.42	4226051.76	RES	35.07
185	564082.92	4225656.59	RES	4.88
186	564111.52	4226117.25	RES	13.24
187	564460.48	4225619.76	RES	13.61
188	564496.84	4225670.86	RES	14.58
189	564379.45	4226073.43	RES	35.52
190	564464.46	4225533.98	RES	10.50
191	564044.79	4225635.41	RES	4.72
192	564473.85	4225577.58	RES	10.86
193	564064.54	4225668.00	RES	4.85
194	564093.43	4226117.26	RES	13.00
195	564384.83	4226093.32	RES	35.64
196	564446.21	4225531.36	RES	10.23
197	564022.20	4225644.15	RES	4.78
198	564032.96	4225560.08	RES	5.06
199	564025.89	4225778.20	RES	6.62
200	564495.80	4225934.63	RES	39.44
201	564743.29	4225954.15	RES	26.72
202	564279.12	4225939.37	RES	23.12
203	564191.78	4225913.15	RES	15.90
204	563938.96	4225732.43	RES	4.81
205	563882.12	4225827.63	RES	5.29
206	564046.40	4225677.44	RES	4.84
207	564051.71	4226111.41	RES	11.94
208	563288.38	4227121.37	NON-RES	5.62
209	564454.56	4225575.18	RES	10.65
210	564183.33	4225534.67	RES	7.24
211	564180.96	4225551.26	RES	7.29
212	564178.60	4225567.85	RES	7.29
213	563998.92	4225647.13	RES	4.58
214	564176.14	4225585.17	RES	7.25
215	564026.66	4225684.65	RES	4.82
216	564030.07	4226111.39	RES	11.67
217	563978.77	4225646.85	RES	4.47
218	564005.58	4225687.59	RES	4.74
219	564009.97	4226111.36	RES	11.32
220	564266.73	4225719.14	RES	9.99

221	564169.82	4225621.89	RES	7.78
222	564159.11	4225633.99	RES	7.84
223	563958.01	4225645.10	RES	4.41
224	564148.04	4225647.93	RES	7.91
225	564136.69	4225661.62	RES	8.00
226	564125.50	4225677.44	RES	7.94
227	563983.73	4225689.49	RES	4.55
228	563989.86	4226111.34	RES	11.05
229	564119.85	4225695.11	RES	8.02
230	564114.50	4225711.17	RES	8.02
231	563970.93	4226115.70	RES	10.94
232	563963.14	4225688.55	RES	4.40
233	562858.92	4227545.89	NON-RES	6.22
234	564278.88	4225683.98	RES	9.93
235	563945.20	4226113.35	RES	10.80
236	563942.91	4225685.81	RES	4.36
237	564154.36	4225820.92	RES	9.04
238	564103.09	4225812.14	RES	9.04
239	564150.85	4225842.53	RES	9.06
240	564109.09	4225837.10	RES	8.90
241	564147.93	4225863.66	RES	8.91
242	564097.75	4225853.48	RES	8.73
243	564144.83	4225884.71	RES	8.96
244	564097.19	4225893.55	RES	8.97
245	564141.91	4225905.84	RES	9.34
246	564092.33	4225917.72	RES	9.81
247	564138.99	4225926.97	RES	9.90
248	564087.40	4225941.33	RES	10.26
249	564137.36	4225949.12	RES	10.27
250	563933.43	4226095.96	RES	10.65
251	563921.56	4225681.97	RES	4.29
252	563917.86	4225642.06	RES	4.24
253	563938.11	4226074.79	RES	10.29
254	563902.45	4225680.32	RES	4.26
255	564319.98	4225950.12	RES	22.96
256	564038.24	4225593.83	RES	5.13
257	564234.97	4225919.93	RES	15.92
258	564514.13	4225989.35	RES	40.10

259	563988.70	4225882.70	RES	6.02
260	564064.86	4225829.39	RES	6.34
261	564060.56	4225530.07	RES	5.38
262	564129.02	4225986.05	RES	10.69
263	564126.06	4226007.38	RES	11.08
264	564081.29	4226016.91	RES	11.23
265	563895.81	4225638.32	RES	4.11
266	564123.31	4226027.30	RES	11.22
267	564078.53	4226036.83	RES	11.47
268	564120.55	4226047.22	RES	11.45
269	564121.70	4226066.85	RES	11.79
270	563942.93	4226055.94	RES	9.91
271	563882.22	4225677.57	RES	4.21
272	563873.25	4225635.98	RES	3.99
273	563861.29	4225674.53	RES	4.12
274	563946.25	4226036.93	RES	9.64
275	564275.77	4225963.56	RES	22.73
276	564189.03	4225933.07	RES	15.75
277	563984.38	4225829.82	RES	5.90
278	564519.76	4225947.99	RES	40.42
279	563918.44	4225730.66	RES	4.62
280	564022.84	4225798.05	RES	6.46
281	563879.36	4225847.55	RES	5.61
282	564042.80	4225577.72	RES	5.12
283	564261.69	4225681.53	RES	9.51
284	563949.45	4226017.02	RES	9.27
285	563953.56	4225990.89	RES	8.94
286	563995.19	4225991.11	RES	8.81
287	563998.20	4225969.32	RES	8.57
288	564068.96	4225894.76	RES	7.64
289	564255.99	4225842.30	RES	16.35
290	564323.67	4225856.27	RES	24.16
291	563964.79	4225597.22	RES	4.81
292	564430.66	4225981.35	RES	35.09
293	564091.44	4225749.97	RES	6.92
294	563988.92	4225787.40	RES	5.71
295	563979.00	4226674.00	RES	17.21
296	564249.39	4225716.67	RES	9.59

297	564456.08	4225787.98	RES	21.63
298	564116.39	4225781.41	RES	8.10
299	564612.95	4225922.10	RES	34.31
300	564454.47	4225744.05	RES	20.91
301	564408.44	4225526.76	RES	9.54
302	564120.62	4225742.34	RES	8.08
303	564405.86	4225564.55	RES	9.61
304	564415.41	4225608.81	RES	12.32
305	564626.45	4225980.74	RES	35.17
306	564484.98	4225791.51	RES	23.42
307	563253.75	4227636.71	NON-RES	7.08
308	564475.20	4225747.05	RES	22.08
309	564390.05	4225524.12	RES	8.97
310	564394.21	4225565.60	RES	9.64
311	564596.37	4225942.71	RES	35.92
312	564397.69	4225607.44	RES	11.52
313	564495.41	4225749.93	RES	23.66
314	564372.86	4225521.68	RES	8.69
315	564372.29	4225560.69	RES	9.30
316	564577.43	4225960.90	RES	36.93
317	564380.50	4225605.00	RES	10.95
318	564509.72	4225795.04	RES	26.21
319	564613.35	4225997.97	RES	37.11
320	564516.53	4225752.94	RES	26.22
321	564354.49	4225558.15	RES	9.20
322	564567.03	4225976.01	RES	37.26
323	564363.31	4225602.55	RES	10.57
324	564534.14	4225799.18	RES	29.44
325	564601.48	4226015.34	RES	37.10
326	564537.44	4225756.50	RES	29.10
327	563932.36	4225531.78	RES	4.79
328	564336.69	4225555.62	RES	9.18
329	564560.83	4225996.19	RES	37.32
330	564346.12	4225600.10	RES	10.22
331	564317.18	4225970.03	RES	22.69
332	564232.21	4225939.85	RES	15.78
333	563923.01	4225872.05	RES	5.93
334	564064.96	4225849.07	RES	6.33

335	563968.78	4225879.95	RES	5.88
336	564558.57	4225802.67	RES	32.16
337	564587.03	4226033.59	RES	37.05
338	564336.79	4225647.22	RES	10.86
339	564561.31	4225753.02	RES	32.28
340	563929.68	4225552.34	RES	4.69
341	564318.90	4225553.09	RES	8.87
342	564328.92	4225597.65	RES	9.98
343	564550.15	4226013.01	RES	37.22
344	564572.91	4226048.62	RES	37.03
345	564322.03	4225648.49	RES	10.64
346	564576.56	4225761.27	RES	34.05
347	563927.51	4225573.41	RES	4.55
348	564301.10	4225550.56	RES	8.67
349	564533.87	4226019.00	RES	37.11
350	564311.73	4225595.21	RES	9.64
351	564301.65	4225642.24	RES	10.11
352	564595.23	4225766.74	RES	34.38
353	563924.85	4225592.78	RES	4.47
354	564186.14	4225953.97	RES	15.57
355	564524.88	4225967.95	RES	40.60
356	563964.46	4225827.06	RES	5.78
357	563899.11	4225726.97	RES	4.67
358	564020.08	4225817.97	RES	6.32
359	563876.61	4225867.47	RES	5.91
360	564244.50	4225679.08	RES	9.38
361	564553.34	4226067.43	RES	34.61
362	564283.30	4225548.02	RES	8.47
363	564294.54	4225592.76	RES	9.39
364	564284.46	4225639.79	RES	9.68
365	564613.87	4225782.96	RES	36.40
366	563921.51	4225612.66	RES	4.35
367	564518.04	4226039.57	RES	36.69
368	564265.51	4225545.48	RES	8.21
369	564277.34	4225590.31	RES	9.16
370	564577.63	4225812.16	RES	34.99
371	564670.11	4225823.99	RES	29.34
372	564267.26	4225637.34	RES	9.41

373	564267.26	4225637.34	RES	9.41
374	564623.20	4225804.67	RES	36.66
375	564500.64	4226049.55	RES	36.29
376	564247.71	4225542.95	RES	8.08
377	564260.15	4225587.86	RES	8.89
378	564232.80	4225714.30	RES	9.32
379	564499.18	4226100.81	RES	35.51
380	564688.71	4225734.94	NON-RES	19.83
381	564250.07	4225634.89	RES	9.09
382	564483.06	4226051.80	RES	36.07
383	564628.22	4225826.33	RES	36.91
384	564228.99	4225540.30	RES	7.75
385	564242.95	4225585.41	RES	8.66
386	564481.39	4226100.19	RES	35.26
387	564232.88	4225632.44	RES	8.77
388	564627.51	4225857.81	RES	37.36
389	564463.82	4226053.11	RES	35.90
390	564224.55	4225582.77	RES	8.50
391	564460.92	4226102.48	RES	34.88
392	564216.12	4225630.26	RES	8.46
393	564445.01	4226050.36	RES	35.78
394	564442.06	4226101.52	RES	34.71
395	564424.81	4226098.27	RES	35.02
396	564423.06	4226046.82	RES	35.65
397	564314.33	4225990.33	RES	22.52
398	564230.67	4225961.06	RES	15.76
399	563948.86	4225877.19	RES	5.73
400	563921.63	4225898.48	RES	6.30
401	564407.05	4226091.55	RES	34.98
402	564689.47	4227109.75	NON-RES	20.42
403	564017.10	4225839.51	RES	6.10
404	563944.54	4225824.30	RES	5.57
405	563879.19	4225724.24	RES	4.55
406	563874.73	4225886.96	RES	6.20
407	564224.09	4225670.63	RES	9.23
408	564216.21	4225711.94	RES	9.06
409	564194.82	4225839.59	RES	16.34
410	564435.38	4225930.77	RES	34.62

411	564066.31	4225725.01	RES	7.06
412	564299.15	4225854.36	RES	24.09
413	563964.78	4225550.50	RES	4.78
414	564000.56	4225735.66	RES	5.83
415	563889.64	4225765.34	RES	4.53
416	564740.90	4225600.53	RES	11.92
417	563917.53	4225919.53	RES	6.55
418	564311.59	4226009.85	RES	22.59
419	564677.62	4225596.08	RES	11.85
420	564089.71	4225987.69	RES	10.51
421	564754.83	4227597.24	NON-RES	15.33
422	564708.62	4225549.62	RES	11.25
423	564663.96	4225578.61	RES	11.72
424	564068.90	4225984.18	RES	10.20
425	564063.29	4225930.37	RES	9.97
426	564695.62	4225537.72	RES	10.87
427	563858.13	4225722.11	RES	4.40
428	564274.37	4226005.83	RES	22.70
429	563926.31	4225821.88	RES	5.34
430	563871.97	4225906.88	RES	6.56
431	564048.22	4225980.70	RES	9.84
432	564651.15	4225565.53	RES	11.38
433	564042.26	4225931.62	RES	9.50
434	564683.54	4225522.85	RES	10.65
435	564029.93	4225977.04	RES	9.54
436	564021.52	4225927.94	RES	9.19
437	564636.40	4225553.24	RES	11.23
438	564007.35	4225930.16	RES	8.96
439	564198.98	4225709.89	RES	8.79
440	564620.47	4225542.53	RES	11.07
441	563987.43	4225927.40	RES	8.60
442	564603.37	4225533.44	RES	10.85
443	563967.51	4225924.64	RES	8.32
444	563947.93	4225967.94	RES	8.23
445	564213.73	4225670.34	RES	9.03
446	563947.60	4225921.88	RES	7.96
447	564586.25	4225526.29	RES	10.70
448	563934.16	4225960.85	RES	7.85

449	563910.09	4225958.00	RES	6.95
450	564570.18	4225520.12	RES	10.35
451	564308.82	4226029.54	RES	22.68
452	564271.57	4226034.91	RES	22.83
453	563869.21	4225926.80	RES	6.86
454	564573.61	4227865.17	RES	14.51
455	564182.38	4225707.53	RES	8.57
456	564192.78	4225663.75	RES	8.58
457	564305.99	4226049.69	RES	22.78
458	564268.78	4226052.20	RES	22.92
459	563866.45	4225946.72	RES	7.15
460	564325.80	4225727.40	RES	12.16
461	564165.04	4225705.09	RES	8.35
462	564513.60	4227681.31	NON-RES	13.76
463	563884.10	4225542.91	RES	4.15
464	564303.20	4226069.60	RES	22.90
465	563881.19	4225564.34	RES	4.24
466	563878.28	4225585.78	RES	4.33
467	563875.37	4225607.17	RES	4.31
468	564265.63	4226074.98	RES	23.07
469	563863.70	4225966.64	RES	7.43
470	564383.43	4227829.94	NON-RES	13.47
471	564743.61	4226650.32	NON-RES	32.01
472	564742.24	4226685.77	NON-RES	31.58
473	564739.01	4226723.82	NON-RES	30.47
474	564732.96	4226764.19	NON-RES	29.96
475	564638.28	4226847.42	NON-RES	29.96
476	564714.85	4226895.77	NON-RES	26.30
477	563906.29	4225983.93	RES	7.64
478	564303.84	4226089.73	RES	22.93
479	564262.47	4226097.77	RES	23.15
480	563860.94	4225986.56	RES	7.72
481	564329.15	4225692.38	RES	11.53
482	564315.23	4226118.22	RES	23.28
483	563904.80	4226003.86	RES	8.01
484	563846.46	4225759.17	RES	4.45
485	563922.05	4226257.75	NON-RES	10.25
486	564325.56	4227695.16	NON-RES	12.17

487	563844.42	4225781.90	RES	4.59
488	564215.10	4227694.33	NON-RES	11.72
489	563841.51	4225802.10	RES	4.73
490	564255.09	4226121.27	RES	22.82
491	563857.58	4226012.78	RES	8.13
492	563838.75	4225822.02	RES	4.83
493	563835.99	4225841.94	RES	5.00
494	563833.24	4225861.86	RES	5.10
495	563830.48	4225881.78	RES	5.28
496	563827.72	4225901.70	RES	5.37
497	563824.96	4225921.62	RES	5.52
498	563822.20	4225941.54	RES	5.68
499	563900.48	4226025.92	RES	8.40
500	563819.45	4225961.46	RES	5.82
501	563816.69	4225981.38	RES	5.91
502	563813.93	4226001.30	RES	6.08
503	563855.42	4226026.39	RES	8.32
504	563379.22	4227699.05	NON-RES	7.95
505	563811.17	4226021.21	RES	6.41
506	563808.42	4226041.13	RES	6.56
507	563805.64	4226061.20	RES	6.77
508	563802.70	4226083.10	RES	7.06
509	563803.67	4226109.49	RES	7.44
510	563802.90	4226131.12	RES	7.60
511	563897.79	4226045.83	RES	8.70
512	563852.67	4226046.31	RES	8.61
513	564348.87	4225863.96	RES	24.50
514	564453.86	4225984.74	RES	36.14
515	563983.59	4225599.67	RES	4.92
516	564720.98	4225563.42	RES	11.96
517	564088.48	4225770.97	RES	6.76
518	564047.51	4225891.79	RES	6.89
519	564249.95	4225859.69	RES	16.28
520	563968.66	4225785.29	RES	5.36
521	563895.68	4226065.83	RES	8.92
522	563849.81	4226066.95	RES	8.93
523	564183.31	4227322.00	NON-RES	14.48
524	564394.43	4227205.20	NON-RES	25.67

525	564286.22	4227787.81	NON-RES	11.95
526	563904.35	4226105.48	RES	9.59
527	563837.87	4226095.31	RES	9.35
528	564115.00	4227201.23	NON-RES	27.14
529	563988.20	4225565.94	RES	4.76
530	563979.44	4225732.83	RES	5.41
531	564036.22	4225739.65	RES	6.89
532	563887.68	4225787.49	RES	4.68
533	564285.78	4225892.75	RES	23.88
534	564192.93	4225863.40	RES	16.21
535	564456.03	4225934.09	RES	35.65
536	563888.04	4226122.35	RES	9.54
537	564304.95	4227437.20	NON-RES	11.27
538	563740.59	4226229.39	NON-RES	6.78
539	563855.58	4226119.47	RES	9.53
540	563420.15	4227595.70	NON-RES	7.58
541	564122.82	4227575.67	NON-RES	11.38
542	564306.07	4225724.20	RES	11.33
543	564038.02	4227445.05	NON-RES	11.18
544	563939.91	4227649.02	NON-RES	10.31
545	563913.02	4227507.83	NON-RES	10.29
546	563850.79	4227763.02	RES	10.17
547	563813.84	4227760.66	RES	10.19
548	563781.10	4227767.76	RES	10.36
549	563796.27	4227476.10	NON-RES	9.54
550	563745.49	4227812.08	RES	10.28
551	563780.57	4227654.54	NON-RES	10.19
552	564312.90	4225689.02	RES	10.95
553	564414.62	4225658.62	RES	14.40
554	564469.12	4225664.84	RES	14.12
555	564417.12	4225676.62	RES	15.23
556	564461.74	4225679.57	RES	14.94
557	564410.24	4225696.76	RES	16.44
558	564463.18	4225706.60	RES	16.59
559	563225.00	4226300.00	RISK	1.60
560	563225.00	4226325.00	RISK	1.56
561	563225.00	4226350.00	RISK	1.40
562	563225.00	4226375.00	RISK	1.40

563	563225.00	4226400.00	RISK	1.40
564	563225.00	4226425.00	RISK	1.41
565	563225.00	4226450.00	RISK	1.83
566	563225.00	4226475.00	RISK	1.77
567	563225.00	4226500.00	RISK	1.75
568	563225.00	4226525.00	RISK	2.39
569	563225.00	4226550.00	RISK	2.34
570	563225.00	4226575.00	RISK	2.68
571	563225.00	4226600.00	RISK	2.86
572	563225.00	4226625.00	RISK	2.94
573	563225.00	4226650.00	RISK	3.91
574	563225.00	4226675.00	RISK	3.83
575	563225.00	4226700.00	RISK	3.67
576	563225.00	4226725.00	RISK	3.52
577	563225.00	4226750.00	RISK	3.51
578	563225.00	4226775.00	RISK	3.95
579	563225.00	4226800.00	RISK	4.79
580	563225.00	4226825.00	RISK	5.21
581	563225.00	4226850.00	RISK	5.00
582	563225.00	4226875.00	RISK	6.38
583	563225.00	4226900.00	RISK	6.56
584	563225.00	4226925.00	RISK	6.38
585	563225.00	4226950.00	RISK	6.19
586	563225.00	4226975.00	RISK	6.08
587	563225.00	4227000.00	RISK	6.20
588	563225.00	4227025.00	RISK	5.81
589	563225.00	4227050.00	RISK	6.32
590	563250.00	4226300.00	RISK	1.74
591	563250.00	4226325.00	RISK	1.76
592	563250.00	4226350.00	RISK	1.78
593	563250.00	4226375.00	RISK	1.56
594	563250.00	4226400.00	RISK	1.40
595	563250.00	4226425.00	RISK	1.51
596	563250.00	4226450.00	RISK	1.73
597	563250.00	4226475.00	RISK	1.81
598	563250.00	4226500.00	RISK	2.19
599	563250.00	4226525.00	RISK	2.41
600	563250.00	4226550.00	RISK	2.21

601	563250.00	4226575.00	RISK	2.74
602	563250.00	4226600.00	RISK	2.99
603	563250.00	4226625.00	RISK	2.77
604	563250.00	4226650.00	RISK	2.74
605	563250.00	4226675.00	RISK	3.02
606	563250.00	4226700.00	RISK	4.20
607	563250.00	4226725.00	RISK	3.82
608	563250.00	4226750.00	RISK	3.56
609	563250.00	4226775.00	RISK	3.49
610	563250.00	4226800.00	RISK	3.79
611	563250.00	4226825.00	RISK	4.40
612	563250.00	4226850.00	RISK	5.99
613	563250.00	4226875.00	RISK	6.43
614	563250.00	4226900.00	RISK	6.37
615	563250.00	4226925.00	RISK	6.20
616	563250.00	4226950.00	RISK	5.95
617	563250.00	4226975.00	RISK	6.09
618	563250.00	4227000.00	RISK	6.29
619	563250.00	4227025.00	RISK	5.92
620	563250.00	4227050.00	RISK	6.34
621	563275.00	4226300.00	RISK	1.83
622	563275.00	4226325.00	RISK	1.72
623	563275.00	4226350.00	RISK	1.74
624	563275.00	4226375.00	RISK	1.84
625	563275.00	4226400.00	RISK	1.92
626	563275.00	4226425.00	RISK	1.85
627	563275.00	4226450.00	RISK	1.88
628	563275.00	4226475.00	RISK	1.83
629	563275.00	4226500.00	RISK	2.00
630	563275.00	4226525.00	RISK	2.17
631	563275.00	4226550.00	RISK	2.19
632	563275.00	4226575.00	RISK	2.37
633	563275.00	4226600.00	RISK	2.43
634	563275.00	4226625.00	RISK	2.48
635	563275.00	4226650.00	RISK	2.53
636	563275.00	4226675.00	RISK	2.57
637	563275.00	4226700.00	RISK	2.80
638	563275.00	4226725.00	RISK	3.28

639	563275.00	4226750.00	RISK	3.99
640	563275.00	4226775.00	RISK	4.11
641	563275.00	4226800.00	RISK	3.55
642	563275.00	4226825.00	RISK	3.70
643	563275.00	4226850.00	RISK	4.31
644	563275.00	4226875.00	RISK	5.63
645	563275.00	4226900.00	RISK	6.28
646	563275.00	4226925.00	RISK	6.19
647	563275.00	4226950.00	RISK	6.19
648	563275.00	4226975.00	RISK	6.37
649	563275.00	4227000.00	RISK	6.39
650	563275.00	4227025.00	RISK	5.92
651	563275.00	4227050.00	RISK	6.42
652	563300.00	4226300.00	RISK	1.99
653	563300.00	4226325.00	RISK	1.95
654	563300.00	4226350.00	RISK	1.93
655	563300.00	4226375.00	RISK	1.92
656	563300.00	4226400.00	RISK	1.90
657	563300.00	4226425.00	RISK	1.91
658	563300.00	4226450.00	RISK	1.95
659	563300.00	4226475.00	RISK	1.90
660	563300.00	4226500.00	RISK	2.11
661	563300.00	4226525.00	RISK	1.90
662	563300.00	4226550.00	RISK	1.89
663	563300.00	4226575.00	RISK	2.49
664	563300.00	4226600.00	RISK	3.76
665	563300.00	4226625.00	RISK	2.50
666	563300.00	4226650.00	RISK	2.57
667	563300.00	4226675.00	RISK	2.72
668	563300.00	4226700.00	RISK	2.77
669	563300.00	4226725.00	RISK	2.97
670	563300.00	4226750.00	RISK	3.20
671	563300.00	4226775.00	RISK	3.91
672	563300.00	4226800.00	RISK	4.40
673	563300.00	4226825.00	RISK	3.51
674	563300.00	4226850.00	RISK	3.82
675	563300.00	4226875.00	RISK	4.27
676	563300.00	4226900.00	RISK	5.03

677	563300.00	4226925.00	RISK	6.07
678	563300.00	4226950.00	RISK	6.23
679	563300.00	4226975.00	RISK	6.62
680	563300.00	4227000.00	RISK	6.43
681	563300.00	4227025.00	RISK	5.95
682	563300.00	4227050.00	RISK	6.38
683	563325.00	4226300.00	RISK	2.66
684	563325.00	4226325.00	RISK	2.76
685	563325.00	4226350.00	RISK	2.76
686	563325.00	4226375.00	RISK	2.67
687	563325.00	4226400.00	RISK	2.56
688	563325.00	4226425.00	RISK	2.39
689	563325.00	4226450.00	RISK	2.20
690	563325.00	4226475.00	RISK	2.15
691	563325.00	4226500.00	RISK	2.49
692	563325.00	4226525.00	RISK	1.88
693	563325.00	4226550.00	RISK	1.88
694	563325.00	4226575.00	RISK	2.30
695	563325.00	4226600.00	RISK	2.97
696	563325.00	4226625.00	RISK	2.76
697	563325.00	4226650.00	RISK	2.58
698	563325.00	4226675.00	RISK	2.76
699	563325.00	4226700.00	RISK	2.89
700	563325.00	4226725.00	RISK	2.83
701	563325.00	4226750.00	RISK	2.76
702	563325.00	4226775.00	RISK	3.03
703	563325.00	4226800.00	RISK	3.60
704	563325.00	4226825.00	RISK	4.27
705	563325.00	4226850.00	RISK	4.26
706	563325.00	4226875.00	RISK	3.85
707	563325.00	4226900.00	RISK	3.96
708	563325.00	4226925.00	RISK	5.32
709	563325.00	4226950.00	RISK	5.30
710	563325.00	4226975.00	RISK	6.39
711	563325.00	4227000.00	RISK	6.45
712	563325.00	4227025.00	RISK	6.14
713	563325.00	4227050.00	RISK	6.40
714	563350.00	4226300.00	RISK	2.95

715	563350.00	4226325.00	RISK	3.04
716	563350.00	4226350.00	RISK	2.98
717	563350.00	4226375.00	RISK	2.84
718	563350.00	4226400.00	RISK	2.85
719	563350.00	4226425.00	RISK	2.63
720	563350.00	4226450.00	RISK	2.57
721	563350.00	4226475.00	RISK	2.53
722	563350.00	4226500.00	RISK	2.51
723	563350.00	4226525.00	RISK	2.43
724	563350.00	4226550.00	RISK	2.47
725	563350.00	4226575.00	RISK	2.72
726	563350.00	4226600.00	RISK	2.78
727	563350.00	4226625.00	RISK	2.87
728	563350.00	4226650.00	RISK	2.60
729	563350.00	4226675.00	RISK	2.80
730	563350.00	4226700.00	RISK	2.93
731	563350.00	4226725.00	RISK	3.08
732	563350.00	4226750.00	RISK	2.94
733	563350.00	4226775.00	RISK	2.95
734	563350.00	4226800.00	RISK	3.05
735	563350.00	4226825.00	RISK	3.26
736	563350.00	4226850.00	RISK	3.43
737	563350.00	4226875.00	RISK	3.64
738	563350.00	4226900.00	RISK	3.77
739	563350.00	4226925.00	RISK	4.49
740	563350.00	4226950.00	RISK	3.85
741	563350.00	4226975.00	RISK	4.35
742	563350.00	4227000.00	RISK	6.23
743	563350.00	4227025.00	RISK	6.11
744	563350.00	4227050.00	RISK	6.52
745	563375.00	4226300.00	RISK	3.09
746	563375.00	4226325.00	RISK	3.19
747	563375.00	4226350.00	RISK	3.34
748	563375.00	4226375.00	RISK	3.40
749	563375.00	4226400.00	RISK	3.32
750	563375.00	4226425.00	RISK	3.20
751	563375.00	4226450.00	RISK	3.12
752	563375.00	4226475.00	RISK	2.95

753	563375.00	4226500.00	RISK	2.64
754	563375.00	4226525.00	RISK	2.45
755	563375.00	4226550.00	RISK	2.50
756	563375.00	4226575.00	RISK	2.78
757	563375.00	4226600.00	RISK	2.85
758	563375.00	4226625.00	RISK	2.85
759	563375.00	4226650.00	RISK	2.92
760	563375.00	4226675.00	RISK	2.94
761	563375.00	4226700.00	RISK	3.04
762	563375.00	4226725.00	RISK	3.15
763	563375.00	4226750.00	RISK	3.18
764	563375.00	4226775.00	RISK	3.19
765	563375.00	4226800.00	RISK	3.25
766	563375.00	4226825.00	RISK	3.36
767	563375.00	4226850.00	RISK	3.55
768	563375.00	4226875.00	RISK	3.70
769	563375.00	4226900.00	RISK	3.84
770	563375.00	4226925.00	RISK	4.29
771	563375.00	4226950.00	RISK	4.01
772	563375.00	4226975.00	RISK	4.08
773	563375.00	4227000.00	RISK	5.57
774	563375.00	4227025.00	RISK	6.06
775	563375.00	4227050.00	RISK	6.36
776	563400.00	4226300.00	RISK	3.55
777	563400.00	4226325.00	RISK	3.56
778	563400.00	4226350.00	RISK	3.70
779	563400.00	4226375.00	RISK	3.85
780	563400.00	4226400.00	RISK	3.73
781	563400.00	4226425.00	RISK	3.60
782	563400.00	4226450.00	RISK	3.43
783	563400.00	4226475.00	RISK	3.22
784	563400.00	4226500.00	RISK	2.99
785	563400.00	4226525.00	RISK	2.63
786	563400.00	4226550.00	RISK	2.50
787	563400.00	4226575.00	RISK	2.58
788	563400.00	4226600.00	RISK	2.60
789	563400.00	4226625.00	RISK	2.68
790	563400.00	4226650.00	RISK	2.91

791	563400.00	4226675.00	RISK	3.04
792	563400.00	4226700.00	RISK	3.13
793	563400.00	4226725.00	RISK	3.30
794	563400.00	4226750.00	RISK	3.46
795	563400.00	4226775.00	RISK	3.48
796	563400.00	4226800.00	RISK	3.54
797	563400.00	4226825.00	RISK	3.51
798	563400.00	4226850.00	RISK	3.66
799	563400.00	4226875.00	RISK	3.80
800	563400.00	4226900.00	RISK	3.99
801	563400.00	4226925.00	RISK	4.31
802	563400.00	4226950.00	RISK	4.22
803	563400.00	4226975.00	RISK	4.24
804	563400.00	4227000.00	RISK	4.86
805	563400.00	4227025.00	RISK	6.23
806	563400.00	4227050.00	RISK	6.09
807	563425.00	4226300.00	RISK	3.78
808	563425.00	4226325.00	RISK	3.73
809	563425.00	4226350.00	RISK	3.82
810	563425.00	4226375.00	RISK	4.01
811	563425.00	4226400.00	RISK	4.01
812	563425.00	4226425.00	RISK	3.79
813	563425.00	4226450.00	RISK	3.58
814	563425.00	4226475.00	RISK	3.44
815	563425.00	4226500.00	RISK	3.15
816	563425.00	4226525.00	RISK	2.89
817	563425.00	4226550.00	RISK	2.75
818	563425.00	4226575.00	RISK	2.59
819	563425.00	4226600.00	RISK	2.78
820	563425.00	4226625.00	RISK	2.95
821	563425.00	4226650.00	RISK	2.89
822	563425.00	4226675.00	RISK	2.85
823	563425.00	4226700.00	RISK	3.02
824	563425.00	4226725.00	RISK	3.53
825	563425.00	4226750.00	RISK	3.35
826	563425.00	4226775.00	RISK	3.42
827	563425.00	4226800.00	RISK	3.54
828	563425.00	4226825.00	RISK	3.60

829	563425.00	4226850.00	RISK	3.69
830	563425.00	4226875.00	RISK	3.79
831	563425.00	4226900.00	RISK	3.97
832	563425.00	4226925.00	RISK	4.24
833	563425.00	4226950.00	RISK	4.32
834	563425.00	4226975.00	RISK	4.43
835	563425.00	4227000.00	RISK	4.78
836	563425.00	4227025.00	RISK	5.49
837	563425.00	4227050.00	RISK	6.49
838	563450.00	4226300.00	RISK	3.91
839	563450.00	4226325.00	RISK	4.02
840	563450.00	4226350.00	RISK	4.08
841	563450.00	4226375.00	RISK	4.25
842	563450.00	4226400.00	RISK	4.37
843	563450.00	4226425.00	RISK	4.11
844	563450.00	4226450.00	RISK	3.97
845	563450.00	4226475.00	RISK	3.90
846	563450.00	4226500.00	RISK	3.49
847	563450.00	4226525.00	RISK	3.28
848	563450.00	4226550.00	RISK	3.03
849	563450.00	4226575.00	RISK	2.96
850	563450.00	4226650.00	RISK	3.44
851	563450.00	4226675.00	RISK	3.24
852	563450.00	4226700.00	RISK	3.27
853	563450.00	4226725.00	RISK	3.55
854	563450.00	4226750.00	RISK	3.48
855	563450.00	4226775.00	RISK	3.55
856	563450.00	4226800.00	RISK	3.61
857	563450.00	4226825.00	RISK	3.72
858	563450.00	4226850.00	RISK	3.78
859	563450.00	4226875.00	RISK	3.78
860	563450.00	4226900.00	RISK	3.89
861	563450.00	4226925.00	RISK	4.17
862	563450.00	4226950.00	RISK	4.43
863	563450.00	4226975.00	RISK	4.40
864	563450.00	4227000.00	RISK	4.69
865	563450.00	4227025.00	RISK	4.98
866	563450.00	4227050.00	RISK	7.48

867	563475.00	4226300.00	RISK	4.00
868	563475.00	4226325.00	RISK	4.23
869	563475.00	4226350.00	RISK	4.43
870	563475.00	4226375.00	RISK	4.52
871	563475.00	4226400.00	RISK	4.67
872	563475.00	4226425.00	RISK	4.47
873	563475.00	4226450.00	RISK	4.38
874	563475.00	4226475.00	RISK	4.30
875	563475.00	4226500.00	RISK	3.98
876	563475.00	4226525.00	RISK	3.81
877	563475.00	4226550.00	RISK	3.60
878	563475.00	4226575.00	RISK	3.52
879	563475.00	4226775.00	RISK	4.20
880	563475.00	4226800.00	RISK	4.09
881	563475.00	4226825.00	RISK	4.01
882	563475.00	4226850.00	RISK	3.84
883	563475.00	4226875.00	RISK	4.17
884	563475.00	4226900.00	RISK	4.06
885	563475.00	4226925.00	RISK	4.24
886	563475.00	4226950.00	RISK	4.25
887	563475.00	4226975.00	RISK	4.34
888	563475.00	4227000.00	RISK	4.64
889	563475.00	4227025.00	RISK	4.89
890	563475.00	4227050.00	RISK	7.40
891	563500.00	4226300.00	RISK	4.18
892	563500.00	4226325.00	RISK	4.50
893	563500.00	4226350.00	RISK	4.60
894	563500.00	4226375.00	RISK	4.79
895	563500.00	4226400.00	RISK	4.91
896	563500.00	4226425.00	RISK	4.93
897	563500.00	4226450.00	RISK	4.86
898	563500.00	4226475.00	RISK	4.74
899	563500.00	4226500.00	RISK	4.48
900	563500.00	4226525.00	RISK	4.27
901	563500.00	4226550.00	RISK	4.22
902	563500.00	4226575.00	RISK	4.08
903	563500.00	4226775.00	RISK	4.63
904	563500.00	4226800.00	RISK	4.57

905	563500.00	4226825.00	RISK	4.55
906	563500.00	4226850.00	RISK	4.34
907	563500.00	4226875.00	RISK	4.58
908	563500.00	4226900.00	RISK	4.73
909	563500.00	4226925.00	RISK	5.41
910	563500.00	4226950.00	RISK	4.88
911	563500.00	4226975.00	RISK	4.27
912	563500.00	4227000.00	RISK	4.55
913	563500.00	4227025.00	RISK	4.92
914	563500.00	4227050.00	RISK	7.35
915	563525.00	4226300.00	RISK	4.10
916	563525.00	4226325.00	RISK	4.40
917	563525.00	4226350.00	RISK	4.69
918	563525.00	4226375.00	RISK	5.09
919	563525.00	4226400.00	RISK	5.05
920	563525.00	4226425.00	RISK	5.22
921	563525.00	4226450.00	RISK	5.26
922	563525.00	4226475.00	RISK	5.03
923	563525.00	4226500.00	RISK	5.00
924	563525.00	4226525.00	RISK	4.78
925	563525.00	4226550.00	RISK	4.77
926	563525.00	4226575.00	RISK	4.75
927	563525.00	4226775.00	RISK	5.07
928	563525.00	4226800.00	RISK	5.07
929	563525.00	4226825.00	RISK	5.04
930	563525.00	4226850.00	RISK	4.92
931	563525.00	4226875.00	RISK	5.26
932	563525.00	4226900.00	RISK	5.46
933	563525.00	4226925.00	RISK	6.04
934	563525.00	4226950.00	RISK	6.29
935	563525.00	4226975.00	RISK	5.65
936	563525.00	4227000.00	RISK	4.36
937	563525.00	4227025.00	RISK	4.79
938	563525.00	4227050.00	RISK	7.32
939	563550.00	4226300.00	RISK	4.32
940	563550.00	4226325.00	RISK	4.53
941	563550.00	4226350.00	RISK	4.77
942	563550.00	4226375.00	RISK	5.01

943	563550.00	4226400.00	RISK	5.18
944	563550.00	4226425.00	RISK	5.38
945	563550.00	4226450.00	RISK	5.46
946	563550.00	4226475.00	RISK	5.28
947	563550.00	4226500.00	RISK	5.43
948	563550.00	4226525.00	RISK	5.30
949	563550.00	4226550.00	RISK	5.25
950	563550.00	4226575.00	RISK	5.35
951	563550.00	4226775.00	RISK	5.55
952	563550.00	4226800.00	RISK	5.47
953	563550.00	4226825.00	RISK	5.60
954	563550.00	4226850.00	RISK	5.56
955	563550.00	4226875.00	RISK	5.77
956	563550.00	4226900.00	RISK	6.01
957	563550.00	4226925.00	RISK	6.86
958	563550.00	4226950.00	RISK	8.11
959	563550.00	4226975.00	RISK	9.57
960	563550.00	4227000.00	RISK	5.66
961	563550.00	4227025.00	RISK	4.60
962	563550.00	4227050.00	RISK	7.35
963	563575.00	4226300.00	RISK	4.58
964	563575.00	4226325.00	RISK	4.78
965	563575.00	4226350.00	RISK	5.01
966	563575.00	4226375.00	RISK	5.20
967	563575.00	4226400.00	RISK	5.34
968	563575.00	4226425.00	RISK	5.56
969	563575.00	4226450.00	RISK	5.65
970	563575.00	4226475.00	RISK	5.57
971	563575.00	4226500.00	RISK	5.69
972	563575.00	4226525.00	RISK	5.64
973	563575.00	4226550.00	RISK	5.62
974	563575.00	4226575.00	RISK	5.78
975	563575.00	4226775.00	RISK	5.93
976	563575.00	4226800.00	RISK	5.94
977	563575.00	4226825.00	RISK	6.04
978	563575.00	4226850.00	RISK	6.05
979	563575.00	4226875.00	RISK	6.15
980	563575.00	4226900.00	RISK	6.27

981	563575.00	4226925.00	RISK	7.16
982	563575.00	4226950.00	RISK	8.72
983	563575.00	4226975.00	RISK	9.95
984	563575.00	4227000.00	RISK	9.84
985	563575.00	4227025.00	RISK	6.64
986	563575.00	4227050.00	RISK	5.52
987	563600.00	4226300.00	RISK	4.85
988	563600.00	4226325.00	RISK	5.01
989	563600.00	4226350.00	RISK	5.23
990	563600.00	4226375.00	RISK	5.63
991	563600.00	4226400.00	RISK	5.56
992	563600.00	4226425.00	RISK	5.64
993	563600.00	4226450.00	RISK	5.90
994	563600.00	4226475.00	RISK	5.98
995	563600.00	4226500.00	RISK	5.97
996	563600.00	4226525.00	RISK	6.01
997	563600.00	4226550.00	RISK	6.03
998	563600.00	4226575.00	RISK	6.18
999	563600.00	4226775.00	RISK	6.15
1,000	563600.00	4226800.00	RISK	6.36
1,001	563600.00	4226825.00	RISK	6.56
1,002	563600.00	4226850.00	RISK	6.64
1,003	563600.00	4226875.00	RISK	6.60
1,004	563600.00	4226900.00	RISK	6.66
1,005	563600.00	4226925.00	RISK	7.62
1,006	563600.00	4226950.00	RISK	8.36
1,007	563600.00	4226975.00	RISK	9.27
1,008	563600.00	4227000.00	RISK	9.78
1,009	563600.00	4227025.00	RISK	9.36
1,010	563600.00	4227050.00	RISK	7.27
1,011	563625.00	4226300.00	RISK	5.40
1,012	563625.00	4226325.00	RISK	5.43
1,013	563625.00	4226350.00	RISK	5.50
1,014	563625.00	4226375.00	RISK	5.84
1,015	563625.00	4226400.00	RISK	5.90
1,016	563625.00	4226425.00	RISK	5.97
1,017	563625.00	4226450.00	RISK	6.13
1,018	563625.00	4226475.00	RISK	6.26

1,019	563625.00	4226500.00	RISK	6.35
1,020	563625.00	4226525.00	RISK	6.35
1,021	563625.00	4226550.00	RISK	6.48
1,022	563625.00	4226575.00	RISK	6.60
1,023	563625.00	4226775.00	RISK	6.54
1,024	563625.00	4226800.00	RISK	6.82
1,025	563625.00	4226825.00	RISK	6.99
1,026	563625.00	4226850.00	RISK	7.17
1,027	563625.00	4226875.00	RISK	7.12
1,028	563625.00	4226900.00	RISK	7.16
1,029	563625.00	4226925.00	RISK	8.08
1,030	563625.00	4226950.00	RISK	8.15
1,031	563625.00	4226975.00	RISK	8.52
1,032	563625.00	4227000.00	RISK	8.89
1,033	563625.00	4227025.00	RISK	8.95
1,034	563625.00	4227050.00	RISK	8.17
1,035	563650.00	4226300.00	RISK	5.49
1,036	563650.00	4226325.00	RISK	5.75
1,037	563650.00	4226350.00	RISK	5.75
1,038	563650.00	4226375.00	RISK	5.94
1,039	563650.00	4226400.00	RISK	6.18
1,040	563650.00	4226425.00	RISK	6.28
1,041	563650.00	4226450.00	RISK	6.45
1,042	563650.00	4226475.00	RISK	6.59
1,043	563650.00	4226500.00	RISK	6.66
1,044	563650.00	4226525.00	RISK	6.71
1,045	563650.00	4226550.00	RISK	6.92
1,046	563650.00	4226575.00	RISK	7.02
1,047	563650.00	4226775.00	RISK	7.00
1,048	563650.00	4226800.00	RISK	7.20
1,049	563650.00	4226825.00	RISK	7.45
1,050	563650.00	4226850.00	RISK	7.54
1,051	563650.00	4226875.00	RISK	7.54
1,052	563650.00	4226900.00	RISK	7.57
1,053	563650.00	4226925.00	RISK	8.50
1,054	563650.00	4226950.00	RISK	8.47
1,055	563650.00	4226975.00	RISK	8.81
1,056	563650.00	4227000.00	RISK	9.15

1,057	563650.00	4227025.00	RISK	9.07
1,058	563650.00	4227050.00	RISK	8.66
1,059	563675.00	4226300.00	RISK	5.78
1,060	563675.00	4226325.00	RISK	6.12
1,061	563675.00	4226350.00	RISK	6.17
1,062	563675.00	4226375.00	RISK	6.24
1,063	563675.00	4226400.00	RISK	6.37
1,064	563675.00	4226425.00	RISK	6.55
1,065	563675.00	4226450.00	RISK	6.72
1,066	563675.00	4226475.00	RISK	6.84
1,067	563675.00	4226500.00	RISK	6.93
1,068	563675.00	4226525.00	RISK	7.10
1,069	563675.00	4226550.00	RISK	7.22
1,070	563675.00	4226575.00	RISK	7.36
1,071	563675.00	4226775.00	RISK	7.58
1,072	563675.00	4226800.00	RISK	7.72
1,073	563675.00	4226825.00	RISK	7.99
1,074	563675.00	4226850.00	RISK	8.07
1,075	563675.00	4226875.00	RISK	7.98
1,076	563675.00	4226900.00	RISK	8.01
1,077	563675.00	4226925.00	RISK	9.03
1,078	563675.00	4226950.00	RISK	9.01
1,079	563675.00	4226975.00	RISK	9.55
1,080	563675.00	4227000.00	RISK	9.99
1,081	563675.00	4227025.00	RISK	9.79
1,082	563675.00	4227050.00	RISK	9.40
1,083	563700.00	4226300.00	RISK	6.18
1,084	563700.00	4226325.00	RISK	6.39
1,085	563700.00	4226350.00	RISK	6.59
1,086	563700.00	4226375.00	RISK	6.78
1,087	563700.00	4226400.00	RISK	6.58
1,088	563700.00	4226425.00	RISK	6.88
1,089	563700.00	4226450.00	RISK	7.02
1,090	563700.00	4226475.00	RISK	7.13
1,091	563700.00	4226500.00	RISK	7.33
1,092	563700.00	4226525.00	RISK	7.45
1,093	563700.00	4226550.00	RISK	7.60
1,094	563700.00	4226575.00	RISK	7.71

1,095	563700.00	4226775.00	RISK	8.29
1,096	563700.00	4226800.00	RISK	8.26
1,097	563700.00	4226825.00	RISK	8.48
1,098	563700.00	4226850.00	RISK	8.52
1,099	563700.00	4226875.00	RISK	8.49
1,100	563700.00	4226900.00	RISK	8.61
1,101	563700.00	4226925.00	RISK	9.49
1,102	563700.00	4226950.00	RISK	9.19
1,103	563700.00	4226975.00	RISK	9.56
1,104	563700.00	4227000.00	RISK	9.66
1,105	563700.00	4227025.00	RISK	9.46
1,106	563700.00	4227050.00	RISK	9.74
1,107	563725.00	4226300.00	RISK	6.49
1,108	563725.00	4226325.00	RISK	6.72
1,109	563725.00	4226350.00	RISK	6.91
1,110	563725.00	4226375.00	RISK	7.33
1,111	563725.00	4226400.00	RISK	7.04
1,112	563725.00	4226425.00	RISK	7.23
1,113	563725.00	4226450.00	RISK	7.42
1,114	563725.00	4226475.00	RISK	7.61
1,115	563725.00	4226500.00	RISK	7.83
1,116	563725.00	4226525.00	RISK	8.04
1,117	563725.00	4226550.00	RISK	8.14
1,118	563725.00	4226575.00	RISK	8.30
1,119	563725.00	4226775.00	RISK	9.16
1,120	563725.00	4226800.00	RISK	9.08
1,121	563725.00	4226825.00	RISK	9.04
1,122	563725.00	4226850.00	RISK	9.04
1,123	563725.00	4226875.00	RISK	9.20
1,124	563725.00	4226900.00	RISK	9.49
1,125	563725.00	4226925.00	RISK	10.10
1,126	563725.00	4226950.00	RISK	9.59
1,127	563725.00	4226975.00	RISK	9.47
1,128	563725.00	4227000.00	RISK	9.24
1,129	563725.00	4227025.00	RISK	9.15
1,130	563725.00	4227050.00	RISK	9.81
1,131	563750.00	4226300.00	RISK	7.35
1,132	563750.00	4226325.00	RISK	7.42

1,133	563750.00	4226350.00	RISK	7.54
1,134	563750.00	4226375.00	RISK	7.61
1,135	563750.00	4226400.00	RISK	7.50
1,136	563750.00	4226425.00	RISK	7.53
1,137	563750.00	4226450.00	RISK	7.64
1,138	563750.00	4226475.00	RISK	7.88
1,139	563750.00	4226500.00	RISK	8.13
1,140	563750.00	4226525.00	RISK	8.46
1,141	563750.00	4226550.00	RISK	8.51
1,142	563750.00	4226575.00	RISK	8.65
1,143	563750.00	4226600.00	RISK	8.86
1,144	563750.00	4226625.00	RISK	9.09
1,145	563750.00	4226650.00	RISK	9.16
1,146	563750.00	4226675.00	RISK	9.14
1,147	563750.00	4226700.00	RISK	9.27
1,148	563750.00	4226725.00	RISK	9.46
1,149	563750.00	4226750.00	RISK	9.66
1,150	563750.00	4226775.00	RISK	10.00
1,151	563750.00	4226800.00	RISK	10.04
1,152	563750.00	4226825.00	RISK	9.86
1,153	563750.00	4226850.00	RISK	9.79
1,154	563750.00	4226875.00	RISK	9.91
1,155	563750.00	4226900.00	RISK	10.02
1,156	563750.00	4226925.00	RISK	10.44
1,157	563750.00	4226950.00	RISK	10.06
1,158	563750.00	4226975.00	RISK	9.74
1,159	563750.00	4227000.00	RISK	9.40
1,160	563750.00	4227025.00	RISK	9.17
1,161	563750.00	4227050.00	RISK	9.91
1,162	563775.00	4226300.00	RISK	7.32
1,163	563775.00	4226325.00	RISK	7.34
1,164	563775.00	4226350.00	RISK	7.38
1,165	563775.00	4226375.00	RISK	7.59
1,166	563775.00	4226400.00	RISK	7.67
1,167	563775.00	4226425.00	RISK	7.90
1,168	563775.00	4226450.00	RISK	8.09
1,169	563775.00	4226475.00	RISK	8.28
1,170	563775.00	4226500.00	RISK	8.41

1,171	563775.00	4226525.00	RISK	8.78
1,172	563775.00	4226550.00	RISK	8.85
1,173	563775.00	4226575.00	RISK	9.00
1,174	563775.00	4226600.00	RISK	9.38
1,175	563775.00	4226625.00	RISK	9.59
1,176	563775.00	4226650.00	RISK	9.66
1,177	563775.00	4226675.00	RISK	9.69
1,178	563775.00	4226700.00	RISK	9.76
1,179	563775.00	4226725.00	RISK	9.82
1,180	563775.00	4226750.00	RISK	9.89
1,181	563775.00	4226775.00	RISK	10.00
1,182	563775.00	4226800.00	RISK	10.28
1,183	563775.00	4226825.00	RISK	10.72
1,184	563775.00	4226850.00	RISK	10.57
1,185	563775.00	4226875.00	RISK	10.47
1,186	563775.00	4226900.00	RISK	10.87
1,187	563775.00	4226925.00	RISK	10.68
1,188	563775.00	4226950.00	RISK	10.35
1,189	563775.00	4226975.00	RISK	10.20
1,190	563775.00	4227000.00	RISK	9.93
1,191	563775.00	4227025.00	RISK	9.85
1,192	563775.00	4227050.00	RISK	10.22
1,193	563800.00	4226300.00	RISK	7.65
1,194	563800.00	4226325.00	RISK	7.76
1,195	563800.00	4226350.00	RISK	7.86
1,196	563800.00	4226375.00	RISK	7.95
1,197	563800.00	4226400.00	RISK	7.99
1,198	563800.00	4226425.00	RISK	8.23
1,199	563800.00	4226450.00	RISK	8.50
1,200	563800.00	4226475.00	RISK	8.75
1,201	563800.00	4226500.00	RISK	8.83
1,202	563800.00	4226525.00	RISK	9.33
1,203	563800.00	4226550.00	RISK	9.51
1,204	563800.00	4226575.00	RISK	9.65
1,205	563800.00	4226600.00	RISK	10.03
1,206	563800.00	4226625.00	RISK	10.21
1,207	563800.00	4226650.00	RISK	10.29
1,208	563800.00	4226675.00	RISK	10.36

1,209	563800.00	4226700.00	RISK	10.49
1,210	563800.00	4226725.00	RISK	10.50
1,211	563800.00	4226750.00	RISK	10.70
1,212	563800.00	4226775.00	RISK	10.68
1,213	563800.00	4226800.00	RISK	10.67
1,214	563800.00	4226825.00	RISK	10.84
1,215	563800.00	4226850.00	RISK	11.04
1,216	563800.00	4226875.00	RISK	11.42
1,217	563800.00	4226900.00	RISK	11.58
1,218	563800.00	4226925.00	RISK	11.63
1,219	563800.00	4226950.00	RISK	11.74
1,220	563800.00	4226975.00	RISK	11.86
1,221	563800.00	4227000.00	RISK	11.94
1,222	563800.00	4227025.00	RISK	12.12
1,223	563800.00	4227050.00	RISK	12.19
1,224	563825.00	4226300.00	RISK	8.11
1,225	563825.00	4226325.00	RISK	8.13
1,226	563825.00	4226350.00	RISK	8.27
1,227	563825.00	4226375.00	RISK	8.38
1,228	563825.00	4226400.00	RISK	8.41
1,229	563825.00	4226425.00	RISK	8.62
1,230	563825.00	4226450.00	RISK	8.78
1,231	563825.00	4226475.00	RISK	9.01
1,232	563825.00	4226500.00	RISK	9.28
1,233	563825.00	4226525.00	RISK	9.87
1,234	563825.00	4226550.00	RISK	10.14
1,235	563825.00	4226575.00	RISK	10.36
1,236	563825.00	4226600.00	RISK	10.64
1,237	563825.00	4226625.00	RISK	10.84
1,238	563825.00	4226650.00	RISK	10.95
1,239	563825.00	4226675.00	RISK	11.14
1,240	563825.00	4226700.00	RISK	11.28
1,241	563825.00	4226725.00	RISK	11.40
1,242	563825.00	4226750.00	RISK	11.54
1,243	563825.00	4226775.00	RISK	11.32
1,244	563825.00	4226800.00	RISK	11.31
1,245	563825.00	4226825.00	RISK	11.29
1,246	563825.00	4226850.00	RISK	11.32

1,247	563825.00	4226875.00	RISK	11.59
1,248	563825.00	4226900.00	RISK	11.81
1,249	563825.00	4226925.00	RISK	12.66
1,250	563825.00	4226950.00	RISK	14.44
1,251	563825.00	4226975.00	RISK	14.44
1,252	563825.00	4227000.00	RISK	14.47
1,253	563825.00	4227025.00	RISK	14.36
1,254	563825.00	4227050.00	RISK	13.75
1,255	563850.00	4226300.00	RISK	8.62
1,256	563850.00	4226325.00	RISK	8.59
1,257	563850.00	4226350.00	RISK	8.65
1,258	563850.00	4226375.00	RISK	8.77
1,259	563850.00	4226400.00	RISK	8.83
1,260	563850.00	4226425.00	RISK	9.01
1,261	563850.00	4226450.00	RISK	9.18
1,262	563850.00	4226475.00	RISK	9.50
1,263	563850.00	4226500.00	RISK	9.82
1,264	563850.00	4226525.00	RISK	10.33
1,265	563850.00	4226550.00	RISK	10.65
1,266	563850.00	4226575.00	RISK	11.08
1,267	563850.00	4226600.00	RISK	11.38
1,268	563850.00	4226625.00	RISK	11.56
1,269	563850.00	4226650.00	RISK	11.75
1,270	563850.00	4226675.00	RISK	11.94
1,271	563850.00	4226700.00	RISK	12.09
1,272	563850.00	4226725.00	RISK	12.03
1,273	563850.00	4226750.00	RISK	12.10
1,274	563850.00	4226775.00	RISK	12.01
1,275	563850.00	4226800.00	RISK	12.00
1,276	563850.00	4226825.00	RISK	11.84
1,277	563850.00	4226850.00	RISK	11.96
1,278	563850.00	4226875.00	RISK	12.23
1,279	563850.00	4226900.00	RISK	12.65
1,280	563850.00	4226925.00	RISK	13.84
1,281	563850.00	4226950.00	RISK	15.90
1,282	563850.00	4226975.00	RISK	15.31
1,283	563850.00	4227000.00	RISK	15.16
1,284	563850.00	4227025.00	RISK	15.57

1,285	563850.00	4227050.00	RISK	15.50
1,286	563875.00	4226300.00	RISK	9.07
1,287	563875.00	4226325.00	RISK	9.04
1,288	563875.00	4226350.00	RISK	9.05
1,289	563875.00	4226375.00	RISK	9.22
1,290	563875.00	4226400.00	RISK	9.24
1,291	563875.00	4226425.00	RISK	9.38
1,292	563875.00	4226450.00	RISK	9.69
1,293	563875.00	4226475.00	RISK	9.91
1,294	563875.00	4226500.00	RISK	10.35
1,295	563875.00	4226525.00	RISK	10.74
1,296	563875.00	4226550.00	RISK	11.29
1,297	563875.00	4226575.00	RISK	11.70
1,298	563875.00	4226600.00	RISK	12.17
1,299	563875.00	4226625.00	RISK	12.29
1,300	563875.00	4226650.00	RISK	12.55
1,301	563875.00	4226675.00	RISK	12.67
1,302	563875.00	4226700.00	RISK	12.87
1,303	563875.00	4226725.00	RISK	12.94
1,304	563875.00	4226750.00	RISK	13.00
1,305	563875.00	4226775.00	RISK	12.93
1,306	563875.00	4226800.00	RISK	12.89
1,307	563875.00	4226825.00	RISK	12.77
1,308	563875.00	4226850.00	RISK	12.95
1,309	563875.00	4226875.00	RISK	13.25
1,310	563875.00	4226900.00	RISK	13.89
1,311	563875.00	4226925.00	RISK	14.81
1,312	563875.00	4226950.00	RISK	16.36
1,313	563875.00	4226975.00	RISK	15.75
1,314	563875.00	4227000.00	RISK	15.71
1,315	563875.00	4227025.00	RISK	15.69
1,316	563875.00	4227050.00	RISK	15.67
1,317	563900.00	4226300.00	RISK	9.56
1,318	563900.00	4226325.00	RISK	9.51
1,319	563900.00	4226350.00	RISK	9.64
1,320	563900.00	4226375.00	RISK	9.84
1,321	563900.00	4226400.00	RISK	9.95
1,322	563900.00	4226425.00	RISK	9.94

1,323	563900.00	4226450.00	RISK	10.35
1,324	563900.00	4226475.00	RISK	10.68
1,325	563900.00	4226500.00	RISK	10.91
1,326	563900.00	4226525.00	RISK	11.28
1,327	563900.00	4226550.00	RISK	11.71
1,328	563900.00	4226575.00	RISK	12.12
1,329	563900.00	4226600.00	RISK	12.53
1,330	563900.00	4226625.00	RISK	13.00
1,331	563900.00	4226650.00	RISK	13.30
1,332	563900.00	4226675.00	RISK	13.54
1,333	563900.00	4226700.00	RISK	13.79
1,334	563900.00	4226725.00	RISK	13.90
1,335	563900.00	4226750.00	RISK	14.06
1,336	563900.00	4226775.00	RISK	14.03
1,337	563900.00	4226800.00	RISK	13.92
1,338	563900.00	4226825.00	RISK	13.81
1,339	563900.00	4226850.00	RISK	14.06
1,340	563900.00	4226875.00	RISK	14.37
1,341	563900.00	4226900.00	RISK	14.88
1,342	563900.00	4226925.00	RISK	15.71
1,343	563900.00	4226950.00	RISK	16.32
1,344	563900.00	4226975.00	RISK	16.15
1,345	563900.00	4227000.00	RISK	15.98
1,346	563900.00	4227025.00	RISK	15.91
1,347	563900.00	4227050.00	RISK	15.90
1,348	563925.00	4226300.00	RISK	10.09
1,349	563925.00	4226325.00	RISK	10.11
1,350	563925.00	4226350.00	RISK	10.20
1,351	563925.00	4226375.00	RISK	10.40
1,352	563925.00	4226400.00	RISK	10.39
1,353	563925.00	4226425.00	RISK	10.54
1,354	563925.00	4226450.00	RISK	10.84
1,355	563925.00	4226475.00	RISK	11.23
1,356	563925.00	4226500.00	RISK	11.48
1,357	563925.00	4226525.00	RISK	11.72
1,358	563925.00	4226550.00	RISK	11.95
1,359	563925.00	4226575.00	RISK	12.47
1,360	563925.00	4226600.00	RISK	13.07

1,361	563925.00	4226625.00	RISK	13.77
1,362	563925.00	4226650.00	RISK	14.17
1,363	563925.00	4226675.00	RISK	14.52
1,364	563925.00	4226700.00	RISK	14.85
1,365	563925.00	4226725.00	RISK	15.05
1,366	563925.00	4226750.00	RISK	15.33
1,367	563925.00	4226775.00	RISK	15.40
1,368	563925.00	4226800.00	RISK	15.37
1,369	563925.00	4226825.00	RISK	15.34
1,370	563925.00	4226850.00	RISK	15.67
1,371	563925.00	4226875.00	RISK	16.00
1,372	563925.00	4226900.00	RISK	16.60
1,373	563925.00	4226925.00	RISK	17.03
1,374	563925.00	4226950.00	RISK	16.45
1,375	563925.00	4226975.00	RISK	16.36
1,376	563925.00	4227000.00	RISK	16.18
1,377	563925.00	4227025.00	RISK	16.14
1,378	563925.00	4227050.00	RISK	16.13
1,379	563950.00	4226300.00	RISK	10.78
1,380	563950.00	4226325.00	RISK	10.72
1,381	563950.00	4226350.00	RISK	10.84
1,382	563950.00	4226375.00	RISK	11.09
1,383	563950.00	4226400.00	RISK	11.15
1,384	563950.00	4226425.00	RISK	11.32
1,385	563950.00	4226450.00	RISK	11.64
1,386	563950.00	4226475.00	RISK	12.00
1,387	563950.00	4226500.00	RISK	12.27
1,388	563950.00	4226525.00	RISK	12.46
1,389	563950.00	4226550.00	RISK	12.80
1,390	563950.00	4226575.00	RISK	13.20
1,391	563950.00	4226600.00	RISK	13.82
1,392	563950.00	4226625.00	RISK	14.53
1,393	563950.00	4226650.00	RISK	15.15
1,394	563950.00	4226675.00	RISK	15.76
1,395	563950.00	4226700.00	RISK	16.10
1,396	563950.00	4226725.00	RISK	16.49
1,397	563950.00	4226750.00	RISK	16.85
1,398	563950.00	4226775.00	RISK	17.01

1,399	563950.00	4226800.00	RISK	16.96
1,400	563950.00	4226825.00	RISK	17.06
1,401	563950.00	4226850.00	RISK	17.50
1,402	563950.00	4226875.00	RISK	18.24
1,403	563950.00	4226900.00	RISK	18.84
1,404	563950.00	4226925.00	RISK	18.58
1,405	563950.00	4226950.00	RISK	16.44
1,406	563950.00	4226975.00	RISK	16.52
1,407	563950.00	4227000.00	RISK	16.37
1,408	563950.00	4227025.00	RISK	16.37
1,409	563950.00	4227050.00	RISK	16.34
1,410	563975.00	4226300.00	RISK	11.58
1,411	563975.00	4226325.00	RISK	11.48
1,412	563975.00	4226350.00	RISK	11.54
1,413	563975.00	4226375.00	RISK	11.73
1,414	563975.00	4226400.00	RISK	11.78
1,415	563975.00	4226425.00	RISK	12.17
1,416	563975.00	4226450.00	RISK	12.47
1,417	563975.00	4226475.00	RISK	12.91
1,418	563975.00	4226500.00	RISK	13.26
1,419	563975.00	4226525.00	RISK	13.50
1,420	563975.00	4226550.00	RISK	13.95
1,421	563975.00	4226575.00	RISK	14.39
1,422	563975.00	4226600.00	RISK	14.97
1,423	563975.00	4226625.00	RISK	15.58
1,424	563975.00	4226650.00	RISK	16.33
1,425	563975.00	4226675.00	RISK	17.05
1,426	563975.00	4226700.00	RISK	17.54
1,427	563975.00	4226725.00	RISK	17.89
1,428	563975.00	4226750.00	RISK	18.35
1,429	563975.00	4226775.00	RISK	18.57
1,430	563975.00	4226800.00	RISK	18.81
1,431	563975.00	4226825.00	RISK	19.13
1,432	563975.00	4226850.00	RISK	19.52
1,433	563975.00	4226875.00	RISK	20.22
1,434	563975.00	4226900.00	RISK	20.72
1,435	563975.00	4226925.00	RISK	20.27
1,436	563975.00	4226950.00	RISK	16.54

1,437	563975.00	4226975.00	RISK	16.57
1,438	563975.00	4227000.00	RISK	16.60
1,439	563975.00	4227025.00	RISK	16.60
1,440	563975.00	4227050.00	RISK	16.53
1,441	563225.00	4227141.50	RISK	5.48
1,442	563225.00	4227233.50	RISK	5.45
1,443	563225.00	4227325.00	RISK	6.21
1,444	563225.00	4227416.50	RISK	3.90
1,445	563225.00	4227508.50	RISK	6.20
1,446	563225.00	4227600.00	RISK	7.02
1,447	563225.00	4227691.50	RISK	7.90
1,448	563225.00	4227783.50	RISK	9.93
1,449	563225.00	4227875.00	RISK	9.57
1,450	563323.44	4227141.50	RISK	5.46
1,451	563323.44	4227233.50	RISK	5.41
1,452	563323.44	4227325.00	RISK	6.09
1,453	563323.44	4227416.50	RISK	5.93
1,454	563323.44	4227508.50	RISK	6.86
1,455	563323.44	4227600.00	RISK	7.01
1,456	563323.44	4227691.50	RISK	8.03
1,457	563323.44	4227783.50	RISK	9.78
1,458	563323.44	4227875.00	RISK	9.50
1,459	563421.88	4227141.50	RISK	7.80
1,460	563421.88	4227233.50	RISK	8.05
1,461	563421.88	4227325.00	RISK	7.89
1,462	563421.88	4227416.50	RISK	7.97
1,463	563421.88	4227508.50	RISK	6.60
1,464	563421.88	4227600.00	RISK	7.43
1,465	563421.88	4227691.50	RISK	8.32
1,466	563421.88	4227783.50	RISK	9.57
1,467	563421.88	4227875.00	RISK	9.38
1,468	563520.31	4227141.50	RISK	8.75
1,469	563520.31	4227233.50	RISK	8.48
1,470	563520.31	4227325.00	RISK	8.59
1,471	563520.31	4227416.50	RISK	8.96
1,472	563520.31	4227508.50	RISK	8.48
1,473	563520.31	4227600.00	RISK	8.07
1,474	563520.31	4227691.50	RISK	8.76

1,475	563520.31	4227783.50	RISK	10.32
1,476	563520.31	4227875.00	RISK	9.58
1,477	563618.75	4227141.50	RISK	7.15
1,478	563618.75	4227233.50	RISK	5.79
1,479	563618.75	4227325.00	RISK	8.06
1,480	563618.75	4227416.50	RISK	8.71
1,481	563618.75	4227508.50	RISK	8.73
1,482	563618.75	4227600.00	RISK	8.06
1,483	563618.75	4227691.50	RISK	8.44
1,484	563618.75	4227783.50	RISK	10.25
1,485	563618.75	4227875.00	RISK	9.57
1,486	563717.19	4227141.50	RISK	9.38
1,487	563717.19	4227233.50	RISK	9.80
1,488	563717.19	4227325.00	RISK	9.90
1,489	563717.19	4227416.50	RISK	8.78
1,490	563717.19	4227508.50	RISK	9.33
1,491	563717.19	4227600.00	RISK	9.86
1,492	563717.19	4227691.50	RISK	10.08
1,493	563717.19	4227783.50	RISK	9.85
1,494	563717.19	4227875.00	RISK	10.28
1,495	563815.63	4227141.50	RISK	13.05
1,496	563815.63	4227233.50	RISK	12.66
1,497	563815.63	4227325.00	RISK	9.82
1,498	563815.63	4227416.50	RISK	10.18
1,499	563815.63	4227508.50	RISK	9.75
1,500	563815.63	4227600.00	RISK	9.22
1,501	563815.63	4227691.50	RISK	9.78
1,502	563815.63	4227783.50	RISK	10.22
1,503	563815.63	4227875.00	RISK	10.08
1,504	563914.06	4227141.50	RISK	15.93
1,505	563914.06	4227233.50	RISK	16.56
1,506	563914.06	4227325.00	RISK	9.73
1,507	563914.06	4227416.50	RISK	10.16
1,508	563914.06	4227508.50	RISK	10.30
1,509	563914.06	4227600.00	RISK	10.75
1,510	563914.06	4227691.50	RISK	10.58
1,511	563914.06	4227783.50	RISK	10.21
1,512	563914.06	4227875.00	RISK	10.17

1,513	564012.50	4227141.50	RISK	27.97
1,514	564012.50	4227233.50	RISK	26.70
1,515	564012.50	4227325.00	RISK	17.27
1,516	564012.50	4227416.50	RISK	11.14
1,517	564012.50	4227508.50	RISK	10.33
1,518	564012.50	4227600.00	RISK	11.62
1,519	564012.50	4227691.50	RISK	10.69
1,520	564012.50	4227783.50	RISK	10.55
1,521	564012.50	4227875.00	RISK	10.88
1,522	564110.94	4227141.50	RISK	27.68
1,523	564110.94	4227233.50	RISK	26.86
1,524	564110.94	4227325.00	RISK	18.56
1,525	564110.94	4227416.50	RISK	10.12
1,526	564110.94	4227508.50	RISK	10.35
1,527	564110.94	4227600.00	RISK	10.93
1,528	564110.94	4227691.50	RISK	11.26
1,529	564110.94	4227783.50	RISK	10.95
1,530	564110.94	4227875.00	RISK	11.14
1,531	564209.38	4227141.50	RISK	27.35
1,532	564209.38	4227233.50	RISK	26.67
1,533	564209.38	4227325.00	RISK	14.78
1,534	564209.38	4227416.50	RISK	11.80
1,535	564209.38	4227508.50	RISK	11.73
1,536	564209.38	4227600.00	RISK	10.97
1,537	564209.38	4227691.50	RISK	11.65
1,538	564209.38	4227783.50	RISK	11.39
1,539	564209.38	4227875.00	RISK	11.84
1,540	564307.81	4227141.50	RISK	25.63
1,541	564307.81	4227233.50	RISK	24.45
1,542	564307.81	4227325.00	RISK	13.12
1,543	564307.81	4227416.50	RISK	11.67
1,544	564307.81	4227508.50	RISK	11.51
1,545	564307.81	4227600.00	RISK	11.82
1,546	564307.81	4227691.50	RISK	12.19
1,547	564307.81	4227783.50	RISK	12.01
1,548	564307.81	4227875.00	RISK	12.51
1,549	564406.25	4227141.50	RISK	24.89
1,550	564406.25	4227233.50	RISK	25.47

1,551	564406.25	4227325.00	RISK	13.00
1,552	564406.25	4227416.50	RISK	11.30
1,553	564406.25	4227508.50	RISK	12.26
1,554	564406.25	4227600.00	RISK	12.28
1,555	564406.25	4227691.50	RISK	12.51
1,556	564406.25	4227783.50	RISK	13.81
1,557	564406.25	4227875.00	RISK	13.40
1,558	564504.69	4227141.50	RISK	24.68
1,559	564504.69	4227233.50	RISK	24.45
1,560	564504.69	4227325.00	RISK	19.11
1,561	564504.69	4227416.50	RISK	12.86
1,562	564504.69	4227508.50	RISK	12.71
1,563	564504.69	4227600.00	RISK	13.05
1,564	564504.69	4227691.50	RISK	13.80
1,565	564504.69	4227783.50	RISK	12.92
1,566	564504.69	4227875.00	RISK	12.70
1,567	564603.13	4227141.50	RISK	20.97
1,568	564603.13	4227233.50	RISK	18.38
1,569	564603.13	4227325.00	RISK	13.87
1,570	564603.13	4227416.50	RISK	13.97
1,571	564603.13	4227508.50	RISK	15.16
1,572	564603.13	4227600.00	RISK	15.07
1,573	564603.13	4227691.50	RISK	15.35
1,574	564603.13	4227783.50	RISK	14.75
1,575	564603.13	4227875.00	RISK	15.33
1,576	564701.56	4227141.50	RISK	20.03
1,577	564701.56	4227233.50	RISK	14.56
1,578	564701.56	4227325.00	RISK	14.24
1,579	564701.56	4227416.50	RISK	16.25
1,580	564701.56	4227508.50	RISK	16.25
1,581	564701.56	4227600.00	RISK	15.47
1,582	564701.56	4227691.50	RISK	16.06
1,583	564701.56	4227783.50	RISK	15.90
1,584	564701.56	4227875.00	RISK	16.00
1,585	564800.00	4227141.50	RISK	15.40
1,586	564800.00	4227233.50	RISK	15.76
1,587	564800.00	4227325.00	RISK	15.69
1,588	564800.00	4227416.50	RISK	16.69

1,589	564800.00	4227508.50	RISK	15.52
1,590	564800.00	4227600.00	RISK	15.13
1,591	564800.00	4227691.50	RISK	16.08
1,592	564800.00	4227783.50	RISK	16.59
1,593	564800.00	4227875.00	RISK	17.39
1,594	564066.69	4227050.00	RISK	32.47
1,595	564066.69	4226951.50	RISK	34.47
1,596	564066.69	4226853.00	RISK	32.29
1,597	564066.69	4226754.50	RISK	24.68
1,598	564066.69	4226656.00	RISK	23.30
1,599	564066.69	4226558.00	RISK	20.95
1,600	564066.69	4226459.50	RISK	17.38
1,601	564066.69	4226361.00	RISK	15.27
1,602	564066.69	4226262.50	RISK	14.07
1,603	564066.69	4226164.00	RISK	12.24
1,604	564066.69	4226065.50	RISK	11.77
1,605	564066.69	4225967.00	RISK	9.65
1,606	564066.69	4225869.00	RISK	6.49
1,607	564066.69	4225770.50	RISK	6.32
1,608	564066.69	4225672.00	RISK	4.87
1,609	564066.69	4225573.50	RISK	5.21
1,610	564066.69	4225475.00	RISK	5.35
1,611	564158.31	4227050.00	RISK	36.42
1,612	564158.31	4226951.50	RISK	49.54
1,613	564158.31	4226853.00	RISK	46.16
1,614	564158.31	4226754.50	RISK	25.77
1,615	564158.31	4226656.00	RISK	23.81
1,616	564158.31	4226558.00	RISK	19.18
1,617	564158.31	4226459.50	RISK	17.12
1,618	564158.31	4226361.00	RISK	15.82
1,619	564158.31	4226262.50	RISK	14.32
1,620	564158.31	4226164.00	RISK	13.71
1,621	564158.31	4226065.50	RISK	15.22
1,622	564158.31	4225967.00	RISK	12.56
1,623	564158.31	4225869.00	RISK	9.33
1,624	564158.31	4225770.50	RISK	8.54
1,625	564158.31	4225672.00	RISK	7.85
1,626	564158.31	4225573.50	RISK	5.96

1,627	564158.31	4225475.00	RISK	5.99
1,628	564250.00	4227050.00	RISK	39.52
1,629	564250.00	4226951.50	RISK	49.51
1,630	564250.00	4226853.00	RISK	55.41
1,631	564250.00	4226754.50	RISK	49.73
1,632	564250.00	4226656.00	RISK	49.55
1,633	564250.00	4226558.00	RISK	48.03
1,634	564250.00	4226459.50	RISK	27.24
1,635	564250.00	4226361.00	RISK	21.00
1,636	564250.00	4226262.50	RISK	15.36
1,637	564250.00	4226164.00	RISK	16.52
1,638	564250.00	4226065.50	RISK	22.55
1,639	564250.00	4225967.00	RISK	17.47
1,640	564250.00	4225869.00	RISK	16.23
1,641	564250.00	4225770.50	RISK	10.06
1,642	564250.00	4225672.00	RISK	9.55
1,643	564250.00	4225573.50	RISK	8.66
1,644	564250.00	4225475.00	RISK	7.07
1,645	564341.69	4227050.00	RISK	35.16
1,646	564341.69	4226951.50	RISK	51.34
1,647	564341.69	4226853.00	RISK	65.81
1,648	564341.69	4226754.50	RISK	66.00
1,649	564341.69	4226656.00	RISK	57.99
1,650	564341.69	4226558.00	RISK	67.49
1,651	564341.69	4226459.50	RISK	47.14
1,652	564341.69	4226361.00	RISK	28.16
1,653	564341.69	4226262.50	RISK	21.58
1,654	564341.69	4226164.00	RISK	19.86
1,655	564341.69	4226065.50	RISK	28.79
1,656	564341.69	4225967.00	RISK	23.81
1,657	564341.69	4225869.00	RISK	24.32
1,658	564341.69	4225770.50	RISK	16.11
1,659	564341.69	4225672.00	RISK	11.38
1,660	564341.69	4225573.50	RISK	9.60
1,661	564341.69	4225475.00	RISK	7.90
1,662	564433.31	4227050.00	RISK	24.52
1,663	564433.31	4226951.50	RISK	40.93
1,664	564433.31	4226853.00	RISK	65.75

1,665	564433.31	4226754.50	RISK	72.81
1,666	564433.31	4226656.00	RISK	75.95
1,667	564433.31	4226558.00	RISK	78.75
1,668	564433.31	4226459.50	RISK	61.55
1,669	564433.31	4226361.00	RISK	54.16
1,670	564433.31	4226262.50	RISK	31.01
1,671	564433.31	4226164.00	RISK	22.84
1,672	564433.31	4226065.50	RISK	35.12
1,673	564433.31	4225967.00	RISK	34.48
1,674	564433.31	4225869.00	RISK	33.32
1,675	564433.31	4225770.50	RISK	21.54
1,676	564433.31	4225672.00	RISK	14.37
1,677	564433.31	4225573.50	RISK	10.03
1,678	564433.31	4225475.00	RISK	8.08
1,679	564525.00	4227050.00	RISK	24.39
1,680	564525.00	4226951.50	RISK	30.28
1,681	564525.00	4226853.00	RISK	48.94
1,682	564525.00	4226754.50	RISK	67.67
1,683	564525.00	4226656.00	RISK	72.65
1,684	564525.00	4226558.00	RISK	74.44
1,685	564525.00	4226459.50	RISK	74.07
1,686	564525.00	4226361.00	RISK	57.63
1,687	564525.00	4226262.50	RISK	39.85
1,688	564525.00	4226164.00	RISK	27.82
1,689	564525.00	4226065.50	RISK	35.03
1,690	564525.00	4225967.00	RISK	40.62
1,691	564525.00	4225869.00	RISK	41.68
1,692	564525.00	4225770.50	RISK	26.74
1,693	564525.00	4225672.00	RISK	15.00
1,694	564525.00	4225573.50	RISK	11.11
1,695	564525.00	4225475.00	RISK	8.72
1,696	564616.69	4227050.00	RISK	23.74
1,697	564616.69	4226951.50	RISK	26.58
1,698	564616.69	4226853.00	RISK	29.88
1,699	564616.69	4226754.50	RISK	46.21
1,700	564616.69	4226656.00	RISK	61.23
1,701	564616.69	4226558.00	RISK	67.72
1,702	564616.69	4226459.50	RISK	74.21

1,703	564616.69	4226361.00	RISK	71.96
1,704	564616.69	4226262.50	RISK	57.19
1,705	564616.69	4226164.00	RISK	41.71
1,706	564616.69	4226065.50	RISK	35.27
1,707	564616.69	4225967.00	RISK	34.71
1,708	564616.69	4225869.00	RISK	37.52
1,709	564616.69	4225770.50	RISK	35.90
1,710	564616.69	4225672.00	RISK	16.19
1,711	564616.69	4225573.50	RISK	12.84
1,712	564616.69	4225475.00	RISK	10.02
1,713	564708.31	4227050.00	RISK	23.86
1,714	564708.31	4226951.50	RISK	27.52
1,715	564708.31	4226853.00	RISK	25.72
1,716	564708.31	4226754.50	RISK	30.63
1,717	564708.31	4226656.00	RISK	34.03
1,718	564708.31	4226558.00	RISK	48.75
1,719	564708.31	4226459.50	RISK	58.30
1,720	564708.31	4226361.00	RISK	62.32
1,721	564708.31	4226262.50	RISK	54.44
1,722	564708.31	4226164.00	RISK	39.26
1,723	564708.31	4226065.50	RISK	29.18
1,724	564708.31	4225967.00	RISK	29.80
1,725	564708.31	4225869.00	RISK	25.20
1,726	564708.31	4225770.50	RISK	21.36
1,727	564708.31	4225672.00	RISK	13.52
1,728	564708.31	4225573.50	RISK	11.02
1,729	564708.31	4225475.00	RISK	12.00
1,730	564800.00	4227050.00	RISK	18.50
1,731	564800.00	4226951.50	RISK	21.74
1,732	564800.00	4226853.00	RISK	23.58
1,733	564800.00	4226754.50	RISK	23.46
1,734	564800.00	4226656.00	RISK	25.56
1,735	564800.00	4226558.00	RISK	31.52
1,736	564800.00	4226459.50	RISK	37.49
1,737	564800.00	4226361.00	RISK	44.01
1,738	564800.00	4226262.50	RISK	43.05
1,739	564800.00	4226164.00	RISK	33.37
1,740	564800.00	4226065.50	RISK	26.97

1,741	564800.00	4225967.00	RISK	26.13
1,742	564800.00	4225869.00	RISK	22.29
1,743	564800.00	4225770.50	RISK	14.10
1,744	564800.00	4225672.00	RISK	22.52
1,745	564800.00	4225573.50	RISK	18.67
1,746	564800.00	4225475.00	RISK	14.53
1,747	563975.00	4226208.50	RISK	10.92
1,748	563975.00	4226116.50	RISK	10.98
1,749	563975.00	4226025.00	RISK	8.84
1,750	563975.00	4225933.50	RISK	8.29
1,751	563975.00	4225841.50	RISK	5.62
1,752	563975.00	4225750.00	RISK	4.95
1,753	563975.00	4225658.50	RISK	4.15
1,754	563975.00	4225566.50	RISK	4.60
1,755	563975.00	4225475.00	RISK	4.56
1,756	563876.56	4226208.50	RISK	9.21
1,757	563876.56	4226116.50	RISK	9.42
1,758	563876.56	4226025.00	RISK	7.67
1,759	563876.56	4225933.50	RISK	6.72
1,760	563876.56	4225841.50	RISK	5.54
1,761	563876.56	4225750.00	RISK	4.10
1,762	563876.56	4225658.50	RISK	3.80
1,763	563876.56	4225566.50	RISK	4.17
1,764	563876.56	4225475.00	RISK	3.66
1,765	563778.13	4226208.50	RISK	7.47
1,766	563778.13	4226116.50	RISK	6.75
1,767	563778.13	4226025.00	RISK	6.01
1,768	563778.13	4225933.50	RISK	5.15
1,769	563778.13	4225841.50	RISK	3.85
1,770	563778.13	4225750.00	RISK	3.46
1,771	563778.13	4225658.50	RISK	2.54
1,772	563778.13	4225566.50	RISK	1.40
1,773	563778.13	4225475.00	RISK	1.21
1,774	563679.69	4226208.50	RISK	5.79
1,775	563679.69	4226116.50	RISK	5.41
1,776	563679.69	4226025.00	RISK	4.19
1,777	563679.69	4225933.50	RISK	3.46
1,778	563679.69	4225841.50	RISK	2.73

1,779	563679.69	4225750.00	RISK	2.07
1,780	563679.69	4225658.50	RISK	2.34
1,781	563679.69	4225566.50	RISK	1.20
1,782	563679.69	4225475.00	RISK	1.20
1,783	563581.25	4226208.50	RISK	4.15
1,784	563581.25	4226116.50	RISK	3.88
1,785	563581.25	4226025.00	RISK	3.67
1,786	563581.25	4225933.50	RISK	2.37
1,787	563581.25	4225841.50	RISK	1.20
1,788	563581.25	4225750.00	RISK	1.21
1,789	563581.25	4225658.50	RISK	1.20
1,790	563581.25	4225566.50	RISK	1.20
1,791	563581.25	4225475.00	RISK	1.20
1,792	563482.81	4226208.50	RISK	3.07
1,793	563482.81	4226116.50	RISK	2.51
1,794	563482.81	4226025.00	RISK	2.60
1,795	563482.81	4225933.50	RISK	1.42
1,796	563482.81	4225841.50	RISK	1.28
1,797	563482.81	4225750.00	RISK	1.25
1,798	563482.81	4225658.50	RISK	1.20
1,799	563482.81	4225566.50	RISK	1.20
1,800	563482.81	4225475.00	RISK	1.20
1,801	563384.38	4226208.50	RISK	2.69
1,802	563384.38	4226116.50	RISK	1.89
1,803	563384.38	4226025.00	RISK	1.29
1,804	563384.38	4225933.50	RISK	1.29
1,805	563384.38	4225841.50	RISK	1.29
1,806	563384.38	4225750.00	RISK	1.25
1,807	563384.38	4225658.50	RISK	1.21
1,808	563384.38	4225566.50	RISK	1.20
1,809	563384.38	4225475.00	RISK	1.20
1,810	563285.94	4226208.50	RISK	1.83
1,811	563285.94	4226116.50	RISK	1.82
1,812	563285.94	4226025.00	RISK	1.29
1,813	563285.94	4225933.50	RISK	1.29
1,814	563285.94	4225841.50	RISK	1.29
1,815	563285.94	4225750.00	RISK	1.26
1,816	563285.94	4225658.50	RISK	1.21

1,817	563285.94	4225566.50	RISK	1.20
1,818	563285.94	4225475.00	RISK	1.20
1,819	563187.50	4226208.50	RISK	1.40
1,820	563187.50	4226116.50	RISK	3.49
1,821	563187.50	4226025.00	RISK	2.27
1,822	563187.50	4225933.50	RISK	1.29
1,823	563187.50	4225841.50	RISK	1.29
1,824	563187.50	4225750.00	RISK	1.25
1,825	563187.50	4225658.50	RISK	1.22
1,826	563187.50	4225566.50	RISK	1.20
1,827	563187.50	4225475.00	RISK	1.20
1,828	563089.06	4226208.50	RISK	1.40
1,829	563089.06	4226116.50	RISK	3.58
1,830	563089.06	4226025.00	RISK	12.27
1,831	563089.06	4225933.50	RISK	11.73
1,832	563089.06	4225841.50	RISK	10.84
1,833	563089.06	4225750.00	RISK	10.68
1,834	563089.06	4225658.50	RISK	9.07
1,835	563089.06	4225566.50	RISK	9.75
1,836	563089.06	4225475.00	RISK	8.78
1,837	562990.63	4226208.50	RISK	1.40
1,838	562990.63	4226116.50	RISK	3.34
1,839	562990.63	4226025.00	RISK	13.84
1,840	562990.63	4225933.50	RISK	14.12
1,841	562990.63	4225841.50	RISK	13.72
1,842	562990.63	4225750.00	RISK	11.99
1,843	562990.63	4225658.50	RISK	12.27
1,844	562990.63	4225566.50	RISK	12.37
1,845	562990.63	4225475.00	RISK	12.72
1,846	562892.19	4226208.50	RISK	1.40
1,847	562892.19	4226116.50	RISK	2.18
1,848	562892.19	4226025.00	RISK	11.52
1,849	562892.19	4225933.50	RISK	11.31
1,850	562892.19	4225841.50	RISK	11.96
1,851	562892.19	4225750.00	RISK	13.23
1,852	562892.19	4225658.50	RISK	13.99
1,853	562892.19	4225566.50	RISK	13.96
1,854	562892.19	4225475.00	RISK	12.75

1,855	562793.75	4226208.50	RISK	1.40
1,856	562793.75	4226116.50	RISK	1.86
1,857	562793.75	4226025.00	RISK	2.58
1,858	562793.75	4225933.50	RISK	3.20
1,859	562793.75	4225841.50	RISK	5.32
1,860	562793.75	4225750.00	RISK	6.85
1,861	562793.75	4225658.50	RISK	10.89
1,862	562793.75	4225566.50	RISK	12.86
1,863	562793.75	4225475.00	RISK	11.33
1,864	562695.31	4226208.50	RISK	1.10
1,865	562695.31	4226116.50	RISK	1.53
1,866	562695.31	4226025.00	RISK	2.56
1,867	562695.31	4225933.50	RISK	1.59
1,868	562695.31	4225841.50	RISK	1.59
1,869	562695.31	4225750.00	RISK	1.68
1,870	562695.31	4225658.50	RISK	2.18
1,871	562695.31	4225566.50	RISK	6.44
1,872	562695.31	4225475.00	RISK	6.55
1,873	562596.88	4226208.50	RISK	1.10
1,874	562596.88	4226116.50	RISK	1.10
1,875	562596.88	4226025.00	RISK	1.32
1,876	562596.88	4225933.50	RISK	1.59
1,877	562596.88	4225841.50	RISK	1.59
1,878	562596.88	4225750.00	RISK	1.59
1,879	562596.88	4225658.50	RISK	1.96
1,880	562596.88	4225566.50	RISK	3.17
1,881	562596.88	4225475.00	RISK	0.90
1,882	562498.44	4226208.50	RISK	1.10
1,883	562498.44	4226116.50	RISK	1.10
1,884	562498.44	4226025.00	RISK	1.15
1,885	562498.44	4225933.50	RISK	1.09
1,886	562498.44	4225841.50	RISK	1.59
1,887	562498.44	4225750.00	RISK	2.66
1,888	562498.44	4225658.50	RISK	0.90
1,889	562498.44	4225566.50	RISK	0.90
1,890	562498.44	4225475.00	RISK	0.90
1,891	562400.00	4226208.50	RISK	1.10
1,892	562400.00	4226116.50	RISK	1.10

1,893	562400.00	4226025.00	RISK	1.10
1,894	562400.00	4225933.50	RISK	0.94
1,895	562400.00	4225841.50	RISK	1.37
1,896	562400.00	4225750.00	RISK	0.90
1,897	562400.00	4225658.50	RISK	0.90
1,898	562400.00	4225566.50	RISK	0.90
1,899	562400.00	4225475.00	RISK	0.90
1,900	563133.31	4226300.00	RISK	1.40
1,901	563133.31	4226398.50	RISK	1.40
1,902	563133.31	4226497.00	RISK	3.46
1,903	563133.31	4226595.50	RISK	4.10
1,904	563133.31	4226694.00	RISK	4.86
1,905	563133.31	4226792.00	RISK	5.38
1,906	563133.31	4226890.50	RISK	5.46
1,907	563133.31	4226989.00	RISK	5.45
1,908	563133.31	4227087.50	RISK	2.75
1,909	563133.31	4227186.00	RISK	3.75
1,910	563133.31	4227284.50	RISK	4.62
1,911	563133.31	4227383.00	RISK	4.28
1,912	563133.31	4227481.00	RISK	5.36
1,913	563133.31	4227579.50	RISK	6.98
1,914	563133.31	4227678.00	RISK	8.79
1,915	563133.31	4227776.50	RISK	9.63
1,916	563133.31	4227875.00	RISK	11.05
1,917	563041.69	4226300.00	RISK	1.40
1,918	563041.69	4226398.50	RISK	1.40
1,919	563041.69	4226497.00	RISK	3.77
1,920	563041.69	4226595.50	RISK	3.40
1,921	563041.69	4226694.00	RISK	4.39
1,922	563041.69	4226792.00	RISK	5.30
1,923	563041.69	4226890.50	RISK	3.48
1,924	563041.69	4226989.00	RISK	2.27
1,925	563041.69	4227087.50	RISK	2.95
1,926	563041.69	4227186.00	RISK	2.80
1,927	563041.69	4227284.50	RISK	3.54
1,928	563041.69	4227383.00	RISK	6.00
1,929	563041.69	4227481.00	RISK	7.40
1,930	563041.69	4227579.50	RISK	7.67

1,931	563041.69	4227678.00	RISK	9.19
1,932	563041.69	4227776.50	RISK	11.73
1,933	563041.69	4227875.00	RISK	14.32
1,934	562950.00	4226300.00	RISK	1.40
1,935	562950.00	4226398.50	RISK	2.58
1,936	562950.00	4226497.00	RISK	3.30
1,937	562950.00	4226595.50	RISK	3.39
1,938	562950.00	4226694.00	RISK	5.05
1,939	562950.00	4226792.00	RISK	1.52
1,940	562950.00	4226890.50	RISK	1.71
1,941	562950.00	4226989.00	RISK	3.30
1,942	562950.00	4227087.50	RISK	3.64
1,943	562950.00	4227186.00	RISK	4.73
1,944	562950.00	4227284.50	RISK	6.78
1,945	562950.00	4227383.00	RISK	9.18
1,946	562950.00	4227481.00	RISK	7.50
1,947	562950.00	4227579.50	RISK	6.89
1,948	562950.00	4227678.00	RISK	8.53
1,949	562950.00	4227776.50	RISK	10.52
1,950	562950.00	4227875.00	RISK	11.40
1,951	562858.31	4226300.00	RISK	1.45
1,952	562858.31	4226398.50	RISK	1.98
1,953	562858.31	4226497.00	RISK	2.83
1,954	562858.31	4226595.50	RISK	2.29
1,955	562858.31	4226694.00	RISK	2.52
1,956	562858.31	4226792.00	RISK	1.09
1,957	562858.31	4226890.50	RISK	2.52
1,958	562858.31	4226989.00	RISK	3.65
1,959	562858.31	4227087.50	RISK	3.90
1,960	562858.31	4227186.00	RISK	5.12
1,961	562858.31	4227284.50	RISK	6.76
1,962	562858.31	4227383.00	RISK	7.13
1,963	562858.31	4227481.00	RISK	7.18
1,964	562858.31	4227579.50	RISK	5.51
1,965	562858.31	4227678.00	RISK	7.67
1,966	562858.31	4227776.50	RISK	8.47
1,967	562858.31	4227875.00	RISK	9.10
1,968	562766.69	4226300.00	RISK	2.38

1,969	562766.69	4226398.50	RISK	1.10
1,970	562766.69	4226497.00	RISK	1.10
1,971	562766.69	4226595.50	RISK	1.10
1,972	562766.69	4226694.00	RISK	1.10
1,973	562766.69	4226792.00	RISK	1.03
1,974	562766.69	4226890.50	RISK	2.26
1,975	562766.69	4226989.00	RISK	3.19
1,976	562766.69	4227087.50	RISK	3.55
1,977	562766.69	4227186.00	RISK	4.68
1,978	562766.69	4227284.50	RISK	5.29
1,979	562766.69	4227383.00	RISK	5.46
1,980	562766.69	4227481.00	RISK	4.62
1,981	562766.69	4227579.50	RISK	3.74
1,982	562766.69	4227678.00	RISK	4.61
1,983	562766.69	4227776.50	RISK	6.72
1,984	562766.69	4227875.00	RISK	7.91
1,985	562675.00	4226300.00	RISK	1.10
1,986	562675.00	4226398.50	RISK	1.10
1,987	562675.00	4226497.00	RISK	1.10
1,988	562675.00	4226595.50	RISK	1.10
1,989	562675.00	4226694.00	RISK	1.10
1,990	562675.00	4226792.00	RISK	1.10
1,991	562675.00	4226890.50	RISK	1.67
1,992	562675.00	4226989.00	RISK	2.12
1,993	562675.00	4227087.50	RISK	3.19
1,994	562675.00	4227186.00	RISK	3.95
1,995	562675.00	4227284.50	RISK	3.20
1,996	562675.00	4227383.00	RISK	3.19
1,997	562675.00	4227481.00	RISK	2.47
1,998	562675.00	4227579.50	RISK	3.51
1,999	562675.00	4227678.00	RISK	7.44
2,000	562675.00	4227776.50	RISK	9.65
2,001	562675.00	4227875.00	RISK	9.69
2,002	562583.31	4226300.00	RISK	1.10
2,003	562583.31	4226398.50	RISK	1.10
2,004	562583.31	4226497.00	RISK	1.10
2,005	562583.31	4226595.50	RISK	1.10
2,006	562583.31	4226694.00	RISK	1.10

2,007	562583.31	4226792.00	RISK	1.10
2,008	562583.31	4226890.50	RISK	1.11
2,009	562583.31	4226989.00	RISK	1.60
2,010	562583.31	4227087.50	RISK	2.36
2,011	562583.31	4227186.00	RISK	3.10
2,012	562583.31	4227284.50	RISK	2.16
2,013	562583.31	4227383.00	RISK	0.81
2,014	562583.31	4227481.00	RISK	1.09
2,015	562583.31	4227579.50	RISK	2.25
2,016	562583.31	4227678.00	RISK	4.15
2,017	562583.31	4227776.50	RISK	4.17
2,018	562583.31	4227875.00	RISK	4.67
2,019	562491.69	4226300.00	RISK	1.10
2,020	562491.69	4226398.50	RISK	1.10
2,021	562491.69	4226497.00	RISK	1.10
2,022	562491.69	4226595.50	RISK	1.10
2,023	562491.69	4226694.00	RISK	1.10
2,024	562491.69	4226792.00	RISK	1.10
2,025	562491.69	4226890.50	RISK	1.10
2,026	562491.69	4226989.00	RISK	1.17
2,027	562491.69	4227087.50	RISK	1.54
2,028	562491.69	4227186.00	RISK	1.79
2,029	562491.69	4227284.50	RISK	0.96
2,030	562491.69	4227383.00	RISK	0.97
2,031	562491.69	4227481.00	RISK	1.09
2,032	562491.69	4227579.50	RISK	1.27
2,033	562491.69	4227678.00	RISK	2.10
2,034	562491.69	4227776.50	RISK	2.25
2,035	562491.69	4227875.00	RISK	2.93
2,036	562400.00	4226300.00	RISK	1.10
2,037	562400.00	4226398.50	RISK	1.10
2,038	562400.00	4226497.00	RISK	1.10
2,039	562400.00	4226595.50	RISK	1.10
2,040	562400.00	4226694.00	RISK	1.10
2,041	562400.00	4226792.00	RISK	1.10
2,042	562400.00	4226890.50	RISK	1.26
2,043	562400.00	4226989.00	RISK	0.89
2,044	562400.00	4227087.50	RISK	0.85

2,045	562400.00	4227186.00	RISK	0.79	
2,046	562400.00	4227284.50	RISK	0.89	
2,047	562400.00	4227383.00	RISK	0.85	
2,048	562400.00	4227481.00	RISK	0.95	
2,049	562400.00	4227579.50	RISK	1.20	
2,050	562400.00	4227678.00	RISK	1.36	
2,051	562400.00	4227776.50	RISK	2.32	
2,052	562400.00	4227875.00	RISK	2.81	

Plant Boundary Receptors

Receptor Groups

Record Number	Group ID	Group Description
1	NESTED	Nested Grid receptors
2	RES	
3	NON-RES	
4	G	
5	FENCEPRI	Cartesian plant boundary Primary Receptors
6	FENCEINT	Cartesian plant boundary Intermediate Receptors
7	MEI	
8	RISK	Receptors generated from Risk Grid

Terrain Elevations and Flagpole Heights for Network Grids

Meteorology Pathway

Met Input Data

Surface Met Data

Filename: 56390001.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: 56390001.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 4.30 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2013			Napa County Aiport (KAPC)
Upper Air		2013			OAKLAND/WSO AP

Data Period

Data Period to Process

Start Date: 1/1/2013 Start Hour: 1 End Date: 12/31/2017 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

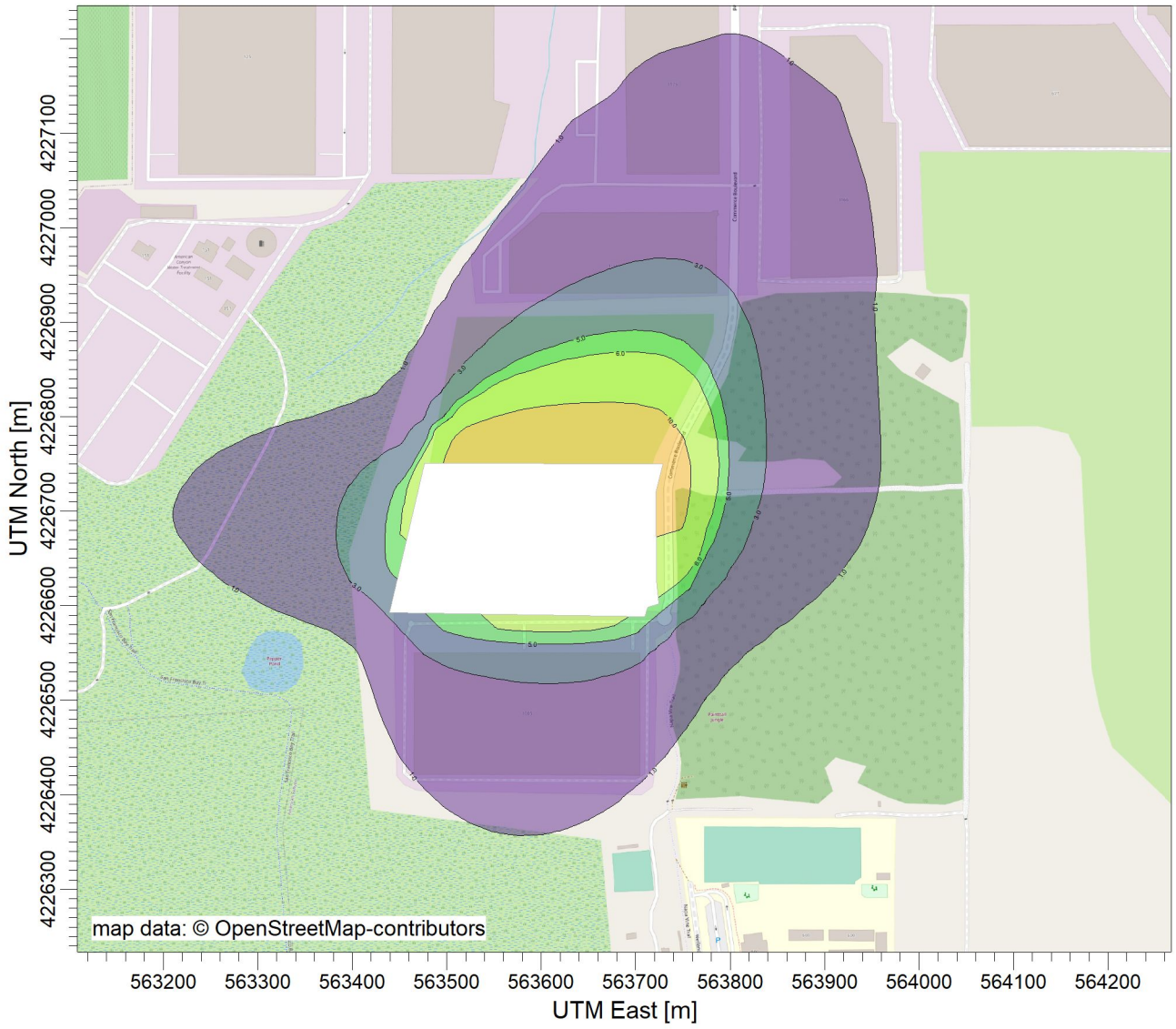
Contour Plot Files (PLOTFILE)

Path for PLOTFILES: 56390001.AD

Averaging Period	Source Group ID	High Value	File Name
Period	HAUL		PE_HAUL.PLT
Period	SITE		PE_SITE.PLT

PROJECT TITLE:

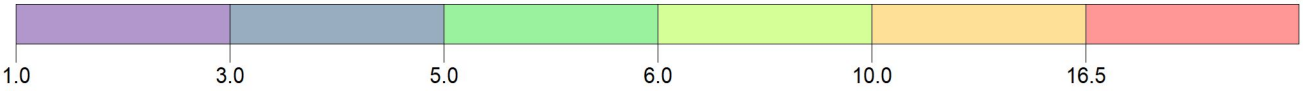
SDG Commerce 220 Diatribution Center
Construction HRA - Residential Cancer Risk (in-a-million)



PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ALL

Risk/Million

Max: 16.5 [Risk/Million] at (563625.00, 4226775.00)



COMMENTS:	SOURCES: **2**	COMPANY NAME:	
	RECEPTORS: **2052**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:7,285 — 0 — 0.2 km	
	MAX: **16.5 Risk/Million**	DATE: **11/21/2023**	PROJECT NO.:

SDG Commerce 220 Distribution Center Project

Project Construction Emissions for HRA - PM10 Exhaust (DPM)

On-Site Emissions	$PM_{2.5}$ (Exhaust) lbs
3.1 Site Preparation (2024)	16.00
3.3 Grading (2024)	30.62
3.5 Building Construction (2024)	28.80
3.7 Building Construction (2025)	61.38
3.9 Paving (2025)	6.97
3.11 Architectural Coating (2025)	0.55
Total Onsite	**144.32**

Off-Site Emissions	PM2.5 (Exhaust) lbs
Haul Trucks	**0.93**
Vendor Trucks	**4.08**
Total Offsite	**5.01**

Exhaust PM10 Inputs

Construction Year	1.00	**year**
Hours per Day	8	
Days per Week	5	
Variable Factor	**4.20**	
On-Site Emissions	**144.32**	**lbs**
	144.32	**lbs/year**
Off-Site Emissions	**0.29**	**lbs/year**

CalEEMOD Modeling	Project Trips	One-Way Travel miles	Project VMT	$PM_{2.5}$ (Exhaust) lbs per VMT
Haul Trucks	705	20.00	14100	6.61E-05
Vendor Trucks	11012	8.40	92501	4.41E-05

Off-Site AERMOD Input Adjustments

Roadway Segment	Length (Miles)	Percentage of Trips on Segment	Haul VMT w/in 1,000 ft	Vendor VMT w/in 1000 ft	PM2.5 (Exhaust) Emission Rate (pounds/year)
Commerce Court	0.54	100%	381.1	5952.6	**0.29**
				Totals	**0.29**

Add 0.25 miles of emissions to include additional idling

SDG Commerce 220 Distribution Center Project

Project Construction Emissions for HRA - PM2.5 Exhaust

On-Site Emissions	$PM_{2.5}$ (Exhaust) lbs
3.1 Site Preparation (2024)	14.72
3.3 Grading (2024)	28.17
3.5 Building Construction (2024)	26.50
3.7 Building Construction (2025)	56.47
3.9 Paving (2025)	6.41
3.11 Architectural Coating (2025)	0.50
Total Onsite	**132.77**

Off-Site Emissions	PM2.5 (Exhaust) lbs
Haul Trucks	**0.62**
Vendor Trucks	**4.08**
Total Offsite	**4.70**

Exhaust PM2.5 Inputs

Construction Year	1.00	**year**
Hours per Day	8	
Days per Week	5	
Variable Factor	**4.20**	
On-Site Emissions	**132.77**	**lbs**
	132.77	**lbs/year**
Off-Site Emissions	**0.28**	**lbs/year**

CalEEMOD Modeling	Project Trips	One-Way Travel miles	Project VMT	$PM_{2.5}$ (Exhaust) lbs per VMT
Haul Trucks	705	20.00	14100	4.41E-05
Vendor Trucks	11012	8.40	92501	4.41E-05

Off-Site AERMOD Input Adjustments

Roadway Segment	Length (Miles)	Percentage of Trips on Segment	Haul VMT w/in 1,000 ft	Vendor VMT w/in 1000 ft	PM2.5 (Exhaust) Emission Rate (pounds/year)
Commerce Court	0.54	100%	381.1	5952.6	**0.28**
				Totals	**0.28**

Add 0.25 miles of emissions to include additional idling/lower speeds

SDG 220 Commerce Distribution Center
Summary of HARP2 Results and Health Risk Calculations
Maximally Exposed Indvidual Resident

		Cancer Risk/million	Concentration (ug/m3)	NonCancer Chronic	MAX HI Acute
Maximum Risk		0.78	0.0044	0.001	0
		X	Y		
	MEIR UTM	563979	4226674	Receptor #	295

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO
295	ALL	RES	563979	4226674	0.004404852	9901	DieselExhPM	7.83E-07	1YrCancerRMP_Inh_FAH16to70
510	ALL	RES	563802.9	4226131.12	0.001335012	9901	DieselExhPM	2.37E-07	1YrCancerRMP_Inh_FAH16to70
509	ALL	RES	563803.67	4226109.49	0.001273433	9901	DieselExhPM	2.26E-07	1YrCancerRMP_Inh_FAH16to70
508	ALL	RES	563802.7	4226083.1	0.001213316	9901	DieselExhPM	2.16E-07	1YrCancerRMP_Inh_FAH16to70
546	ALL	RES	563850.79	4227763.02	0.001173436	9901	DieselExhPM	2.09E-07	1YrCancerRMP_Inh_FAH16to70
507	ALL	RES	563805.64	4226061.2	0.001154396	9901	DieselExhPM	2.05E-07	1YrCancerRMP_Inh_FAH16to70
506	ALL	RES	563808.42	4226041.13	0.001104159	9901	DieselExhPM	1.96E-07	1YrCancerRMP_Inh_FAH16to70
527	ALL	RES	563837.87	4226095.31	0.001076806	9901	DieselExhPM	1.92E-07	1YrCancerRMP_Inh_FAH16to70
539	ALL	RES	563855.58	4226119.47	0.001064504	9901	DieselExhPM	1.89E-07	1YrCancerRMP_Inh_FAH16to70
505	ALL	RES	563811.17	4226021.21	0.001057754	9901	DieselExhPM	1.88E-07	1YrCancerRMP_Inh_FAH16to70
547	ALL	RES	563813.84	4227760.66	0.001057001	9901	DieselExhPM	1.88E-07	1YrCancerRMP_Inh_FAH16to70
502	ALL	RES	563813.93	4226001.29	0.001015694	9901	DieselExhPM	1.81E-07	1YrCancerRMP_Inh_FAH16to70
522	ALL	RES	563849.81	4226066.95	0.000995093	9901	DieselExhPM	1.77E-07	1YrCancerRMP_Inh_FAH16to70
501	ALL	RES	563816.69	4225981.38	0.000975783	9901	DieselExhPM	1.74E-07	1YrCancerRMP_Inh_FAH16to70
536	ALL	RES	563888.04	4226122.35	0.000975619	9901	DieselExhPM	1.74E-07	1YrCancerRMP_Inh_FAH16to70
512	ALL	RES	563852.67	4226046.31	0.000956924	9901	DieselExhPM	1.70E-07	1YrCancerRMP_Inh_FAH16to70
500	ALL	RES	563819.45	4225961.46	0.000938288	9901	DieselExhPM	1.67E-07	1YrCancerRMP_Inh_FAH16to70
503	ALL	RES	563855.42	4226026.39	0.000922422	9901	DieselExhPM	1.64E-07	1YrCancerRMP_Inh_FAH16to70
548	ALL	RES	563781.1	4227767.76	0.000921968	9901	DieselExhPM	1.64E-07	1YrCancerRMP_Inh_FAH16to70
526	ALL	RES	563904.35	4226105.48	0.000906966	9901	DieselExhPM	1.61E-07	1YrCancerRMP_Inh_FAH16to70
498	ALL	RES	563822.2	4225941.54	0.00090356	9901	DieselExhPM	1.61E-07	1YrCancerRMP_Inh_FAH16to70
491	ALL	RES	563857.58	4226012.78	0.000899396	9901	DieselExhPM	1.60E-07	1YrCancerRMP_Inh_FAH16to70
521	ALL	RES	563895.68	4226065.83	0.000875396	9901	DieselExhPM	1.56E-07	1YrCancerRMP_Inh_FAH16to70
480	ALL	RES	563860.94	4225986.56	0.000872247	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70
497	ALL	RES	563824.96	4225921.62	0.000871225	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70

SDG 220 Commerce Distribution Center
Summary of HARP2 Results and Health Risk Calculations
Maximally Exposed Indvidual Worker (Off-Site)

		Cancer	Concentration	NonCancer	MAX HI
Maximum Risk		Risk/million	(ug/m3)	Chronic	Acute
Existing		1.0	0.093	0.019	0
		X	Y		
	MEIW UTM	563625	4226775	Receptor #	1023

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	1YR-RISK_SUM	CHRONIC HI
1023	ALL	RISK-GRID	563625	4226775	0.09254394	9901	DieselExhPM	9.62E-07	0.019
1047	ALL	RISK-GRID	563650	4226775	0.09208775	9901	DieselExhPM	9.57E-07	0.018
999	ALL	RISK-GRID	563600	4226775	0.09171558	9901	DieselExhPM	9.54E-07	0.018
1071	ALL	RISK-GRID	563675	4226775	0.09043781	9901	DieselExhPM	9.40E-07	0.018
975	ALL	RISK-GRID	563575	4226775	0.08889814	9901	DieselExhPM	9.24E-07	0.018
1095	ALL	RISK-GRID	563700	4226775	0.08722249	9901	DieselExhPM	9.07E-07	0.017
951	ALL	RISK-GRID	563550	4226775	0.08439079	9901	DieselExhPM	8.77E-07	0.017
1119	ALL	RISK-GRID	563725	4226775	0.07969124	9901	DieselExhPM	8.29E-07	0.016
927	ALL	RISK-GRID	563525	4226775	0.07457435	9901	DieselExhPM	7.75E-07	0.015
1048	ALL	RISK-GRID	563650	4226800	0.06640656	9901	DieselExhPM	6.90E-07	0.013
1072	ALL	RISK-GRID	563675	4226800	0.0661568	9901	DieselExhPM	6.88E-07	0.013
1024	ALL	RISK-GRID	563625	4226800	0.06562733	9901	DieselExhPM	6.82E-07	0.013
1096	ALL	RISK-GRID	563700	4226800	0.06483952	9901	DieselExhPM	6.74E-07	0.013
1148	ALL	RISK-GRID	563750	4226725	0.06402932	9901	DieselExhPM	6.66E-07	0.013
1000	ALL	RISK-GRID	563600	4226800	0.06400916	9901	DieselExhPM	6.66E-07	0.013
1149	ALL	RISK-GRID	563750	4226750	0.06378514	9901	DieselExhPM	6.63E-07	0.013
976	ALL	RISK-GRID	563575	4226800	0.06098784	9901	DieselExhPM	6.34E-07	0.012
1147	ALL	RISK-GRID	563750	4226700	0.06060027	9901	DieselExhPM	6.30E-07	0.012
1120	ALL	RISK-GRID	563725	4226800	0.06059632	9901	DieselExhPM	6.30E-07	0.012
1150	ALL	RISK-GRID	563750	4226775	0.05772209	9901	DieselExhPM	6.00E-07	0.012
952	ALL	RISK-GRID	563550	4226800	0.0560565	9901	DieselExhPM	5.83E-07	0.011
1146	ALL	RISK-GRID	563750	4226675	0.05439699	9901	DieselExhPM	5.66E-07	0.011
903	ALL	RISK-GRID	563500	4226775	0.05136573	9901	DieselExhPM	5.34E-07	0.010
1073	ALL	RISK-GRID	563675	4226825	0.05006251	9901	DieselExhPM	5.21E-07	0.010
1049	ALL	RISK-GRID	563650	4226825	0.04968867	9901	DieselExhPM	5.17E-07	0.010

SDG 220 Commerce Distribution Center
Summary of HARP2 Results and Health Risk Calculations
Schools within 1,000 feet

		Cancer Risk/million	Concentration (ug/m3)	NonCancer Chronic	MAX HI Acute
Maximum Risk		0.21	0.0012	0.0002	0
		X	Y		
	UTM	563877	4226209	Receptor #	1756

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO
1756	ALL	SCHOOL	563876.56	4226208.5	0.001205486	9901	DieselExhPM	2.14E-07	1YrCancerRMP_Inh_FAH16to70

** Only School within 1,000 ft is Napa Junction Elementary School, Represented by Receptor 1756

HARP Project Summary Report 11/21/2023 4:04:42 AM

PROJECT INFORMATION
HARP Version: 22118
Project Name: SDG 220
Project Output Directory: F:\Jobs\56390001\HARP\RESIDENT
HARP Database: NA

FACILITY INFORMATION
Origin
X (m):0
Y (m):0
Zone:1
No. of Sources:0
No. of Buildings:0

EMISSION INVENTORY
No. of Pollutants:2
No. of Background Pollutants:0

Emissions

ScrID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
Commerce Blvd	0	0	9901	DieselExhPM	1	0.3	0	1
Project Site	0	0	9901	DieselExhPM	1	144.3	0	1

Background

PolID	PolAbbrev	Conc (ug/m^3)	MWAF

Ground level concentration files (\glc\)

9901MAXHR.txt
9901PER.txt

POLLUTANT HEALTH INFORMATION
Health Database: C:\HARP2\Tables\HEALTH17320.mdb
Health Table Version: HEALTH22013
Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1			5		

HARP2 - HRACalc (dated 22118) 11/21/2023 4:03:11 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentCancerRisk.csv
Cancer risk total by receptor saved to: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentCancerRiskSumByRec.csv
HRA ran successfully

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	ALL		564003	4225605	0.00044	9901	DieselExhPM	7.83E-08	1YrCancerRMP_Inh_FAH16to70	*	7.83E-08
2	ALL		564234.8	4225878	0.000363	9901	DieselExhPM	6.46E-08	1YrCancerRMP_Inh_FAH16to70	*	6.46E-08
3	ALL		563950.2	4225784	0.000567	9901	DieselExhPM	1.01E-07	1YrCancerRMP_Inh_FAH16to70	*	1.01E-07
4	ALL		564471.2	4225998	0.000222	9901	DieselExhPM	3.95E-08	1YrCancerRMP_Inh_FAH16to70	*	3.95E-08
5	ALL		564028.5	4225888	0.000544	9901	DieselExhPM	9.68E-08	1YrCancerRMP_Inh_FAH16to70	*	9.68E-08
6	ALL		564072.8	4225789	0.000462	9901	DieselExhPM	8.22E-08	1YrCancerRMP_Inh_FAH16to70	*	8.22E-08
7	ALL		564333	4225909	0.000331	9901	DieselExhPM	5.89E-08	1YrCancerRMP_Inh_FAH16to70	*	5.89E-08
8	ALL		564734.1	4225544	0.000212	9901	DieselExhPM	3.76E-08	1YrCancerRMP_Inh_FAH16to70	*	3.76E-08
9	ALL		564375.3	4225648	0.00026	9901	DieselExhPM	4.62E-08	1YrCancerRMP_Inh_FAH16to70	*	4.62E-08
10	ALL		563319.6	4227454	0.000333	9901	DieselExhPM	5.92E-08	1YrCancerRMP_Inh_FAH16to70	*	5.92E-08
11	ALL		564405.5	4225726	0.000272	9901	DieselExhPM	4.84E-08	1YrCancerRMP_Inh_FAH16to70	*	4.84E-08
12	ALL		564406.9	4225753	0.000274	9901	DieselExhPM	4.88E-08	1YrCancerRMP_Inh_FAH16to70	*	4.88E-08
13	ALL		563642.9	4226248	0.003208	9901	DieselExhPM	5.70E-07	1YrCancerRMP_Inh_FAH16to70	*	5.70E-07
14	ALL		564403.5	4225776	0.000276	9901	DieselExhPM	4.91E-08	1YrCancerRMP_Inh_FAH16to70	*	4.91E-08
15	ALL		564647.6	4225612	0.00023	9901	DieselExhPM	4.10E-08	1YrCancerRMP_Inh_FAH16to70	*	4.10E-08
16	ALL		564318.8	4225771	0.0003	9901	DieselExhPM	5.33E-08	1YrCancerRMP_Inh_FAH16to70	*	5.33E-08
17	ALL		564400.6	4225801	0.000275	9901	DieselExhPM	4.89E-08	1YrCancerRMP_Inh_FAH16to70	*	4.89E-08
18	ALL		564399.8	4225824	0.000275	9901	DieselExhPM	4.90E-08	1YrCancerRMP_Inh_FAH16to70	*	4.90E-08
19	ALL		564220.7	4225999	0.000433	9901	DieselExhPM	7.71E-08	1YrCancerRMP_Inh_FAH16to70	*	7.71E-08
20	ALL		564396.8	4225861	0.000274	9901	DieselExhPM	4.87E-08	1YrCancerRMP_Inh_FAH16to70	*	4.87E-08
21	ALL		564308.2	4225814	0.000317	9901	DieselExhPM	5.64E-08	1YrCancerRMP_Inh_FAH16to70	*	5.64E-08
22	ALL		564370.6	4225652	0.000262	9901	DieselExhPM	4.66E-08	1YrCancerRMP_Inh_FAH16to70	*	4.66E-08
23	ALL		564401.9	4225843	0.000271	9901	DieselExhPM	4.82E-08	1YrCancerRMP_Inh_FAH16to70	*	4.82E-08
24	ALL		564179.4	4225995	0.00045	9901	DieselExhPM	8.00E-08	1YrCancerRMP_Inh_FAH16to70	*	8.00E-08
25	ALL		564443.9	4225890	0.000257	9901	DieselExhPM	4.57E-08	1YrCancerRMP_Inh_FAH16to70	*	4.57E-08
26	ALL		564473.4	4225843	0.000242	9901	DieselExhPM	4.31E-08	1YrCancerRMP_Inh_FAH16to70	*	4.31E-08
27	ALL		564466	4225898	0.00024	9901	DieselExhPM	4.27E-08	1YrCancerRMP_Inh_FAH16to70	*	4.27E-08
28	ALL		564497.6	4225846	0.00023	9901	DieselExhPM	4.09E-08	1YrCancerRMP_Inh_FAH16to70	*	4.09E-08
29	ALL		564487.5	4225902	0.000229	9901	DieselExhPM	4.07E-08	1YrCancerRMP_Inh_FAH16to70	*	4.07E-08
30	ALL		564373	4225665	0.000264	9901	DieselExhPM	4.69E-08	1YrCancerRMP_Inh_FAH16to70	*	4.69E-08
31	ALL		564518.7	4225849	0.000221	9901	DieselExhPM	3.93E-08	1YrCancerRMP_Inh_FAH16to70	*	3.93E-08
32	ALL		564509.6	4225905	0.000217	9901	DieselExhPM	3.86E-08	1YrCancerRMP_Inh_FAH16to70	*	3.86E-08
33	ALL		564541	4225852	0.000211	9901	DieselExhPM	3.76E-08	1YrCancerRMP_Inh_FAH16to70	*	3.76E-08
34	ALL		564532.7	4225908	0.000205	9901	DieselExhPM	3.65E-08	1YrCancerRMP_Inh_FAH16to70	*	3.65E-08
35	ALL		564298.4	4225768	0.000307	9901	DieselExhPM	5.46E-08	1YrCancerRMP_Inh_FAH16to70	*	5.46E-08
36	ALL		564635.1	4225597	0.00023	9901	DieselExhPM	4.08E-08	1YrCancerRMP_Inh_FAH16to70	*	4.08E-08
37	ALL		564745.2	4225773	0.000174	9901	DieselExhPM	3.10E-08	1YrCancerRMP_Inh_FAH16to70	*	3.10E-08
38	ALL		563353.2	4227487	0.000319	9901	DieselExhPM	5.68E-08	1YrCancerRMP_Inh_FAH16to70	*	5.68E-08
39	ALL		564563.4	4225856	0.000203	9901	DieselExhPM	3.61E-08	1YrCancerRMP_Inh_FAH16to70	*	3.61E-08
40	ALL		564556.9	4225911	0.000195	9901	DieselExhPM	3.47E-08	1YrCancerRMP_Inh_FAH16to70	*	3.47E-08
41	ALL		564584.9	4225859	0.000195	9901	DieselExhPM	3.47E-08	1YrCancerRMP_Inh_FAH16to70	*	3.47E-08
42	ALL		564578.9	4225917	0.000187	9901	DieselExhPM	3.33E-08	1YrCancerRMP_Inh_FAH16to70	*	3.33E-08
43	ALL		563634.4	4226382	0.006099	9901	DieselExhPM	1.08E-06	1YrCancerRMP_Inh_FAH16to70	*	1.08E-06
44	ALL		564217.7	4226020	0.000445	9901	DieselExhPM	7.92E-08	1YrCancerRMP_Inh_FAH16to70	*	7.92E-08
45	ALL		564393	4225878	0.000277	9901	DieselExhPM	4.93E-08	1YrCancerRMP_Inh_FAH16to70	*	4.93E-08
46	ALL		564287.9	4225811	0.000324	9901	DieselExhPM	5.77E-08	1YrCancerRMP_Inh_FAH16to70	*	5.77E-08
47	ALL		564638.5	4225880	0.000174	9901	DieselExhPM	3.10E-08	1YrCancerRMP_Inh_FAH16to70	*	3.10E-08
48	ALL		564658.1	4225902	0.000166	9901	DieselExhPM	2.96E-08	1YrCancerRMP_Inh_FAH16to70	*	2.96E-08
49	ALL		564176	4226014	0.000463	9901	DieselExhPM	8.24E-08	1YrCancerRMP_Inh_FAH16to70	*	8.24E-08
50	ALL		564648.6	4225972	0.000165	9901	DieselExhPM	2.94E-08	1YrCancerRMP_Inh_FAH16to70	*	2.94E-08
51	ALL		564691.6	4225950	0.000156	9901	DieselExhPM	2.78E-08	1YrCancerRMP_Inh_FAH16to70	*	2.78E-08
52	ALL		563637	4226485	0.012281	9901	DieselExhPM	2.18E-06	1YrCancerRMP_Inh_FAH16to70	*	2.18E-06
53	ALL		564704.5	4225969	0.000155	9901	DieselExhPM	2.76E-08	1YrCancerRMP_Inh_FAH16to70	*	2.76E-08
54	ALL		564659.3	4226002	0.000165	9901	DieselExhPM	2.93E-08	1YrCancerRMP_Inh_FAH16to70	*	2.93E-08
55	ALL		564370.3	4225681	0.000268	9901	DieselExhPM	4.77E-08	1YrCancerRMP_Inh_FAH16to70	*	4.77E-08
56	ALL		564713.5	4225987	0.000155	9901	DieselExhPM	2.76E-08	1YrCancerRMP_Inh_FAH16to70	*	2.76E-08
57	ALL		564667	4226017	0.000166	9901	DieselExhPM	2.95E-08	1YrCancerRMP_Inh_FAH16to70	*	2.95E-08
58	ALL		564715.2	4226005	0.000158	9901	DieselExhPM	2.80E-08	1YrCancerRMP_Inh_FAH16to70	*	2.80E-08
59	ALL		564675	4226034	0.000167	9901	DieselExhPM	2.97E-08	1YrCancerRMP_Inh_FAH16to70	*	2.97E-08
60	ALL		564727.5	4226025	0.000159	9901	DieselExhPM	2.83E-08	1YrCancerRMP_Inh_FAH16to70	*	2.83E-08
61	ALL		564682.5	4226052	0.000169	9901	DieselExhPM	3.01E-08	1YrCancerRMP_Inh_FAH16to70	*	3.01E-08
62	ALL		564734.9	4225793	0.000172	9901	DieselExhPM	3.06E-08	1YrCancerRMP_Inh_FAH16to70	*	3.06E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
63	ALL		564278.8	4225765	0.000316	9901	DieselExhPM	5.62E-08	1YrCancerRMP_Inh_FAH16to70	*	5.62E-08
64	ALL		564621.9	4225585	0.000228	9901	DieselExhPM	4.06E-08	1YrCancerRMP_Inh_FAH16to70	*	4.06E-08
65	ALL		564727.2	4226038	0.000162	9901	DieselExhPM	2.88E-08	1YrCancerRMP_Inh_FAH16to70	*	2.88E-08
66	ALL		564008.2	4225550	0.000418	9901	DieselExhPM	7.43E-08	1YrCancerRMP_Inh_FAH16to70	*	7.43E-08
67	ALL		564031.6	4225759	0.000481	9901	DieselExhPM	8.55E-08	1YrCancerRMP_Inh_FAH16to70	*	8.55E-08
68	ALL		563884.9	4225808	0.00066	9901	DieselExhPM	1.17E-07	1YrCancerRMP_Inh_FAH16to70	*	1.17E-07
69	ALL		564194.8	4225891	0.000382	9901	DieselExhPM	6.79E-08	1YrCancerRMP_Inh_FAH16to70	*	6.79E-08
70	ALL		564476.1	4225941	0.000231	9901	DieselExhPM	4.10E-08	1YrCancerRMP_Inh_FAH16to70	*	4.10E-08
71	ALL		564282.5	4225915	0.000346	9901	DieselExhPM	6.16E-08	1YrCancerRMP_Inh_FAH16to70	*	6.16E-08
72	ALL		563959	4225735	0.000531	9901	DieselExhPM	9.45E-08	1YrCancerRMP_Inh_FAH16to70	*	9.45E-08
73	ALL		564725.9	4225933	0.000151	9901	DieselExhPM	2.69E-08	1YrCancerRMP_Inh_FAH16to70	*	2.69E-08
74	ALL		564214.9	4226040	0.000455	9901	DieselExhPM	8.09E-08	1YrCancerRMP_Inh_FAH16to70	*	8.09E-08
75	ALL		564390.5	4225895	0.000279	9901	DieselExhPM	4.97E-08	1YrCancerRMP_Inh_FAH16to70	*	4.97E-08
76	ALL		564268.3	4225808	0.000333	9901	DieselExhPM	5.92E-08	1YrCancerRMP_Inh_FAH16to70	*	5.92E-08
77	ALL		563519.3	4227451	0.000559	9901	DieselExhPM	9.94E-08	1YrCancerRMP_Inh_FAH16to70	*	9.94E-08
78	ALL		564608.5	4225629	0.000236	9901	DieselExhPM	4.20E-08	1YrCancerRMP_Inh_FAH16to70	*	4.20E-08
79	ALL		564173.3	4226034	0.000477	9901	DieselExhPM	8.49E-08	1YrCancerRMP_Inh_FAH16to70	*	8.49E-08
80	ALL		564366.8	4225698	0.000274	9901	DieselExhPM	4.87E-08	1YrCancerRMP_Inh_FAH16to70	*	4.87E-08
81	ALL		564729.6	4225812	0.000168	9901	DieselExhPM	2.99E-08	1YrCancerRMP_Inh_FAH16to70	*	2.99E-08
82	ALL		564260	4225762	0.000326	9901	DieselExhPM	5.79E-08	1YrCancerRMP_Inh_FAH16to70	*	5.79E-08
83	ALL		564604.8	4225574	0.000226	9901	DieselExhPM	4.02E-08	1YrCancerRMP_Inh_FAH16to70	*	4.02E-08
84	ALL		564212.2	4226060	0.000463	9901	DieselExhPM	8.23E-08	1YrCancerRMP_Inh_FAH16to70	*	8.23E-08
85	ALL		564392.8	4225914	0.00028	9901	DieselExhPM	4.97E-08	1YrCancerRMP_Inh_FAH16to70	*	4.97E-08
86	ALL		564253.7	4225800	0.000338	9901	DieselExhPM	6.02E-08	1YrCancerRMP_Inh_FAH16to70	*	6.02E-08
87	ALL		564587.9	4225639	0.00024	9901	DieselExhPM	4.26E-08	1YrCancerRMP_Inh_FAH16to70	*	4.26E-08
88	ALL		564170.5	4226054	0.000491	9901	DieselExhPM	8.73E-08	1YrCancerRMP_Inh_FAH16to70	*	8.73E-08
89	ALL		563691.1	4226973	0.01568	9901	DieselExhPM	2.79E-06	1YrCancerRMP_Inh_FAH16to70	*	2.79E-06
90	ALL		564629	4225674	0.000237	9901	DieselExhPM	4.22E-08	1YrCancerRMP_Inh_FAH16to70	*	4.22E-08
91	ALL		564364.4	4225715	0.000279	9901	DieselExhPM	4.96E-08	1YrCancerRMP_Inh_FAH16to70	*	4.96E-08
92	ALL		563915.2	4227131	0.005659	9901	DieselExhPM	1.01E-06	1YrCancerRMP_Inh_FAH16to70	*	1.01E-06
93	ALL		564724.8	4225832	0.000165	9901	DieselExhPM	2.93E-08	1YrCancerRMP_Inh_FAH16to70	*	2.93E-08
94	ALL		564586.8	4225565	0.000224	9901	DieselExhPM	3.99E-08	1YrCancerRMP_Inh_FAH16to70	*	3.99E-08
95	ALL		564242.6	4225760	0.000334	9901	DieselExhPM	5.94E-08	1YrCancerRMP_Inh_FAH16to70	*	5.94E-08
96	ALL		563742.3	4227210	0.005169	9901	DieselExhPM	9.19E-07	1YrCancerRMP_Inh_FAH16to70	*	9.19E-07
97	ALL		564573.2	4225602	0.000234	9901	DieselExhPM	4.17E-08	1YrCancerRMP_Inh_FAH16to70	*	4.17E-08
98	ALL		564209.2	4226080	0.00047	9901	DieselExhPM	8.36E-08	1YrCancerRMP_Inh_FAH16to70	*	8.36E-08
99	ALL		564390.8	4225932	0.00028	9901	DieselExhPM	4.98E-08	1YrCancerRMP_Inh_FAH16to70	*	4.98E-08
100	ALL		564150.5	4225532	0.000349	9901	DieselExhPM	6.21E-08	1YrCancerRMP_Inh_FAH16to70	*	6.21E-08
101	ALL		564236.3	4225798	0.000347	9901	DieselExhPM	6.17E-08	1YrCancerRMP_Inh_FAH16to70	*	6.17E-08
102	ALL		564567.5	4225638	0.000241	9901	DieselExhPM	4.29E-08	1YrCancerRMP_Inh_FAH16to70	*	4.29E-08
103	ALL		564166.5	4226074	0.000504	9901	DieselExhPM	8.97E-08	1YrCancerRMP_Inh_FAH16to70	*	8.97E-08
104	ALL		564285.6	4225722	0.000306	9901	DieselExhPM	5.43E-08	1YrCancerRMP_Inh_FAH16to70	*	5.43E-08
105	ALL		564607.3	4225684	0.000243	9901	DieselExhPM	4.31E-08	1YrCancerRMP_Inh_FAH16to70	*	4.31E-08
106	ALL		564362	4225733	0.000284	9901	DieselExhPM	5.05E-08	1YrCancerRMP_Inh_FAH16to70	*	5.05E-08
107	ALL		564563.4	4225599	0.000234	9901	DieselExhPM	4.16E-08	1YrCancerRMP_Inh_FAH16to70	*	4.16E-08
108	ALL		563496.8	4227224	0.001024	9901	DieselExhPM	1.82E-07	1YrCancerRMP_Inh_FAH16to70	*	1.82E-07
109	ALL		564720.4	4225854	0.00016	9901	DieselExhPM	2.84E-08	1YrCancerRMP_Inh_FAH16to70	*	2.84E-08
110	ALL		564574.6	4225559	0.000222	9901	DieselExhPM	3.95E-08	1YrCancerRMP_Inh_FAH16to70	*	3.95E-08
111	ALL		564226.1	4225757	0.000343	9901	DieselExhPM	6.10E-08	1YrCancerRMP_Inh_FAH16to70	*	6.10E-08
112	ALL		564111.2	4225532	0.000364	9901	DieselExhPM	6.47E-08	1YrCancerRMP_Inh_FAH16to70	*	6.47E-08
113	ALL		564388.3	4225949	0.000281	9901	DieselExhPM	4.99E-08	1YrCancerRMP_Inh_FAH16to70	*	4.99E-08
114	ALL		564219.7	4225795	0.000355	9901	DieselExhPM	6.32E-08	1YrCancerRMP_Inh_FAH16to70	*	6.32E-08
115	ALL		564548.3	4225597	0.000233	9901	DieselExhPM	4.15E-08	1YrCancerRMP_Inh_FAH16to70	*	4.15E-08
116	ALL		564206.6	4226100	0.000476	9901	DieselExhPM	8.46E-08	1YrCancerRMP_Inh_FAH16to70	*	8.46E-08
117	ALL		564141.1	4225556	0.000359	9901	DieselExhPM	6.38E-08	1YrCancerRMP_Inh_FAH16to70	*	6.38E-08
118	ALL		564550	4225635	0.000242	9901	DieselExhPM	4.30E-08	1YrCancerRMP_Inh_FAH16to70	*	4.30E-08
119	ALL		564582.3	4225683	0.000248	9901	DieselExhPM	4.41E-08	1YrCancerRMP_Inh_FAH16to70	*	4.41E-08
120	ALL		564359.5	4225750	0.000288	9901	DieselExhPM	5.13E-08	1YrCancerRMP_Inh_FAH16to70	*	5.13E-08
121	ALL		564385.8	4225967	0.00028	9901	DieselExhPM	4.98E-08	1YrCancerRMP_Inh_FAH16to70	*	4.98E-08
122	ALL		563634.4	4227497	0.001004	9901	DieselExhPM	1.79E-07	1YrCancerRMP_Inh_FAH16to70	*	1.79E-07
123	ALL		564209.5	4225755	0.000352	9901	DieselExhPM	6.26E-08	1YrCancerRMP_Inh_FAH16to70	*	6.26E-08
124	ALL		564554	4225552	0.000221	9901	DieselExhPM	3.92E-08	1YrCancerRMP_Inh_FAH16to70	*	3.92E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
125	ALL		564706.8	4225875	0.000159	9901	DieselExhPM	2.83E-08	1YrCancerRMP_Inh_FAH16to70	*	2.83E-08
126	ALL		564107.4	4225552	0.000371	9901	DieselExhPM	6.60E-08	1YrCancerRMP_Inh_FAH16to70	*	6.60E-08
127	ALL		563295.7	4227226	0.000508	9901	DieselExhPM	9.03E-08	1YrCancerRMP_Inh_FAH16to70	*	9.03E-08
128	ALL		564205.8	4226122	0.000475	9901	DieselExhPM	8.45E-08	1YrCancerRMP_Inh_FAH16to70	*	8.45E-08
129	ALL		564383.3	4225984	0.000279	9901	DieselExhPM	4.96E-08	1YrCancerRMP_Inh_FAH16to70	*	4.96E-08
130	ALL		564203.2	4225793	0.000364	9901	DieselExhPM	6.48E-08	1YrCancerRMP_Inh_FAH16to70	*	6.48E-08
131	ALL		564138.1	4225575	0.000365	9901	DieselExhPM	6.48E-08	1YrCancerRMP_Inh_FAH16to70	*	6.48E-08
132	ALL		564532.5	4225633	0.000242	9901	DieselExhPM	4.30E-08	1YrCancerRMP_Inh_FAH16to70	*	4.30E-08
133	ALL		563577.6	4227631	0.000488	9901	DieselExhPM	8.68E-08	1YrCancerRMP_Inh_FAH16to70	*	8.68E-08
134	ALL		564526.3	4225589	0.000232	9901	DieselExhPM	4.12E-08	1YrCancerRMP_Inh_FAH16to70	*	4.12E-08
135	ALL		564356.8	4225769	0.000293	9901	DieselExhPM	5.20E-08	1YrCancerRMP_Inh_FAH16to70	*	5.20E-08
136	ALL		564565.9	4225683	0.000251	9901	DieselExhPM	4.46E-08	1YrCancerRMP_Inh_FAH16to70	*	4.46E-08
137	ALL		564687.4	4225890	0.000162	9901	DieselExhPM	2.88E-08	1YrCancerRMP_Inh_FAH16to70	*	2.88E-08
138	ALL		564193.2	4225752	0.000362	9901	DieselExhPM	6.44E-08	1YrCancerRMP_Inh_FAH16to70	*	6.44E-08
139	ALL		564103.1	4225572	0.000379	9901	DieselExhPM	6.73E-08	1YrCancerRMP_Inh_FAH16to70	*	6.73E-08
140	ALL		564537.1	4225547	0.000219	9901	DieselExhPM	3.90E-08	1YrCancerRMP_Inh_FAH16to70	*	3.90E-08
141	ALL		564296.1	4225686	0.000295	9901	DieselExhPM	5.24E-08	1YrCancerRMP_Inh_FAH16to70	*	5.24E-08
142	ALL		564380.8	4226002	0.000277	9901	DieselExhPM	4.93E-08	1YrCancerRMP_Inh_FAH16to70	*	4.93E-08
143	ALL		564186.6	4225791	0.000375	9901	DieselExhPM	6.66E-08	1YrCancerRMP_Inh_FAH16to70	*	6.66E-08
144	ALL		564124.2	4225609	0.00038	9901	DieselExhPM	6.75E-08	1YrCancerRMP_Inh_FAH16to70	*	6.75E-08
145	ALL		564172.6	4226118	0.000517	9901	DieselExhPM	9.20E-08	1YrCancerRMP_Inh_FAH16to70	*	9.20E-08
146	ALL		564426	4226004	0.00025	9901	DieselExhPM	4.44E-08	1YrCancerRMP_Inh_FAH16to70	*	4.44E-08
147	ALL		564515.1	4225630	0.000241	9901	DieselExhPM	4.29E-08	1YrCancerRMP_Inh_FAH16to70	*	4.29E-08
148	ALL		564354.1	4225788	0.000297	9901	DieselExhPM	5.28E-08	1YrCancerRMP_Inh_FAH16to70	*	5.28E-08
149	ALL		564549	4225681	0.000253	9901	DieselExhPM	4.50E-08	1YrCancerRMP_Inh_FAH16to70	*	4.50E-08
150	ALL		564176.6	4225750	0.000372	9901	DieselExhPM	6.62E-08	1YrCancerRMP_Inh_FAH16to70	*	6.62E-08
151	ALL		564090.9	4225587	0.000389	9901	DieselExhPM	6.91E-08	1YrCancerRMP_Inh_FAH16to70	*	6.91E-08
152	ALL		564518.1	4225542	0.000218	9901	DieselExhPM	3.89E-08	1YrCancerRMP_Inh_FAH16to70	*	3.89E-08
153	ALL		564112.6	4225626	0.00039	9901	DieselExhPM	6.94E-08	1YrCancerRMP_Inh_FAH16to70	*	6.94E-08
154	ALL		564508.2	4225583	0.00023	9901	DieselExhPM	4.09E-08	1YrCancerRMP_Inh_FAH16to70	*	4.09E-08
155	ALL		564378.3	4226019	0.000275	9901	DieselExhPM	4.90E-08	1YrCancerRMP_Inh_FAH16to70	*	4.90E-08
156	ALL		564170	4225789	0.000385	9901	DieselExhPM	6.84E-08	1YrCancerRMP_Inh_FAH16to70	*	6.84E-08
157	ALL		564151.7	4226117	0.000541	9901	DieselExhPM	9.63E-08	1YrCancerRMP_Inh_FAH16to70	*	9.63E-08
158	ALL		564428.2	4226025	0.000242	9901	DieselExhPM	4.30E-08	1YrCancerRMP_Inh_FAH16to70	*	4.30E-08
159	ALL		564497.7	4225627	0.000241	9901	DieselExhPM	4.28E-08	1YrCancerRMP_Inh_FAH16to70	*	4.28E-08
160	ALL		564531.9	4225678	0.000254	9901	DieselExhPM	4.52E-08	1YrCancerRMP_Inh_FAH16to70	*	4.52E-08
161	ALL		564353.3	4225803	0.0003	9901	DieselExhPM	5.33E-08	1YrCancerRMP_Inh_FAH16to70	*	5.33E-08
162	ALL		564159.3	4225747	0.000384	9901	DieselExhPM	6.83E-08	1YrCancerRMP_Inh_FAH16to70	*	6.83E-08
163	ALL		564499.4	4225539	0.000219	9901	DieselExhPM	3.90E-08	1YrCancerRMP_Inh_FAH16to70	*	3.90E-08
164	ALL		564082.4	4225608	0.000399	9901	DieselExhPM	7.10E-08	1YrCancerRMP_Inh_FAH16to70	*	7.10E-08
165	ALL		564375.9	4226035	0.000271	9901	DieselExhPM	4.83E-08	1YrCancerRMP_Inh_FAH16to70	*	4.83E-08
166	ALL		564152.6	4225786	0.000396	9901	DieselExhPM	7.04E-08	1YrCancerRMP_Inh_FAH16to70	*	7.04E-08
167	ALL		564131.6	4226117	0.000564	9901	DieselExhPM	1.00E-07	1YrCancerRMP_Inh_FAH16to70	*	1.00E-07
168	ALL		564097.3	4225643	0.000403	9901	DieselExhPM	7.16E-08	1YrCancerRMP_Inh_FAH16to70	*	7.16E-08
169	ALL		564480.2	4225624	0.00024	9901	DieselExhPM	4.27E-08	1YrCancerRMP_Inh_FAH16to70	*	4.27E-08
170	ALL		564322.8	4225930	0.000341	9901	DieselExhPM	6.07E-08	1YrCancerRMP_Inh_FAH16to70	*	6.07E-08
171	ALL		564023.2	4225606	0.000429	9901	DieselExhPM	7.62E-08	1YrCancerRMP_Inh_FAH16to70	*	7.62E-08
172	ALL		564036.7	4225520	0.000392	9901	DieselExhPM	6.98E-08	1YrCancerRMP_Inh_FAH16to70	*	6.98E-08
173	ALL		564067.7	4225809	0.000474	9901	DieselExhPM	8.43E-08	1YrCancerRMP_Inh_FAH16to70	*	8.43E-08
174	ALL		563931.3	4225781	0.000586	9901	DieselExhPM	1.04E-07	1YrCancerRMP_Inh_FAH16to70	*	1.04E-07
175	ALL		564491.2	4225998	0.000211	9901	DieselExhPM	3.75E-08	1YrCancerRMP_Inh_FAH16to70	*	3.75E-08
176	ALL		564008.6	4225885	0.000564	9901	DieselExhPM	1.00E-07	1YrCancerRMP_Inh_FAH16to70	*	1.00E-07
177	ALL		564237.7	4225900	0.000374	9901	DieselExhPM	6.65E-08	1YrCancerRMP_Inh_FAH16to70	*	6.65E-08
178	ALL		564730.8	4225520	0.000209	9901	DieselExhPM	3.72E-08	1YrCancerRMP_Inh_FAH16to70	*	3.72E-08
179	ALL		564491	4225580	0.00023	9901	DieselExhPM	4.09E-08	1YrCancerRMP_Inh_FAH16to70	*	4.09E-08
180	ALL		564514.8	4225675	0.000255	9901	DieselExhPM	4.53E-08	1YrCancerRMP_Inh_FAH16to70	*	4.53E-08
181	ALL		564351.6	4225823	0.000303	9901	DieselExhPM	5.40E-08	1YrCancerRMP_Inh_FAH16to70	*	5.40E-08
182	ALL		564482	4225536	0.00022	9901	DieselExhPM	3.92E-08	1YrCancerRMP_Inh_FAH16to70	*	3.92E-08
183	ALL		564064	4225621	0.000413	9901	DieselExhPM	7.34E-08	1YrCancerRMP_Inh_FAH16to70	*	7.34E-08
184	ALL		564373.4	4226052	0.00027	9901	DieselExhPM	4.80E-08	1YrCancerRMP_Inh_FAH16to70	*	4.80E-08
185	ALL		564082.9	4225657	0.000414	9901	DieselExhPM	7.37E-08	1YrCancerRMP_Inh_FAH16to70	*	7.37E-08
186	ALL		564111.5	4226117	0.000587	9901	DieselExhPM	1.04E-07	1YrCancerRMP_Inh_FAH16to70	*	1.04E-07

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
187	ALL		564460.5	4225620	0.00024	9901	DieselExhPM	4.26E-08	1YrCancerRMP_Inh_FAH16to70	*	4.26E-08
188	ALL		564496.8	4225671	0.000255	9901	DieselExhPM	4.53E-08	1YrCancerRMP_Inh_FAH16to70	*	4.53E-08
189	ALL		564379.5	4226073	0.000261	9901	DieselExhPM	4.65E-08	1YrCancerRMP_Inh_FAH16to70	*	4.65E-08
190	ALL		564464.5	4225534	0.000223	9901	DieselExhPM	3.96E-08	1YrCancerRMP_Inh_FAH16to70	*	3.96E-08
191	ALL		564044.8	4225635	0.000428	9901	DieselExhPM	7.61E-08	1YrCancerRMP_Inh_FAH16to70	*	7.61E-08
192	ALL		564473.9	4225578	0.000231	9901	DieselExhPM	4.10E-08	1YrCancerRMP_Inh_FAH16to70	*	4.10E-08
193	ALL		564064.5	4225668	0.000428	9901	DieselExhPM	7.62E-08	1YrCancerRMP_Inh_FAH16to70	*	7.62E-08
194	ALL		564093.4	4226117	0.000608	9901	DieselExhPM	1.08E-07	1YrCancerRMP_Inh_FAH16to70	*	1.08E-07
195	ALL		564384.8	4226093	0.000255	9901	DieselExhPM	4.54E-08	1YrCancerRMP_Inh_FAH16to70	*	4.54E-08
196	ALL		564446.2	4225531	0.000226	9901	DieselExhPM	4.02E-08	1YrCancerRMP_Inh_FAH16to70	*	4.02E-08
197	ALL		564022.2	4225644	0.000444	9901	DieselExhPM	7.90E-08	1YrCancerRMP_Inh_FAH16to70	*	7.90E-08
198	ALL		564033	4225560	0.000407	9901	DieselExhPM	7.24E-08	1YrCancerRMP_Inh_FAH16to70	*	7.24E-08
199	ALL		564025.9	4225778	0.000494	9901	DieselExhPM	8.78E-08	1YrCancerRMP_Inh_FAH16to70	*	8.78E-08
200	ALL		564495.8	4225935	0.000221	9901	DieselExhPM	3.92E-08	1YrCancerRMP_Inh_FAH16to70	*	3.92E-08
201	ALL		564743.3	4225954	0.000149	9901	DieselExhPM	2.66E-08	1YrCancerRMP_Inh_FAH16to70	*	2.66E-08
202	ALL		564279.1	4225939	0.000358	9901	DieselExhPM	6.37E-08	1YrCancerRMP_Inh_FAH16to70	*	6.37E-08
203	ALL		564191.8	4225913	0.000395	9901	DieselExhPM	7.02E-08	1YrCancerRMP_Inh_FAH16to70	*	7.02E-08
204	ALL		563939	4225732	0.00055	9901	DieselExhPM	9.77E-08	1YrCancerRMP_Inh_FAH16to70	*	9.77E-08
205	ALL		563882.1	4225828	0.000679	9901	DieselExhPM	1.21E-07	1YrCancerRMP_Inh_FAH16to70	*	1.21E-07
206	ALL		564046.4	4225677	0.000442	9901	DieselExhPM	7.86E-08	1YrCancerRMP_Inh_FAH16to70	*	7.86E-08
207	ALL		564051.7	4226111	0.000654	9901	DieselExhPM	1.16E-07	1YrCancerRMP_Inh_FAH16to70	*	1.16E-07
208	ALL		563288.4	4227121	0.000621	9901	DieselExhPM	1.10E-07	1YrCancerRMP_Inh_FAH16to70	*	1.10E-07
209	ALL		564454.6	4225575	0.000232	9901	DieselExhPM	4.13E-08	1YrCancerRMP_Inh_FAH16to70	*	4.13E-08
210	ALL		564183.3	4225535	0.000335	9901	DieselExhPM	5.96E-08	1YrCancerRMP_Inh_FAH16to70	*	5.96E-08
211	ALL		564181	4225551	0.000339	9901	DieselExhPM	6.03E-08	1YrCancerRMP_Inh_FAH16to70	*	6.03E-08
212	ALL		564178.6	4225568	0.000343	9901	DieselExhPM	6.10E-08	1YrCancerRMP_Inh_FAH16to70	*	6.10E-08
213	ALL		563998.9	4225647	0.000461	9901	DieselExhPM	8.19E-08	1YrCancerRMP_Inh_FAH16to70	*	8.19E-08
214	ALL		564176.1	4225585	0.000348	9901	DieselExhPM	6.18E-08	1YrCancerRMP_Inh_FAH16to70	*	6.18E-08
215	ALL		564026.7	4225685	0.000457	9901	DieselExhPM	8.13E-08	1YrCancerRMP_Inh_FAH16to70	*	8.13E-08
216	ALL		564030.1	4226111	0.000682	9901	DieselExhPM	1.21E-07	1YrCancerRMP_Inh_FAH16to70	*	1.21E-07
217	ALL		563978.8	4225647	0.000475	9901	DieselExhPM	8.45E-08	1YrCancerRMP_Inh_FAH16to70	*	8.45E-08
218	ALL		564005.6	4225688	0.000473	9901	DieselExhPM	8.41E-08	1YrCancerRMP_Inh_FAH16to70	*	8.41E-08
219	ALL		564010	4226111	0.000711	9901	DieselExhPM	1.27E-07	1YrCancerRMP_Inh_FAH16to70	*	1.27E-07
220	ALL		564266.7	4225719	0.000314	9901	DieselExhPM	5.59E-08	1YrCancerRMP_Inh_FAH16to70	*	5.59E-08
221	ALL		564169.8	4225622	0.000357	9901	DieselExhPM	6.35E-08	1YrCancerRMP_Inh_FAH16to70	*	6.35E-08
222	ALL		564159.1	4225634	0.000365	9901	DieselExhPM	6.48E-08	1YrCancerRMP_Inh_FAH16to70	*	6.48E-08
223	ALL		563958	4225645	0.00049	9901	DieselExhPM	8.72E-08	1YrCancerRMP_Inh_FAH16to70	*	8.72E-08
224	ALL		564148	4225648	0.000373	9901	DieselExhPM	6.64E-08	1YrCancerRMP_Inh_FAH16to70	*	6.64E-08
225	ALL		564136.7	4225662	0.000382	9901	DieselExhPM	6.80E-08	1YrCancerRMP_Inh_FAH16to70	*	6.80E-08
226	ALL		564125.5	4225677	0.000392	9901	DieselExhPM	6.98E-08	1YrCancerRMP_Inh_FAH16to70	*	6.98E-08
227	ALL		563983.7	4225689	0.00049	9901	DieselExhPM	8.71E-08	1YrCancerRMP_Inh_FAH16to70	*	8.71E-08
228	ALL		563989.9	4226111	0.000742	9901	DieselExhPM	1.32E-07	1YrCancerRMP_Inh_FAH16to70	*	1.32E-07
229	ALL		564119.9	4225695	0.0004	9901	DieselExhPM	7.11E-08	1YrCancerRMP_Inh_FAH16to70	*	7.11E-08
230	ALL		564114.5	4225711	0.000407	9901	DieselExhPM	7.24E-08	1YrCancerRMP_Inh_FAH16to70	*	7.24E-08
231	ALL		563970.9	4226116	0.000779	9901	DieselExhPM	1.38E-07	1YrCancerRMP_Inh_FAH16to70	*	1.38E-07
232	ALL		563963.1	4225689	0.000506	9901	DieselExhPM	9.00E-08	1YrCancerRMP_Inh_FAH16to70	*	9.00E-08
233	ALL		562858.9	4227546	0.000127	9901	DieselExhPM	2.26E-08	1YrCancerRMP_Inh_FAH16to70	*	2.26E-08
234	ALL		564278.9	4225684	0.000303	9901	DieselExhPM	5.39E-08	1YrCancerRMP_Inh_FAH16to70	*	5.39E-08
235	ALL		563945.2	4226113	0.000822	9901	DieselExhPM	1.46E-07	1YrCancerRMP_Inh_FAH16to70	*	1.46E-07
236	ALL		563942.9	4225686	0.000522	9901	DieselExhPM	9.29E-08	1YrCancerRMP_Inh_FAH16to70	*	9.29E-08
237	ALL		564154.4	4225821	0.000403	9901	DieselExhPM	7.17E-08	1YrCancerRMP_Inh_FAH16to70	*	7.17E-08
238	ALL		564103.1	4225812	0.000438	9901	DieselExhPM	7.79E-08	1YrCancerRMP_Inh_FAH16to70	*	7.79E-08
239	ALL		564150.9	4225843	0.000412	9901	DieselExhPM	7.33E-08	1YrCancerRMP_Inh_FAH16to70	*	7.33E-08
240	ALL		564109.1	4225837	0.000442	9901	DieselExhPM	7.86E-08	1YrCancerRMP_Inh_FAH16to70	*	7.86E-08
241	ALL		564147.9	4225864	0.000422	9901	DieselExhPM	7.51E-08	1YrCancerRMP_Inh_FAH16to70	*	7.51E-08
242	ALL		564097.7	4225853	0.000457	9901	DieselExhPM	8.12E-08	1YrCancerRMP_Inh_FAH16to70	*	8.12E-08
243	ALL		564144.8	4225885	0.000432	9901	DieselExhPM	7.69E-08	1YrCancerRMP_Inh_FAH16to70	*	7.69E-08
244	ALL		564097.2	4225894	0.000472	9901	DieselExhPM	8.39E-08	1YrCancerRMP_Inh_FAH16to70	*	8.39E-08
245	ALL		564141.9	4225906	0.000442	9901	DieselExhPM	7.87E-08	1YrCancerRMP_Inh_FAH16to70	*	7.87E-08
246	ALL		564092.3	4225918	0.000483	9901	DieselExhPM	8.59E-08	1YrCancerRMP_Inh_FAH16to70	*	8.59E-08
247	ALL		564139	4225927	0.000453	9901	DieselExhPM	8.05E-08	1YrCancerRMP_Inh_FAH16to70	*	8.05E-08
248	ALL		564087.4	4225941	0.000497	9901	DieselExhPM	8.84E-08	1YrCancerRMP_Inh_FAH16to70	*	8.84E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
249	ALL		564137.4	4225949	0.000465	9901	DieselExhPM	8.26E-08	1YrCancerRMP_Inh_FAH16to70	*	8.26E-08
250	ALL		563933.4	4226096	0.000821	9901	DieselExhPM	1.46E-07	1YrCancerRMP_Inh_FAH16to70	*	1.46E-07
251	ALL		563921.6	4225682	0.000541	9901	DieselExhPM	9.61E-08	1YrCancerRMP_Inh_FAH16to70	*	9.61E-08
252	ALL		563917.9	4225642	0.000524	9901	DieselExhPM	9.32E-08	1YrCancerRMP_Inh_FAH16to70	*	9.32E-08
253	ALL		563938.1	4226075	0.000789	9901	DieselExhPM	1.40E-07	1YrCancerRMP_Inh_FAH16to70	*	1.40E-07
254	ALL		563902.5	4225680	0.000558	9901	DieselExhPM	9.93E-08	1YrCancerRMP_Inh_FAH16to70	*	9.93E-08
255	ALL		564320	4225950	0.000348	9901	DieselExhPM	6.18E-08	1YrCancerRMP_Inh_FAH16to70	*	6.18E-08
256	ALL		564038.2	4225594	0.000416	9901	DieselExhPM	7.39E-08	1YrCancerRMP_Inh_FAH16to70	*	7.39E-08
257	ALL		564235	4225920	0.000386	9901	DieselExhPM	6.86E-08	1YrCancerRMP_Inh_FAH16to70	*	6.86E-08
258	ALL		564514.1	4225989	0.000202	9901	DieselExhPM	3.59E-08	1YrCancerRMP_Inh_FAH16to70	*	3.59E-08
259	ALL		563988.7	4225883	0.000584	9901	DieselExhPM	1.04E-07	1YrCancerRMP_Inh_FAH16to70	*	1.04E-07
260	ALL		564064.9	4225829	0.000485	9901	DieselExhPM	8.62E-08	1YrCancerRMP_Inh_FAH16to70	*	8.62E-08
261	ALL		564060.6	4225530	0.000384	9901	DieselExhPM	6.83E-08	1YrCancerRMP_Inh_FAH16to70	*	6.83E-08
262	ALL		564129	4225986	0.000491	9901	DieselExhPM	8.74E-08	1YrCancerRMP_Inh_FAH16to70	*	8.74E-08
263	ALL		564126.1	4226007	0.000506	9901	DieselExhPM	9.00E-08	1YrCancerRMP_Inh_FAH16to70	*	9.00E-08
264	ALL		564081.3	4226017	0.000546	9901	DieselExhPM	9.72E-08	1YrCancerRMP_Inh_FAH16to70	*	9.72E-08
265	ALL		563895.8	4225638	0.000542	9901	DieselExhPM	9.65E-08	1YrCancerRMP_Inh_FAH16to70	*	9.65E-08
266	ALL		564123.3	4226027	0.000522	9901	DieselExhPM	9.28E-08	1YrCancerRMP_Inh_FAH16to70	*	9.28E-08
267	ALL		564078.5	4226037	0.000563	9901	DieselExhPM	1.00E-07	1YrCancerRMP_Inh_FAH16to70	*	1.00E-07
268	ALL		564120.6	4226047	0.000537	9901	DieselExhPM	9.56E-08	1YrCancerRMP_Inh_FAH16to70	*	9.56E-08
269	ALL		564121.7	4226067	0.00055	9901	DieselExhPM	9.78E-08	1YrCancerRMP_Inh_FAH16to70	*	9.78E-08
270	ALL		563942.9	4226056	0.000762	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
271	ALL		563882.2	4225678	0.000577	9901	DieselExhPM	1.03E-07	1YrCancerRMP_Inh_FAH16to70	*	1.03E-07
272	ALL		563873.3	4225636	0.000562	9901	DieselExhPM	1.00E-07	1YrCancerRMP_Inh_FAH16to70	*	1.00E-07
273	ALL		563861.3	4225675	0.000596	9901	DieselExhPM	1.06E-07	1YrCancerRMP_Inh_FAH16to70	*	1.06E-07
274	ALL		563946.3	4226037	0.000738	9901	DieselExhPM	1.31E-07	1YrCancerRMP_Inh_FAH16to70	*	1.31E-07
275	ALL		564275.8	4225964	0.00037	9901	DieselExhPM	6.57E-08	1YrCancerRMP_Inh_FAH16to70	*	6.57E-08
276	ALL		564189	4225933	0.000407	9901	DieselExhPM	7.24E-08	1YrCancerRMP_Inh_FAH16to70	*	7.24E-08
277	ALL		563984.4	4225830	0.000558	9901	DieselExhPM	9.92E-08	1YrCancerRMP_Inh_FAH16to70	*	9.92E-08
278	ALL		564519.8	4225948	0.000206	9901	DieselExhPM	3.66E-08	1YrCancerRMP_Inh_FAH16to70	*	3.66E-08
279	ALL		563918.4	4225731	0.00057	9901	DieselExhPM	1.01E-07	1YrCancerRMP_Inh_FAH16to70	*	1.01E-07
280	ALL		564022.8	4225798	0.000506	9901	DieselExhPM	8.99E-08	1YrCancerRMP_Inh_FAH16to70	*	8.99E-08
281	ALL		563879.4	4225848	0.000699	9901	DieselExhPM	1.24E-07	1YrCancerRMP_Inh_FAH16to70	*	1.24E-07
282	ALL		564042.8	4225578	0.000408	9901	DieselExhPM	7.26E-08	1YrCancerRMP_Inh_FAH16to70	*	7.26E-08
283	ALL		564261.7	4225682	0.000312	9901	DieselExhPM	5.54E-08	1YrCancerRMP_Inh_FAH16to70	*	5.54E-08
284	ALL		563949.5	4226017	0.000716	9901	DieselExhPM	1.27E-07	1YrCancerRMP_Inh_FAH16to70	*	1.27E-07
285	ALL		563953.6	4225991	0.000688	9901	DieselExhPM	1.22E-07	1YrCancerRMP_Inh_FAH16to70	*	1.22E-07
286	ALL		563995.2	4225991	0.000632	9901	DieselExhPM	1.12E-07	1YrCancerRMP_Inh_FAH16to70	*	1.12E-07
287	ALL		563998.2	4225969	0.000614	9901	DieselExhPM	1.09E-07	1YrCancerRMP_Inh_FAH16to70	*	1.09E-07
288	ALL		564069	4225895	0.000506	9901	DieselExhPM	9.00E-08	1YrCancerRMP_Inh_FAH16to70	*	9.00E-08
289	ALL		564256	4225842	0.00034	9901	DieselExhPM	6.04E-08	1YrCancerRMP_Inh_FAH16to70	*	6.04E-08
290	ALL		564323.7	4225856	0.000313	9901	DieselExhPM	5.57E-08	1YrCancerRMP_Inh_FAH16to70	*	5.57E-08
291	ALL		563964.8	4225597	0.000464	9901	DieselExhPM	8.25E-08	1YrCancerRMP_Inh_FAH16to70	*	8.25E-08
292	ALL		564430.7	4225981	0.000251	9901	DieselExhPM	4.47E-08	1YrCancerRMP_Inh_FAH16to70	*	4.47E-08
293	ALL		564091.4	4225750	0.000435	9901	DieselExhPM	7.74E-08	1YrCancerRMP_Inh_FAH16to70	*	7.74E-08
294	ALL		563988.9	4225787	0.000531	9901	DieselExhPM	9.44E-08	1YrCancerRMP_Inh_FAH16to70	*	9.44E-08
295	ALL		563979	4226674	0.004405	9901	DieselExhPM	7.83E-07	1YrCancerRMP_Inh_FAH16to70	*	7.83E-07
296	ALL		564249.4	4225717	0.000323	9901	DieselExhPM	5.75E-08	1YrCancerRMP_Inh_FAH16to70	*	5.75E-08
297	ALL		564456.1	4225788	0.00028	9901	DieselExhPM	4.98E-08	1YrCancerRMP_Inh_FAH16to70	*	4.98E-08
298	ALL		564116.4	4225781	0.000422	9901	DieselExhPM	7.51E-08	1YrCancerRMP_Inh_FAH16to70	*	7.51E-08
299	ALL		564613	4225922	0.000177	9901	DieselExhPM	3.16E-08	1YrCancerRMP_Inh_FAH16to70	*	3.16E-08
300	ALL		564454.5	4225744	0.00027	9901	DieselExhPM	4.80E-08	1YrCancerRMP_Inh_FAH16to70	*	4.80E-08
301	ALL		564408.4	4225527	0.000236	9901	DieselExhPM	4.20E-08	1YrCancerRMP_Inh_FAH16to70	*	4.20E-08
302	ALL		564120.6	4225742	0.000412	9901	DieselExhPM	7.32E-08	1YrCancerRMP_Inh_FAH16to70	*	7.32E-08
303	ALL		564405.9	4225565	0.000241	9901	DieselExhPM	4.29E-08	1YrCancerRMP_Inh_FAH16to70	*	4.29E-08
304	ALL		564415.4	4225609	0.000243	9901	DieselExhPM	4.32E-08	1YrCancerRMP_Inh_FAH16to70	*	4.32E-08
305	ALL		564626.5	4225981	0.000168	9901	DieselExhPM	3.00E-08	1YrCancerRMP_Inh_FAH16to70	*	3.00E-08
306	ALL		564485	4225792	0.00027	9901	DieselExhPM	4.80E-08	1YrCancerRMP_Inh_FAH16to70	*	4.80E-08
307	ALL		563253.8	4227637	0.00023	9901	DieselExhPM	4.10E-08	1YrCancerRMP_Inh_FAH16to70	*	4.10E-08
308	ALL		564475.2	4225747	0.000267	9901	DieselExhPM	4.74E-08	1YrCancerRMP_Inh_FAH16to70	*	4.74E-08
309	ALL		564390.1	4225524	0.000243	9901	DieselExhPM	4.32E-08	1YrCancerRMP_Inh_FAH16to70	*	4.32E-08
310	ALL		564394.2	4225566	0.000244	9901	DieselExhPM	4.35E-08	1YrCancerRMP_Inh_FAH16to70	*	4.35E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
311	ALL		564596.4	4225943	0.000179	9901	DieselExhPM	3.19E-08	1YrCancerRMP_Inh_FAH16to70	*	3.19E-08
312	ALL		564397.7	4225607	0.000247	9901	DieselExhPM	4.39E-08	1YrCancerRMP_Inh_FAH16to70	*	4.39E-08
313	ALL		564495.4	4225750	0.000261	9901	DieselExhPM	4.64E-08	1YrCancerRMP_Inh_FAH16to70	*	4.64E-08
314	ALL		564372.9	4225522	0.00025	9901	DieselExhPM	4.44E-08	1YrCancerRMP_Inh_FAH16to70	*	4.44E-08
315	ALL		564372.3	4225561	0.000252	9901	DieselExhPM	4.48E-08	1YrCancerRMP_Inh_FAH16to70	*	4.48E-08
316	ALL		564577.4	4225961	0.000183	9901	DieselExhPM	3.25E-08	1YrCancerRMP_Inh_FAH16to70	*	3.25E-08
317	ALL		564380.5	4225605	0.000252	9901	DieselExhPM	4.48E-08	1YrCancerRMP_Inh_FAH16to70	*	4.48E-08
318	ALL		564509.7	4225795	0.000256	9901	DieselExhPM	4.56E-08	1YrCancerRMP_Inh_FAH16to70	*	4.56E-08
319	ALL		564613.4	4225998	0.000171	9901	DieselExhPM	3.04E-08	1YrCancerRMP_Inh_FAH16to70	*	3.04E-08
320	ALL		564516.5	4225753	0.000252	9901	DieselExhPM	4.48E-08	1YrCancerRMP_Inh_FAH16to70	*	4.48E-08
321	ALL		564354.5	4225558	0.000259	9901	DieselExhPM	4.60E-08	1YrCancerRMP_Inh_FAH16to70	*	4.60E-08
322	ALL		564567	4225976	0.000185	9901	DieselExhPM	3.29E-08	1YrCancerRMP_Inh_FAH16to70	*	3.29E-08
323	ALL		564363.3	4225603	0.000257	9901	DieselExhPM	4.57E-08	1YrCancerRMP_Inh_FAH16to70	*	4.57E-08
324	ALL		564534.1	4225799	0.000241	9901	DieselExhPM	4.28E-08	1YrCancerRMP_Inh_FAH16to70	*	4.28E-08
325	ALL		564601.5	4226015	0.000174	9901	DieselExhPM	3.10E-08	1YrCancerRMP_Inh_FAH16to70	*	3.10E-08
326	ALL		564537.4	4225757	0.00024	9901	DieselExhPM	4.28E-08	1YrCancerRMP_Inh_FAH16to70	*	4.28E-08
327	ALL		563932.4	4225532	0.000463	9901	DieselExhPM	8.24E-08	1YrCancerRMP_Inh_FAH16to70	*	8.24E-08
328	ALL		564336.7	4225556	0.000266	9901	DieselExhPM	4.73E-08	1YrCancerRMP_Inh_FAH16to70	*	4.73E-08
329	ALL		564560.8	4225996	0.000186	9901	DieselExhPM	3.30E-08	1YrCancerRMP_Inh_FAH16to70	*	3.30E-08
330	ALL		564346.1	4225600	0.000264	9901	DieselExhPM	4.69E-08	1YrCancerRMP_Inh_FAH16to70	*	4.69E-08
331	ALL		564317.2	4225970	0.000353	9901	DieselExhPM	6.27E-08	1YrCancerRMP_Inh_FAH16to70	*	6.27E-08
332	ALL		564232.2	4225940	0.000398	9901	DieselExhPM	7.07E-08	1YrCancerRMP_Inh_FAH16to70	*	7.07E-08
333	ALL		563923	4225872	0.000656	9901	DieselExhPM	1.17E-07	1YrCancerRMP_Inh_FAH16to70	*	1.17E-07
334	ALL		564065	4225849	0.000493	9901	DieselExhPM	8.76E-08	1YrCancerRMP_Inh_FAH16to70	*	8.76E-08
335	ALL		563968.8	4225880	0.000605	9901	DieselExhPM	1.08E-07	1YrCancerRMP_Inh_FAH16to70	*	1.08E-07
336	ALL		564558.6	4225803	0.000226	9901	DieselExhPM	4.01E-08	1YrCancerRMP_Inh_FAH16to70	*	4.01E-08
337	ALL		564587	4226034	0.000179	9901	DieselExhPM	3.17E-08	1YrCancerRMP_Inh_FAH16to70	*	3.17E-08
338	ALL		564336.8	4225647	0.000272	9901	DieselExhPM	4.84E-08	1YrCancerRMP_Inh_FAH16to70	*	4.84E-08
339	ALL		564561.3	4225753	0.000228	9901	DieselExhPM	4.06E-08	1YrCancerRMP_Inh_FAH16to70	*	4.06E-08
340	ALL		563929.7	4225552	0.000474	9901	DieselExhPM	8.42E-08	1YrCancerRMP_Inh_FAH16to70	*	8.42E-08
341	ALL		564318.9	4225553	0.000274	9901	DieselExhPM	4.87E-08	1YrCancerRMP_Inh_FAH16to70	*	4.87E-08
342	ALL		564328.9	4225598	0.000271	9901	DieselExhPM	4.81E-08	1YrCancerRMP_Inh_FAH16to70	*	4.81E-08
343	ALL		564550.2	4226013	0.000188	9901	DieselExhPM	3.34E-08	1YrCancerRMP_Inh_FAH16to70	*	3.34E-08
344	ALL		564572.9	4226049	0.000183	9901	DieselExhPM	3.25E-08	1YrCancerRMP_Inh_FAH16to70	*	3.25E-08
345	ALL		564322	4225648	0.000278	9901	DieselExhPM	4.94E-08	1YrCancerRMP_Inh_FAH16to70	*	4.94E-08
346	ALL		564576.6	4225761	0.000221	9901	DieselExhPM	3.93E-08	1YrCancerRMP_Inh_FAH16to70	*	3.93E-08
347	ALL		563927.5	4225573	0.000484	9901	DieselExhPM	8.61E-08	1YrCancerRMP_Inh_FAH16to70	*	8.61E-08
348	ALL		564301.1	4225551	0.000283	9901	DieselExhPM	5.02E-08	1YrCancerRMP_Inh_FAH16to70	*	5.02E-08
349	ALL		564533.9	4226019	0.000193	9901	DieselExhPM	3.43E-08	1YrCancerRMP_Inh_FAH16to70	*	3.43E-08
350	ALL		564311.7	4225595	0.000279	9901	DieselExhPM	4.96E-08	1YrCancerRMP_Inh_FAH16to70	*	4.96E-08
351	ALL		564301.7	4225642	0.000287	9901	DieselExhPM	5.10E-08	1YrCancerRMP_Inh_FAH16to70	*	5.10E-08
352	ALL		564595.2	4225767	0.000214	9901	DieselExhPM	3.80E-08	1YrCancerRMP_Inh_FAH16to70	*	3.80E-08
353	ALL		563924.9	4225593	0.000495	9901	DieselExhPM	8.80E-08	1YrCancerRMP_Inh_FAH16to70	*	8.80E-08
354	ALL		564186.1	4225954	0.000421	9901	DieselExhPM	7.50E-08	1YrCancerRMP_Inh_FAH16to70	*	7.50E-08
355	ALL		564524.9	4225968	0.0002	9901	DieselExhPM	3.56E-08	1YrCancerRMP_Inh_FAH16to70	*	3.56E-08
356	ALL		563964.5	4225827	0.000576	9901	DieselExhPM	1.03E-07	1YrCancerRMP_Inh_FAH16to70	*	1.03E-07
357	ALL		563899.1	4225727	0.000588	9901	DieselExhPM	1.05E-07	1YrCancerRMP_Inh_FAH16to70	*	1.05E-07
358	ALL		564020.1	4225818	0.000518	9901	DieselExhPM	9.21E-08	1YrCancerRMP_Inh_FAH16to70	*	9.21E-08
359	ALL		563876.6	4225867	0.00072	9901	DieselExhPM	1.28E-07	1YrCancerRMP_Inh_FAH16to70	*	1.28E-07
360	ALL		564244.5	4225679	0.00032	9901	DieselExhPM	5.70E-08	1YrCancerRMP_Inh_FAH16to70	*	5.70E-08
361	ALL		564553.3	4226067	0.000191	9901	DieselExhPM	3.39E-08	1YrCancerRMP_Inh_FAH16to70	*	3.39E-08
362	ALL		564283.3	4225548	0.000291	9901	DieselExhPM	5.18E-08	1YrCancerRMP_Inh_FAH16to70	*	5.18E-08
363	ALL		564294.5	4225593	0.000287	9901	DieselExhPM	5.10E-08	1YrCancerRMP_Inh_FAH16to70	*	5.10E-08
364	ALL		564284.5	4225640	0.000295	9901	DieselExhPM	5.25E-08	1YrCancerRMP_Inh_FAH16to70	*	5.25E-08
365	ALL		564613.9	4225783	0.000203	9901	DieselExhPM	3.60E-08	1YrCancerRMP_Inh_FAH16to70	*	3.60E-08
366	ALL		563921.5	4225613	0.000506	9901	DieselExhPM	9.01E-08	1YrCancerRMP_Inh_FAH16to70	*	9.01E-08
367	ALL		564518	4226040	0.000198	9901	DieselExhPM	3.52E-08	1YrCancerRMP_Inh_FAH16to70	*	3.52E-08
368	ALL		564265.5	4225545	0.0003	9901	DieselExhPM	5.33E-08	1YrCancerRMP_Inh_FAH16to70	*	5.33E-08
369	ALL		564277.3	4225590	0.000296	9901	DieselExhPM	5.26E-08	1YrCancerRMP_Inh_FAH16to70	*	5.26E-08
370	ALL		564577.6	4225812	0.000212	9901	DieselExhPM	3.77E-08	1YrCancerRMP_Inh_FAH16to70	*	3.77E-08
371	ALL		564670.1	4225824	0.00018	9901	DieselExhPM	3.19E-08	1YrCancerRMP_Inh_FAH16to70	*	3.19E-08
372	ALL		564267.3	4225637	0.000304	9901	DieselExhPM	5.41E-08	1YrCancerRMP_Inh_FAH16to70	*	5.41E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
373	ALL		564267.3	4225637	0.000304	9901	DieselExhPM	5.41E-08	1YrCancerRMP_Inh_FAH16to70	*	5.41E-08
374	ALL		564623.2	4225805	0.000195	9901	DieselExhPM	3.47E-08	1YrCancerRMP_Inh_FAH16to70	*	3.47E-08
375	ALL		564500.6	4226050	0.000204	9901	DieselExhPM	3.63E-08	1YrCancerRMP_Inh_FAH16to70	*	3.63E-08
376	ALL		564247.7	4225543	0.000308	9901	DieselExhPM	5.48E-08	1YrCancerRMP_Inh_FAH16to70	*	5.48E-08
377	ALL		564260.2	4225588	0.000304	9901	DieselExhPM	5.41E-08	1YrCancerRMP_Inh_FAH16to70	*	5.41E-08
378	ALL		564232.8	4225714	0.000332	9901	DieselExhPM	5.90E-08	1YrCancerRMP_Inh_FAH16to70	*	5.90E-08
379	ALL		564499.2	4226101	0.000208	9901	DieselExhPM	3.70E-08	1YrCancerRMP_Inh_FAH16to70	*	3.70E-08
380	ALL		564688.7	4225735	0.000205	9901	DieselExhPM	3.64E-08	1YrCancerRMP_Inh_FAH16to70	*	3.64E-08
381	ALL		564250.1	4225635	0.000313	9901	DieselExhPM	5.57E-08	1YrCancerRMP_Inh_FAH16to70	*	5.57E-08
382	ALL		564483.1	4226052	0.000211	9901	DieselExhPM	3.75E-08	1YrCancerRMP_Inh_FAH16to70	*	3.75E-08
383	ALL		564628.2	4225826	0.000188	9901	DieselExhPM	3.35E-08	1YrCancerRMP_Inh_FAH16to70	*	3.35E-08
384	ALL		564229	4225540	0.000317	9901	DieselExhPM	5.63E-08	1YrCancerRMP_Inh_FAH16to70	*	5.63E-08
385	ALL		564243	4225585	0.000313	9901	DieselExhPM	5.57E-08	1YrCancerRMP_Inh_FAH16to70	*	5.57E-08
386	ALL		564481.4	4226100	0.000213	9901	DieselExhPM	3.79E-08	1YrCancerRMP_Inh_FAH16to70	*	3.79E-08
387	ALL		564232.9	4225632	0.000323	9901	DieselExhPM	5.74E-08	1YrCancerRMP_Inh_FAH16to70	*	5.74E-08
388	ALL		564627.5	4225858	0.000182	9901	DieselExhPM	3.23E-08	1YrCancerRMP_Inh_FAH16to70	*	3.23E-08
389	ALL		564463.8	4226053	0.000219	9901	DieselExhPM	3.89E-08	1YrCancerRMP_Inh_FAH16to70	*	3.89E-08
390	ALL		564224.6	4225583	0.000322	9901	DieselExhPM	5.73E-08	1YrCancerRMP_Inh_FAH16to70	*	5.73E-08
391	ALL		564460.9	4226102	0.000221	9901	DieselExhPM	3.92E-08	1YrCancerRMP_Inh_FAH16to70	*	3.92E-08
392	ALL		564216.1	4225630	0.000332	9901	DieselExhPM	5.90E-08	1YrCancerRMP_Inh_FAH16to70	*	5.90E-08
393	ALL		564445	4226050	0.000228	9901	DieselExhPM	4.06E-08	1YrCancerRMP_Inh_FAH16to70	*	4.06E-08
394	ALL		564442.1	4226102	0.000228	9901	DieselExhPM	4.05E-08	1YrCancerRMP_Inh_FAH16to70	*	4.05E-08
395	ALL		564424.8	4226098	0.000235	9901	DieselExhPM	4.18E-08	1YrCancerRMP_Inh_FAH16to70	*	4.18E-08
396	ALL		564423.1	4226047	0.00024	9901	DieselExhPM	4.27E-08	1YrCancerRMP_Inh_FAH16to70	*	4.27E-08
397	ALL		564314.3	4225990	0.000356	9901	DieselExhPM	6.33E-08	1YrCancerRMP_Inh_FAH16to70	*	6.33E-08
398	ALL		564230.7	4225961	0.00041	9901	DieselExhPM	7.29E-08	1YrCancerRMP_Inh_FAH16to70	*	7.29E-08
399	ALL		563948.9	4225877	0.000627	9901	DieselExhPM	1.12E-07	1YrCancerRMP_Inh_FAH16to70	*	1.12E-07
400	ALL		563921.6	4225898	0.000678	9901	DieselExhPM	1.21E-07	1YrCancerRMP_Inh_FAH16to70	*	1.21E-07
401	ALL		564407.1	4226092	0.000244	9901	DieselExhPM	4.34E-08	1YrCancerRMP_Inh_FAH16to70	*	4.34E-08
402	ALL		564689.5	4227110	0.000505	9901	DieselExhPM	8.99E-08	1YrCancerRMP_Inh_FAH16to70	*	8.99E-08
403	ALL		564017.1	4225840	0.000531	9901	DieselExhPM	9.45E-08	1YrCancerRMP_Inh_FAH16to70	*	9.45E-08
404	ALL		563944.5	4225824	0.000597	9901	DieselExhPM	1.06E-07	1YrCancerRMP_Inh_FAH16to70	*	1.06E-07
405	ALL		563879.2	4225724	0.000609	9901	DieselExhPM	1.08E-07	1YrCancerRMP_Inh_FAH16to70	*	1.08E-07
406	ALL		563874.7	4225887	0.00074	9901	DieselExhPM	1.32E-07	1YrCancerRMP_Inh_FAH16to70	*	1.32E-07
407	ALL		564224.1	4225671	0.000331	9901	DieselExhPM	5.88E-08	1YrCancerRMP_Inh_FAH16to70	*	5.88E-08
408	ALL		564216.2	4225712	0.000341	9901	DieselExhPM	6.07E-08	1YrCancerRMP_Inh_FAH16to70	*	6.07E-08
409	ALL		564194.8	4225840	0.00036	9901	DieselExhPM	6.40E-08	1YrCancerRMP_Inh_FAH16to70	*	6.40E-08
410	ALL		564435.4	4225931	0.000257	9901	DieselExhPM	4.57E-08	1YrCancerRMP_Inh_FAH16to70	*	4.57E-08
411	ALL		564066.3	4225725	0.000443	9901	DieselExhPM	7.88E-08	1YrCancerRMP_Inh_FAH16to70	*	7.88E-08
412	ALL		564299.2	4225854	0.000315	9901	DieselExhPM	5.60E-08	1YrCancerRMP_Inh_FAH16to70	*	5.60E-08
413	ALL		563964.8	4225551	0.000447	9901	DieselExhPM	7.94E-08	1YrCancerRMP_Inh_FAH16to70	*	7.94E-08
414	ALL		564000.6	4225736	0.000496	9901	DieselExhPM	8.81E-08	1YrCancerRMP_Inh_FAH16to70	*	8.81E-08
415	ALL		563889.6	4225765	0.000625	9901	DieselExhPM	1.11E-07	1YrCancerRMP_Inh_FAH16to70	*	1.11E-07
416	ALL		564740.9	4225601	0.000212	9901	DieselExhPM	3.77E-08	1YrCancerRMP_Inh_FAH16to70	*	3.77E-08
417	ALL		563917.5	4225920	0.000701	9901	DieselExhPM	1.25E-07	1YrCancerRMP_Inh_FAH16to70	*	1.25E-07
418	ALL		564311.6	4226010	0.000357	9901	DieselExhPM	6.35E-08	1YrCancerRMP_Inh_FAH16to70	*	6.35E-08
419	ALL		564677.6	4225596	0.000225	9901	DieselExhPM	4.00E-08	1YrCancerRMP_Inh_FAH16to70	*	4.00E-08
420	ALL		564089.7	4225988	0.000522	9901	DieselExhPM	9.29E-08	1YrCancerRMP_Inh_FAH16to70	*	9.29E-08
421	ALL		564754.8	4227597	0.000486	9901	DieselExhPM	8.65E-08	1YrCancerRMP_Inh_FAH16to70	*	8.65E-08
422	ALL		564708.6	4225550	0.000216	9901	DieselExhPM	3.84E-08	1YrCancerRMP_Inh_FAH16to70	*	3.84E-08
423	ALL		564664	4225579	0.000225	9901	DieselExhPM	3.99E-08	1YrCancerRMP_Inh_FAH16to70	*	3.99E-08
424	ALL		564068.9	4225984	0.00054	9901	DieselExhPM	9.60E-08	1YrCancerRMP_Inh_FAH16to70	*	9.60E-08
425	ALL		564063.3	4225930	0.000514	9901	DieselExhPM	9.14E-08	1YrCancerRMP_Inh_FAH16to70	*	9.14E-08
426	ALL		564695.6	4225538	0.000215	9901	DieselExhPM	3.83E-08	1YrCancerRMP_Inh_FAH16to70	*	3.83E-08
427	ALL		563858.1	4225722	0.000631	9901	DieselExhPM	1.12E-07	1YrCancerRMP_Inh_FAH16to70	*	1.12E-07
428	ALL		564274.4	4226006	0.00038	9901	DieselExhPM	6.77E-08	1YrCancerRMP_Inh_FAH16to70	*	6.77E-08
429	ALL		563926.3	4225822	0.000617	9901	DieselExhPM	1.10E-07	1YrCancerRMP_Inh_FAH16to70	*	1.10E-07
430	ALL		563872	4225907	0.000763	9901	DieselExhPM	1.36E-07	1YrCancerRMP_Inh_FAH16to70	*	1.36E-07
431	ALL		564048.2	4225981	0.000559	9901	DieselExhPM	9.94E-08	1YrCancerRMP_Inh_FAH16to70	*	9.94E-08
432	ALL		564651.2	4225566	0.000223	9901	DieselExhPM	3.97E-08	1YrCancerRMP_Inh_FAH16to70	*	3.97E-08
433	ALL		564042.3	4225932	0.000537	9901	DieselExhPM	9.56E-08	1YrCancerRMP_Inh_FAH16to70	*	9.56E-08
434	ALL		564683.5	4225523	0.000213	9901	DieselExhPM	3.80E-08	1YrCancerRMP_Inh_FAH16to70	*	3.80E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
435	ALL		564029.9	4225977	0.000577	9901	DieselExhPM	1.03E-07	1YrCancerRMP_Inh_FAH16to70	*	1.03E-07
436	ALL		564021.5	4225928	0.000558	9901	DieselExhPM	9.93E-08	1YrCancerRMP_Inh_FAH16to70	*	9.93E-08
437	ALL		564636.4	4225553	0.000221	9901	DieselExhPM	3.94E-08	1YrCancerRMP_Inh_FAH16to70	*	3.94E-08
438	ALL		564007.4	4225930	0.000576	9901	DieselExhPM	1.02E-07	1YrCancerRMP_Inh_FAH16to70	*	1.02E-07
439	ALL		564199	4225710	0.000352	9901	DieselExhPM	6.25E-08	1YrCancerRMP_Inh_FAH16to70	*	6.25E-08
440	ALL		564620.5	4225543	0.000219	9901	DieselExhPM	3.89E-08	1YrCancerRMP_Inh_FAH16to70	*	3.89E-08
441	ALL		563987.4	4225927	0.000599	9901	DieselExhPM	1.06E-07	1YrCancerRMP_Inh_FAH16to70	*	1.06E-07
442	ALL		564603.4	4225533	0.000216	9901	DieselExhPM	3.85E-08	1YrCancerRMP_Inh_FAH16to70	*	3.85E-08
443	ALL		563967.5	4225925	0.000622	9901	DieselExhPM	1.11E-07	1YrCancerRMP_Inh_FAH16to70	*	1.11E-07
444	ALL		563947.9	4225968	0.000681	9901	DieselExhPM	1.21E-07	1YrCancerRMP_Inh_FAH16to70	*	1.21E-07
445	ALL		564213.7	4225670	0.000337	9901	DieselExhPM	6.00E-08	1YrCancerRMP_Inh_FAH16to70	*	6.00E-08
446	ALL		563947.6	4225922	0.000655	9901	DieselExhPM	1.16E-07	1YrCancerRMP_Inh_FAH16to70	*	1.16E-07
447	ALL		564586.3	4225526	0.000214	9901	DieselExhPM	3.81E-08	1YrCancerRMP_Inh_FAH16to70	*	3.81E-08
448	ALL		563934.2	4225961	0.000706	9901	DieselExhPM	1.26E-07	1YrCancerRMP_Inh_FAH16to70	*	1.26E-07
449	ALL		563910.1	4225958	0.000747	9901	DieselExhPM	1.33E-07	1YrCancerRMP_Inh_FAH16to70	*	1.33E-07
450	ALL		564570.2	4225520	0.000213	9901	DieselExhPM	3.79E-08	1YrCancerRMP_Inh_FAH16to70	*	3.79E-08
451	ALL		564308.8	4226030	0.000357	9901	DieselExhPM	6.34E-08	1YrCancerRMP_Inh_FAH16to70	*	6.34E-08
452	ALL		564271.6	4226035	0.000384	9901	DieselExhPM	6.83E-08	1YrCancerRMP_Inh_FAH16to70	*	6.83E-08
453	ALL		563869.2	4225927	0.000788	9901	DieselExhPM	1.40E-07	1YrCancerRMP_Inh_FAH16to70	*	1.40E-07
454	ALL		564573.6	4227865	0.000612	9901	DieselExhPM	1.09E-07	1YrCancerRMP_Inh_FAH16to70	*	1.09E-07
455	ALL		564182.4	4225708	0.000362	9901	DieselExhPM	6.44E-08	1YrCancerRMP_Inh_FAH16to70	*	6.44E-08
456	ALL		564192.8	4225664	0.000349	9901	DieselExhPM	6.21E-08	1YrCancerRMP_Inh_FAH16to70	*	6.21E-08
457	ALL		564306	4226050	0.000355	9901	DieselExhPM	6.31E-08	1YrCancerRMP_Inh_FAH16to70	*	6.31E-08
458	ALL		564268.8	4226052	0.000385	9901	DieselExhPM	6.86E-08	1YrCancerRMP_Inh_FAH16to70	*	6.86E-08
459	ALL		563866.5	4225947	0.000814	9901	DieselExhPM	1.45E-07	1YrCancerRMP_Inh_FAH16to70	*	1.45E-07
460	ALL		564325.8	4225727	0.000292	9901	DieselExhPM	5.19E-08	1YrCancerRMP_Inh_FAH16to70	*	5.19E-08
461	ALL		564165	4225705	0.000372	9901	DieselExhPM	6.62E-08	1YrCancerRMP_Inh_FAH16to70	*	6.62E-08
462	ALL		564513.6	4227681	0.000711	9901	DieselExhPM	1.26E-07	1YrCancerRMP_Inh_FAH16to70	*	1.26E-07
463	ALL		563884.1	4225543	0.000506	9901	DieselExhPM	8.99E-08	1YrCancerRMP_Inh_FAH16to70	*	8.99E-08
464	ALL		564303.2	4226070	0.000352	9901	DieselExhPM	6.27E-08	1YrCancerRMP_Inh_FAH16to70	*	6.27E-08
465	ALL		563881.2	4225564	0.000518	9901	DieselExhPM	9.21E-08	1YrCancerRMP_Inh_FAH16to70	*	9.21E-08
466	ALL		563878.3	4225586	0.00053	9901	DieselExhPM	9.43E-08	1YrCancerRMP_Inh_FAH16to70	*	9.43E-08
467	ALL		563875.4	4225607	0.000544	9901	DieselExhPM	9.67E-08	1YrCancerRMP_Inh_FAH16to70	*	9.67E-08
468	ALL		564265.6	4226075	0.000385	9901	DieselExhPM	6.85E-08	1YrCancerRMP_Inh_FAH16to70	*	6.85E-08
469	ALL		563863.7	4225967	0.000842	9901	DieselExhPM	1.50E-07	1YrCancerRMP_Inh_FAH16to70	*	1.50E-07
470	ALL		564383.4	4227830	0.000872	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70	*	1.55E-07
471	ALL		564743.6	4226650	0.000471	9901	DieselExhPM	8.38E-08	1YrCancerRMP_Inh_FAH16to70	*	8.38E-08
472	ALL		564742.2	4226686	0.0005	9901	DieselExhPM	8.89E-08	1YrCancerRMP_Inh_FAH16to70	*	8.89E-08
473	ALL		564739	4226724	0.000524	9901	DieselExhPM	9.32E-08	1YrCancerRMP_Inh_FAH16to70	*	9.32E-08
474	ALL		564733	4226764	0.000538	9901	DieselExhPM	9.57E-08	1YrCancerRMP_Inh_FAH16to70	*	9.57E-08
475	ALL		564638.3	4226847	0.000619	9901	DieselExhPM	1.10E-07	1YrCancerRMP_Inh_FAH16to70	*	1.10E-07
476	ALL		564714.9	4226896	0.000543	9901	DieselExhPM	9.65E-08	1YrCancerRMP_Inh_FAH16to70	*	9.65E-08
477	ALL		563906.3	4225984	0.000777	9901	DieselExhPM	1.38E-07	1YrCancerRMP_Inh_FAH16to70	*	1.38E-07
478	ALL		564303.8	4226090	0.000346	9901	DieselExhPM	6.15E-08	1YrCancerRMP_Inh_FAH16to70	*	6.15E-08
479	ALL		564262.5	4226098	0.000384	9901	DieselExhPM	6.83E-08	1YrCancerRMP_Inh_FAH16to70	*	6.83E-08
480	ALL		563860.9	4225987	0.000872	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70	*	1.55E-07
481	ALL		564329.2	4225692	0.000282	9901	DieselExhPM	5.02E-08	1YrCancerRMP_Inh_FAH16to70	*	5.02E-08
482	ALL		564315.2	4226118	0.000325	9901	DieselExhPM	5.79E-08	1YrCancerRMP_Inh_FAH16to70	*	5.79E-08
483	ALL		563904.8	4226004	0.000799	9901	DieselExhPM	1.42E-07	1YrCancerRMP_Inh_FAH16to70	*	1.42E-07
484	ALL		563846.5	4225759	0.000672	9901	DieselExhPM	1.20E-07	1YrCancerRMP_Inh_FAH16to70	*	1.20E-07
485	ALL		563922.1	4226258	0.001158	9901	DieselExhPM	2.06E-07	1YrCancerRMP_Inh_FAH16to70	*	2.06E-07
486	ALL		564325.6	4227695	0.001039	9901	DieselExhPM	1.85E-07	1YrCancerRMP_Inh_FAH16to70	*	1.85E-07
487	ALL		563844.4	4225782	0.000694	9901	DieselExhPM	1.23E-07	1YrCancerRMP_Inh_FAH16to70	*	1.23E-07
488	ALL		564215.1	4227694	0.001302	9901	DieselExhPM	2.32E-07	1YrCancerRMP_Inh_FAH16to70	*	2.32E-07
489	ALL		563841.5	4225802	0.000715	9901	DieselExhPM	1.27E-07	1YrCancerRMP_Inh_FAH16to70	*	1.27E-07
490	ALL		564255.1	4226121	0.000387	9901	DieselExhPM	6.89E-08	1YrCancerRMP_Inh_FAH16to70	*	6.89E-08
491	ALL		563857.6	4226013	0.000899	9901	DieselExhPM	1.60E-07	1YrCancerRMP_Inh_FAH16to70	*	1.60E-07
492	ALL		563838.8	4225822	0.000737	9901	DieselExhPM	1.31E-07	1YrCancerRMP_Inh_FAH16to70	*	1.31E-07
493	ALL		563836	4225842	0.000761	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
494	ALL		563833.2	4225862	0.000786	9901	DieselExhPM	1.40E-07	1YrCancerRMP_Inh_FAH16to70	*	1.40E-07
495	ALL		563830.5	4225882	0.000812	9901	DieselExhPM	1.44E-07	1YrCancerRMP_Inh_FAH16to70	*	1.44E-07
496	ALL		563827.7	4225902	0.000841	9901	DieselExhPM	1.50E-07	1YrCancerRMP_Inh_FAH16to70	*	1.50E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
497	ALL		563825	4225922	0.000871	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70	*	1.55E-07
498	ALL		563822.2	4225942	0.000904	9901	DieselExhPM	1.61E-07	1YrCancerRMP_Inh_FAH16to70	*	1.61E-07
499	ALL		563900.5	4226026	0.000819	9901	DieselExhPM	1.46E-07	1YrCancerRMP_Inh_FAH16to70	*	1.46E-07
500	ALL		563819.5	4225961	0.000938	9901	DieselExhPM	1.67E-07	1YrCancerRMP_Inh_FAH16to70	*	1.67E-07
501	ALL		563816.7	4225981	0.000976	9901	DieselExhPM	1.74E-07	1YrCancerRMP_Inh_FAH16to70	*	1.74E-07
502	ALL		563813.9	4226001	0.001016	9901	DieselExhPM	1.81E-07	1YrCancerRMP_Inh_FAH16to70	*	1.81E-07
503	ALL		563855.4	4226026	0.000922	9901	DieselExhPM	1.64E-07	1YrCancerRMP_Inh_FAH16to70	*	1.64E-07
504	ALL		563379.2	4227699	0.000215	9901	DieselExhPM	3.83E-08	1YrCancerRMP_Inh_FAH16to70	*	3.83E-08
505	ALL		563811.2	4226021	0.001058	9901	DieselExhPM	1.88E-07	1YrCancerRMP_Inh_FAH16to70	*	1.88E-07
506	ALL		563808.4	4226041	0.001104	9901	DieselExhPM	1.96E-07	1YrCancerRMP_Inh_FAH16to70	*	1.96E-07
507	ALL		563805.6	4226061	0.001154	9901	DieselExhPM	2.05E-07	1YrCancerRMP_Inh_FAH16to70	*	2.05E-07
508	ALL		563802.7	4226083	0.001213	9901	DieselExhPM	2.16E-07	1YrCancerRMP_Inh_FAH16to70	*	2.16E-07
509	ALL		563803.7	4226109	0.001273	9901	DieselExhPM	2.26E-07	1YrCancerRMP_Inh_FAH16to70	*	2.26E-07
510	ALL		563802.9	4226131	0.001335	9901	DieselExhPM	2.37E-07	1YrCancerRMP_Inh_FAH16to70	*	2.37E-07
511	ALL		563897.8	4226046	0.000846	9901	DieselExhPM	1.51E-07	1YrCancerRMP_Inh_FAH16to70	*	1.51E-07
512	ALL		563852.7	4226046	0.000957	9901	DieselExhPM	1.70E-07	1YrCancerRMP_Inh_FAH16to70	*	1.70E-07
513	ALL		564348.9	4225864	0.000311	9901	DieselExhPM	5.54E-08	1YrCancerRMP_Inh_FAH16to70	*	5.54E-08
514	ALL		564453.9	4225985	0.000235	9901	DieselExhPM	4.18E-08	1YrCancerRMP_Inh_FAH16to70	*	4.18E-08
515	ALL		563983.6	4225600	0.000451	9901	DieselExhPM	8.03E-08	1YrCancerRMP_Inh_FAH16to70	*	8.03E-08
516	ALL		564721	4225563	0.000215	9901	DieselExhPM	3.83E-08	1YrCancerRMP_Inh_FAH16to70	*	3.83E-08
517	ALL		564088.5	4225771	0.000444	9901	DieselExhPM	7.90E-08	1YrCancerRMP_Inh_FAH16to70	*	7.90E-08
518	ALL		564047.5	4225892	0.000527	9901	DieselExhPM	9.37E-08	1YrCancerRMP_Inh_FAH16to70	*	9.37E-08
519	ALL		564250	4225860	0.000349	9901	DieselExhPM	6.22E-08	1YrCancerRMP_Inh_FAH16to70	*	6.22E-08
520	ALL		563968.7	4225785	0.000549	9901	DieselExhPM	9.77E-08	1YrCancerRMP_Inh_FAH16to70	*	9.77E-08
521	ALL		563895.7	4226066	0.000875	9901	DieselExhPM	1.56E-07	1YrCancerRMP_Inh_FAH16to70	*	1.56E-07
522	ALL		563849.8	4226067	0.000995	9901	DieselExhPM	1.77E-07	1YrCancerRMP_Inh_FAH16to70	*	1.77E-07
523	ALL		564183.3	4227322	0.001762	9901	DieselExhPM	3.13E-07	1YrCancerRMP_Inh_FAH16to70	*	3.13E-07
524	ALL		564394.4	4227205	0.000943	9901	DieselExhPM	1.68E-07	1YrCancerRMP_Inh_FAH16to70	*	1.68E-07
525	ALL		564286.2	4227788	0.001069	9901	DieselExhPM	1.90E-07	1YrCancerRMP_Inh_FAH16to70	*	1.90E-07
526	ALL		563904.4	4226105	0.000907	9901	DieselExhPM	1.61E-07	1YrCancerRMP_Inh_FAH16to70	*	1.61E-07
527	ALL		563837.9	4226095	0.001077	9901	DieselExhPM	1.92E-07	1YrCancerRMP_Inh_FAH16to70	*	1.92E-07
528	ALL		564115	4227201	0.00221	9901	DieselExhPM	3.93E-07	1YrCancerRMP_Inh_FAH16to70	*	3.93E-07
529	ALL		563988.2	4225566	0.000436	9901	DieselExhPM	7.76E-08	1YrCancerRMP_Inh_FAH16to70	*	7.76E-08
530	ALL		563979.4	4225733	0.000512	9901	DieselExhPM	9.10E-08	1YrCancerRMP_Inh_FAH16to70	*	9.10E-08
531	ALL		564036.2	4225740	0.000469	9901	DieselExhPM	8.35E-08	1YrCancerRMP_Inh_FAH16to70	*	8.35E-08
532	ALL		563887.7	4225787	0.000642	9901	DieselExhPM	1.14E-07	1YrCancerRMP_Inh_FAH16to70	*	1.14E-07
533	ALL		564285.8	4225893	0.000334	9901	DieselExhPM	5.95E-08	1YrCancerRMP_Inh_FAH16to70	*	5.95E-08
534	ALL		564192.9	4225863	0.00037	9901	DieselExhPM	6.59E-08	1YrCancerRMP_Inh_FAH16to70	*	6.59E-08
535	ALL		564456	4225934	0.000244	9901	DieselExhPM	4.34E-08	1YrCancerRMP_Inh_FAH16to70	*	4.34E-08
536	ALL		563888	4226122	0.000976	9901	DieselExhPM	1.74E-07	1YrCancerRMP_Inh_FAH16to70	*	1.74E-07
537	ALL		564305	4227437	0.00121	9901	DieselExhPM	2.15E-07	1YrCancerRMP_Inh_FAH16to70	*	2.15E-07
538	ALL		563740.6	4226229	0.002154	9901	DieselExhPM	3.83E-07	1YrCancerRMP_Inh_FAH16to70	*	3.83E-07
539	ALL		563855.6	4226119	0.001065	9901	DieselExhPM	1.89E-07	1YrCancerRMP_Inh_FAH16to70	*	1.89E-07
540	ALL		563420.2	4227596	0.000279	9901	DieselExhPM	4.97E-08	1YrCancerRMP_Inh_FAH16to70	*	4.97E-08
541	ALL		564122.8	4227576	0.001736	9901	DieselExhPM	3.09E-07	1YrCancerRMP_Inh_FAH16to70	*	3.09E-07
542	ALL		564306.1	4225724	0.000298	9901	DieselExhPM	5.29E-08	1YrCancerRMP_Inh_FAH16to70	*	5.29E-08
543	ALL		564038	4227445	0.002423	9901	DieselExhPM	4.31E-07	1YrCancerRMP_Inh_FAH16to70	*	4.31E-07
544	ALL		563939.9	4227649	0.001776	9901	DieselExhPM	3.16E-07	1YrCancerRMP_Inh_FAH16to70	*	3.16E-07
545	ALL		563913	4227508	0.00243	9901	DieselExhPM	4.32E-07	1YrCancerRMP_Inh_FAH16to70	*	4.32E-07
546	ALL		563850.8	4227763	0.001173	9901	DieselExhPM	2.09E-07	1YrCancerRMP_Inh_FAH16to70	*	2.09E-07
547	ALL		563813.8	4227761	0.001057	9901	DieselExhPM	1.88E-07	1YrCancerRMP_Inh_FAH16to70	*	1.88E-07
548	ALL		563781.1	4227768	0.000922	9901	DieselExhPM	1.64E-07	1YrCancerRMP_Inh_FAH16to70	*	1.64E-07
549	ALL		563796.3	4227476	0.002252	9901	DieselExhPM	4.00E-07	1YrCancerRMP_Inh_FAH16to70	*	4.00E-07
550	ALL		563745.5	4227812	0.00071	9901	DieselExhPM	1.26E-07	1YrCancerRMP_Inh_FAH16to70	*	1.26E-07
551	ALL		563780.6	4227655	0.001251	9901	DieselExhPM	2.23E-07	1YrCancerRMP_Inh_FAH16to70	*	2.23E-07
552	ALL		564312.9	4225689	0.000288	9901	DieselExhPM	5.12E-08	1YrCancerRMP_Inh_FAH16to70	*	5.12E-08
553	ALL		564414.6	4225659	0.000253	9901	DieselExhPM	4.50E-08	1YrCancerRMP_Inh_FAH16to70	*	4.50E-08
554	ALL		564469.1	4225665	0.000254	9901	DieselExhPM	4.51E-08	1YrCancerRMP_Inh_FAH16to70	*	4.51E-08
555	ALL		564417.1	4225677	0.000258	9901	DieselExhPM	4.58E-08	1YrCancerRMP_Inh_FAH16to70	*	4.58E-08
556	ALL		564461.7	4225680	0.000258	9901	DieselExhPM	4.59E-08	1YrCancerRMP_Inh_FAH16to70	*	4.59E-08
557	ALL		564410.2	4225697	0.000263	9901	DieselExhPM	4.68E-08	1YrCancerRMP_Inh_FAH16to70	*	4.68E-08
558	ALL		564463.2	4225707	0.000265	9901	DieselExhPM	4.71E-08	1YrCancerRMP_Inh_FAH16to70	*	4.71E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
559	ALL		563225	4226300	0.00075	9901	DieselExhPM	1.33E-07	1YrCancerRMP_Inh_FAH16to70	*	1.33E-07
560	ALL		563225	4226325	0.000747	9901	DieselExhPM	1.33E-07	1YrCancerRMP_Inh_FAH16to70	*	1.33E-07
561	ALL		563225	4226350	0.000749	9901	DieselExhPM	1.33E-07	1YrCancerRMP_Inh_FAH16to70	*	1.33E-07
562	ALL		563225	4226375	0.000758	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
563	ALL		563225	4226400	0.000776	9901	DieselExhPM	1.38E-07	1YrCancerRMP_Inh_FAH16to70	*	1.38E-07
564	ALL		563225	4226425	0.000803	9901	DieselExhPM	1.43E-07	1YrCancerRMP_Inh_FAH16to70	*	1.43E-07
565	ALL		563225	4226450	0.000853	9901	DieselExhPM	1.52E-07	1YrCancerRMP_Inh_FAH16to70	*	1.52E-07
566	ALL		563225	4226475	0.000937	9901	DieselExhPM	1.67E-07	1YrCancerRMP_Inh_FAH16to70	*	1.67E-07
567	ALL		563225	4226500	0.001091	9901	DieselExhPM	1.94E-07	1YrCancerRMP_Inh_FAH16to70	*	1.94E-07
568	ALL		563225	4226525	0.001375	9901	DieselExhPM	2.45E-07	1YrCancerRMP_Inh_FAH16to70	*	2.45E-07
569	ALL		563225	4226550	0.001857	9901	DieselExhPM	3.30E-07	1YrCancerRMP_Inh_FAH16to70	*	3.30E-07
570	ALL		563225	4226575	0.002598	9901	DieselExhPM	4.62E-07	1YrCancerRMP_Inh_FAH16to70	*	4.62E-07
571	ALL		563225	4226600	0.003548	9901	DieselExhPM	6.31E-07	1YrCancerRMP_Inh_FAH16to70	*	6.31E-07
572	ALL		563225	4226625	0.00454	9901	DieselExhPM	8.07E-07	1YrCancerRMP_Inh_FAH16to70	*	8.07E-07
573	ALL		563225	4226650	0.005353	9901	DieselExhPM	9.52E-07	1YrCancerRMP_Inh_FAH16to70	*	9.52E-07
574	ALL		563225	4226675	0.00586	9901	DieselExhPM	1.04E-06	1YrCancerRMP_Inh_FAH16to70	*	1.04E-06
575	ALL		563225	4226700	0.006001	9901	DieselExhPM	1.07E-06	1YrCancerRMP_Inh_FAH16to70	*	1.07E-06
576	ALL		563225	4226725	0.005776	9901	DieselExhPM	1.03E-06	1YrCancerRMP_Inh_FAH16to70	*	1.03E-06
577	ALL		563225	4226750	0.005236	9901	DieselExhPM	9.31E-07	1YrCancerRMP_Inh_FAH16to70	*	9.31E-07
578	ALL		563225	4226775	0.004481	9901	DieselExhPM	7.97E-07	1YrCancerRMP_Inh_FAH16to70	*	7.97E-07
579	ALL		563225	4226800	0.003653	9901	DieselExhPM	6.50E-07	1YrCancerRMP_Inh_FAH16to70	*	6.50E-07
580	ALL		563225	4226825	0.002917	9901	DieselExhPM	5.19E-07	1YrCancerRMP_Inh_FAH16to70	*	5.19E-07
581	ALL		563225	4226850	0.002339	9901	DieselExhPM	4.16E-07	1YrCancerRMP_Inh_FAH16to70	*	4.16E-07
582	ALL		563225	4226875	0.001858	9901	DieselExhPM	3.30E-07	1YrCancerRMP_Inh_FAH16to70	*	3.30E-07
583	ALL		563225	4226900	0.001511	9901	DieselExhPM	2.69E-07	1YrCancerRMP_Inh_FAH16to70	*	2.69E-07
584	ALL		563225	4226925	0.001247	9901	DieselExhPM	2.22E-07	1YrCancerRMP_Inh_FAH16to70	*	2.22E-07
585	ALL		563225	4226950	0.001043	9901	DieselExhPM	1.85E-07	1YrCancerRMP_Inh_FAH16to70	*	1.85E-07
586	ALL		563225	4226975	0.000887	9901	DieselExhPM	1.58E-07	1YrCancerRMP_Inh_FAH16to70	*	1.58E-07
587	ALL		563225	4227000	0.000769	9901	DieselExhPM	1.37E-07	1YrCancerRMP_Inh_FAH16to70	*	1.37E-07
588	ALL		563225	4227025	0.000684	9901	DieselExhPM	1.22E-07	1YrCancerRMP_Inh_FAH16to70	*	1.22E-07
589	ALL		563225	4227050	0.000617	9901	DieselExhPM	1.10E-07	1YrCancerRMP_Inh_FAH16to70	*	1.10E-07
590	ALL		563250	4226300	0.000877	9901	DieselExhPM	1.56E-07	1YrCancerRMP_Inh_FAH16to70	*	1.56E-07
591	ALL		563250	4226325	0.00087	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70	*	1.55E-07
592	ALL		563250	4226350	0.000867	9901	DieselExhPM	1.54E-07	1YrCancerRMP_Inh_FAH16to70	*	1.54E-07
593	ALL		563250	4226375	0.00087	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70	*	1.55E-07
594	ALL		563250	4226400	0.000882	9901	DieselExhPM	1.57E-07	1YrCancerRMP_Inh_FAH16to70	*	1.57E-07
595	ALL		563250	4226425	0.00091	9901	DieselExhPM	1.62E-07	1YrCancerRMP_Inh_FAH16to70	*	1.62E-07
596	ALL		563250	4226450	0.000958	9901	DieselExhPM	1.70E-07	1YrCancerRMP_Inh_FAH16to70	*	1.70E-07
597	ALL		563250	4226475	0.001042	9901	DieselExhPM	1.85E-07	1YrCancerRMP_Inh_FAH16to70	*	1.85E-07
598	ALL		563250	4226500	0.001199	9901	DieselExhPM	2.13E-07	1YrCancerRMP_Inh_FAH16to70	*	2.13E-07
599	ALL		563250	4226525	0.001493	9901	DieselExhPM	2.65E-07	1YrCancerRMP_Inh_FAH16to70	*	2.65E-07
600	ALL		563250	4226550	0.002017	9901	DieselExhPM	3.59E-07	1YrCancerRMP_Inh_FAH16to70	*	3.59E-07
601	ALL		563250	4226575	0.002874	9901	DieselExhPM	5.11E-07	1YrCancerRMP_Inh_FAH16to70	*	5.11E-07
602	ALL		563250	4226600	0.00401	9901	DieselExhPM	7.13E-07	1YrCancerRMP_Inh_FAH16to70	*	7.13E-07
603	ALL		563250	4226625	0.005191	9901	DieselExhPM	9.23E-07	1YrCancerRMP_Inh_FAH16to70	*	9.23E-07
604	ALL		563250	4226650	0.006145	9901	DieselExhPM	1.09E-06	1YrCancerRMP_Inh_FAH16to70	*	1.09E-06
605	ALL		563250	4226675	0.006711	9901	DieselExhPM	1.19E-06	1YrCancerRMP_Inh_FAH16to70	*	1.19E-06
606	ALL		563250	4226700	0.006807	9901	DieselExhPM	1.21E-06	1YrCancerRMP_Inh_FAH16to70	*	1.21E-06
607	ALL		563250	4226725	0.006521	9901	DieselExhPM	1.16E-06	1YrCancerRMP_Inh_FAH16to70	*	1.16E-06
608	ALL		563250	4226750	0.00585	9901	DieselExhPM	1.04E-06	1YrCancerRMP_Inh_FAH16to70	*	1.04E-06
609	ALL		563250	4226775	0.004935	9901	DieselExhPM	8.78E-07	1YrCancerRMP_Inh_FAH16to70	*	8.78E-07
610	ALL		563250	4226800	0.00397	9901	DieselExhPM	7.06E-07	1YrCancerRMP_Inh_FAH16to70	*	7.06E-07
611	ALL		563250	4226825	0.003109	9901	DieselExhPM	5.53E-07	1YrCancerRMP_Inh_FAH16to70	*	5.53E-07
612	ALL		563250	4226850	0.00241	9901	DieselExhPM	4.29E-07	1YrCancerRMP_Inh_FAH16to70	*	4.29E-07
613	ALL		563250	4226875	0.001915	9901	DieselExhPM	3.40E-07	1YrCancerRMP_Inh_FAH16to70	*	3.40E-07
614	ALL		563250	4226900	0.001552	9901	DieselExhPM	2.76E-07	1YrCancerRMP_Inh_FAH16to70	*	2.76E-07
615	ALL		563250	4226925	0.001279	9901	DieselExhPM	2.27E-07	1YrCancerRMP_Inh_FAH16to70	*	2.27E-07
616	ALL		563250	4226950	0.001076	9901	DieselExhPM	1.91E-07	1YrCancerRMP_Inh_FAH16to70	*	1.91E-07
617	ALL		563250	4226975	0.00092	9901	DieselExhPM	1.64E-07	1YrCancerRMP_Inh_FAH16to70	*	1.64E-07
618	ALL		563250	4227000	0.000806	9901	DieselExhPM	1.43E-07	1YrCancerRMP_Inh_FAH16to70	*	1.43E-07
619	ALL		563250	4227025	0.000724	9901	DieselExhPM	1.29E-07	1YrCancerRMP_Inh_FAH16to70	*	1.29E-07
620	ALL		563250	4227050	0.000659	9901	DieselExhPM	1.17E-07	1YrCancerRMP_Inh_FAH16to70	*	1.17E-07

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
621	ALL		563275	4226300	0.001038	9901	DieselExhPM	1.85E-07	1YrCancerRMP_Inh_FAH16to70	*	1.85E-07
622	ALL		563275	4226325	0.00103	9901	DieselExhPM	1.83E-07	1YrCancerRMP_Inh_FAH16to70	*	1.83E-07
623	ALL		563275	4226350	0.001024	9901	DieselExhPM	1.82E-07	1YrCancerRMP_Inh_FAH16to70	*	1.82E-07
624	ALL		563275	4226375	0.001024	9901	DieselExhPM	1.82E-07	1YrCancerRMP_Inh_FAH16to70	*	1.82E-07
625	ALL		563275	4226400	0.001032	9901	DieselExhPM	1.84E-07	1YrCancerRMP_Inh_FAH16to70	*	1.84E-07
626	ALL		563275	4226425	0.001054	9901	DieselExhPM	1.87E-07	1YrCancerRMP_Inh_FAH16to70	*	1.87E-07
627	ALL		563275	4226450	0.001098	9901	DieselExhPM	1.95E-07	1YrCancerRMP_Inh_FAH16to70	*	1.95E-07
628	ALL		563275	4226475	0.001178	9901	DieselExhPM	2.10E-07	1YrCancerRMP_Inh_FAH16to70	*	2.10E-07
629	ALL		563275	4226500	0.001334	9901	DieselExhPM	2.37E-07	1YrCancerRMP_Inh_FAH16to70	*	2.37E-07
630	ALL		563275	4226525	0.001637	9901	DieselExhPM	2.91E-07	1YrCancerRMP_Inh_FAH16to70	*	2.91E-07
631	ALL		563275	4226550	0.00221	9901	DieselExhPM	3.93E-07	1YrCancerRMP_Inh_FAH16to70	*	3.93E-07
632	ALL		563275	4226575	0.003198	9901	DieselExhPM	5.69E-07	1YrCancerRMP_Inh_FAH16to70	*	5.69E-07
633	ALL		563275	4226600	0.004571	9901	DieselExhPM	8.13E-07	1YrCancerRMP_Inh_FAH16to70	*	8.13E-07
634	ALL		563275	4226625	0.006007	9901	DieselExhPM	1.07E-06	1YrCancerRMP_Inh_FAH16to70	*	1.07E-06
635	ALL		563275	4226650	0.007118	9901	DieselExhPM	1.27E-06	1YrCancerRMP_Inh_FAH16to70	*	1.27E-06
636	ALL		563275	4226675	0.007728	9901	DieselExhPM	1.37E-06	1YrCancerRMP_Inh_FAH16to70	*	1.37E-06
637	ALL		563275	4226700	0.007838	9901	DieselExhPM	1.39E-06	1YrCancerRMP_Inh_FAH16to70	*	1.39E-06
638	ALL		563275	4226725	0.007444	9901	DieselExhPM	1.32E-06	1YrCancerRMP_Inh_FAH16to70	*	1.32E-06
639	ALL		563275	4226750	0.006558	9901	DieselExhPM	1.17E-06	1YrCancerRMP_Inh_FAH16to70	*	1.17E-06
640	ALL		563275	4226775	0.005414	9901	DieselExhPM	9.63E-07	1YrCancerRMP_Inh_FAH16to70	*	9.63E-07
641	ALL		563275	4226800	0.004289	9901	DieselExhPM	7.63E-07	1YrCancerRMP_Inh_FAH16to70	*	7.63E-07
642	ALL		563275	4226825	0.003317	9901	DieselExhPM	5.90E-07	1YrCancerRMP_Inh_FAH16to70	*	5.90E-07
643	ALL		563275	4226850	0.002565	9901	DieselExhPM	4.56E-07	1YrCancerRMP_Inh_FAH16to70	*	4.56E-07
644	ALL		563275	4226875	0.001999	9901	DieselExhPM	3.55E-07	1YrCancerRMP_Inh_FAH16to70	*	3.55E-07
645	ALL		563275	4226900	0.001602	9901	DieselExhPM	2.85E-07	1YrCancerRMP_Inh_FAH16to70	*	2.85E-07
646	ALL		563275	4226925	0.001323	9901	DieselExhPM	2.35E-07	1YrCancerRMP_Inh_FAH16to70	*	2.35E-07
647	ALL		563275	4226950	0.001118	9901	DieselExhPM	1.99E-07	1YrCancerRMP_Inh_FAH16to70	*	1.99E-07
648	ALL		563275	4226975	0.000967	9901	DieselExhPM	1.72E-07	1YrCancerRMP_Inh_FAH16to70	*	1.72E-07
649	ALL		563275	4227000	0.000857	9901	DieselExhPM	1.52E-07	1YrCancerRMP_Inh_FAH16to70	*	1.52E-07
650	ALL		563275	4227025	0.000778	9901	DieselExhPM	1.38E-07	1YrCancerRMP_Inh_FAH16to70	*	1.38E-07
651	ALL		563275	4227050	0.000712	9901	DieselExhPM	1.27E-07	1YrCancerRMP_Inh_FAH16to70	*	1.27E-07
652	ALL		563300	4226300	0.001235	9901	DieselExhPM	2.20E-07	1YrCancerRMP_Inh_FAH16to70	*	2.20E-07
653	ALL		563300	4226325	0.001236	9901	DieselExhPM	2.20E-07	1YrCancerRMP_Inh_FAH16to70	*	2.20E-07
654	ALL		563300	4226350	0.001235	9901	DieselExhPM	2.20E-07	1YrCancerRMP_Inh_FAH16to70	*	2.20E-07
655	ALL		563300	4226375	0.001233	9901	DieselExhPM	2.19E-07	1YrCancerRMP_Inh_FAH16to70	*	2.19E-07
656	ALL		563300	4226400	0.001236	9901	DieselExhPM	2.20E-07	1YrCancerRMP_Inh_FAH16to70	*	2.20E-07
657	ALL		563300	4226425	0.001251	9901	DieselExhPM	2.22E-07	1YrCancerRMP_Inh_FAH16to70	*	2.22E-07
658	ALL		563300	4226450	0.001289	9901	DieselExhPM	2.29E-07	1YrCancerRMP_Inh_FAH16to70	*	2.29E-07
659	ALL		563300	4226475	0.001365	9901	DieselExhPM	2.43E-07	1YrCancerRMP_Inh_FAH16to70	*	2.43E-07
660	ALL		563300	4226500	0.001519	9901	DieselExhPM	2.70E-07	1YrCancerRMP_Inh_FAH16to70	*	2.70E-07
661	ALL		563300	4226525	0.001822	9901	DieselExhPM	3.24E-07	1YrCancerRMP_Inh_FAH16to70	*	3.24E-07
662	ALL		563300	4226550	0.002442	9901	DieselExhPM	4.34E-07	1YrCancerRMP_Inh_FAH16to70	*	4.34E-07
663	ALL		563300	4226575	0.003606	9901	DieselExhPM	6.41E-07	1YrCancerRMP_Inh_FAH16to70	*	6.41E-07
664	ALL		563300	4226600	0.005313	9901	DieselExhPM	9.45E-07	1YrCancerRMP_Inh_FAH16to70	*	9.45E-07
665	ALL		563300	4226625	0.007072	9901	DieselExhPM	1.26E-06	1YrCancerRMP_Inh_FAH16to70	*	1.26E-06
666	ALL		563300	4226650	0.008364	9901	DieselExhPM	1.49E-06	1YrCancerRMP_Inh_FAH16to70	*	1.49E-06
667	ALL		563300	4226675	0.009027	9901	DieselExhPM	1.61E-06	1YrCancerRMP_Inh_FAH16to70	*	1.61E-06
668	ALL		563300	4226700	0.009085	9901	DieselExhPM	1.62E-06	1YrCancerRMP_Inh_FAH16to70	*	1.62E-06
669	ALL		563300	4226725	0.008556	9901	DieselExhPM	1.52E-06	1YrCancerRMP_Inh_FAH16to70	*	1.52E-06
670	ALL		563300	4226750	0.00746	9901	DieselExhPM	1.33E-06	1YrCancerRMP_Inh_FAH16to70	*	1.33E-06
671	ALL		563300	4226775	0.006008	9901	DieselExhPM	1.07E-06	1YrCancerRMP_Inh_FAH16to70	*	1.07E-06
672	ALL		563300	4226800	0.004587	9901	DieselExhPM	8.16E-07	1YrCancerRMP_Inh_FAH16to70	*	8.16E-07
673	ALL		563300	4226825	0.003521	9901	DieselExhPM	6.26E-07	1YrCancerRMP_Inh_FAH16to70	*	6.26E-07
674	ALL		563300	4226850	0.002703	9901	DieselExhPM	4.81E-07	1YrCancerRMP_Inh_FAH16to70	*	4.81E-07
675	ALL		563300	4226875	0.002116	9901	DieselExhPM	3.76E-07	1YrCancerRMP_Inh_FAH16to70	*	3.76E-07
676	ALL		563300	4226900	0.001694	9901	DieselExhPM	3.01E-07	1YrCancerRMP_Inh_FAH16to70	*	3.01E-07
677	ALL		563300	4226925	0.00139	9901	DieselExhPM	2.47E-07	1YrCancerRMP_Inh_FAH16to70	*	2.47E-07
678	ALL		563300	4226950	0.001183	9901	DieselExhPM	2.10E-07	1YrCancerRMP_Inh_FAH16to70	*	2.10E-07
679	ALL		563300	4226975	0.001031	9901	DieselExhPM	1.83E-07	1YrCancerRMP_Inh_FAH16to70	*	1.83E-07
680	ALL		563300	4227000	0.000924	9901	DieselExhPM	1.64E-07	1YrCancerRMP_Inh_FAH16to70	*	1.64E-07
681	ALL		563300	4227025	0.000845	9901	DieselExhPM	1.50E-07	1YrCancerRMP_Inh_FAH16to70	*	1.50E-07
682	ALL		563300	4227050	0.000776	9901	DieselExhPM	1.38E-07	1YrCancerRMP_Inh_FAH16to70	*	1.38E-07

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
683	ALL		563325	4226300	0.001481	9901	DieselExhPM	2.63E-07	1YrCancerRMP_Inh_FAH16to70	*	2.63E-07
684	ALL		563325	4226325	0.001501	9901	DieselExhPM	2.67E-07	1YrCancerRMP_Inh_FAH16to70	*	2.67E-07
685	ALL		563325	4226350	0.001515	9901	DieselExhPM	2.70E-07	1YrCancerRMP_Inh_FAH16to70	*	2.70E-07
686	ALL		563325	4226375	0.001524	9901	DieselExhPM	2.71E-07	1YrCancerRMP_Inh_FAH16to70	*	2.71E-07
687	ALL		563325	4226400	0.001531	9901	DieselExhPM	2.72E-07	1YrCancerRMP_Inh_FAH16to70	*	2.72E-07
688	ALL		563325	4226425	0.001541	9901	DieselExhPM	2.74E-07	1YrCancerRMP_Inh_FAH16to70	*	2.74E-07
689	ALL		563325	4226450	0.001569	9901	DieselExhPM	2.79E-07	1YrCancerRMP_Inh_FAH16to70	*	2.79E-07
690	ALL		563325	4226475	0.001637	9901	DieselExhPM	2.91E-07	1YrCancerRMP_Inh_FAH16to70	*	2.91E-07
691	ALL		563325	4226500	0.001788	9901	DieselExhPM	3.18E-07	1YrCancerRMP_Inh_FAH16to70	*	3.18E-07
692	ALL		563325	4226525	0.002082	9901	DieselExhPM	3.70E-07	1YrCancerRMP_Inh_FAH16to70	*	3.70E-07
693	ALL		563325	4226550	0.002744	9901	DieselExhPM	4.88E-07	1YrCancerRMP_Inh_FAH16to70	*	4.88E-07
694	ALL		563325	4226575	0.004107	9901	DieselExhPM	7.30E-07	1YrCancerRMP_Inh_FAH16to70	*	7.30E-07
695	ALL		563325	4226600	0.006298	9901	DieselExhPM	1.12E-06	1YrCancerRMP_Inh_FAH16to70	*	1.12E-06
696	ALL		563325	4226625	0.00851	9901	DieselExhPM	1.51E-06	1YrCancerRMP_Inh_FAH16to70	*	1.51E-06
697	ALL		563325	4226650	0.009978	9901	DieselExhPM	1.77E-06	1YrCancerRMP_Inh_FAH16to70	*	1.77E-06
698	ALL		563325	4226675	0.010672	9901	DieselExhPM	1.90E-06	1YrCancerRMP_Inh_FAH16to70	*	1.90E-06
699	ALL		563325	4226700	0.010663	9901	DieselExhPM	1.90E-06	1YrCancerRMP_Inh_FAH16to70	*	1.90E-06
700	ALL		563325	4226725	0.009944	9901	DieselExhPM	1.77E-06	1YrCancerRMP_Inh_FAH16to70	*	1.77E-06
701	ALL		563325	4226750	0.008524	9901	DieselExhPM	1.52E-06	1YrCancerRMP_Inh_FAH16to70	*	1.52E-06
702	ALL		563325	4226775	0.006721	9901	DieselExhPM	1.20E-06	1YrCancerRMP_Inh_FAH16to70	*	1.20E-06
703	ALL		563325	4226800	0.005023	9901	DieselExhPM	8.93E-07	1YrCancerRMP_Inh_FAH16to70	*	8.93E-07
704	ALL		563325	4226825	0.003707	9901	DieselExhPM	6.59E-07	1YrCancerRMP_Inh_FAH16to70	*	6.59E-07
705	ALL		563325	4226850	0.002828	9901	DieselExhPM	5.03E-07	1YrCancerRMP_Inh_FAH16to70	*	5.03E-07
706	ALL		563325	4226875	0.002239	9901	DieselExhPM	3.98E-07	1YrCancerRMP_Inh_FAH16to70	*	3.98E-07
707	ALL		563325	4226900	0.001815	9901	DieselExhPM	3.23E-07	1YrCancerRMP_Inh_FAH16to70	*	3.23E-07
708	ALL		563325	4226925	0.001494	9901	DieselExhPM	2.66E-07	1YrCancerRMP_Inh_FAH16to70	*	2.66E-07
709	ALL		563325	4226950	0.001286	9901	DieselExhPM	2.29E-07	1YrCancerRMP_Inh_FAH16to70	*	2.29E-07
710	ALL		563325	4226975	0.001121	9901	DieselExhPM	1.99E-07	1YrCancerRMP_Inh_FAH16to70	*	1.99E-07
711	ALL		563325	4227000	0.001008	9901	DieselExhPM	1.79E-07	1YrCancerRMP_Inh_FAH16to70	*	1.79E-07
712	ALL		563325	4227025	0.000923	9901	DieselExhPM	1.64E-07	1YrCancerRMP_Inh_FAH16to70	*	1.64E-07
713	ALL		563325	4227050	0.000849	9901	DieselExhPM	1.51E-07	1YrCancerRMP_Inh_FAH16to70	*	1.51E-07
714	ALL		563350	4226300	0.001775	9901	DieselExhPM	3.16E-07	1YrCancerRMP_Inh_FAH16to70	*	3.16E-07
715	ALL		563350	4226325	0.001817	9901	DieselExhPM	3.23E-07	1YrCancerRMP_Inh_FAH16to70	*	3.23E-07
716	ALL		563350	4226350	0.001855	9901	DieselExhPM	3.30E-07	1YrCancerRMP_Inh_FAH16to70	*	3.30E-07
717	ALL		563350	4226375	0.001888	9901	DieselExhPM	3.36E-07	1YrCancerRMP_Inh_FAH16to70	*	3.36E-07
718	ALL		563350	4226400	0.001921	9901	DieselExhPM	3.42E-07	1YrCancerRMP_Inh_FAH16to70	*	3.42E-07
719	ALL		563350	4226425	0.001947	9901	DieselExhPM	3.46E-07	1YrCancerRMP_Inh_FAH16to70	*	3.46E-07
720	ALL		563350	4226450	0.001984	9901	DieselExhPM	3.53E-07	1YrCancerRMP_Inh_FAH16to70	*	3.53E-07
721	ALL		563350	4226475	0.002051	9901	DieselExhPM	3.65E-07	1YrCancerRMP_Inh_FAH16to70	*	3.65E-07
722	ALL		563350	4226500	0.002189	9901	DieselExhPM	3.89E-07	1YrCancerRMP_Inh_FAH16to70	*	3.89E-07
723	ALL		563350	4226525	0.002488	9901	DieselExhPM	4.42E-07	1YrCancerRMP_Inh_FAH16to70	*	4.42E-07
724	ALL		563350	4226550	0.003182	9901	DieselExhPM	5.66E-07	1YrCancerRMP_Inh_FAH16to70	*	5.66E-07
725	ALL		563350	4226575	0.004783	9901	DieselExhPM	8.51E-07	1YrCancerRMP_Inh_FAH16to70	*	8.51E-07
726	ALL		563350	4226600	0.007626	9901	DieselExhPM	1.36E-06	1YrCancerRMP_Inh_FAH16to70	*	1.36E-06
727	ALL		563350	4226625	0.010488	9901	DieselExhPM	1.87E-06	1YrCancerRMP_Inh_FAH16to70	*	1.87E-06
728	ALL		563350	4226650	0.012125	9901	DieselExhPM	2.16E-06	1YrCancerRMP_Inh_FAH16to70	*	2.16E-06
729	ALL		563350	4226675	0.012805	9901	DieselExhPM	2.28E-06	1YrCancerRMP_Inh_FAH16to70	*	2.28E-06
730	ALL		563350	4226700	0.012688	9901	DieselExhPM	2.26E-06	1YrCancerRMP_Inh_FAH16to70	*	2.26E-06
731	ALL		563350	4226725	0.011773	9901	DieselExhPM	2.09E-06	1YrCancerRMP_Inh_FAH16to70	*	2.09E-06
732	ALL		563350	4226750	0.009915	9901	DieselExhPM	1.76E-06	1YrCancerRMP_Inh_FAH16to70	*	1.76E-06
733	ALL		563350	4226775	0.00755	9901	DieselExhPM	1.34E-06	1YrCancerRMP_Inh_FAH16to70	*	1.34E-06
734	ALL		563350	4226800	0.005473	9901	DieselExhPM	9.73E-07	1YrCancerRMP_Inh_FAH16to70	*	9.73E-07
735	ALL		563350	4226825	0.004009	9901	DieselExhPM	7.13E-07	1YrCancerRMP_Inh_FAH16to70	*	7.13E-07
736	ALL		563350	4226850	0.003042	9901	DieselExhPM	5.41E-07	1YrCancerRMP_Inh_FAH16to70	*	5.41E-07
737	ALL		563350	4226875	0.002399	9901	DieselExhPM	4.27E-07	1YrCancerRMP_Inh_FAH16to70	*	4.27E-07
738	ALL		563350	4226900	0.001959	9901	DieselExhPM	3.48E-07	1YrCancerRMP_Inh_FAH16to70	*	3.48E-07
739	ALL		563350	4226925	0.001637	9901	DieselExhPM	2.91E-07	1YrCancerRMP_Inh_FAH16to70	*	2.91E-07
740	ALL		563350	4226950	0.00143	9901	DieselExhPM	2.54E-07	1YrCancerRMP_Inh_FAH16to70	*	2.54E-07
741	ALL		563350	4226975	0.001259	9901	DieselExhPM	2.24E-07	1YrCancerRMP_Inh_FAH16to70	*	2.24E-07
742	ALL		563350	4227000	0.001112	9901	DieselExhPM	1.98E-07	1YrCancerRMP_Inh_FAH16to70	*	1.98E-07
743	ALL		563350	4227025	0.001015	9901	DieselExhPM	1.81E-07	1YrCancerRMP_Inh_FAH16to70	*	1.81E-07
744	ALL		563350	4227050	0.00093	9901	DieselExhPM	1.65E-07	1YrCancerRMP_Inh_FAH16to70	*	1.65E-07

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
745	ALL		563375	4226300	0.002127	9901	DieselExhPM	3.78E-07	1YrCancerRMP_Inh_FAH16to70	*	3.78E-07
746	ALL		563375	4226325	0.002203	9901	DieselExhPM	3.92E-07	1YrCancerRMP_Inh_FAH16to70	*	3.92E-07
747	ALL		563375	4226350	0.002282	9901	DieselExhPM	4.06E-07	1YrCancerRMP_Inh_FAH16to70	*	4.06E-07
748	ALL		563375	4226375	0.002361	9901	DieselExhPM	4.20E-07	1YrCancerRMP_Inh_FAH16to70	*	4.20E-07
749	ALL		563375	4226400	0.00244	9901	DieselExhPM	4.34E-07	1YrCancerRMP_Inh_FAH16to70	*	4.34E-07
750	ALL		563375	4226425	0.002518	9901	DieselExhPM	4.48E-07	1YrCancerRMP_Inh_FAH16to70	*	4.48E-07
751	ALL		563375	4226450	0.0026	9901	DieselExhPM	4.62E-07	1YrCancerRMP_Inh_FAH16to70	*	4.62E-07
752	ALL		563375	4226475	0.002691	9901	DieselExhPM	4.79E-07	1YrCancerRMP_Inh_FAH16to70	*	4.79E-07
753	ALL		563375	4226500	0.002829	9901	DieselExhPM	5.03E-07	1YrCancerRMP_Inh_FAH16to70	*	5.03E-07
754	ALL		563375	4226525	0.003126	9901	DieselExhPM	5.56E-07	1YrCancerRMP_Inh_FAH16to70	*	5.56E-07
755	ALL		563375	4226550	0.003843	9901	DieselExhPM	6.84E-07	1YrCancerRMP_Inh_FAH16to70	*	6.84E-07
756	ALL		563375	4226575	0.005697	9901	DieselExhPM	1.01E-06	1YrCancerRMP_Inh_FAH16to70	*	1.01E-06
757	ALL		563375	4226600	0.009572	9901	DieselExhPM	1.70E-06	1YrCancerRMP_Inh_FAH16to70	*	1.70E-06
758	ALL		563375	4226625	0.013288	9901	DieselExhPM	2.36E-06	1YrCancerRMP_Inh_FAH16to70	*	2.36E-06
759	ALL		563375	4226650	0.015125	9901	DieselExhPM	2.69E-06	1YrCancerRMP_Inh_FAH16to70	*	2.69E-06
760	ALL		563375	4226675	0.015674	9901	DieselExhPM	2.79E-06	1YrCancerRMP_Inh_FAH16to70	*	2.79E-06
761	ALL		563375	4226700	0.015394	9901	DieselExhPM	2.74E-06	1YrCancerRMP_Inh_FAH16to70	*	2.74E-06
762	ALL		563375	4226725	0.014195	9901	DieselExhPM	2.52E-06	1YrCancerRMP_Inh_FAH16to70	*	2.52E-06
763	ALL		563375	4226750	0.011752	9901	DieselExhPM	2.09E-06	1YrCancerRMP_Inh_FAH16to70	*	2.09E-06
764	ALL		563375	4226775	0.008586	9901	DieselExhPM	1.53E-06	1YrCancerRMP_Inh_FAH16to70	*	1.53E-06
765	ALL		563375	4226800	0.00601	9901	DieselExhPM	1.07E-06	1YrCancerRMP_Inh_FAH16to70	*	1.07E-06
766	ALL		563375	4226825	0.00434	9901	DieselExhPM	7.72E-07	1YrCancerRMP_Inh_FAH16to70	*	7.72E-07
767	ALL		563375	4226850	0.003294	9901	DieselExhPM	5.86E-07	1YrCancerRMP_Inh_FAH16to70	*	5.86E-07
768	ALL		563375	4226875	0.002612	9901	DieselExhPM	4.65E-07	1YrCancerRMP_Inh_FAH16to70	*	4.65E-07
769	ALL		563375	4226900	0.002149	9901	DieselExhPM	3.82E-07	1YrCancerRMP_Inh_FAH16to70	*	3.82E-07
770	ALL		563375	4226925	0.001813	9901	DieselExhPM	3.22E-07	1YrCancerRMP_Inh_FAH16to70	*	3.22E-07
771	ALL		563375	4226950	0.001585	9901	DieselExhPM	2.82E-07	1YrCancerRMP_Inh_FAH16to70	*	2.82E-07
772	ALL		563375	4226975	0.001405	9901	DieselExhPM	2.50E-07	1YrCancerRMP_Inh_FAH16to70	*	2.50E-07
773	ALL		563375	4227000	0.001242	9901	DieselExhPM	2.21E-07	1YrCancerRMP_Inh_FAH16to70	*	2.21E-07
774	ALL		563375	4227025	0.001123	9901	DieselExhPM	2.00E-07	1YrCancerRMP_Inh_FAH16to70	*	2.00E-07
775	ALL		563375	4227050	0.001025	9901	DieselExhPM	1.82E-07	1YrCancerRMP_Inh_FAH16to70	*	1.82E-07
776	ALL		563400	4226300	0.002523	9901	DieselExhPM	4.49E-07	1YrCancerRMP_Inh_FAH16to70	*	4.49E-07
777	ALL		563400	4226325	0.002654	9901	DieselExhPM	4.72E-07	1YrCancerRMP_Inh_FAH16to70	*	4.72E-07
778	ALL		563400	4226350	0.002792	9901	DieselExhPM	4.97E-07	1YrCancerRMP_Inh_FAH16to70	*	4.97E-07
779	ALL		563400	4226375	0.002939	9901	DieselExhPM	5.23E-07	1YrCancerRMP_Inh_FAH16to70	*	5.23E-07
780	ALL		563400	4226400	0.003104	9901	DieselExhPM	5.52E-07	1YrCancerRMP_Inh_FAH16to70	*	5.52E-07
781	ALL		563400	4226425	0.003282	9901	DieselExhPM	5.84E-07	1YrCancerRMP_Inh_FAH16to70	*	5.84E-07
782	ALL		563400	4226450	0.003468	9901	DieselExhPM	6.17E-07	1YrCancerRMP_Inh_FAH16to70	*	6.17E-07
783	ALL		563400	4226475	0.003671	9901	DieselExhPM	6.53E-07	1YrCancerRMP_Inh_FAH16to70	*	6.53E-07
784	ALL		563400	4226500	0.00391	9901	DieselExhPM	6.95E-07	1YrCancerRMP_Inh_FAH16to70	*	6.95E-07
785	ALL		563400	4226525	0.00425	9901	DieselExhPM	7.56E-07	1YrCancerRMP_Inh_FAH16to70	*	7.56E-07
786	ALL		563400	4226550	0.005004	9901	DieselExhPM	8.90E-07	1YrCancerRMP_Inh_FAH16to70	*	8.90E-07
787	ALL		563400	4226575	0.007074	9901	DieselExhPM	1.26E-06	1YrCancerRMP_Inh_FAH16to70	*	1.26E-06
788	ALL		563400	4226600	0.012367	9901	DieselExhPM	2.20E-06	1YrCancerRMP_Inh_FAH16to70	*	2.20E-06
789	ALL		563400	4226625	0.01718	9901	DieselExhPM	3.06E-06	1YrCancerRMP_Inh_FAH16to70	*	3.06E-06
790	ALL		563400	4226650	0.019195	9901	DieselExhPM	3.41E-06	1YrCancerRMP_Inh_FAH16to70	*	3.41E-06
791	ALL		563400	4226675	0.01964	9901	DieselExhPM	3.49E-06	1YrCancerRMP_Inh_FAH16to70	*	3.49E-06
792	ALL		563400	4226700	0.019118	9901	DieselExhPM	3.40E-06	1YrCancerRMP_Inh_FAH16to70	*	3.40E-06
793	ALL		563400	4226725	0.017555	9901	DieselExhPM	3.12E-06	1YrCancerRMP_Inh_FAH16to70	*	3.12E-06
794	ALL		563400	4226750	0.014258	9901	DieselExhPM	2.54E-06	1YrCancerRMP_Inh_FAH16to70	*	2.54E-06
795	ALL		563400	4226775	0.009884	9901	DieselExhPM	1.76E-06	1YrCancerRMP_Inh_FAH16to70	*	1.76E-06
796	ALL		563400	4226800	0.006693	9901	DieselExhPM	1.19E-06	1YrCancerRMP_Inh_FAH16to70	*	1.19E-06
797	ALL		563400	4226825	0.004805	9901	DieselExhPM	8.55E-07	1YrCancerRMP_Inh_FAH16to70	*	8.55E-07
798	ALL		563400	4226850	0.003662	9901	DieselExhPM	6.51E-07	1YrCancerRMP_Inh_FAH16to70	*	6.51E-07
799	ALL		563400	4226875	0.002922	9901	DieselExhPM	5.20E-07	1YrCancerRMP_Inh_FAH16to70	*	5.20E-07
800	ALL		563400	4226900	0.002414	9901	DieselExhPM	4.29E-07	1YrCancerRMP_Inh_FAH16to70	*	4.29E-07
801	ALL		563400	4226925	0.002048	9901	DieselExhPM	3.64E-07	1YrCancerRMP_Inh_FAH16to70	*	3.64E-07
802	ALL		563400	4226950	0.001788	9901	DieselExhPM	3.18E-07	1YrCancerRMP_Inh_FAH16to70	*	3.18E-07
803	ALL		563400	4226975	0.001585	9901	DieselExhPM	2.82E-07	1YrCancerRMP_Inh_FAH16to70	*	2.82E-07
804	ALL		563400	4227000	0.001409	9901	DieselExhPM	2.51E-07	1YrCancerRMP_Inh_FAH16to70	*	2.51E-07
805	ALL		563400	4227025	0.001253	9901	DieselExhPM	2.23E-07	1YrCancerRMP_Inh_FAH16to70	*	2.23E-07
806	ALL		563400	4227050	0.001143	9901	DieselExhPM	2.03E-07	1YrCancerRMP_Inh_FAH16to70	*	2.03E-07

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
807	ALL		563425	4226300	0.002935	9901	DieselExhPM	5.22E-07	1YrCancerRMP_Inh_FAH16to70	*	5.22E-07
808	ALL		563425	4226325	0.003133	9901	DieselExhPM	5.57E-07	1YrCancerRMP_Inh_FAH16to70	*	5.57E-07
809	ALL		563425	4226350	0.003353	9901	DieselExhPM	5.96E-07	1YrCancerRMP_Inh_FAH16to70	*	5.96E-07
810	ALL		563425	4226375	0.003599	9901	DieselExhPM	6.40E-07	1YrCancerRMP_Inh_FAH16to70	*	6.40E-07
811	ALL		563425	4226400	0.003886	9901	DieselExhPM	6.91E-07	1YrCancerRMP_Inh_FAH16to70	*	6.91E-07
812	ALL		563425	4226425	0.004226	9901	DieselExhPM	7.52E-07	1YrCancerRMP_Inh_FAH16to70	*	7.52E-07
813	ALL		563425	4226450	0.004625	9901	DieselExhPM	8.23E-07	1YrCancerRMP_Inh_FAH16to70	*	8.23E-07
814	ALL		563425	4226475	0.005091	9901	DieselExhPM	9.05E-07	1YrCancerRMP_Inh_FAH16to70	*	9.05E-07
815	ALL		563425	4226500	0.005662	9901	DieselExhPM	1.01E-06	1YrCancerRMP_Inh_FAH16to70	*	1.01E-06
816	ALL		563425	4226525	0.006377	9901	DieselExhPM	1.13E-06	1YrCancerRMP_Inh_FAH16to70	*	1.13E-06
817	ALL		563425	4226550	0.007465	9901	DieselExhPM	1.33E-06	1YrCancerRMP_Inh_FAH16to70	*	1.33E-06
818	ALL		563425	4226575	0.009786	9901	DieselExhPM	1.74E-06	1YrCancerRMP_Inh_FAH16to70	*	1.74E-06
819	ALL		563425	4226600	0.0163	9901	DieselExhPM	2.90E-06	1YrCancerRMP_Inh_FAH16to70	*	2.90E-06
820	ALL		563425	4226625	0.022235	9901	DieselExhPM	3.95E-06	1YrCancerRMP_Inh_FAH16to70	*	3.95E-06
821	ALL		563425	4226650	0.024386	9901	DieselExhPM	4.34E-06	1YrCancerRMP_Inh_FAH16to70	*	4.34E-06
822	ALL		563425	4226675	0.024775	9901	DieselExhPM	4.41E-06	1YrCancerRMP_Inh_FAH16to70	*	4.41E-06
823	ALL		563425	4226700	0.024229	9901	DieselExhPM	4.31E-06	1YrCancerRMP_Inh_FAH16to70	*	4.31E-06
824	ALL		563425	4226725	0.022342	9901	DieselExhPM	3.97E-06	1YrCancerRMP_Inh_FAH16to70	*	3.97E-06
825	ALL		563425	4226750	0.017907	9901	DieselExhPM	3.18E-06	1YrCancerRMP_Inh_FAH16to70	*	3.18E-06
826	ALL		563425	4226775	0.011677	9901	DieselExhPM	2.08E-06	1YrCancerRMP_Inh_FAH16to70	*	2.08E-06
827	ALL		563425	4226800	0.007737	9901	DieselExhPM	1.38E-06	1YrCancerRMP_Inh_FAH16to70	*	1.38E-06
828	ALL		563425	4226825	0.005575	9901	DieselExhPM	9.92E-07	1YrCancerRMP_Inh_FAH16to70	*	9.92E-07
829	ALL		563425	4226850	0.004275	9901	DieselExhPM	7.60E-07	1YrCancerRMP_Inh_FAH16to70	*	7.60E-07
830	ALL		563425	4226875	0.003429	9901	DieselExhPM	6.10E-07	1YrCancerRMP_Inh_FAH16to70	*	6.10E-07
831	ALL		563425	4226900	0.002838	9901	DieselExhPM	5.05E-07	1YrCancerRMP_Inh_FAH16to70	*	5.05E-07
832	ALL		563425	4226925	0.002406	9901	DieselExhPM	4.28E-07	1YrCancerRMP_Inh_FAH16to70	*	4.28E-07
833	ALL		563425	4226950	0.002089	9901	DieselExhPM	3.72E-07	1YrCancerRMP_Inh_FAH16to70	*	3.72E-07
834	ALL		563425	4226975	0.001839	9901	DieselExhPM	3.27E-07	1YrCancerRMP_Inh_FAH16to70	*	3.27E-07
835	ALL		563425	4227000	0.001629	9901	DieselExhPM	2.90E-07	1YrCancerRMP_Inh_FAH16to70	*	2.90E-07
836	ALL		563425	4227025	0.001448	9901	DieselExhPM	2.58E-07	1YrCancerRMP_Inh_FAH16to70	*	2.58E-07
837	ALL		563425	4227050	0.001292	9901	DieselExhPM	2.30E-07	1YrCancerRMP_Inh_FAH16to70	*	2.30E-07
838	ALL		563450	4226300	0.00333	9901	DieselExhPM	5.92E-07	1YrCancerRMP_Inh_FAH16to70	*	5.92E-07
839	ALL		563450	4226325	0.003597	9901	DieselExhPM	6.40E-07	1YrCancerRMP_Inh_FAH16to70	*	6.40E-07
840	ALL		563450	4226350	0.003905	9901	DieselExhPM	6.94E-07	1YrCancerRMP_Inh_FAH16to70	*	6.94E-07
841	ALL		563450	4226375	0.004262	9901	DieselExhPM	7.58E-07	1YrCancerRMP_Inh_FAH16to70	*	7.58E-07
842	ALL		563450	4226400	0.004688	9901	DieselExhPM	8.34E-07	1YrCancerRMP_Inh_FAH16to70	*	8.34E-07
843	ALL		563450	4226425	0.005223	9901	DieselExhPM	9.29E-07	1YrCancerRMP_Inh_FAH16to70	*	9.29E-07
844	ALL		563450	4226450	0.005886	9901	DieselExhPM	1.05E-06	1YrCancerRMP_Inh_FAH16to70	*	1.05E-06
845	ALL		563450	4226475	0.006736	9901	DieselExhPM	1.20E-06	1YrCancerRMP_Inh_FAH16to70	*	1.20E-06
846	ALL		563450	4226500	0.007917	9901	DieselExhPM	1.41E-06	1YrCancerRMP_Inh_FAH16to70	*	1.41E-06
847	ALL		563450	4226525	0.0096	9901	DieselExhPM	1.71E-06	1YrCancerRMP_Inh_FAH16to70	*	1.71E-06
848	ALL		563450	4226550	0.012291	9901	DieselExhPM	2.19E-06	1YrCancerRMP_Inh_FAH16to70	*	2.19E-06
849	ALL		563450	4226575	0.016749	9901	DieselExhPM	2.98E-06	1YrCancerRMP_Inh_FAH16to70	*	2.98E-06
850	ALL		563450	4226650	0.033574	9901	DieselExhPM	5.97E-06	1YrCancerRMP_Inh_FAH16to70	*	5.97E-06
851	ALL		563450	4226675	0.033387	9901	DieselExhPM	5.94E-06	1YrCancerRMP_Inh_FAH16to70	*	5.94E-06
852	ALL		563450	4226700	0.031887	9901	DieselExhPM	5.67E-06	1YrCancerRMP_Inh_FAH16to70	*	5.67E-06
853	ALL		563450	4226725	0.029269	9901	DieselExhPM	5.21E-06	1YrCancerRMP_Inh_FAH16to70	*	5.21E-06
854	ALL		563450	4226750	0.023607	9901	DieselExhPM	4.20E-06	1YrCancerRMP_Inh_FAH16to70	*	4.20E-06
855	ALL		563450	4226775	0.014939	9901	DieselExhPM	2.66E-06	1YrCancerRMP_Inh_FAH16to70	*	2.66E-06
856	ALL		563450	4226800	0.0099	9901	DieselExhPM	1.76E-06	1YrCancerRMP_Inh_FAH16to70	*	1.76E-06
857	ALL		563450	4226825	0.007136	9901	DieselExhPM	1.27E-06	1YrCancerRMP_Inh_FAH16to70	*	1.27E-06
858	ALL		563450	4226850	0.005472	9901	DieselExhPM	9.73E-07	1YrCancerRMP_Inh_FAH16to70	*	9.73E-07
859	ALL		563450	4226875	0.004379	9901	DieselExhPM	7.79E-07	1YrCancerRMP_Inh_FAH16to70	*	7.79E-07
860	ALL		563450	4226900	0.003599	9901	DieselExhPM	6.40E-07	1YrCancerRMP_Inh_FAH16to70	*	6.40E-07
861	ALL		563450	4226925	0.003017	9901	DieselExhPM	5.36E-07	1YrCancerRMP_Inh_FAH16to70	*	5.36E-07
862	ALL		563450	4226950	0.002579	9901	DieselExhPM	4.59E-07	1YrCancerRMP_Inh_FAH16to70	*	4.59E-07
863	ALL		563450	4226975	0.00225	9901	DieselExhPM	4.00E-07	1YrCancerRMP_Inh_FAH16to70	*	4.00E-07
864	ALL		563450	4227000	0.001971	9901	DieselExhPM	3.50E-07	1YrCancerRMP_Inh_FAH16to70	*	3.50E-07
865	ALL		563450	4227025	0.001741	9901	DieselExhPM	3.10E-07	1YrCancerRMP_Inh_FAH16to70	*	3.10E-07
866	ALL		563450	4227050	0.001499	9901	DieselExhPM	2.67E-07	1YrCancerRMP_Inh_FAH16to70	*	2.67E-07
867	ALL		563475	4226300	0.003679	9901	DieselExhPM	6.54E-07	1YrCancerRMP_Inh_FAH16to70	*	6.54E-07
868	ALL		563475	4226325	0.004013	9901	DieselExhPM	7.14E-07	1YrCancerRMP_Inh_FAH16to70	*	7.14E-07

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
869	ALL		563475	4226350	0.004401	9901	DieselExhPM	7.83E-07	1YrCancerRMP_Inh_FAH16to70	*	7.83E-07
870	ALL		563475	4226375	0.004866	9901	DieselExhPM	8.65E-07	1YrCancerRMP_Inh_FAH16to70	*	8.65E-07
871	ALL		563475	4226400	0.005426	9901	DieselExhPM	9.65E-07	1YrCancerRMP_Inh_FAH16to70	*	9.65E-07
872	ALL		563475	4226425	0.006142	9901	DieselExhPM	1.09E-06	1YrCancerRMP_Inh_FAH16to70	*	1.09E-06
873	ALL		563475	4226450	0.007053	9901	DieselExhPM	1.25E-06	1YrCancerRMP_Inh_FAH16to70	*	1.25E-06
874	ALL		563475	4226475	0.008267	9901	DieselExhPM	1.47E-06	1YrCancerRMP_Inh_FAH16to70	*	1.47E-06
875	ALL		563475	4226500	0.010008	9901	DieselExhPM	1.78E-06	1YrCancerRMP_Inh_FAH16to70	*	1.78E-06
876	ALL		563475	4226525	0.01264	9901	DieselExhPM	2.25E-06	1YrCancerRMP_Inh_FAH16to70	*	2.25E-06
877	ALL		563475	4226550	0.017113	9901	DieselExhPM	3.04E-06	1YrCancerRMP_Inh_FAH16to70	*	3.04E-06
878	ALL		563475	4226575	0.024581	9901	DieselExhPM	4.37E-06	1YrCancerRMP_Inh_FAH16to70	*	4.37E-06
879	ALL		563475	4226775	0.024408	9901	DieselExhPM	4.34E-06	1YrCancerRMP_Inh_FAH16to70	*	4.34E-06
880	ALL		563475	4226800	0.015748	9901	DieselExhPM	2.80E-06	1YrCancerRMP_Inh_FAH16to70	*	2.80E-06
881	ALL		563475	4226825	0.010932	9901	DieselExhPM	1.94E-06	1YrCancerRMP_Inh_FAH16to70	*	1.94E-06
882	ALL		563475	4226850	0.008116	9901	DieselExhPM	1.44E-06	1YrCancerRMP_Inh_FAH16to70	*	1.44E-06
883	ALL		563475	4226875	0.006202	9901	DieselExhPM	1.10E-06	1YrCancerRMP_Inh_FAH16to70	*	1.10E-06
884	ALL		563475	4226900	0.004989	9901	DieselExhPM	8.87E-07	1YrCancerRMP_Inh_FAH16to70	*	8.87E-07
885	ALL		563475	4226925	0.004087	9901	DieselExhPM	7.27E-07	1YrCancerRMP_Inh_FAH16to70	*	7.27E-07
886	ALL		563475	4226950	0.003434	9901	DieselExhPM	6.11E-07	1YrCancerRMP_Inh_FAH16to70	*	6.11E-07
887	ALL		563475	4226975	0.002926	9901	DieselExhPM	5.20E-07	1YrCancerRMP_Inh_FAH16to70	*	5.20E-07
888	ALL		563475	4227000	0.002512	9901	DieselExhPM	4.47E-07	1YrCancerRMP_Inh_FAH16to70	*	4.47E-07
889	ALL		563475	4227025	0.002184	9901	DieselExhPM	3.88E-07	1YrCancerRMP_Inh_FAH16to70	*	3.88E-07
890	ALL		563475	4227050	0.001845	9901	DieselExhPM	3.28E-07	1YrCancerRMP_Inh_FAH16to70	*	3.28E-07
891	ALL		563500	4226300	0.00396	9901	DieselExhPM	7.04E-07	1YrCancerRMP_Inh_FAH16to70	*	7.04E-07
892	ALL		563500	4226325	0.004353	9901	DieselExhPM	7.74E-07	1YrCancerRMP_Inh_FAH16to70	*	7.74E-07
893	ALL		563500	4226350	0.00482	9901	DieselExhPM	8.57E-07	1YrCancerRMP_Inh_FAH16to70	*	8.57E-07
894	ALL		563500	4226375	0.005372	9901	DieselExhPM	9.55E-07	1YrCancerRMP_Inh_FAH16to70	*	9.55E-07
895	ALL		563500	4226400	0.006048	9901	DieselExhPM	1.08E-06	1YrCancerRMP_Inh_FAH16to70	*	1.08E-06
896	ALL		563500	4226425	0.006899	9901	DieselExhPM	1.23E-06	1YrCancerRMP_Inh_FAH16to70	*	1.23E-06
897	ALL		563500	4226450	0.008003	9901	DieselExhPM	1.42E-06	1YrCancerRMP_Inh_FAH16to70	*	1.42E-06
898	ALL		563500	4226475	0.009488	9901	DieselExhPM	1.69E-06	1YrCancerRMP_Inh_FAH16to70	*	1.69E-06
899	ALL		563500	4226500	0.011608	9901	DieselExhPM	2.06E-06	1YrCancerRMP_Inh_FAH16to70	*	2.06E-06
900	ALL		563500	4226525	0.014816	9901	DieselExhPM	2.63E-06	1YrCancerRMP_Inh_FAH16to70	*	2.63E-06
901	ALL		563500	4226550	0.020092	9901	DieselExhPM	3.57E-06	1YrCancerRMP_Inh_FAH16to70	*	3.57E-06
902	ALL		563500	4226575	0.029191	9901	DieselExhPM	5.19E-06	1YrCancerRMP_Inh_FAH16to70	*	5.19E-06
903	ALL		563500	4226775	0.051366	9901	DieselExhPM	9.14E-06	1YrCancerRMP_Inh_FAH16to70	*	9.14E-06
904	ALL		563500	4226800	0.029735	9901	DieselExhPM	5.29E-06	1YrCancerRMP_Inh_FAH16to70	*	5.29E-06
905	ALL		563500	4226825	0.018757	9901	DieselExhPM	3.34E-06	1YrCancerRMP_Inh_FAH16to70	*	3.34E-06
906	ALL		563500	4226850	0.013004	9901	DieselExhPM	2.31E-06	1YrCancerRMP_Inh_FAH16to70	*	2.31E-06
907	ALL		563500	4226875	0.009496	9901	DieselExhPM	1.69E-06	1YrCancerRMP_Inh_FAH16to70	*	1.69E-06
908	ALL		563500	4226900	0.007281	9901	DieselExhPM	1.29E-06	1YrCancerRMP_Inh_FAH16to70	*	1.29E-06
909	ALL		563500	4226925	0.00571	9901	DieselExhPM	1.02E-06	1YrCancerRMP_Inh_FAH16to70	*	1.02E-06
910	ALL		563500	4226950	0.004716	9901	DieselExhPM	8.39E-07	1YrCancerRMP_Inh_FAH16to70	*	8.39E-07
911	ALL		563500	4226975	0.00398	9901	DieselExhPM	7.08E-07	1YrCancerRMP_Inh_FAH16to70	*	7.08E-07
912	ALL		563500	4227000	0.003344	9901	DieselExhPM	5.95E-07	1YrCancerRMP_Inh_FAH16to70	*	5.95E-07
913	ALL		563500	4227025	0.002843	9901	DieselExhPM	5.06E-07	1YrCancerRMP_Inh_FAH16to70	*	5.06E-07
914	ALL		563500	4227050	0.002363	9901	DieselExhPM	4.20E-07	1YrCancerRMP_Inh_FAH16to70	*	4.20E-07
915	ALL		563525	4226300	0.004172	9901	DieselExhPM	7.42E-07	1YrCancerRMP_Inh_FAH16to70	*	7.42E-07
916	ALL		563525	4226325	0.004618	9901	DieselExhPM	8.21E-07	1YrCancerRMP_Inh_FAH16to70	*	8.21E-07
917	ALL		563525	4226350	0.005141	9901	DieselExhPM	9.14E-07	1YrCancerRMP_Inh_FAH16to70	*	9.14E-07
918	ALL		563525	4226375	0.005758	9901	DieselExhPM	1.02E-06	1YrCancerRMP_Inh_FAH16to70	*	1.02E-06
919	ALL		563525	4226400	0.006533	9901	DieselExhPM	1.16E-06	1YrCancerRMP_Inh_FAH16to70	*	1.16E-06
920	ALL		563525	4226425	0.007485	9901	DieselExhPM	1.33E-06	1YrCancerRMP_Inh_FAH16to70	*	1.33E-06
921	ALL		563525	4226450	0.008719	9901	DieselExhPM	1.55E-06	1YrCancerRMP_Inh_FAH16to70	*	1.55E-06
922	ALL		563525	4226475	0.010401	9901	DieselExhPM	1.85E-06	1YrCancerRMP_Inh_FAH16to70	*	1.85E-06
923	ALL		563525	4226500	0.012726	9901	DieselExhPM	2.26E-06	1YrCancerRMP_Inh_FAH16to70	*	2.26E-06
924	ALL		563525	4226525	0.016247	9901	DieselExhPM	2.89E-06	1YrCancerRMP_Inh_FAH16to70	*	2.89E-06
925	ALL		563525	4226550	0.021909	9901	DieselExhPM	3.90E-06	1YrCancerRMP_Inh_FAH16to70	*	3.90E-06
926	ALL		563525	4226575	0.03183	9901	DieselExhPM	5.66E-06	1YrCancerRMP_Inh_FAH16to70	*	5.66E-06
927	ALL		563525	4226775	0.074574	9901	DieselExhPM	1.33E-05	1YrCancerRMP_Inh_FAH16to70	*	1.33E-05
928	ALL		563525	4226800	0.045725	9901	DieselExhPM	8.13E-06	1YrCancerRMP_Inh_FAH16to70	*	8.13E-06
929	ALL		563525	4226825	0.029029	9901	DieselExhPM	5.16E-06	1YrCancerRMP_Inh_FAH16to70	*	5.16E-06
930	ALL		563525	4226850	0.01974	9901	DieselExhPM	3.51E-06	1YrCancerRMP_Inh_FAH16to70	*	3.51E-06

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
931	ALL		563525	4226875	0.014094	9901	DieselExhPM	2.51E-06	1YrCancerRMP_Inh_FAH16to70	*	2.51E-06
932	ALL		563525	4226900	0.010548	9901	DieselExhPM	1.88E-06	1YrCancerRMP_Inh_FAH16to70	*	1.88E-06
933	ALL		563525	4226925	0.008118	9901	DieselExhPM	1.44E-06	1YrCancerRMP_Inh_FAH16to70	*	1.44E-06
934	ALL		563525	4226950	0.006454	9901	DieselExhPM	1.15E-06	1YrCancerRMP_Inh_FAH16to70	*	1.15E-06
935	ALL		563525	4226975	0.005319	9901	DieselExhPM	9.46E-07	1YrCancerRMP_Inh_FAH16to70	*	9.46E-07
936	ALL		563525	4227000	0.004514	9901	DieselExhPM	8.03E-07	1YrCancerRMP_Inh_FAH16to70	*	8.03E-07
937	ALL		563525	4227025	0.003771	9901	DieselExhPM	6.71E-07	1YrCancerRMP_Inh_FAH16to70	*	6.71E-07
938	ALL		563525	4227050	0.003091	9901	DieselExhPM	5.50E-07	1YrCancerRMP_Inh_FAH16to70	*	5.50E-07
939	ALL		563550	4226300	0.004294	9901	DieselExhPM	7.64E-07	1YrCancerRMP_Inh_FAH16to70	*	7.64E-07
940	ALL		563550	4226325	0.004778	9901	DieselExhPM	8.50E-07	1YrCancerRMP_Inh_FAH16to70	*	8.50E-07
941	ALL		563550	4226350	0.005349	9901	DieselExhPM	9.51E-07	1YrCancerRMP_Inh_FAH16to70	*	9.51E-07
942	ALL		563550	4226375	0.006032	9901	DieselExhPM	1.07E-06	1YrCancerRMP_Inh_FAH16to70	*	1.07E-06
943	ALL		563550	4226400	0.006865	9901	DieselExhPM	1.22E-06	1YrCancerRMP_Inh_FAH16to70	*	1.22E-06
944	ALL		563550	4226425	0.007898	9901	DieselExhPM	1.40E-06	1YrCancerRMP_Inh_FAH16to70	*	1.40E-06
945	ALL		563550	4226450	0.009231	9901	DieselExhPM	1.64E-06	1YrCancerRMP_Inh_FAH16to70	*	1.64E-06
946	ALL		563550	4226475	0.011037	9901	DieselExhPM	1.96E-06	1YrCancerRMP_Inh_FAH16to70	*	1.96E-06
947	ALL		563550	4226500	0.013486	9901	DieselExhPM	2.40E-06	1YrCancerRMP_Inh_FAH16to70	*	2.40E-06
948	ALL		563550	4226525	0.017156	9901	DieselExhPM	3.05E-06	1YrCancerRMP_Inh_FAH16to70	*	3.05E-06
949	ALL		563550	4226550	0.023033	9901	DieselExhPM	4.10E-06	1YrCancerRMP_Inh_FAH16to70	*	4.10E-06
950	ALL		563550	4226575	0.033431	9901	DieselExhPM	5.95E-06	1YrCancerRMP_Inh_FAH16to70	*	5.95E-06
951	ALL		563550	4226775	0.084391	9901	DieselExhPM	1.50E-05	1YrCancerRMP_Inh_FAH16to70	*	1.50E-05
952	ALL		563550	4226800	0.056057	9901	DieselExhPM	9.97E-06	1YrCancerRMP_Inh_FAH16to70	*	9.97E-06
953	ALL		563550	4226825	0.03757	9901	DieselExhPM	6.68E-06	1YrCancerRMP_Inh_FAH16to70	*	6.68E-06
954	ALL		563550	4226850	0.026307	9901	DieselExhPM	4.68E-06	1YrCancerRMP_Inh_FAH16to70	*	4.68E-06
955	ALL		563550	4226875	0.019087	9901	DieselExhPM	3.39E-06	1YrCancerRMP_Inh_FAH16to70	*	3.39E-06
956	ALL		563550	4226900	0.014317	9901	DieselExhPM	2.55E-06	1YrCancerRMP_Inh_FAH16to70	*	2.55E-06
957	ALL		563550	4226925	0.010956	9901	DieselExhPM	1.95E-06	1YrCancerRMP_Inh_FAH16to70	*	1.95E-06
958	ALL		563550	4226950	0.008509	9901	DieselExhPM	1.51E-06	1YrCancerRMP_Inh_FAH16to70	*	1.51E-06
959	ALL		563550	4226975	0.006741	9901	DieselExhPM	1.20E-06	1YrCancerRMP_Inh_FAH16to70	*	1.20E-06
960	ALL		563550	4227000	0.00585	9901	DieselExhPM	1.04E-06	1YrCancerRMP_Inh_FAH16to70	*	1.04E-06
961	ALL		563550	4227025	0.004947	9901	DieselExhPM	8.80E-07	1YrCancerRMP_Inh_FAH16to70	*	8.80E-07
962	ALL		563550	4227050	0.004024	9901	DieselExhPM	7.16E-07	1YrCancerRMP_Inh_FAH16to70	*	7.16E-07
963	ALL		563575	4226300	0.004333	9901	DieselExhPM	7.71E-07	1YrCancerRMP_Inh_FAH16to70	*	7.71E-07
964	ALL		563575	4226325	0.004835	9901	DieselExhPM	8.60E-07	1YrCancerRMP_Inh_FAH16to70	*	8.60E-07
965	ALL		563575	4226350	0.005434	9901	DieselExhPM	9.66E-07	1YrCancerRMP_Inh_FAH16to70	*	9.66E-07
966	ALL		563575	4226375	0.006156	9901	DieselExhPM	1.09E-06	1YrCancerRMP_Inh_FAH16to70	*	1.09E-06
967	ALL		563575	4226400	0.007041	9901	DieselExhPM	1.25E-06	1YrCancerRMP_Inh_FAH16to70	*	1.25E-06
968	ALL		563575	4226425	0.008133	9901	DieselExhPM	1.45E-06	1YrCancerRMP_Inh_FAH16to70	*	1.45E-06
969	ALL		563575	4226450	0.00954	9901	DieselExhPM	1.70E-06	1YrCancerRMP_Inh_FAH16to70	*	1.70E-06
970	ALL		563575	4226475	0.011423	9901	DieselExhPM	2.03E-06	1YrCancerRMP_Inh_FAH16to70	*	2.03E-06
971	ALL		563575	4226500	0.013979	9901	DieselExhPM	2.49E-06	1YrCancerRMP_Inh_FAH16to70	*	2.49E-06
972	ALL		563575	4226525	0.017742	9901	DieselExhPM	3.16E-06	1YrCancerRMP_Inh_FAH16to70	*	3.16E-06
973	ALL		563575	4226550	0.023736	9901	DieselExhPM	4.22E-06	1YrCancerRMP_Inh_FAH16to70	*	4.22E-06
974	ALL		563575	4226575	0.0344	9901	DieselExhPM	6.12E-06	1YrCancerRMP_Inh_FAH16to70	*	6.12E-06
975	ALL		563575	4226775	0.088898	9901	DieselExhPM	1.58E-05	1YrCancerRMP_Inh_FAH16to70	*	1.58E-05
976	ALL		563575	4226800	0.060988	9901	DieselExhPM	1.08E-05	1YrCancerRMP_Inh_FAH16to70	*	1.08E-05
977	ALL		563575	4226825	0.042981	9901	DieselExhPM	7.64E-06	1YrCancerRMP_Inh_FAH16to70	*	7.64E-06
978	ALL		563575	4226850	0.031325	9901	DieselExhPM	5.57E-06	1YrCancerRMP_Inh_FAH16to70	*	5.57E-06
979	ALL		563575	4226875	0.023421	9901	DieselExhPM	4.17E-06	1YrCancerRMP_Inh_FAH16to70	*	4.17E-06
980	ALL		563575	4226900	0.017922	9901	DieselExhPM	3.19E-06	1YrCancerRMP_Inh_FAH16to70	*	3.19E-06
981	ALL		563575	4226925	0.013876	9901	DieselExhPM	2.47E-06	1YrCancerRMP_Inh_FAH16to70	*	2.47E-06
982	ALL		563575	4226950	0.010824	9901	DieselExhPM	1.93E-06	1YrCancerRMP_Inh_FAH16to70	*	1.93E-06
983	ALL		563575	4226975	0.008637	9901	DieselExhPM	1.54E-06	1YrCancerRMP_Inh_FAH16to70	*	1.54E-06
984	ALL		563575	4227000	0.007101	9901	DieselExhPM	1.26E-06	1YrCancerRMP_Inh_FAH16to70	*	1.26E-06
985	ALL		563575	4227025	0.006134	9901	DieselExhPM	1.09E-06	1YrCancerRMP_Inh_FAH16to70	*	1.09E-06
986	ALL		563575	4227050	0.00522	9901	DieselExhPM	9.28E-07	1YrCancerRMP_Inh_FAH16to70	*	9.28E-07
987	ALL		563600	4226300	0.004284	9901	DieselExhPM	7.62E-07	1YrCancerRMP_Inh_FAH16to70	*	7.62E-07
988	ALL		563600	4226325	0.004794	9901	DieselExhPM	8.53E-07	1YrCancerRMP_Inh_FAH16to70	*	8.53E-07
989	ALL		563600	4226350	0.005402	9901	DieselExhPM	9.61E-07	1YrCancerRMP_Inh_FAH16to70	*	9.61E-07
990	ALL		563600	4226375	0.006129	9901	DieselExhPM	1.09E-06	1YrCancerRMP_Inh_FAH16to70	*	1.09E-06
991	ALL		563600	4226400	0.007053	9901	DieselExhPM	1.25E-06	1YrCancerRMP_Inh_FAH16to70	*	1.25E-06
992	ALL		563600	4226425	0.008198	9901	DieselExhPM	1.46E-06	1YrCancerRMP_Inh_FAH16to70	*	1.46E-06

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
993	ALL		563600	4226450	0.009639	9901	DieselExhPM	1.71E-06	1YrCancerRMP_Inh_FAH16to70	*	1.71E-06
994	ALL		563600	4226475	0.011555	9901	DieselExhPM	2.06E-06	1YrCancerRMP_Inh_FAH16to70	*	2.06E-06
995	ALL		563600	4226500	0.014195	9901	DieselExhPM	2.52E-06	1YrCancerRMP_Inh_FAH16to70	*	2.52E-06
996	ALL		563600	4226525	0.01801	9901	DieselExhPM	3.20E-06	1YrCancerRMP_Inh_FAH16to70	*	3.20E-06
997	ALL		563600	4226550	0.024059	9901	DieselExhPM	4.28E-06	1YrCancerRMP_Inh_FAH16to70	*	4.28E-06
998	ALL		563600	4226575	0.034863	9901	DieselExhPM	6.20E-06	1YrCancerRMP_Inh_FAH16to70	*	6.20E-06
999	ALL		563600	4226775	0.091716	9901	DieselExhPM	1.63E-05	1YrCancerRMP_Inh_FAH16to70	*	1.63E-05
1000	ALL		563600	4226800	0.064009	9901	DieselExhPM	1.14E-05	1YrCancerRMP_Inh_FAH16to70	*	1.14E-05
1001	ALL		563600	4226825	0.046322	9901	DieselExhPM	8.24E-06	1YrCancerRMP_Inh_FAH16to70	*	8.24E-06
1002	ALL		563600	4226850	0.034722	9901	DieselExhPM	6.18E-06	1YrCancerRMP_Inh_FAH16to70	*	6.18E-06
1003	ALL		563600	4226875	0.026695	9901	DieselExhPM	4.75E-06	1YrCancerRMP_Inh_FAH16to70	*	4.75E-06
1004	ALL		563600	4226900	0.020877	9901	DieselExhPM	3.71E-06	1YrCancerRMP_Inh_FAH16to70	*	3.71E-06
1005	ALL		563600	4226925	0.016428	9901	DieselExhPM	2.92E-06	1YrCancerRMP_Inh_FAH16to70	*	2.92E-06
1006	ALL		563600	4226950	0.013111	9901	DieselExhPM	2.33E-06	1YrCancerRMP_Inh_FAH16to70	*	2.33E-06
1007	ALL		563600	4226975	0.010606	9901	DieselExhPM	1.89E-06	1YrCancerRMP_Inh_FAH16to70	*	1.89E-06
1008	ALL		563600	4227000	0.008716	9901	DieselExhPM	1.55E-06	1YrCancerRMP_Inh_FAH16to70	*	1.55E-06
1009	ALL		563600	4227025	0.007305	9901	DieselExhPM	1.30E-06	1YrCancerRMP_Inh_FAH16to70	*	1.30E-06
1010	ALL		563600	4227050	0.006296	9901	DieselExhPM	1.12E-06	1YrCancerRMP_Inh_FAH16to70	*	1.12E-06
1011	ALL		563625	4226300	0.004135	9901	DieselExhPM	7.35E-07	1YrCancerRMP_Inh_FAH16to70	*	7.35E-07
1012	ALL		563625	4226325	0.00464	9901	DieselExhPM	8.25E-07	1YrCancerRMP_Inh_FAH16to70	*	8.25E-07
1013	ALL		563625	4226350	0.005247	9901	DieselExhPM	9.33E-07	1YrCancerRMP_Inh_FAH16to70	*	9.33E-07
1014	ALL		563625	4226375	0.005974	9901	DieselExhPM	1.06E-06	1YrCancerRMP_Inh_FAH16to70	*	1.06E-06
1015	ALL		563625	4226400	0.00689	9901	DieselExhPM	1.23E-06	1YrCancerRMP_Inh_FAH16to70	*	1.23E-06
1016	ALL		563625	4226425	0.008045	9901	DieselExhPM	1.43E-06	1YrCancerRMP_Inh_FAH16to70	*	1.43E-06
1017	ALL		563625	4226450	0.009516	9901	DieselExhPM	1.69E-06	1YrCancerRMP_Inh_FAH16to70	*	1.69E-06
1018	ALL		563625	4226475	0.011451	9901	DieselExhPM	2.04E-06	1YrCancerRMP_Inh_FAH16to70	*	2.04E-06
1019	ALL		563625	4226500	0.0141	9901	DieselExhPM	2.51E-06	1YrCancerRMP_Inh_FAH16to70	*	2.51E-06
1020	ALL		563625	4226525	0.01797	9901	DieselExhPM	3.20E-06	1YrCancerRMP_Inh_FAH16to70	*	3.20E-06
1021	ALL		563625	4226550	0.024012	9901	DieselExhPM	4.27E-06	1YrCancerRMP_Inh_FAH16to70	*	4.27E-06
1022	ALL		563625	4226575	0.03485	9901	DieselExhPM	6.20E-06	1YrCancerRMP_Inh_FAH16to70	*	6.20E-06
1023	ALL		563625	4226775	0.092544	9901	DieselExhPM	1.65E-05	1YrCancerRMP_Inh_FAH16to70	*	1.65E-05
1024	ALL		563625	4226800	0.065627	9901	DieselExhPM	1.17E-05	1YrCancerRMP_Inh_FAH16to70	*	1.17E-05
1025	ALL		563625	4226825	0.048481	9901	DieselExhPM	8.62E-06	1YrCancerRMP_Inh_FAH16to70	*	8.62E-06
1026	ALL		563625	4226850	0.037004	9901	DieselExhPM	6.58E-06	1YrCancerRMP_Inh_FAH16to70	*	6.58E-06
1027	ALL		563625	4226875	0.029011	9901	DieselExhPM	5.16E-06	1YrCancerRMP_Inh_FAH16to70	*	5.16E-06
1028	ALL		563625	4226900	0.023109	9901	DieselExhPM	4.11E-06	1YrCancerRMP_Inh_FAH16to70	*	4.11E-06
1029	ALL		563625	4226925	0.018491	9901	DieselExhPM	3.29E-06	1YrCancerRMP_Inh_FAH16to70	*	3.29E-06
1030	ALL		563625	4226950	0.015078	9901	DieselExhPM	2.68E-06	1YrCancerRMP_Inh_FAH16to70	*	2.68E-06
1031	ALL		563625	4226975	0.012411	9901	DieselExhPM	2.21E-06	1YrCancerRMP_Inh_FAH16to70	*	2.21E-06
1032	ALL		563625	4227000	0.010311	9901	DieselExhPM	1.83E-06	1YrCancerRMP_Inh_FAH16to70	*	1.83E-06
1033	ALL		563625	4227025	0.008664	9901	DieselExhPM	1.54E-06	1YrCancerRMP_Inh_FAH16to70	*	1.54E-06
1034	ALL		563625	4227050	0.007391	9901	DieselExhPM	1.31E-06	1YrCancerRMP_Inh_FAH16to70	*	1.31E-06
1035	ALL		563650	4226300	0.003911	9901	DieselExhPM	6.96E-07	1YrCancerRMP_Inh_FAH16to70	*	6.96E-07
1036	ALL		563650	4226325	0.004383	9901	DieselExhPM	7.79E-07	1YrCancerRMP_Inh_FAH16to70	*	7.79E-07
1037	ALL		563650	4226350	0.004964	9901	DieselExhPM	8.83E-07	1YrCancerRMP_Inh_FAH16to70	*	8.83E-07
1038	ALL		563650	4226375	0.00567	9901	DieselExhPM	1.01E-06	1YrCancerRMP_Inh_FAH16to70	*	1.01E-06
1039	ALL		563650	4226400	0.006545	9901	DieselExhPM	1.16E-06	1YrCancerRMP_Inh_FAH16to70	*	1.16E-06
1040	ALL		563650	4226425	0.007665	9901	DieselExhPM	1.36E-06	1YrCancerRMP_Inh_FAH16to70	*	1.36E-06
1041	ALL		563650	4226450	0.009105	9901	DieselExhPM	1.62E-06	1YrCancerRMP_Inh_FAH16to70	*	1.62E-06
1042	ALL		563650	4226475	0.011016	9901	DieselExhPM	1.96E-06	1YrCancerRMP_Inh_FAH16to70	*	1.96E-06
1043	ALL		563650	4226500	0.013661	9901	DieselExhPM	2.43E-06	1YrCancerRMP_Inh_FAH16to70	*	2.43E-06
1044	ALL		563650	4226525	0.017521	9901	DieselExhPM	3.12E-06	1YrCancerRMP_Inh_FAH16to70	*	3.12E-06
1045	ALL		563650	4226550	0.023529	9901	DieselExhPM	4.18E-06	1YrCancerRMP_Inh_FAH16to70	*	4.18E-06
1046	ALL		563650	4226575	0.034299	9901	DieselExhPM	6.10E-06	1YrCancerRMP_Inh_FAH16to70	*	6.10E-06
1047	ALL		563650	4226775	0.092088	9901	DieselExhPM	1.64E-05	1YrCancerRMP_Inh_FAH16to70	*	1.64E-05
1048	ALL		563650	4226800	0.066407	9901	DieselExhPM	1.18E-05	1YrCancerRMP_Inh_FAH16to70	*	1.18E-05
1049	ALL		563650	4226825	0.049689	9901	DieselExhPM	8.84E-06	1YrCancerRMP_Inh_FAH16to70	*	8.84E-06
1050	ALL		563650	4226850	0.038529	9901	DieselExhPM	6.85E-06	1YrCancerRMP_Inh_FAH16to70	*	6.85E-06
1051	ALL		563650	4226875	0.030621	9901	DieselExhPM	5.45E-06	1YrCancerRMP_Inh_FAH16to70	*	5.45E-06
1052	ALL		563650	4226900	0.024746	9901	DieselExhPM	4.40E-06	1YrCancerRMP_Inh_FAH16to70	*	4.40E-06
1053	ALL		563650	4226925	0.020031	9901	DieselExhPM	3.56E-06	1YrCancerRMP_Inh_FAH16to70	*	3.56E-06
1054	ALL		563650	4226950	0.016604	9901	DieselExhPM	2.95E-06	1YrCancerRMP_Inh_FAH16to70	*	2.95E-06

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1055	ALL		563650	4226975	0.013835	9901	DieselExhPM	2.46E-06	1YrCancerRMP_Inh_FAH16to70	*	2.46E-06
1056	ALL		563650	4227000	0.011621	9901	DieselExhPM	2.07E-06	1YrCancerRMP_Inh_FAH16to70	*	2.07E-06
1057	ALL		563650	4227025	0.009866	9901	DieselExhPM	1.75E-06	1YrCancerRMP_Inh_FAH16to70	*	1.75E-06
1058	ALL		563650	4227050	0.008451	9901	DieselExhPM	1.50E-06	1YrCancerRMP_Inh_FAH16to70	*	1.50E-06
1059	ALL		563675	4226300	0.003614	9901	DieselExhPM	6.43E-07	1YrCancerRMP_Inh_FAH16to70	*	6.43E-07
1060	ALL		563675	4226325	0.004038	9901	DieselExhPM	7.18E-07	1YrCancerRMP_Inh_FAH16to70	*	7.18E-07
1061	ALL		563675	4226350	0.004562	9901	DieselExhPM	8.11E-07	1YrCancerRMP_Inh_FAH16to70	*	8.11E-07
1062	ALL		563675	4226375	0.005208	9901	DieselExhPM	9.26E-07	1YrCancerRMP_Inh_FAH16to70	*	9.26E-07
1063	ALL		563675	4226400	0.006013	9901	DieselExhPM	1.07E-06	1YrCancerRMP_Inh_FAH16to70	*	1.07E-06
1064	ALL		563675	4226425	0.007031	9901	DieselExhPM	1.25E-06	1YrCancerRMP_Inh_FAH16to70	*	1.25E-06
1065	ALL		563675	4226450	0.008361	9901	DieselExhPM	1.49E-06	1YrCancerRMP_Inh_FAH16to70	*	1.49E-06
1066	ALL		563675	4226475	0.010159	9901	DieselExhPM	1.81E-06	1YrCancerRMP_Inh_FAH16to70	*	1.81E-06
1067	ALL		563675	4226500	0.012694	9901	DieselExhPM	2.26E-06	1YrCancerRMP_Inh_FAH16to70	*	2.26E-06
1068	ALL		563675	4226525	0.016439	9901	DieselExhPM	2.92E-06	1YrCancerRMP_Inh_FAH16to70	*	2.92E-06
1069	ALL		563675	4226550	0.022415	9901	DieselExhPM	3.99E-06	1YrCancerRMP_Inh_FAH16to70	*	3.99E-06
1070	ALL		563675	4226575	0.033036	9901	DieselExhPM	5.88E-06	1YrCancerRMP_Inh_FAH16to70	*	5.88E-06
1071	ALL		563675	4226775	0.090438	9901	DieselExhPM	1.61E-05	1YrCancerRMP_Inh_FAH16to70	*	1.61E-05
1072	ALL		563675	4226800	0.066157	9901	DieselExhPM	1.18E-05	1YrCancerRMP_Inh_FAH16to70	*	1.18E-05
1073	ALL		563675	4226825	0.050063	9901	DieselExhPM	8.90E-06	1YrCancerRMP_Inh_FAH16to70	*	8.90E-06
1074	ALL		563675	4226850	0.039274	9901	DieselExhPM	6.98E-06	1YrCancerRMP_Inh_FAH16to70	*	6.98E-06
1075	ALL		563675	4226875	0.031613	9901	DieselExhPM	5.62E-06	1YrCancerRMP_Inh_FAH16to70	*	5.62E-06
1076	ALL		563675	4226900	0.025841	9901	DieselExhPM	4.60E-06	1YrCancerRMP_Inh_FAH16to70	*	4.60E-06
1077	ALL		563675	4226925	0.02114	9901	DieselExhPM	3.76E-06	1YrCancerRMP_Inh_FAH16to70	*	3.76E-06
1078	ALL		563675	4226950	0.01772	9901	DieselExhPM	3.15E-06	1YrCancerRMP_Inh_FAH16to70	*	3.15E-06
1079	ALL		563675	4226975	0.014899	9901	DieselExhPM	2.65E-06	1YrCancerRMP_Inh_FAH16to70	*	2.65E-06
1080	ALL		563675	4227000	0.012634	9901	DieselExhPM	2.25E-06	1YrCancerRMP_Inh_FAH16to70	*	2.25E-06
1081	ALL		563675	4227025	0.010838	9901	DieselExhPM	1.93E-06	1YrCancerRMP_Inh_FAH16to70	*	1.93E-06
1082	ALL		563675	4227050	0.009358	9901	DieselExhPM	1.66E-06	1YrCancerRMP_Inh_FAH16to70	*	1.66E-06
1083	ALL		563700	4226300	0.00328	9901	DieselExhPM	5.83E-07	1YrCancerRMP_Inh_FAH16to70	*	5.83E-07
1084	ALL		563700	4226325	0.00365	9901	DieselExhPM	6.49E-07	1YrCancerRMP_Inh_FAH16to70	*	6.49E-07
1085	ALL		563700	4226350	0.004096	9901	DieselExhPM	7.29E-07	1YrCancerRMP_Inh_FAH16to70	*	7.29E-07
1086	ALL		563700	4226375	0.004642	9901	DieselExhPM	8.26E-07	1YrCancerRMP_Inh_FAH16to70	*	8.26E-07
1087	ALL		563700	4226400	0.005343	9901	DieselExhPM	9.50E-07	1YrCancerRMP_Inh_FAH16to70	*	9.50E-07
1088	ALL		563700	4226425	0.006195	9901	DieselExhPM	1.10E-06	1YrCancerRMP_Inh_FAH16to70	*	1.10E-06
1089	ALL		563700	4226450	0.007315	9901	DieselExhPM	1.30E-06	1YrCancerRMP_Inh_FAH16to70	*	1.30E-06
1090	ALL		563700	4226475	0.008832	9901	DieselExhPM	1.57E-06	1YrCancerRMP_Inh_FAH16to70	*	1.57E-06
1091	ALL		563700	4226500	0.010979	9901	DieselExhPM	1.95E-06	1YrCancerRMP_Inh_FAH16to70	*	1.95E-06
1092	ALL		563700	4226525	0.01427	9901	DieselExhPM	2.54E-06	1YrCancerRMP_Inh_FAH16to70	*	2.54E-06
1093	ALL		563700	4226550	0.019722	9901	DieselExhPM	3.51E-06	1YrCancerRMP_Inh_FAH16to70	*	3.51E-06
1094	ALL		563700	4226575	0.029928	9901	DieselExhPM	5.32E-06	1YrCancerRMP_Inh_FAH16to70	*	5.32E-06
1095	ALL		563700	4226775	0.087222	9901	DieselExhPM	1.55E-05	1YrCancerRMP_Inh_FAH16to70	*	1.55E-05
1096	ALL		563700	4226800	0.06484	9901	DieselExhPM	1.15E-05	1YrCancerRMP_Inh_FAH16to70	*	1.15E-05
1097	ALL		563700	4226825	0.049604	9901	DieselExhPM	8.82E-06	1YrCancerRMP_Inh_FAH16to70	*	8.82E-06
1098	ALL		563700	4226850	0.039307	9901	DieselExhPM	6.99E-06	1YrCancerRMP_Inh_FAH16to70	*	6.99E-06
1099	ALL		563700	4226875	0.031911	9901	DieselExhPM	5.68E-06	1YrCancerRMP_Inh_FAH16to70	*	5.68E-06
1100	ALL		563700	4226900	0.026309	9901	DieselExhPM	4.68E-06	1YrCancerRMP_Inh_FAH16to70	*	4.68E-06
1101	ALL		563700	4226925	0.021809	9901	DieselExhPM	3.88E-06	1YrCancerRMP_Inh_FAH16to70	*	3.88E-06
1102	ALL		563700	4226950	0.018506	9901	DieselExhPM	3.29E-06	1YrCancerRMP_Inh_FAH16to70	*	3.29E-06
1103	ALL		563700	4226975	0.015731	9901	DieselExhPM	2.80E-06	1YrCancerRMP_Inh_FAH16to70	*	2.80E-06
1104	ALL		563700	4227000	0.013498	9901	DieselExhPM	2.40E-06	1YrCancerRMP_Inh_FAH16to70	*	2.40E-06
1105	ALL		563700	4227025	0.011676	9901	DieselExhPM	2.08E-06	1YrCancerRMP_Inh_FAH16to70	*	2.08E-06
1106	ALL		563700	4227050	0.010109	9901	DieselExhPM	1.80E-06	1YrCancerRMP_Inh_FAH16to70	*	1.80E-06
1107	ALL		563725	4226300	0.002948	9901	DieselExhPM	5.24E-07	1YrCancerRMP_Inh_FAH16to70	*	5.24E-07
1108	ALL		563725	4226325	0.003258	9901	DieselExhPM	5.79E-07	1YrCancerRMP_Inh_FAH16to70	*	5.79E-07
1109	ALL		563725	4226350	0.003629	9901	DieselExhPM	6.45E-07	1YrCancerRMP_Inh_FAH16to70	*	6.45E-07
1110	ALL		563725	4226375	0.004064	9901	DieselExhPM	7.23E-07	1YrCancerRMP_Inh_FAH16to70	*	7.23E-07
1111	ALL		563725	4226400	0.00463	9901	DieselExhPM	8.23E-07	1YrCancerRMP_Inh_FAH16to70	*	8.23E-07
1112	ALL		563725	4226425	0.005304	9901	DieselExhPM	9.43E-07	1YrCancerRMP_Inh_FAH16to70	*	9.43E-07
1113	ALL		563725	4226450	0.006161	9901	DieselExhPM	1.10E-06	1YrCancerRMP_Inh_FAH16to70	*	1.10E-06
1114	ALL		563725	4226475	0.007291	9901	DieselExhPM	1.30E-06	1YrCancerRMP_Inh_FAH16to70	*	1.30E-06
1115	ALL		563725	4226500	0.008851	9901	DieselExhPM	1.57E-06	1YrCancerRMP_Inh_FAH16to70	*	1.57E-06
1116	ALL		563725	4226525	0.011148	9901	DieselExhPM	1.98E-06	1YrCancerRMP_Inh_FAH16to70	*	1.98E-06

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1117	ALL		563725	4226550	0.01457	9901	DieselExhPM	2.59E-06	1YrCancerRMP_Inh_FAH16to70	*	2.59E-06
1118	ALL		563725	4226575	0.02112	9901	DieselExhPM	3.76E-06	1YrCancerRMP_Inh_FAH16to70	*	3.76E-06
1119	ALL		563725	4226775	0.079691	9901	DieselExhPM	1.42E-05	1YrCancerRMP_Inh_FAH16to70	*	1.42E-05
1120	ALL		563725	4226800	0.060596	9901	DieselExhPM	1.08E-05	1YrCancerRMP_Inh_FAH16to70	*	1.08E-05
1121	ALL		563725	4226825	0.047433	9901	DieselExhPM	8.44E-06	1YrCancerRMP_Inh_FAH16to70	*	8.44E-06
1122	ALL		563725	4226850	0.038132	9901	DieselExhPM	6.78E-06	1YrCancerRMP_Inh_FAH16to70	*	6.78E-06
1123	ALL		563725	4226875	0.031256	9901	DieselExhPM	5.56E-06	1YrCancerRMP_Inh_FAH16to70	*	5.56E-06
1124	ALL		563725	4226900	0.026016	9901	DieselExhPM	4.63E-06	1YrCancerRMP_Inh_FAH16to70	*	4.63E-06
1125	ALL		563725	4226925	0.021869	9901	DieselExhPM	3.89E-06	1YrCancerRMP_Inh_FAH16to70	*	3.89E-06
1126	ALL		563725	4226950	0.018778	9901	DieselExhPM	3.34E-06	1YrCancerRMP_Inh_FAH16to70	*	3.34E-06
1127	ALL		563725	4226975	0.016181	9901	DieselExhPM	2.88E-06	1YrCancerRMP_Inh_FAH16to70	*	2.88E-06
1128	ALL		563725	4227000	0.014043	9901	DieselExhPM	2.50E-06	1YrCancerRMP_Inh_FAH16to70	*	2.50E-06
1129	ALL		563725	4227025	0.012237	9901	DieselExhPM	2.18E-06	1YrCancerRMP_Inh_FAH16to70	*	2.18E-06
1130	ALL		563725	4227050	0.01065	9901	DieselExhPM	1.89E-06	1YrCancerRMP_Inh_FAH16to70	*	1.89E-06
1131	ALL		563750	4226300	0.002622	9901	DieselExhPM	4.66E-07	1YrCancerRMP_Inh_FAH16to70	*	4.66E-07
1132	ALL		563750	4226325	0.00288	9901	DieselExhPM	5.12E-07	1YrCancerRMP_Inh_FAH16to70	*	5.12E-07
1133	ALL		563750	4226350	0.00318	9901	DieselExhPM	5.66E-07	1YrCancerRMP_Inh_FAH16to70	*	5.66E-07
1134	ALL		563750	4226375	0.003536	9901	DieselExhPM	6.29E-07	1YrCancerRMP_Inh_FAH16to70	*	6.29E-07
1135	ALL		563750	4226400	0.003968	9901	DieselExhPM	7.06E-07	1YrCancerRMP_Inh_FAH16to70	*	7.06E-07
1136	ALL		563750	4226425	0.004484	9901	DieselExhPM	7.97E-07	1YrCancerRMP_Inh_FAH16to70	*	7.97E-07
1137	ALL		563750	4226450	0.005118	9901	DieselExhPM	9.10E-07	1YrCancerRMP_Inh_FAH16to70	*	9.10E-07
1138	ALL		563750	4226475	0.00592	9901	DieselExhPM	1.05E-06	1YrCancerRMP_Inh_FAH16to70	*	1.05E-06
1139	ALL		563750	4226500	0.006857	9901	DieselExhPM	1.22E-06	1YrCancerRMP_Inh_FAH16to70	*	1.22E-06
1140	ALL		563750	4226525	0.008316	9901	DieselExhPM	1.48E-06	1YrCancerRMP_Inh_FAH16to70	*	1.48E-06
1141	ALL		563750	4226550	0.010588	9901	DieselExhPM	1.88E-06	1YrCancerRMP_Inh_FAH16to70	*	1.88E-06
1142	ALL		563750	4226575	0.014513	9901	DieselExhPM	2.58E-06	1YrCancerRMP_Inh_FAH16to70	*	2.58E-06
1143	ALL		563750	4226600	0.022375	9901	DieselExhPM	3.98E-06	1YrCancerRMP_Inh_FAH16to70	*	3.98E-06
1144	ALL		563750	4226625	0.033531	9901	DieselExhPM	5.96E-06	1YrCancerRMP_Inh_FAH16to70	*	5.96E-06
1145	ALL		563750	4226650	0.045026	9901	DieselExhPM	8.01E-06	1YrCancerRMP_Inh_FAH16to70	*	8.01E-06
1146	ALL		563750	4226675	0.054397	9901	DieselExhPM	9.67E-06	1YrCancerRMP_Inh_FAH16to70	*	9.67E-06
1147	ALL		563750	4226700	0.0606	9901	DieselExhPM	1.08E-05	1YrCancerRMP_Inh_FAH16to70	*	1.08E-05
1148	ALL		563750	4226725	0.064029	9901	DieselExhPM	1.14E-05	1YrCancerRMP_Inh_FAH16to70	*	1.14E-05
1149	ALL		563750	4226750	0.063785	9901	DieselExhPM	1.13E-05	1YrCancerRMP_Inh_FAH16to70	*	1.13E-05
1150	ALL		563750	4226775	0.057722	9901	DieselExhPM	1.03E-05	1YrCancerRMP_Inh_FAH16to70	*	1.03E-05
1151	ALL		563750	4226800	0.049428	9901	DieselExhPM	8.79E-06	1YrCancerRMP_Inh_FAH16to70	*	8.79E-06
1152	ALL		563750	4226825	0.041353	9901	DieselExhPM	7.35E-06	1YrCancerRMP_Inh_FAH16to70	*	7.35E-06
1153	ALL		563750	4226850	0.034603	9901	DieselExhPM	6.15E-06	1YrCancerRMP_Inh_FAH16to70	*	6.15E-06
1154	ALL		563750	4226875	0.029144	9901	DieselExhPM	5.18E-06	1YrCancerRMP_Inh_FAH16to70	*	5.18E-06
1155	ALL		563750	4226900	0.024797	9901	DieselExhPM	4.41E-06	1YrCancerRMP_Inh_FAH16to70	*	4.41E-06
1156	ALL		563750	4226925	0.021222	9901	DieselExhPM	3.77E-06	1YrCancerRMP_Inh_FAH16to70	*	3.77E-06
1157	ALL		563750	4226950	0.018439	9901	DieselExhPM	3.28E-06	1YrCancerRMP_Inh_FAH16to70	*	3.28E-06
1158	ALL		563750	4226975	0.016103	9901	DieselExhPM	2.86E-06	1YrCancerRMP_Inh_FAH16to70	*	2.86E-06
1159	ALL		563750	4227000	0.014133	9901	DieselExhPM	2.51E-06	1YrCancerRMP_Inh_FAH16to70	*	2.51E-06
1160	ALL		563750	4227025	0.012445	9901	DieselExhPM	2.21E-06	1YrCancerRMP_Inh_FAH16to70	*	2.21E-06
1161	ALL		563750	4227050	0.010923	9901	DieselExhPM	1.94E-06	1YrCancerRMP_Inh_FAH16to70	*	1.94E-06
1162	ALL		563775	4226300	0.002346	9901	DieselExhPM	4.17E-07	1YrCancerRMP_Inh_FAH16to70	*	4.17E-07
1163	ALL		563775	4226325	0.002558	9901	DieselExhPM	4.55E-07	1YrCancerRMP_Inh_FAH16to70	*	4.55E-07
1164	ALL		563775	4226350	0.002802	9901	DieselExhPM	4.98E-07	1YrCancerRMP_Inh_FAH16to70	*	4.98E-07
1165	ALL		563775	4226375	0.003078	9901	DieselExhPM	5.47E-07	1YrCancerRMP_Inh_FAH16to70	*	5.47E-07
1166	ALL		563775	4226400	0.003403	9901	DieselExhPM	6.05E-07	1YrCancerRMP_Inh_FAH16to70	*	6.05E-07
1167	ALL		563775	4226425	0.003781	9901	DieselExhPM	6.72E-07	1YrCancerRMP_Inh_FAH16to70	*	6.72E-07
1168	ALL		563775	4226450	0.004242	9901	DieselExhPM	7.54E-07	1YrCancerRMP_Inh_FAH16to70	*	7.54E-07
1169	ALL		563775	4226475	0.004735	9901	DieselExhPM	8.42E-07	1YrCancerRMP_Inh_FAH16to70	*	8.42E-07
1170	ALL		563775	4226500	0.005487	9901	DieselExhPM	9.76E-07	1YrCancerRMP_Inh_FAH16to70	*	9.76E-07
1171	ALL		563775	4226525	0.006499	9901	DieselExhPM	1.16E-06	1YrCancerRMP_Inh_FAH16to70	*	1.16E-06
1172	ALL		563775	4226550	0.008075	9901	DieselExhPM	1.44E-06	1YrCancerRMP_Inh_FAH16to70	*	1.44E-06
1173	ALL		563775	4226575	0.010757	9901	DieselExhPM	1.91E-06	1YrCancerRMP_Inh_FAH16to70	*	1.91E-06
1174	ALL		563775	4226600	0.015264	9901	DieselExhPM	2.71E-06	1YrCancerRMP_Inh_FAH16to70	*	2.71E-06
1175	ALL		563775	4226625	0.02101	9901	DieselExhPM	3.74E-06	1YrCancerRMP_Inh_FAH16to70	*	3.74E-06
1176	ALL		563775	4226650	0.026932	9901	DieselExhPM	4.79E-06	1YrCancerRMP_Inh_FAH16to70	*	4.79E-06
1177	ALL		563775	4226675	0.032524	9901	DieselExhPM	5.78E-06	1YrCancerRMP_Inh_FAH16to70	*	5.78E-06
1178	ALL		563775	4226700	0.037118	9901	DieselExhPM	6.60E-06	1YrCancerRMP_Inh_FAH16to70	*	6.60E-06

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1179	ALL		563775	4226725	0.04027	9901	DieselExhPM	7.16E-06	1YrCancerRMP_Inh_FAH16to70	*	7.16E-06
1180	ALL		563775	4226750	0.041109	9901	DieselExhPM	7.31E-06	1YrCancerRMP_Inh_FAH16to70	*	7.31E-06
1181	ALL		563775	4226775	0.039443	9901	DieselExhPM	7.01E-06	1YrCancerRMP_Inh_FAH16to70	*	7.01E-06
1182	ALL		563775	4226800	0.036596	9901	DieselExhPM	6.51E-06	1YrCancerRMP_Inh_FAH16to70	*	6.51E-06
1183	ALL		563775	4226825	0.032729	9901	DieselExhPM	5.82E-06	1YrCancerRMP_Inh_FAH16to70	*	5.82E-06
1184	ALL		563775	4226850	0.029148	9901	DieselExhPM	5.18E-06	1YrCancerRMP_Inh_FAH16to70	*	5.18E-06
1185	ALL		563775	4226875	0.02564	9901	DieselExhPM	4.56E-06	1YrCancerRMP_Inh_FAH16to70	*	4.56E-06
1186	ALL		563775	4226900	0.022417	9901	DieselExhPM	3.99E-06	1YrCancerRMP_Inh_FAH16to70	*	3.99E-06
1187	ALL		563775	4226925	0.019764	9901	DieselExhPM	3.51E-06	1YrCancerRMP_Inh_FAH16to70	*	3.51E-06
1188	ALL		563775	4226950	0.017487	9901	DieselExhPM	3.11E-06	1YrCancerRMP_Inh_FAH16to70	*	3.11E-06
1189	ALL		563775	4226975	0.015492	9901	DieselExhPM	2.76E-06	1YrCancerRMP_Inh_FAH16to70	*	2.76E-06
1190	ALL		563775	4227000	0.013773	9901	DieselExhPM	2.45E-06	1YrCancerRMP_Inh_FAH16to70	*	2.45E-06
1191	ALL		563775	4227025	0.012258	9901	DieselExhPM	2.18E-06	1YrCancerRMP_Inh_FAH16to70	*	2.18E-06
1192	ALL		563775	4227050	0.010888	9901	DieselExhPM	1.94E-06	1YrCancerRMP_Inh_FAH16to70	*	1.94E-06
1193	ALL		563800	4226300	0.002093	9901	DieselExhPM	3.72E-07	1YrCancerRMP_Inh_FAH16to70	*	3.72E-07
1194	ALL		563800	4226325	0.002264	9901	DieselExhPM	4.03E-07	1YrCancerRMP_Inh_FAH16to70	*	4.03E-07
1195	ALL		563800	4226350	0.002456	9901	DieselExhPM	4.37E-07	1YrCancerRMP_Inh_FAH16to70	*	4.37E-07
1196	ALL		563800	4226375	0.002675	9901	DieselExhPM	4.76E-07	1YrCancerRMP_Inh_FAH16to70	*	4.76E-07
1197	ALL		563800	4226400	0.002927	9901	DieselExhPM	5.21E-07	1YrCancerRMP_Inh_FAH16to70	*	5.21E-07
1198	ALL		563800	4226425	0.003162	9901	DieselExhPM	5.62E-07	1YrCancerRMP_Inh_FAH16to70	*	5.62E-07
1199	ALL		563800	4226450	0.003497	9901	DieselExhPM	6.22E-07	1YrCancerRMP_Inh_FAH16to70	*	6.22E-07
1200	ALL		563800	4226475	0.003916	9901	DieselExhPM	6.97E-07	1YrCancerRMP_Inh_FAH16to70	*	6.97E-07
1201	ALL		563800	4226500	0.004479	9901	DieselExhPM	7.97E-07	1YrCancerRMP_Inh_FAH16to70	*	7.97E-07
1202	ALL		563800	4226525	0.005223	9901	DieselExhPM	9.29E-07	1YrCancerRMP_Inh_FAH16to70	*	9.29E-07
1203	ALL		563800	4226550	0.006403	9901	DieselExhPM	1.14E-06	1YrCancerRMP_Inh_FAH16to70	*	1.14E-06
1204	ALL		563800	4226575	0.008342	9901	DieselExhPM	1.48E-06	1YrCancerRMP_Inh_FAH16to70	*	1.48E-06
1205	ALL		563800	4226600	0.011249	9901	DieselExhPM	2.00E-06	1YrCancerRMP_Inh_FAH16to70	*	2.00E-06
1206	ALL		563800	4226625	0.01477	9901	DieselExhPM	2.63E-06	1YrCancerRMP_Inh_FAH16to70	*	2.63E-06
1207	ALL		563800	4226650	0.018289	9901	DieselExhPM	3.25E-06	1YrCancerRMP_Inh_FAH16to70	*	3.25E-06
1208	ALL		563800	4226675	0.021624	9901	DieselExhPM	3.85E-06	1YrCancerRMP_Inh_FAH16to70	*	3.85E-06
1209	ALL		563800	4226700	0.024528	9901	DieselExhPM	4.36E-06	1YrCancerRMP_Inh_FAH16to70	*	4.36E-06
1210	ALL		563800	4226725	0.026731	9901	DieselExhPM	4.75E-06	1YrCancerRMP_Inh_FAH16to70	*	4.75E-06
1211	ALL		563800	4226750	0.027555	9901	DieselExhPM	4.90E-06	1YrCancerRMP_Inh_FAH16to70	*	4.90E-06
1212	ALL		563800	4226775	0.027243	9901	DieselExhPM	4.85E-06	1YrCancerRMP_Inh_FAH16to70	*	4.85E-06
1213	ALL		563800	4226800	0.02633	9901	DieselExhPM	4.68E-06	1YrCancerRMP_Inh_FAH16to70	*	4.68E-06
1214	ALL		563800	4226825	0.024985	9901	DieselExhPM	4.44E-06	1YrCancerRMP_Inh_FAH16to70	*	4.44E-06
1215	ALL		563800	4226850	0.023413	9901	DieselExhPM	4.16E-06	1YrCancerRMP_Inh_FAH16to70	*	4.16E-06
1216	ALL		563800	4226875	0.021445	9901	DieselExhPM	3.81E-06	1YrCancerRMP_Inh_FAH16to70	*	3.81E-06
1217	ALL		563800	4226900	0.019432	9901	DieselExhPM	3.46E-06	1YrCancerRMP_Inh_FAH16to70	*	3.46E-06
1218	ALL		563800	4226925	0.017664	9901	DieselExhPM	3.14E-06	1YrCancerRMP_Inh_FAH16to70	*	3.14E-06
1219	ALL		563800	4226950	0.015868	9901	DieselExhPM	2.82E-06	1YrCancerRMP_Inh_FAH16to70	*	2.82E-06
1220	ALL		563800	4226975	0.014377	9901	DieselExhPM	2.56E-06	1YrCancerRMP_Inh_FAH16to70	*	2.56E-06
1221	ALL		563800	4227000	0.012915	9901	DieselExhPM	2.30E-06	1YrCancerRMP_Inh_FAH16to70	*	2.30E-06
1222	ALL		563800	4227025	0.011693	9901	DieselExhPM	2.08E-06	1YrCancerRMP_Inh_FAH16to70	*	2.08E-06
1223	ALL		563800	4227050	0.010511	9901	DieselExhPM	1.87E-06	1YrCancerRMP_Inh_FAH16to70	*	1.87E-06
1224	ALL		563825	4226300	0.001844	9901	DieselExhPM	3.28E-07	1YrCancerRMP_Inh_FAH16to70	*	3.28E-07
1225	ALL		563825	4226325	0.001984	9901	DieselExhPM	3.53E-07	1YrCancerRMP_Inh_FAH16to70	*	3.53E-07
1226	ALL		563825	4226350	0.002136	9901	DieselExhPM	3.80E-07	1YrCancerRMP_Inh_FAH16to70	*	3.80E-07
1227	ALL		563825	4226375	0.002305	9901	DieselExhPM	4.10E-07	1YrCancerRMP_Inh_FAH16to70	*	4.10E-07
1228	ALL		563825	4226400	0.002499	9901	DieselExhPM	4.44E-07	1YrCancerRMP_Inh_FAH16to70	*	4.44E-07
1229	ALL		563825	4226425	0.002717	9901	DieselExhPM	4.83E-07	1YrCancerRMP_Inh_FAH16to70	*	4.83E-07
1230	ALL		563825	4226450	0.002979	9901	DieselExhPM	5.30E-07	1YrCancerRMP_Inh_FAH16to70	*	5.30E-07
1231	ALL		563825	4226475	0.003304	9901	DieselExhPM	5.88E-07	1YrCancerRMP_Inh_FAH16to70	*	5.88E-07
1232	ALL		563825	4226500	0.003732	9901	DieselExhPM	6.64E-07	1YrCancerRMP_Inh_FAH16to70	*	6.64E-07
1233	ALL		563825	4226525	0.004321	9901	DieselExhPM	7.68E-07	1YrCancerRMP_Inh_FAH16to70	*	7.68E-07
1234	ALL		563825	4226550	0.005256	9901	DieselExhPM	9.35E-07	1YrCancerRMP_Inh_FAH16to70	*	9.35E-07
1235	ALL		563825	4226575	0.006705	9901	DieselExhPM	1.19E-06	1YrCancerRMP_Inh_FAH16to70	*	1.19E-06
1236	ALL		563825	4226600	0.008745	9901	DieselExhPM	1.56E-06	1YrCancerRMP_Inh_FAH16to70	*	1.56E-06
1237	ALL		563825	4226625	0.011118	9901	DieselExhPM	1.98E-06	1YrCancerRMP_Inh_FAH16to70	*	1.98E-06
1238	ALL		563825	4226650	0.013454	9901	DieselExhPM	2.39E-06	1YrCancerRMP_Inh_FAH16to70	*	2.39E-06
1239	ALL		563825	4226675	0.015578	9901	DieselExhPM	2.77E-06	1YrCancerRMP_Inh_FAH16to70	*	2.77E-06
1240	ALL		563825	4226700	0.017432	9901	DieselExhPM	3.10E-06	1YrCancerRMP_Inh_FAH16to70	*	3.10E-06

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1241	ALL		563825	4226725	0.018817	9901	DieselExhPM	3.35E-06	1YrCancerRMP_Inh_FAH16to70	*	3.35E-06
1242	ALL		563825	4226750	0.019486	9901	DieselExhPM	3.47E-06	1YrCancerRMP_Inh_FAH16to70	*	3.47E-06
1243	ALL		563825	4226775	0.019591	9901	DieselExhPM	3.48E-06	1YrCancerRMP_Inh_FAH16to70	*	3.48E-06
1244	ALL		563825	4226800	0.019285	9901	DieselExhPM	3.43E-06	1YrCancerRMP_Inh_FAH16to70	*	3.43E-06
1245	ALL		563825	4226825	0.018802	9901	DieselExhPM	3.34E-06	1YrCancerRMP_Inh_FAH16to70	*	3.34E-06
1246	ALL		563825	4226850	0.018121	9901	DieselExhPM	3.22E-06	1YrCancerRMP_Inh_FAH16to70	*	3.22E-06
1247	ALL		563825	4226875	0.017225	9901	DieselExhPM	3.06E-06	1YrCancerRMP_Inh_FAH16to70	*	3.06E-06
1248	ALL		563825	4226900	0.016225	9901	DieselExhPM	2.89E-06	1YrCancerRMP_Inh_FAH16to70	*	2.89E-06
1249	ALL		563825	4226925	0.01505	9901	DieselExhPM	2.68E-06	1YrCancerRMP_Inh_FAH16to70	*	2.68E-06
1250	ALL		563825	4226950	0.013749	9901	DieselExhPM	2.45E-06	1YrCancerRMP_Inh_FAH16to70	*	2.45E-06
1251	ALL		563825	4226975	0.012729	9901	DieselExhPM	2.26E-06	1YrCancerRMP_Inh_FAH16to70	*	2.26E-06
1252	ALL		563825	4227000	0.011736	9901	DieselExhPM	2.09E-06	1YrCancerRMP_Inh_FAH16to70	*	2.09E-06
1253	ALL		563825	4227025	0.010803	9901	DieselExhPM	1.92E-06	1YrCancerRMP_Inh_FAH16to70	*	1.92E-06
1254	ALL		563825	4227050	0.00993	9901	DieselExhPM	1.77E-06	1YrCancerRMP_Inh_FAH16to70	*	1.77E-06
1255	ALL		563850	4226300	0.001661	9901	DieselExhPM	2.95E-07	1YrCancerRMP_Inh_FAH16to70	*	2.95E-07
1256	ALL		563850	4226325	0.001777	9901	DieselExhPM	3.16E-07	1YrCancerRMP_Inh_FAH16to70	*	3.16E-07
1257	ALL		563850	4226350	0.0019	9901	DieselExhPM	3.38E-07	1YrCancerRMP_Inh_FAH16to70	*	3.38E-07
1258	ALL		563850	4226375	0.002034	9901	DieselExhPM	3.62E-07	1YrCancerRMP_Inh_FAH16to70	*	3.62E-07
1259	ALL		563850	4226400	0.002185	9901	DieselExhPM	3.89E-07	1YrCancerRMP_Inh_FAH16to70	*	3.89E-07
1260	ALL		563850	4226425	0.002355	9901	DieselExhPM	4.19E-07	1YrCancerRMP_Inh_FAH16to70	*	4.19E-07
1261	ALL		563850	4226450	0.00256	9901	DieselExhPM	4.55E-07	1YrCancerRMP_Inh_FAH16to70	*	4.55E-07
1262	ALL		563850	4226475	0.002814	9901	DieselExhPM	5.00E-07	1YrCancerRMP_Inh_FAH16to70	*	5.00E-07
1263	ALL		563850	4226500	0.003163	9901	DieselExhPM	5.63E-07	1YrCancerRMP_Inh_FAH16to70	*	5.63E-07
1264	ALL		563850	4226525	0.003666	9901	DieselExhPM	6.52E-07	1YrCancerRMP_Inh_FAH16to70	*	6.52E-07
1265	ALL		563850	4226550	0.004433	9901	DieselExhPM	7.88E-07	1YrCancerRMP_Inh_FAH16to70	*	7.88E-07
1266	ALL		563850	4226575	0.005538	9901	DieselExhPM	9.85E-07	1YrCancerRMP_Inh_FAH16to70	*	9.85E-07
1267	ALL		563850	4226600	0.007035	9901	DieselExhPM	1.25E-06	1YrCancerRMP_Inh_FAH16to70	*	1.25E-06
1268	ALL		563850	4226625	0.008743	9901	DieselExhPM	1.55E-06	1YrCancerRMP_Inh_FAH16to70	*	1.55E-06
1269	ALL		563850	4226650	0.010394	9901	DieselExhPM	1.85E-06	1YrCancerRMP_Inh_FAH16to70	*	1.85E-06
1270	ALL		563850	4226675	0.01186	9901	DieselExhPM	2.11E-06	1YrCancerRMP_Inh_FAH16to70	*	2.11E-06
1271	ALL		563850	4226700	0.013089	9901	DieselExhPM	2.33E-06	1YrCancerRMP_Inh_FAH16to70	*	2.33E-06
1272	ALL		563850	4226725	0.014038	9901	DieselExhPM	2.50E-06	1YrCancerRMP_Inh_FAH16to70	*	2.50E-06
1273	ALL		563850	4226750	0.014517	9901	DieselExhPM	2.58E-06	1YrCancerRMP_Inh_FAH16to70	*	2.58E-06
1274	ALL		563850	4226775	0.014627	9901	DieselExhPM	2.60E-06	1YrCancerRMP_Inh_FAH16to70	*	2.60E-06
1275	ALL		563850	4226800	0.014522	9901	DieselExhPM	2.58E-06	1YrCancerRMP_Inh_FAH16to70	*	2.58E-06
1276	ALL		563850	4226825	0.01437	9901	DieselExhPM	2.56E-06	1YrCancerRMP_Inh_FAH16to70	*	2.56E-06
1277	ALL		563850	4226850	0.014074	9901	DieselExhPM	2.50E-06	1YrCancerRMP_Inh_FAH16to70	*	2.50E-06
1278	ALL		563850	4226875	0.013646	9901	DieselExhPM	2.43E-06	1YrCancerRMP_Inh_FAH16to70	*	2.43E-06
1279	ALL		563850	4226900	0.013093	9901	DieselExhPM	2.33E-06	1YrCancerRMP_Inh_FAH16to70	*	2.33E-06
1280	ALL		563850	4226925	0.012362	9901	DieselExhPM	2.20E-06	1YrCancerRMP_Inh_FAH16to70	*	2.20E-06
1281	ALL		563850	4226950	0.011501	9901	DieselExhPM	2.05E-06	1YrCancerRMP_Inh_FAH16to70	*	2.05E-06
1282	ALL		563850	4226975	0.010923	9901	DieselExhPM	1.94E-06	1YrCancerRMP_Inh_FAH16to70	*	1.94E-06
1283	ALL		563850	4227000	0.01027	9901	DieselExhPM	1.83E-06	1YrCancerRMP_Inh_FAH16to70	*	1.83E-06
1284	ALL		563850	4227025	0.00957	9901	DieselExhPM	1.70E-06	1YrCancerRMP_Inh_FAH16to70	*	1.70E-06
1285	ALL		563850	4227050	0.008916	9901	DieselExhPM	1.59E-06	1YrCancerRMP_Inh_FAH16to70	*	1.59E-06
1286	ALL		563875	4226300	0.001506	9901	DieselExhPM	2.68E-07	1YrCancerRMP_Inh_FAH16to70	*	2.68E-07
1287	ALL		563875	4226325	0.001599	9901	DieselExhPM	2.84E-07	1YrCancerRMP_Inh_FAH16to70	*	2.84E-07
1288	ALL		563875	4226350	0.001699	9901	DieselExhPM	3.02E-07	1YrCancerRMP_Inh_FAH16to70	*	3.02E-07
1289	ALL		563875	4226375	0.001803	9901	DieselExhPM	3.21E-07	1YrCancerRMP_Inh_FAH16to70	*	3.21E-07
1290	ALL		563875	4226400	0.001923	9901	DieselExhPM	3.42E-07	1YrCancerRMP_Inh_FAH16to70	*	3.42E-07
1291	ALL		563875	4226425	0.002057	9901	DieselExhPM	3.66E-07	1YrCancerRMP_Inh_FAH16to70	*	3.66E-07
1292	ALL		563875	4226450	0.002216	9901	DieselExhPM	3.94E-07	1YrCancerRMP_Inh_FAH16to70	*	3.94E-07
1293	ALL		563875	4226475	0.002431	9901	DieselExhPM	4.32E-07	1YrCancerRMP_Inh_FAH16to70	*	4.32E-07
1294	ALL		563875	4226500	0.002729	9901	DieselExhPM	4.85E-07	1YrCancerRMP_Inh_FAH16to70	*	4.85E-07
1295	ALL		563875	4226525	0.003172	9901	DieselExhPM	5.64E-07	1YrCancerRMP_Inh_FAH16to70	*	5.64E-07
1296	ALL		563875	4226550	0.0038	9901	DieselExhPM	6.76E-07	1YrCancerRMP_Inh_FAH16to70	*	6.76E-07
1297	ALL		563875	4226575	0.00468	9901	DieselExhPM	8.32E-07	1YrCancerRMP_Inh_FAH16to70	*	8.32E-07
1298	ALL		563875	4226600	0.005811	9901	DieselExhPM	1.03E-06	1YrCancerRMP_Inh_FAH16to70	*	1.03E-06
1299	ALL		563875	4226625	0.007101	9901	DieselExhPM	1.26E-06	1YrCancerRMP_Inh_FAH16to70	*	1.26E-06
1300	ALL		563875	4226650	0.00832	9901	DieselExhPM	1.48E-06	1YrCancerRMP_Inh_FAH16to70	*	1.48E-06
1301	ALL		563875	4226675	0.009391	9901	DieselExhPM	1.67E-06	1YrCancerRMP_Inh_FAH16to70	*	1.67E-06
1302	ALL		563875	4226700	0.010239	9901	DieselExhPM	1.82E-06	1YrCancerRMP_Inh_FAH16to70	*	1.82E-06

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1303	ALL		563875	4226725	0.010861	9901	DieselExhPM	1.93E-06	1YrCancerRMP_Inh_FAH16to70	*	1.93E-06
1304	ALL		563875	4226750	0.011186	9901	DieselExhPM	1.99E-06	1YrCancerRMP_Inh_FAH16to70	*	1.99E-06
1305	ALL		563875	4226775	0.01127	9901	DieselExhPM	2.00E-06	1YrCancerRMP_Inh_FAH16to70	*	2.00E-06
1306	ALL		563875	4226800	0.011228	9901	DieselExhPM	2.00E-06	1YrCancerRMP_Inh_FAH16to70	*	2.00E-06
1307	ALL		563875	4226825	0.011168	9901	DieselExhPM	1.99E-06	1YrCancerRMP_Inh_FAH16to70	*	1.99E-06
1308	ALL		563875	4226850	0.011038	9901	DieselExhPM	1.96E-06	1YrCancerRMP_Inh_FAH16to70	*	1.96E-06
1309	ALL		563875	4226875	0.010842	9901	DieselExhPM	1.93E-06	1YrCancerRMP_Inh_FAH16to70	*	1.93E-06
1310	ALL		563875	4226900	0.01054	9901	DieselExhPM	1.87E-06	1YrCancerRMP_Inh_FAH16to70	*	1.87E-06
1311	ALL		563875	4226925	0.010149	9901	DieselExhPM	1.81E-06	1YrCancerRMP_Inh_FAH16to70	*	1.81E-06
1312	ALL		563875	4226950	0.009656	9901	DieselExhPM	1.72E-06	1YrCancerRMP_Inh_FAH16to70	*	1.72E-06
1313	ALL		563875	4226975	0.009324	9901	DieselExhPM	1.66E-06	1YrCancerRMP_Inh_FAH16to70	*	1.66E-06
1314	ALL		563875	4227000	0.0089	9901	DieselExhPM	1.58E-06	1YrCancerRMP_Inh_FAH16to70	*	1.58E-06
1315	ALL		563875	4227025	0.00845	9901	DieselExhPM	1.50E-06	1YrCancerRMP_Inh_FAH16to70	*	1.50E-06
1316	ALL		563875	4227050	0.007986	9901	DieselExhPM	1.42E-06	1YrCancerRMP_Inh_FAH16to70	*	1.42E-06
1317	ALL		563900	4226300	0.001369	9901	DieselExhPM	2.43E-07	1YrCancerRMP_Inh_FAH16to70	*	2.43E-07
1318	ALL		563900	4226325	0.001445	9901	DieselExhPM	2.57E-07	1YrCancerRMP_Inh_FAH16to70	*	2.57E-07
1319	ALL		563900	4226350	0.001521	9901	DieselExhPM	2.71E-07	1YrCancerRMP_Inh_FAH16to70	*	2.71E-07
1320	ALL		563900	4226375	0.001602	9901	DieselExhPM	2.85E-07	1YrCancerRMP_Inh_FAH16to70	*	2.85E-07
1321	ALL		563900	4226400	0.001693	9901	DieselExhPM	3.01E-07	1YrCancerRMP_Inh_FAH16to70	*	3.01E-07
1322	ALL		563900	4226425	0.001803	9901	DieselExhPM	3.21E-07	1YrCancerRMP_Inh_FAH16to70	*	3.21E-07
1323	ALL		563900	4226450	0.001932	9901	DieselExhPM	3.44E-07	1YrCancerRMP_Inh_FAH16to70	*	3.44E-07
1324	ALL		563900	4226475	0.002116	9901	DieselExhPM	3.76E-07	1YrCancerRMP_Inh_FAH16to70	*	3.76E-07
1325	ALL		563900	4226500	0.002391	9901	DieselExhPM	4.25E-07	1YrCancerRMP_Inh_FAH16to70	*	4.25E-07
1326	ALL		563900	4226525	0.002781	9901	DieselExhPM	4.95E-07	1YrCancerRMP_Inh_FAH16to70	*	4.95E-07
1327	ALL		563900	4226550	0.003317	9901	DieselExhPM	5.90E-07	1YrCancerRMP_Inh_FAH16to70	*	5.90E-07
1328	ALL		563900	4226575	0.004036	9901	DieselExhPM	7.18E-07	1YrCancerRMP_Inh_FAH16to70	*	7.18E-07
1329	ALL		563900	4226600	0.004937	9901	DieselExhPM	8.78E-07	1YrCancerRMP_Inh_FAH16to70	*	8.78E-07
1330	ALL		563900	4226625	0.005908	9901	DieselExhPM	1.05E-06	1YrCancerRMP_Inh_FAH16to70	*	1.05E-06
1331	ALL		563900	4226650	0.006837	9901	DieselExhPM	1.22E-06	1YrCancerRMP_Inh_FAH16to70	*	1.22E-06
1332	ALL		563900	4226675	0.007628	9901	DieselExhPM	1.36E-06	1YrCancerRMP_Inh_FAH16to70	*	1.36E-06
1333	ALL		563900	4226700	0.00824	9901	DieselExhPM	1.47E-06	1YrCancerRMP_Inh_FAH16to70	*	1.47E-06
1334	ALL		563900	4226725	0.008674	9901	DieselExhPM	1.54E-06	1YrCancerRMP_Inh_FAH16to70	*	1.54E-06
1335	ALL		563900	4226750	0.008882	9901	DieselExhPM	1.58E-06	1YrCancerRMP_Inh_FAH16to70	*	1.58E-06
1336	ALL		563900	4226775	0.00893	9901	DieselExhPM	1.59E-06	1YrCancerRMP_Inh_FAH16to70	*	1.59E-06
1337	ALL		563900	4226800	0.008906	9901	DieselExhPM	1.58E-06	1YrCancerRMP_Inh_FAH16to70	*	1.58E-06
1338	ALL		563900	4226825	0.008871	9901	DieselExhPM	1.58E-06	1YrCancerRMP_Inh_FAH16to70	*	1.58E-06
1339	ALL		563900	4226850	0.008801	9901	DieselExhPM	1.57E-06	1YrCancerRMP_Inh_FAH16to70	*	1.57E-06
1340	ALL		563900	4226875	0.008711	9901	DieselExhPM	1.55E-06	1YrCancerRMP_Inh_FAH16to70	*	1.55E-06
1341	ALL		563900	4226900	0.00857	9901	DieselExhPM	1.52E-06	1YrCancerRMP_Inh_FAH16to70	*	1.52E-06
1342	ALL		563900	4226925	0.00836	9901	DieselExhPM	1.49E-06	1YrCancerRMP_Inh_FAH16to70	*	1.49E-06
1343	ALL		563900	4226950	0.008131	9901	DieselExhPM	1.45E-06	1YrCancerRMP_Inh_FAH16to70	*	1.45E-06
1344	ALL		563900	4226975	0.007919	9901	DieselExhPM	1.41E-06	1YrCancerRMP_Inh_FAH16to70	*	1.41E-06
1345	ALL		563900	4227000	0.007668	9901	DieselExhPM	1.36E-06	1YrCancerRMP_Inh_FAH16to70	*	1.36E-06
1346	ALL		563900	4227025	0.00738	9901	DieselExhPM	1.31E-06	1YrCancerRMP_Inh_FAH16to70	*	1.31E-06
1347	ALL		563900	4227050	0.007065	9901	DieselExhPM	1.26E-06	1YrCancerRMP_Inh_FAH16to70	*	1.26E-06
1348	ALL		563925	4226300	0.001247	9901	DieselExhPM	2.22E-07	1YrCancerRMP_Inh_FAH16to70	*	2.22E-07
1349	ALL		563925	4226325	0.001307	9901	DieselExhPM	2.32E-07	1YrCancerRMP_Inh_FAH16to70	*	2.32E-07
1350	ALL		563925	4226350	0.001367	9901	DieselExhPM	2.43E-07	1YrCancerRMP_Inh_FAH16to70	*	2.43E-07
1351	ALL		563925	4226375	0.001428	9901	DieselExhPM	2.54E-07	1YrCancerRMP_Inh_FAH16to70	*	2.54E-07
1352	ALL		563925	4226400	0.001501	9901	DieselExhPM	2.67E-07	1YrCancerRMP_Inh_FAH16to70	*	2.67E-07
1353	ALL		563925	4226425	0.001588	9901	DieselExhPM	2.82E-07	1YrCancerRMP_Inh_FAH16to70	*	2.82E-07
1354	ALL		563925	4226450	0.001704	9901	DieselExhPM	3.03E-07	1YrCancerRMP_Inh_FAH16to70	*	3.03E-07
1355	ALL		563925	4226475	0.001872	9901	DieselExhPM	3.33E-07	1YrCancerRMP_Inh_FAH16to70	*	3.33E-07
1356	ALL		563925	4226500	0.002123	9901	DieselExhPM	3.78E-07	1YrCancerRMP_Inh_FAH16to70	*	3.78E-07
1357	ALL		563925	4226525	0.002473	9901	DieselExhPM	4.40E-07	1YrCancerRMP_Inh_FAH16to70	*	4.40E-07
1358	ALL		563925	4226550	0.00294	9901	DieselExhPM	5.23E-07	1YrCancerRMP_Inh_FAH16to70	*	5.23E-07
1359	ALL		563925	4226575	0.003533	9901	DieselExhPM	6.28E-07	1YrCancerRMP_Inh_FAH16to70	*	6.28E-07
1360	ALL		563925	4226600	0.004249	9901	DieselExhPM	7.56E-07	1YrCancerRMP_Inh_FAH16to70	*	7.56E-07
1361	ALL		563925	4226625	0.005002	9901	DieselExhPM	8.90E-07	1YrCancerRMP_Inh_FAH16to70	*	8.90E-07
1362	ALL		563925	4226650	0.005719	9901	DieselExhPM	1.02E-06	1YrCancerRMP_Inh_FAH16to70	*	1.02E-06
1363	ALL		563925	4226675	0.006321	9901	DieselExhPM	1.12E-06	1YrCancerRMP_Inh_FAH16to70	*	1.12E-06
1364	ALL		563925	4226700	0.006778	9901	DieselExhPM	1.21E-06	1YrCancerRMP_Inh_FAH16to70	*	1.21E-06

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1365	ALL		563925	4226725	0.007089	9901	DieselExhPM	1.26E-06	1YrCancerRMP_Inh_FAH16to70	*	1.26E-06
1366	ALL		563925	4226750	0.007222	9901	DieselExhPM	1.28E-06	1YrCancerRMP_Inh_FAH16to70	*	1.28E-06
1367	ALL		563925	4226775	0.007237	9901	DieselExhPM	1.29E-06	1YrCancerRMP_Inh_FAH16to70	*	1.29E-06
1368	ALL		563925	4226800	0.007202	9901	DieselExhPM	1.28E-06	1YrCancerRMP_Inh_FAH16to70	*	1.28E-06
1369	ALL		563925	4226825	0.007163	9901	DieselExhPM	1.27E-06	1YrCancerRMP_Inh_FAH16to70	*	1.27E-06
1370	ALL		563925	4226850	0.007111	9901	DieselExhPM	1.26E-06	1YrCancerRMP_Inh_FAH16to70	*	1.26E-06
1371	ALL		563925	4226875	0.007067	9901	DieselExhPM	1.26E-06	1YrCancerRMP_Inh_FAH16to70	*	1.26E-06
1372	ALL		563925	4226900	0.006992	9901	DieselExhPM	1.24E-06	1YrCancerRMP_Inh_FAH16to70	*	1.24E-06
1373	ALL		563925	4226925	0.006907	9901	DieselExhPM	1.23E-06	1YrCancerRMP_Inh_FAH16to70	*	1.23E-06
1374	ALL		563925	4226950	0.006856	9901	DieselExhPM	1.22E-06	1YrCancerRMP_Inh_FAH16to70	*	1.22E-06
1375	ALL		563925	4226975	0.006737	9901	DieselExhPM	1.20E-06	1YrCancerRMP_Inh_FAH16to70	*	1.20E-06
1376	ALL		563925	4227000	0.00659	9901	DieselExhPM	1.17E-06	1YrCancerRMP_Inh_FAH16to70	*	1.17E-06
1377	ALL		563925	4227025	0.006408	9901	DieselExhPM	1.14E-06	1YrCancerRMP_Inh_FAH16to70	*	1.14E-06
1378	ALL		563925	4227050	0.006202	9901	DieselExhPM	1.10E-06	1YrCancerRMP_Inh_FAH16to70	*	1.10E-06
1379	ALL		563950	4226300	0.001137	9901	DieselExhPM	2.02E-07	1YrCancerRMP_Inh_FAH16to70	*	2.02E-07
1380	ALL		563950	4226325	0.001184	9901	DieselExhPM	2.10E-07	1YrCancerRMP_Inh_FAH16to70	*	2.10E-07
1381	ALL		563950	4226350	0.001228	9901	DieselExhPM	2.18E-07	1YrCancerRMP_Inh_FAH16to70	*	2.18E-07
1382	ALL		563950	4226375	0.001274	9901	DieselExhPM	2.26E-07	1YrCancerRMP_Inh_FAH16to70	*	2.26E-07
1383	ALL		563950	4226400	0.00133	9901	DieselExhPM	2.37E-07	1YrCancerRMP_Inh_FAH16to70	*	2.37E-07
1384	ALL		563950	4226425	0.001405	9901	DieselExhPM	2.50E-07	1YrCancerRMP_Inh_FAH16to70	*	2.50E-07
1385	ALL		563950	4226450	0.001513	9901	DieselExhPM	2.69E-07	1YrCancerRMP_Inh_FAH16to70	*	2.69E-07
1386	ALL		563950	4226475	0.001672	9901	DieselExhPM	2.97E-07	1YrCancerRMP_Inh_FAH16to70	*	2.97E-07
1387	ALL		563950	4226500	0.001902	9901	DieselExhPM	3.38E-07	1YrCancerRMP_Inh_FAH16to70	*	3.38E-07
1388	ALL		563950	4226525	0.002213	9901	DieselExhPM	3.94E-07	1YrCancerRMP_Inh_FAH16to70	*	3.94E-07
1389	ALL		563950	4226550	0.002611	9901	DieselExhPM	4.64E-07	1YrCancerRMP_Inh_FAH16to70	*	4.64E-07
1390	ALL		563950	4226575	0.003111	9901	DieselExhPM	5.53E-07	1YrCancerRMP_Inh_FAH16to70	*	5.53E-07
1391	ALL		563950	4226600	0.003694	9901	DieselExhPM	6.57E-07	1YrCancerRMP_Inh_FAH16to70	*	6.57E-07
1392	ALL		563950	4226625	0.004295	9901	DieselExhPM	7.64E-07	1YrCancerRMP_Inh_FAH16to70	*	7.64E-07
1393	ALL		563950	4226650	0.004852	9901	DieselExhPM	8.63E-07	1YrCancerRMP_Inh_FAH16to70	*	8.63E-07
1394	ALL		563950	4226675	0.005311	9901	DieselExhPM	9.45E-07	1YrCancerRMP_Inh_FAH16to70	*	9.45E-07
1395	ALL		563950	4226700	0.00567	9901	DieselExhPM	1.01E-06	1YrCancerRMP_Inh_FAH16to70	*	1.01E-06
1396	ALL		563950	4226725	0.005895	9901	DieselExhPM	1.05E-06	1YrCancerRMP_Inh_FAH16to70	*	1.05E-06
1397	ALL		563950	4226750	0.005982	9901	DieselExhPM	1.06E-06	1YrCancerRMP_Inh_FAH16to70	*	1.06E-06
1398	ALL		563950	4226775	0.005979	9901	DieselExhPM	1.06E-06	1YrCancerRMP_Inh_FAH16to70	*	1.06E-06
1399	ALL		563950	4226800	0.005942	9901	DieselExhPM	1.06E-06	1YrCancerRMP_Inh_FAH16to70	*	1.06E-06
1400	ALL		563950	4226825	0.005893	9901	DieselExhPM	1.05E-06	1YrCancerRMP_Inh_FAH16to70	*	1.05E-06
1401	ALL		563950	4226850	0.005842	9901	DieselExhPM	1.04E-06	1YrCancerRMP_Inh_FAH16to70	*	1.04E-06
1402	ALL		563950	4226875	0.005791	9901	DieselExhPM	1.03E-06	1YrCancerRMP_Inh_FAH16to70	*	1.03E-06
1403	ALL		563950	4226900	0.005753	9901	DieselExhPM	1.02E-06	1YrCancerRMP_Inh_FAH16to70	*	1.02E-06
1404	ALL		563950	4226925	0.005751	9901	DieselExhPM	1.02E-06	1YrCancerRMP_Inh_FAH16to70	*	1.02E-06
1405	ALL		563950	4226950	0.005824	9901	DieselExhPM	1.04E-06	1YrCancerRMP_Inh_FAH16to70	*	1.04E-06
1406	ALL		563950	4226975	0.005754	9901	DieselExhPM	1.02E-06	1YrCancerRMP_Inh_FAH16to70	*	1.02E-06
1407	ALL		563950	4227000	0.00567	9901	DieselExhPM	1.01E-06	1YrCancerRMP_Inh_FAH16to70	*	1.01E-06
1408	ALL		563950	4227025	0.005557	9901	DieselExhPM	9.88E-07	1YrCancerRMP_Inh_FAH16to70	*	9.88E-07
1409	ALL		563950	4227050	0.005425	9901	DieselExhPM	9.65E-07	1YrCancerRMP_Inh_FAH16to70	*	9.65E-07
1410	ALL		563975	4226300	0.001036	9901	DieselExhPM	1.84E-07	1YrCancerRMP_Inh_FAH16to70	*	1.84E-07
1411	ALL		563975	4226325	0.00107	9901	DieselExhPM	1.90E-07	1YrCancerRMP_Inh_FAH16to70	*	1.90E-07
1412	ALL		563975	4226350	0.001103	9901	DieselExhPM	1.96E-07	1YrCancerRMP_Inh_FAH16to70	*	1.96E-07
1413	ALL		563975	4226375	0.001138	9901	DieselExhPM	2.02E-07	1YrCancerRMP_Inh_FAH16to70	*	2.02E-07
1414	ALL		563975	4226400	0.001187	9901	DieselExhPM	2.11E-07	1YrCancerRMP_Inh_FAH16to70	*	2.11E-07
1415	ALL		563975	4226425	0.001254	9901	DieselExhPM	2.23E-07	1YrCancerRMP_Inh_FAH16to70	*	2.23E-07
1416	ALL		563975	4226450	0.001358	9901	DieselExhPM	2.41E-07	1YrCancerRMP_Inh_FAH16to70	*	2.41E-07
1417	ALL		563975	4226475	0.001508	9901	DieselExhPM	2.68E-07	1YrCancerRMP_Inh_FAH16to70	*	2.68E-07
1418	ALL		563975	4226500	0.001717	9901	DieselExhPM	3.05E-07	1YrCancerRMP_Inh_FAH16to70	*	3.05E-07
1419	ALL		563975	4226525	0.001993	9901	DieselExhPM	3.54E-07	1YrCancerRMP_Inh_FAH16to70	*	3.54E-07
1420	ALL		563975	4226550	0.002331	9901	DieselExhPM	4.15E-07	1YrCancerRMP_Inh_FAH16to70	*	4.15E-07
1421	ALL		563975	4226575	0.002748	9901	DieselExhPM	4.89E-07	1YrCancerRMP_Inh_FAH16to70	*	4.89E-07
1422	ALL		563975	4226600	0.003226	9901	DieselExhPM	5.74E-07	1YrCancerRMP_Inh_FAH16to70	*	5.74E-07
1423	ALL		563975	4226625	0.003717	9901	DieselExhPM	6.61E-07	1YrCancerRMP_Inh_FAH16to70	*	6.61E-07
1424	ALL		563975	4226650	0.00416	9901	DieselExhPM	7.40E-07	1YrCancerRMP_Inh_FAH16to70	*	7.40E-07
1425	ALL		563975	4226675	0.004526	9901	DieselExhPM	8.05E-07	1YrCancerRMP_Inh_FAH16to70	*	8.05E-07
1426	ALL		563975	4226700	0.004808	9901	DieselExhPM	8.55E-07	1YrCancerRMP_Inh_FAH16to70	*	8.55E-07

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1427	ALL		563975	4226725	0.004988	9901	DieselExhPM	8.87E-07	1YrCancerRMP_Inh_FAH16to70	*	8.87E-07
1428	ALL		563975	4226750	0.005047	9901	DieselExhPM	8.98E-07	1YrCancerRMP_Inh_FAH16to70	*	8.98E-07
1429	ALL		563975	4226775	0.005033	9901	DieselExhPM	8.95E-07	1YrCancerRMP_Inh_FAH16to70	*	8.95E-07
1430	ALL		563975	4226800	0.004981	9901	DieselExhPM	8.86E-07	1YrCancerRMP_Inh_FAH16to70	*	8.86E-07
1431	ALL		563975	4226825	0.004921	9901	DieselExhPM	8.75E-07	1YrCancerRMP_Inh_FAH16to70	*	8.75E-07
1432	ALL		563975	4226850	0.004875	9901	DieselExhPM	8.67E-07	1YrCancerRMP_Inh_FAH16to70	*	8.67E-07
1433	ALL		563975	4226875	0.004834	9901	DieselExhPM	8.60E-07	1YrCancerRMP_Inh_FAH16to70	*	8.60E-07
1434	ALL		563975	4226900	0.004815	9901	DieselExhPM	8.56E-07	1YrCancerRMP_Inh_FAH16to70	*	8.56E-07
1435	ALL		563975	4226925	0.004834	9901	DieselExhPM	8.60E-07	1YrCancerRMP_Inh_FAH16to70	*	8.60E-07
1436	ALL		563975	4226950	0.004981	9901	DieselExhPM	8.86E-07	1YrCancerRMP_Inh_FAH16to70	*	8.86E-07
1437	ALL		563975	4226975	0.004947	9901	DieselExhPM	8.80E-07	1YrCancerRMP_Inh_FAH16to70	*	8.80E-07
1438	ALL		563975	4227000	0.004896	9901	DieselExhPM	8.71E-07	1YrCancerRMP_Inh_FAH16to70	*	8.71E-07
1439	ALL		563975	4227025	0.004827	9901	DieselExhPM	8.59E-07	1YrCancerRMP_Inh_FAH16to70	*	8.59E-07
1440	ALL		563975	4227050	0.004745	9901	DieselExhPM	8.44E-07	1YrCancerRMP_Inh_FAH16to70	*	8.44E-07
1441	ALL		563225	4227142	0.000484	9901	DieselExhPM	8.60E-08	1YrCancerRMP_Inh_FAH16to70	*	8.60E-08
1442	ALL		563225	4227234	0.00041	9901	DieselExhPM	7.29E-08	1YrCancerRMP_Inh_FAH16to70	*	7.29E-08
1443	ALL		563225	4227325	0.000358	9901	DieselExhPM	6.36E-08	1YrCancerRMP_Inh_FAH16to70	*	6.36E-08
1444	ALL		563225	4227417	0.000318	9901	DieselExhPM	5.66E-08	1YrCancerRMP_Inh_FAH16to70	*	5.66E-08
1445	ALL		563225	4227509	0.000276	9901	DieselExhPM	4.91E-08	1YrCancerRMP_Inh_FAH16to70	*	4.91E-08
1446	ALL		563225	4227600	0.000241	9901	DieselExhPM	4.28E-08	1YrCancerRMP_Inh_FAH16to70	*	4.28E-08
1447	ALL		563225	4227692	0.000209	9901	DieselExhPM	3.72E-08	1YrCancerRMP_Inh_FAH16to70	*	3.72E-08
1448	ALL		563225	4227784	0.00018	9901	DieselExhPM	3.20E-08	1YrCancerRMP_Inh_FAH16to70	*	3.20E-08
1449	ALL		563225	4227875	0.000156	9901	DieselExhPM	2.78E-08	1YrCancerRMP_Inh_FAH16to70	*	2.78E-08
1450	ALL		563323.4	4227142	0.000663	9901	DieselExhPM	1.18E-07	1YrCancerRMP_Inh_FAH16to70	*	1.18E-07
1451	ALL		563323.4	4227234	0.000535	9901	DieselExhPM	9.51E-08	1YrCancerRMP_Inh_FAH16to70	*	9.51E-08
1452	ALL		563323.4	4227325	0.000436	9901	DieselExhPM	7.76E-08	1YrCancerRMP_Inh_FAH16to70	*	7.76E-08
1453	ALL		563323.4	4227417	0.000362	9901	DieselExhPM	6.43E-08	1YrCancerRMP_Inh_FAH16to70	*	6.43E-08
1454	ALL		563323.4	4227509	0.0003	9901	DieselExhPM	5.33E-08	1YrCancerRMP_Inh_FAH16to70	*	5.33E-08
1455	ALL		563323.4	4227600	0.000251	9901	DieselExhPM	4.46E-08	1YrCancerRMP_Inh_FAH16to70	*	4.46E-08
1456	ALL		563323.4	4227692	0.000211	9901	DieselExhPM	3.75E-08	1YrCancerRMP_Inh_FAH16to70	*	3.75E-08
1457	ALL		563323.4	4227784	0.000175	9901	DieselExhPM	3.11E-08	1YrCancerRMP_Inh_FAH16to70	*	3.11E-08
1458	ALL		563323.4	4227875	0.000152	9901	DieselExhPM	2.70E-08	1YrCancerRMP_Inh_FAH16to70	*	2.70E-08
1459	ALL		563421.9	4227142	0.000904	9901	DieselExhPM	1.61E-07	1YrCancerRMP_Inh_FAH16to70	*	1.61E-07
1460	ALL		563421.9	4227234	0.000678	9901	DieselExhPM	1.21E-07	1YrCancerRMP_Inh_FAH16to70	*	1.21E-07
1461	ALL		563421.9	4227325	0.000526	9901	DieselExhPM	9.36E-08	1YrCancerRMP_Inh_FAH16to70	*	9.36E-08
1462	ALL		563421.9	4227417	0.000416	9901	DieselExhPM	7.40E-08	1YrCancerRMP_Inh_FAH16to70	*	7.40E-08
1463	ALL		563421.9	4227509	0.000339	9901	DieselExhPM	6.03E-08	1YrCancerRMP_Inh_FAH16to70	*	6.03E-08
1464	ALL		563421.9	4227600	0.000278	9901	DieselExhPM	4.95E-08	1YrCancerRMP_Inh_FAH16to70	*	4.95E-08
1465	ALL		563421.9	4227692	0.00023	9901	DieselExhPM	4.10E-08	1YrCancerRMP_Inh_FAH16to70	*	4.10E-08
1466	ALL		563421.9	4227784	0.000197	9901	DieselExhPM	3.50E-08	1YrCancerRMP_Inh_FAH16to70	*	3.50E-08
1467	ALL		563421.9	4227875	0.000172	9901	DieselExhPM	3.07E-08	1YrCancerRMP_Inh_FAH16to70	*	3.07E-08
1468	ALL		563520.3	4227142	0.001746	9901	DieselExhPM	3.11E-07	1YrCancerRMP_Inh_FAH16to70	*	3.11E-07
1469	ALL		563520.3	4227234	0.001167	9901	DieselExhPM	2.08E-07	1YrCancerRMP_Inh_FAH16to70	*	2.08E-07
1470	ALL		563520.3	4227325	0.000829	9901	DieselExhPM	1.47E-07	1YrCancerRMP_Inh_FAH16to70	*	1.47E-07
1471	ALL		563520.3	4227417	0.000618	9901	DieselExhPM	1.10E-07	1YrCancerRMP_Inh_FAH16to70	*	1.10E-07
1472	ALL		563520.3	4227509	0.000483	9901	DieselExhPM	8.58E-08	1YrCancerRMP_Inh_FAH16to70	*	8.58E-08
1473	ALL		563520.3	4227600	0.000391	9901	DieselExhPM	6.96E-08	1YrCancerRMP_Inh_FAH16to70	*	6.96E-08
1474	ALL		563520.3	4227692	0.000319	9901	DieselExhPM	5.67E-08	1YrCancerRMP_Inh_FAH16to70	*	5.67E-08
1475	ALL		563520.3	4227784	0.000265	9901	DieselExhPM	4.70E-08	1YrCancerRMP_Inh_FAH16to70	*	4.70E-08
1476	ALL		563520.3	4227875	0.000228	9901	DieselExhPM	4.06E-08	1YrCancerRMP_Inh_FAH16to70	*	4.06E-08
1477	ALL		563618.8	4227142	0.004141	9901	DieselExhPM	7.36E-07	1YrCancerRMP_Inh_FAH16to70	*	7.36E-07
1478	ALL		563618.8	4227234	0.002616	9901	DieselExhPM	4.65E-07	1YrCancerRMP_Inh_FAH16to70	*	4.65E-07
1479	ALL		563618.8	4227325	0.001714	9901	DieselExhPM	3.05E-07	1YrCancerRMP_Inh_FAH16to70	*	3.05E-07
1480	ALL		563618.8	4227417	0.001194	9901	DieselExhPM	2.12E-07	1YrCancerRMP_Inh_FAH16to70	*	2.12E-07
1481	ALL		563618.8	4227509	0.000874	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70	*	1.55E-07
1482	ALL		563618.8	4227600	0.00067	9901	DieselExhPM	1.19E-07	1YrCancerRMP_Inh_FAH16to70	*	1.19E-07
1483	ALL		563618.8	4227692	0.00052	9901	DieselExhPM	9.25E-08	1YrCancerRMP_Inh_FAH16to70	*	9.25E-08
1484	ALL		563618.8	4227784	0.000411	9901	DieselExhPM	7.31E-08	1YrCancerRMP_Inh_FAH16to70	*	7.31E-08
1485	ALL		563618.8	4227875	0.000339	9901	DieselExhPM	6.03E-08	1YrCancerRMP_Inh_FAH16to70	*	6.03E-08
1486	ALL		563717.2	4227142	0.006606	9901	DieselExhPM	1.17E-06	1YrCancerRMP_Inh_FAH16to70	*	1.17E-06
1487	ALL		563717.2	4227234	0.004312	9901	DieselExhPM	7.67E-07	1YrCancerRMP_Inh_FAH16to70	*	7.67E-07
1488	ALL		563717.2	4227325	0.00294	9901	DieselExhPM	5.23E-07	1YrCancerRMP_Inh_FAH16to70	*	5.23E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1489	ALL		563717.2	4227417	0.002089	9901	DieselExhPM	3.71E-07	1YrCancerRMP_Inh_FAH16to70	*	3.71E-07
1490	ALL		563717.2	4227509	0.001513	9901	DieselExhPM	2.69E-07	1YrCancerRMP_Inh_FAH16to70	*	2.69E-07
1491	ALL		563717.2	4227600	0.001127	9901	DieselExhPM	2.00E-07	1YrCancerRMP_Inh_FAH16to70	*	2.00E-07
1492	ALL		563717.2	4227692	0.000861	9901	DieselExhPM	1.53E-07	1YrCancerRMP_Inh_FAH16to70	*	1.53E-07
1493	ALL		563717.2	4227784	0.000673	9901	DieselExhPM	1.20E-07	1YrCancerRMP_Inh_FAH16to70	*	1.20E-07
1494	ALL		563717.2	4227875	0.000534	9901	DieselExhPM	9.50E-08	1YrCancerRMP_Inh_FAH16to70	*	9.50E-08
1495	ALL		563815.6	4227142	0.007164	9901	DieselExhPM	1.27E-06	1YrCancerRMP_Inh_FAH16to70	*	1.27E-06
1496	ALL		563815.6	4227234	0.005173	9901	DieselExhPM	9.20E-07	1YrCancerRMP_Inh_FAH16to70	*	9.20E-07
1497	ALL		563815.6	4227325	0.003832	9901	DieselExhPM	6.81E-07	1YrCancerRMP_Inh_FAH16to70	*	6.81E-07
1498	ALL		563815.6	4227417	0.002838	9901	DieselExhPM	5.05E-07	1YrCancerRMP_Inh_FAH16to70	*	5.05E-07
1499	ALL		563815.6	4227509	0.00214	9901	DieselExhPM	3.81E-07	1YrCancerRMP_Inh_FAH16to70	*	3.81E-07
1500	ALL		563815.6	4227600	0.001643	9901	DieselExhPM	2.92E-07	1YrCancerRMP_Inh_FAH16to70	*	2.92E-07
1501	ALL		563815.6	4227692	0.001275	9901	DieselExhPM	2.27E-07	1YrCancerRMP_Inh_FAH16to70	*	2.27E-07
1502	ALL		563815.6	4227784	0.001004	9901	DieselExhPM	1.78E-07	1YrCancerRMP_Inh_FAH16to70	*	1.78E-07
1503	ALL		563815.6	4227875	0.000803	9901	DieselExhPM	1.43E-07	1YrCancerRMP_Inh_FAH16to70	*	1.43E-07
1504	ALL		563914.1	4227142	0.005564	9901	DieselExhPM	9.90E-07	1YrCancerRMP_Inh_FAH16to70	*	9.90E-07
1505	ALL		563914.1	4227234	0.004552	9901	DieselExhPM	8.10E-07	1YrCancerRMP_Inh_FAH16to70	*	8.10E-07
1506	ALL		563914.1	4227325	0.003793	9901	DieselExhPM	6.75E-07	1YrCancerRMP_Inh_FAH16to70	*	6.75E-07
1507	ALL		563914.1	4227417	0.003035	9901	DieselExhPM	5.40E-07	1YrCancerRMP_Inh_FAH16to70	*	5.40E-07
1508	ALL		563914.1	4227509	0.002427	9901	DieselExhPM	4.32E-07	1YrCancerRMP_Inh_FAH16to70	*	4.32E-07
1509	ALL		563914.1	4227600	0.001947	9901	DieselExhPM	3.46E-07	1YrCancerRMP_Inh_FAH16to70	*	3.46E-07
1510	ALL		563914.1	4227692	0.001574	9901	DieselExhPM	2.80E-07	1YrCancerRMP_Inh_FAH16to70	*	2.80E-07
1511	ALL		563914.1	4227784	0.001281	9901	DieselExhPM	2.28E-07	1YrCancerRMP_Inh_FAH16to70	*	2.28E-07
1512	ALL		563914.1	4227875	0.00105	9901	DieselExhPM	1.87E-07	1YrCancerRMP_Inh_FAH16to70	*	1.87E-07
1513	ALL		564012.5	4227142	0.003444	9901	DieselExhPM	6.13E-07	1YrCancerRMP_Inh_FAH16to70	*	6.13E-07
1514	ALL		564012.5	4227234	0.003189	9901	DieselExhPM	5.67E-07	1YrCancerRMP_Inh_FAH16to70	*	5.67E-07
1515	ALL		564012.5	4227325	0.002977	9901	DieselExhPM	5.29E-07	1YrCancerRMP_Inh_FAH16to70	*	5.29E-07
1516	ALL		564012.5	4227417	0.002665	9901	DieselExhPM	4.74E-07	1YrCancerRMP_Inh_FAH16to70	*	4.74E-07
1517	ALL		564012.5	4227509	0.002294	9901	DieselExhPM	4.08E-07	1YrCancerRMP_Inh_FAH16to70	*	4.08E-07
1518	ALL		564012.5	4227600	0.001944	9901	DieselExhPM	3.46E-07	1YrCancerRMP_Inh_FAH16to70	*	3.46E-07
1519	ALL		564012.5	4227692	0.001651	9901	DieselExhPM	2.94E-07	1YrCancerRMP_Inh_FAH16to70	*	2.94E-07
1520	ALL		564012.5	4227784	0.001397	9901	DieselExhPM	2.48E-07	1YrCancerRMP_Inh_FAH16to70	*	2.48E-07
1521	ALL		564012.5	4227875	0.001183	9901	DieselExhPM	2.10E-07	1YrCancerRMP_Inh_FAH16to70	*	2.10E-07
1522	ALL		564110.9	4227142	0.002282	9901	DieselExhPM	4.06E-07	1YrCancerRMP_Inh_FAH16to70	*	4.06E-07
1523	ALL		564110.9	4227234	0.002214	9901	DieselExhPM	3.94E-07	1YrCancerRMP_Inh_FAH16to70	*	3.94E-07
1524	ALL		564110.9	4227325	0.002179	9901	DieselExhPM	3.88E-07	1YrCancerRMP_Inh_FAH16to70	*	3.88E-07
1525	ALL		564110.9	4227417	0.002106	9901	DieselExhPM	3.74E-07	1YrCancerRMP_Inh_FAH16to70	*	3.74E-07
1526	ALL		564110.9	4227509	0.001921	9901	DieselExhPM	3.42E-07	1YrCancerRMP_Inh_FAH16to70	*	3.42E-07
1527	ALL		564110.9	4227600	0.001727	9901	DieselExhPM	3.07E-07	1YrCancerRMP_Inh_FAH16to70	*	3.07E-07
1528	ALL		564110.9	4227692	0.001537	9901	DieselExhPM	2.73E-07	1YrCancerRMP_Inh_FAH16to70	*	2.73E-07
1529	ALL		564110.9	4227784	0.001358	9901	DieselExhPM	2.42E-07	1YrCancerRMP_Inh_FAH16to70	*	2.42E-07
1530	ALL		564110.9	4227875	0.001192	9901	DieselExhPM	2.12E-07	1YrCancerRMP_Inh_FAH16to70	*	2.12E-07
1531	ALL		564209.4	4227142	0.001596	9901	DieselExhPM	2.84E-07	1YrCancerRMP_Inh_FAH16to70	*	2.84E-07
1532	ALL		564209.4	4227234	0.001581	9901	DieselExhPM	2.81E-07	1YrCancerRMP_Inh_FAH16to70	*	2.81E-07
1533	ALL		564209.4	4227325	0.001621	9901	DieselExhPM	2.88E-07	1YrCancerRMP_Inh_FAH16to70	*	2.88E-07
1534	ALL		564209.4	4227417	0.001577	9901	DieselExhPM	2.80E-07	1YrCancerRMP_Inh_FAH16to70	*	2.80E-07
1535	ALL		564209.4	4227509	0.001501	9901	DieselExhPM	2.67E-07	1YrCancerRMP_Inh_FAH16to70	*	2.67E-07
1536	ALL		564209.4	4227600	0.001419	9901	DieselExhPM	2.52E-07	1YrCancerRMP_Inh_FAH16to70	*	2.52E-07
1537	ALL		564209.4	4227692	0.001319	9901	DieselExhPM	2.35E-07	1YrCancerRMP_Inh_FAH16to70	*	2.35E-07
1538	ALL		564209.4	4227784	0.001216	9901	DieselExhPM	2.16E-07	1YrCancerRMP_Inh_FAH16to70	*	2.16E-07
1539	ALL		564209.4	4227875	0.001109	9901	DieselExhPM	1.97E-07	1YrCancerRMP_Inh_FAH16to70	*	1.97E-07
1540	ALL		564307.8	4227142	0.001183	9901	DieselExhPM	2.10E-07	1YrCancerRMP_Inh_FAH16to70	*	2.10E-07
1541	ALL		564307.8	4227234	0.00119	9901	DieselExhPM	2.12E-07	1YrCancerRMP_Inh_FAH16to70	*	2.12E-07
1542	ALL		564307.8	4227325	0.001234	9901	DieselExhPM	2.19E-07	1YrCancerRMP_Inh_FAH16to70	*	2.19E-07
1543	ALL		564307.8	4227417	0.001208	9901	DieselExhPM	2.15E-07	1YrCancerRMP_Inh_FAH16to70	*	2.15E-07
1544	ALL		564307.8	4227509	0.001169	9901	DieselExhPM	2.08E-07	1YrCancerRMP_Inh_FAH16to70	*	2.08E-07
1545	ALL		564307.8	4227600	0.001126	9901	DieselExhPM	2.00E-07	1YrCancerRMP_Inh_FAH16to70	*	2.00E-07
1546	ALL		564307.8	4227692	0.001081	9901	DieselExhPM	1.92E-07	1YrCancerRMP_Inh_FAH16to70	*	1.92E-07
1547	ALL		564307.8	4227784	0.001031	9901	DieselExhPM	1.83E-07	1YrCancerRMP_Inh_FAH16to70	*	1.83E-07
1548	ALL		564307.8	4227875	0.000972	9901	DieselExhPM	1.73E-07	1YrCancerRMP_Inh_FAH16to70	*	1.73E-07
1549	ALL		564406.3	4227142	0.000906	9901	DieselExhPM	1.61E-07	1YrCancerRMP_Inh_FAH16to70	*	1.61E-07
1550	ALL		564406.3	4227234	0.000918	9901	DieselExhPM	1.63E-07	1YrCancerRMP_Inh_FAH16to70	*	1.63E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1551	ALL		564406.3	4227325	0.000964	9901	DieselExhPM	1.71E-07	1YrCancerRMP_Inh_FAH16to70	*	1.71E-07
1552	ALL		564406.3	4227417	0.000954	9901	DieselExhPM	1.70E-07	1YrCancerRMP_Inh_FAH16to70	*	1.70E-07
1553	ALL		564406.3	4227509	0.000928	9901	DieselExhPM	1.65E-07	1YrCancerRMP_Inh_FAH16to70	*	1.65E-07
1554	ALL		564406.3	4227600	0.000902	9901	DieselExhPM	1.60E-07	1YrCancerRMP_Inh_FAH16to70	*	1.60E-07
1555	ALL		564406.3	4227692	0.000876	9901	DieselExhPM	1.56E-07	1YrCancerRMP_Inh_FAH16to70	*	1.56E-07
1556	ALL		564406.3	4227784	0.000848	9901	DieselExhPM	1.51E-07	1YrCancerRMP_Inh_FAH16to70	*	1.51E-07
1557	ALL		564406.3	4227875	0.000822	9901	DieselExhPM	1.46E-07	1YrCancerRMP_Inh_FAH16to70	*	1.46E-07
1558	ALL		564504.7	4227142	0.000714	9901	DieselExhPM	1.27E-07	1YrCancerRMP_Inh_FAH16to70	*	1.27E-07
1559	ALL		564504.7	4227234	0.000736	9901	DieselExhPM	1.31E-07	1YrCancerRMP_Inh_FAH16to70	*	1.31E-07
1560	ALL		564504.7	4227325	0.000757	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
1561	ALL		564504.7	4227417	0.000768	9901	DieselExhPM	1.37E-07	1YrCancerRMP_Inh_FAH16to70	*	1.37E-07
1562	ALL		564504.7	4227509	0.000757	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
1563	ALL		564504.7	4227600	0.00074	9901	DieselExhPM	1.32E-07	1YrCancerRMP_Inh_FAH16to70	*	1.32E-07
1564	ALL		564504.7	4227692	0.000721	9901	DieselExhPM	1.28E-07	1YrCancerRMP_Inh_FAH16to70	*	1.28E-07
1565	ALL		564504.7	4227784	0.000706	9901	DieselExhPM	1.26E-07	1YrCancerRMP_Inh_FAH16to70	*	1.26E-07
1566	ALL		564504.7	4227875	0.000691	9901	DieselExhPM	1.23E-07	1YrCancerRMP_Inh_FAH16to70	*	1.23E-07
1567	ALL		564603.1	4227142	0.000588	9901	DieselExhPM	1.05E-07	1YrCancerRMP_Inh_FAH16to70	*	1.05E-07
1568	ALL		564603.1	4227234	0.000612	9901	DieselExhPM	1.09E-07	1YrCancerRMP_Inh_FAH16to70	*	1.09E-07
1569	ALL		564603.1	4227325	0.000639	9901	DieselExhPM	1.14E-07	1YrCancerRMP_Inh_FAH16to70	*	1.14E-07
1570	ALL		564603.1	4227417	0.000636	9901	DieselExhPM	1.13E-07	1YrCancerRMP_Inh_FAH16to70	*	1.13E-07
1571	ALL		564603.1	4227509	0.000625	9901	DieselExhPM	1.11E-07	1YrCancerRMP_Inh_FAH16to70	*	1.11E-07
1572	ALL		564603.1	4227600	0.000618	9901	DieselExhPM	1.10E-07	1YrCancerRMP_Inh_FAH16to70	*	1.10E-07
1573	ALL		564603.1	4227692	0.000606	9901	DieselExhPM	1.08E-07	1YrCancerRMP_Inh_FAH16to70	*	1.08E-07
1574	ALL		564603.1	4227784	0.000594	9901	DieselExhPM	1.06E-07	1YrCancerRMP_Inh_FAH16to70	*	1.06E-07
1575	ALL		564603.1	4227875	0.000581	9901	DieselExhPM	1.03E-07	1YrCancerRMP_Inh_FAH16to70	*	1.03E-07
1576	ALL		564701.6	4227142	0.000493	9901	DieselExhPM	8.77E-08	1YrCancerRMP_Inh_FAH16to70	*	8.77E-08
1577	ALL		564701.6	4227234	0.000511	9901	DieselExhPM	9.09E-08	1YrCancerRMP_Inh_FAH16to70	*	9.09E-08
1578	ALL		564701.6	4227325	0.000532	9901	DieselExhPM	9.46E-08	1YrCancerRMP_Inh_FAH16to70	*	9.46E-08
1579	ALL		564701.6	4227417	0.000537	9901	DieselExhPM	9.55E-08	1YrCancerRMP_Inh_FAH16to70	*	9.55E-08
1580	ALL		564701.6	4227509	0.000531	9901	DieselExhPM	9.44E-08	1YrCancerRMP_Inh_FAH16to70	*	9.44E-08
1581	ALL		564701.6	4227600	0.000526	9901	DieselExhPM	9.35E-08	1YrCancerRMP_Inh_FAH16to70	*	9.35E-08
1582	ALL		564701.6	4227692	0.00052	9901	DieselExhPM	9.25E-08	1YrCancerRMP_Inh_FAH16to70	*	9.25E-08
1583	ALL		564701.6	4227784	0.000512	9901	DieselExhPM	9.11E-08	1YrCancerRMP_Inh_FAH16to70	*	9.11E-08
1584	ALL		564701.6	4227875	0.000502	9901	DieselExhPM	8.93E-08	1YrCancerRMP_Inh_FAH16to70	*	8.93E-08
1585	ALL		564800	4227142	0.00043	9901	DieselExhPM	7.65E-08	1YrCancerRMP_Inh_FAH16to70	*	7.65E-08
1586	ALL		564800	4227234	0.000429	9901	DieselExhPM	7.63E-08	1YrCancerRMP_Inh_FAH16to70	*	7.63E-08
1587	ALL		564800	4227325	0.000444	9901	DieselExhPM	7.90E-08	1YrCancerRMP_Inh_FAH16to70	*	7.90E-08
1588	ALL		564800	4227417	0.00046	9901	DieselExhPM	8.17E-08	1YrCancerRMP_Inh_FAH16to70	*	8.17E-08
1589	ALL		564800	4227509	0.000464	9901	DieselExhPM	8.25E-08	1YrCancerRMP_Inh_FAH16to70	*	8.25E-08
1590	ALL		564800	4227600	0.000458	9901	DieselExhPM	8.14E-08	1YrCancerRMP_Inh_FAH16to70	*	8.14E-08
1591	ALL		564800	4227692	0.000451	9901	DieselExhPM	8.03E-08	1YrCancerRMP_Inh_FAH16to70	*	8.03E-08
1592	ALL		564800	4227784	0.000447	9901	DieselExhPM	7.95E-08	1YrCancerRMP_Inh_FAH16to70	*	7.95E-08
1593	ALL		564800	4227875	0.00044	9901	DieselExhPM	7.83E-08	1YrCancerRMP_Inh_FAH16to70	*	7.83E-08
1594	ALL		564066.7	4227050	0.002727	9901	DieselExhPM	4.85E-07	1YrCancerRMP_Inh_FAH16to70	*	4.85E-07
1595	ALL		564066.7	4226952	0.002674	9901	DieselExhPM	4.75E-07	1YrCancerRMP_Inh_FAH16to70	*	4.75E-07
1596	ALL		564066.7	4226853	0.002728	9901	DieselExhPM	4.85E-07	1YrCancerRMP_Inh_FAH16to70	*	4.85E-07
1597	ALL		564066.7	4226755	0.002998	9901	DieselExhPM	5.33E-07	1YrCancerRMP_Inh_FAH16to70	*	5.33E-07
1598	ALL		564066.7	4226656	0.002562	9901	DieselExhPM	4.56E-07	1YrCancerRMP_Inh_FAH16to70	*	4.56E-07
1599	ALL		564066.7	4226558	0.001641	9901	DieselExhPM	2.92E-07	1YrCancerRMP_Inh_FAH16to70	*	2.92E-07
1600	ALL		564066.7	4226460	0.001024	9901	DieselExhPM	1.82E-07	1YrCancerRMP_Inh_FAH16to70	*	1.82E-07
1601	ALL		564066.7	4226361	0.000758	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
1602	ALL		564066.7	4226263	0.000722	9901	DieselExhPM	1.28E-07	1YrCancerRMP_Inh_FAH16to70	*	1.28E-07
1603	ALL		564066.7	4226164	0.000682	9901	DieselExhPM	1.21E-07	1YrCancerRMP_Inh_FAH16to70	*	1.21E-07
1604	ALL		564066.7	4226066	0.000596	9901	DieselExhPM	1.06E-07	1YrCancerRMP_Inh_FAH16to70	*	1.06E-07
1605	ALL		564066.7	4225967	0.000533	9901	DieselExhPM	9.49E-08	1YrCancerRMP_Inh_FAH16to70	*	9.49E-08
1606	ALL		564066.7	4225869	0.000499	9901	DieselExhPM	8.88E-08	1YrCancerRMP_Inh_FAH16to70	*	8.88E-08
1607	ALL		564066.7	4225771	0.000461	9901	DieselExhPM	8.19E-08	1YrCancerRMP_Inh_FAH16to70	*	8.19E-08
1608	ALL		564066.7	4225672	0.000428	9901	DieselExhPM	7.62E-08	1YrCancerRMP_Inh_FAH16to70	*	7.62E-08
1609	ALL		564066.7	4225574	0.000395	9901	DieselExhPM	7.02E-08	1YrCancerRMP_Inh_FAH16to70	*	7.02E-08
1610	ALL		564066.7	4225475	0.000365	9901	DieselExhPM	6.50E-08	1YrCancerRMP_Inh_FAH16to70	*	6.50E-08
1611	ALL		564158.3	4227050	0.001827	9901	DieselExhPM	3.25E-07	1YrCancerRMP_Inh_FAH16to70	*	3.25E-07
1612	ALL		564158.3	4226952	0.001693	9901	DieselExhPM	3.01E-07	1YrCancerRMP_Inh_FAH16to70	*	3.01E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1613	ALL		564158.3	4226853	0.00177	9901	DieselExhPM	3.15E-07	1YrCancerRMP_Inh_FAH16to70	*	3.15E-07
1614	ALL		564158.3	4226755	0.002072	9901	DieselExhPM	3.69E-07	1YrCancerRMP_Inh_FAH16to70	*	3.69E-07
1615	ALL		564158.3	4226656	0.001808	9901	DieselExhPM	3.22E-07	1YrCancerRMP_Inh_FAH16to70	*	3.22E-07
1616	ALL		564158.3	4226558	0.00128	9901	DieselExhPM	2.28E-07	1YrCancerRMP_Inh_FAH16to70	*	2.28E-07
1617	ALL		564158.3	4226460	0.000854	9901	DieselExhPM	1.52E-07	1YrCancerRMP_Inh_FAH16to70	*	1.52E-07
1618	ALL		564158.3	4226361	0.000589	9901	DieselExhPM	1.05E-07	1YrCancerRMP_Inh_FAH16to70	*	1.05E-07
1619	ALL		564158.3	4226263	0.000527	9901	DieselExhPM	9.37E-08	1YrCancerRMP_Inh_FAH16to70	*	9.37E-08
1620	ALL		564158.3	4226164	0.000543	9901	DieselExhPM	9.65E-08	1YrCancerRMP_Inh_FAH16to70	*	9.65E-08
1621	ALL		564158.3	4226066	0.000506	9901	DieselExhPM	9.00E-08	1YrCancerRMP_Inh_FAH16to70	*	9.00E-08
1622	ALL		564158.3	4225967	0.000454	9901	DieselExhPM	8.08E-08	1YrCancerRMP_Inh_FAH16to70	*	8.08E-08
1623	ALL		564158.3	4225869	0.000416	9901	DieselExhPM	7.40E-08	1YrCancerRMP_Inh_FAH16to70	*	7.40E-08
1624	ALL		564158.3	4225771	0.000389	9901	DieselExhPM	6.92E-08	1YrCancerRMP_Inh_FAH16to70	*	6.92E-08
1625	ALL		564158.3	4225672	0.000373	9901	DieselExhPM	6.63E-08	1YrCancerRMP_Inh_FAH16to70	*	6.63E-08
1626	ALL		564158.3	4225574	0.000355	9901	DieselExhPM	6.31E-08	1YrCancerRMP_Inh_FAH16to70	*	6.31E-08
1627	ALL		564158.3	4225475	0.000333	9901	DieselExhPM	5.92E-08	1YrCancerRMP_Inh_FAH16to70	*	5.92E-08
1628	ALL		564250	4227050	0.001307	9901	DieselExhPM	2.32E-07	1YrCancerRMP_Inh_FAH16to70	*	2.32E-07
1629	ALL		564250	4226952	0.001255	9901	DieselExhPM	2.23E-07	1YrCancerRMP_Inh_FAH16to70	*	2.23E-07
1630	ALL		564250	4226853	0.001288	9901	DieselExhPM	2.29E-07	1YrCancerRMP_Inh_FAH16to70	*	2.29E-07
1631	ALL		564250	4226755	0.00135	9901	DieselExhPM	2.40E-07	1YrCancerRMP_Inh_FAH16to70	*	2.40E-07
1632	ALL		564250	4226656	0.001159	9901	DieselExhPM	2.06E-07	1YrCancerRMP_Inh_FAH16to70	*	2.06E-07
1633	ALL		564250	4226558	0.000823	9901	DieselExhPM	1.46E-07	1YrCancerRMP_Inh_FAH16to70	*	1.46E-07
1634	ALL		564250	4226460	0.000655	9901	DieselExhPM	1.16E-07	1YrCancerRMP_Inh_FAH16to70	*	1.16E-07
1635	ALL		564250	4226361	0.000489	9901	DieselExhPM	8.69E-08	1YrCancerRMP_Inh_FAH16to70	*	8.69E-08
1636	ALL		564250	4226263	0.000403	9901	DieselExhPM	7.17E-08	1YrCancerRMP_Inh_FAH16to70	*	7.17E-08
1637	ALL		564250	4226164	0.000402	9901	DieselExhPM	7.15E-08	1YrCancerRMP_Inh_FAH16to70	*	7.15E-08
1638	ALL		564250	4226066	0.000402	9901	DieselExhPM	7.15E-08	1YrCancerRMP_Inh_FAH16to70	*	7.15E-08
1639	ALL		564250	4225967	0.0004	9901	DieselExhPM	7.11E-08	1YrCancerRMP_Inh_FAH16to70	*	7.11E-08
1640	ALL		564250	4225869	0.000354	9901	DieselExhPM	6.30E-08	1YrCancerRMP_Inh_FAH16to70	*	6.30E-08
1641	ALL		564250	4225771	0.000334	9901	DieselExhPM	5.93E-08	1YrCancerRMP_Inh_FAH16to70	*	5.93E-08
1642	ALL		564250	4225672	0.000316	9901	DieselExhPM	5.62E-08	1YrCancerRMP_Inh_FAH16to70	*	5.62E-08
1643	ALL		564250	4225574	0.000309	9901	DieselExhPM	5.49E-08	1YrCancerRMP_Inh_FAH16to70	*	5.49E-08
1644	ALL		564250	4225475	0.000301	9901	DieselExhPM	5.35E-08	1YrCancerRMP_Inh_FAH16to70	*	5.35E-08
1645	ALL		564341.7	4227050	0.001011	9901	DieselExhPM	1.80E-07	1YrCancerRMP_Inh_FAH16to70	*	1.80E-07
1646	ALL		564341.7	4226952	0.000977	9901	DieselExhPM	1.74E-07	1YrCancerRMP_Inh_FAH16to70	*	1.74E-07
1647	ALL		564341.7	4226853	0.000986	9901	DieselExhPM	1.75E-07	1YrCancerRMP_Inh_FAH16to70	*	1.75E-07
1648	ALL		564341.7	4226755	0.000991	9901	DieselExhPM	1.76E-07	1YrCancerRMP_Inh_FAH16to70	*	1.76E-07
1649	ALL		564341.7	4226656	0.000887	9901	DieselExhPM	1.58E-07	1YrCancerRMP_Inh_FAH16to70	*	1.58E-07
1650	ALL		564341.7	4226558	0.000625	9901	DieselExhPM	1.11E-07	1YrCancerRMP_Inh_FAH16to70	*	1.11E-07
1651	ALL		564341.7	4226460	0.00049	9901	DieselExhPM	8.72E-08	1YrCancerRMP_Inh_FAH16to70	*	8.72E-08
1652	ALL		564341.7	4226361	0.000414	9901	DieselExhPM	7.36E-08	1YrCancerRMP_Inh_FAH16to70	*	7.36E-08
1653	ALL		564341.7	4226263	0.000334	9901	DieselExhPM	5.93E-08	1YrCancerRMP_Inh_FAH16to70	*	5.93E-08
1654	ALL		564341.7	4226164	0.000303	9901	DieselExhPM	5.38E-08	1YrCancerRMP_Inh_FAH16to70	*	5.38E-08
1655	ALL		564341.7	4226066	0.000303	9901	DieselExhPM	5.39E-08	1YrCancerRMP_Inh_FAH16to70	*	5.39E-08
1656	ALL		564341.7	4225967	0.000335	9901	DieselExhPM	5.96E-08	1YrCancerRMP_Inh_FAH16to70	*	5.96E-08
1657	ALL		564341.7	4225869	0.000315	9901	DieselExhPM	5.60E-08	1YrCancerRMP_Inh_FAH16to70	*	5.60E-08
1658	ALL		564341.7	4225771	0.000296	9901	DieselExhPM	5.27E-08	1YrCancerRMP_Inh_FAH16to70	*	5.27E-08
1659	ALL		564341.7	4225672	0.000274	9901	DieselExhPM	4.88E-08	1YrCancerRMP_Inh_FAH16to70	*	4.88E-08
1660	ALL		564341.7	4225574	0.000264	9901	DieselExhPM	4.70E-08	1YrCancerRMP_Inh_FAH16to70	*	4.70E-08
1661	ALL		564341.7	4225475	0.000263	9901	DieselExhPM	4.68E-08	1YrCancerRMP_Inh_FAH16to70	*	4.68E-08
1662	ALL		564433.3	4227050	0.000833	9901	DieselExhPM	1.48E-07	1YrCancerRMP_Inh_FAH16to70	*	1.48E-07
1663	ALL		564433.3	4226952	0.00082	9901	DieselExhPM	1.46E-07	1YrCancerRMP_Inh_FAH16to70	*	1.46E-07
1664	ALL		564433.3	4226853	0.00081	9901	DieselExhPM	1.44E-07	1YrCancerRMP_Inh_FAH16to70	*	1.44E-07
1665	ALL		564433.3	4226755	0.000791	9901	DieselExhPM	1.41E-07	1YrCancerRMP_Inh_FAH16to70	*	1.41E-07
1666	ALL		564433.3	4226656	0.000684	9901	DieselExhPM	1.22E-07	1YrCancerRMP_Inh_FAH16to70	*	1.22E-07
1667	ALL		564433.3	4226558	0.000514	9901	DieselExhPM	9.14E-08	1YrCancerRMP_Inh_FAH16to70	*	9.14E-08
1668	ALL		564433.3	4226460	0.000401	9901	DieselExhPM	7.12E-08	1YrCancerRMP_Inh_FAH16to70	*	7.12E-08
1669	ALL		564433.3	4226361	0.000323	9901	DieselExhPM	5.74E-08	1YrCancerRMP_Inh_FAH16to70	*	5.74E-08
1670	ALL		564433.3	4226263	0.000288	9901	DieselExhPM	5.13E-08	1YrCancerRMP_Inh_FAH16to70	*	5.13E-08
1671	ALL		564433.3	4226164	0.000252	9901	DieselExhPM	4.48E-08	1YrCancerRMP_Inh_FAH16to70	*	4.48E-08
1672	ALL		564433.3	4226066	0.000233	9901	DieselExhPM	4.14E-08	1YrCancerRMP_Inh_FAH16to70	*	4.14E-08
1673	ALL		564433.3	4225967	0.000254	9901	DieselExhPM	4.52E-08	1YrCancerRMP_Inh_FAH16to70	*	4.52E-08
1674	ALL		564433.3	4225869	0.000264	9901	DieselExhPM	4.69E-08	1YrCancerRMP_Inh_FAH16to70	*	4.69E-08

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1675	ALL		564433.3	4225771	0.000279	9901	DieselExhPM	4.95E-08	1YrCancerRMP_Inh_FAH16to70	*	4.95E-08
1676	ALL		564433.3	4225672	0.000257	9901	DieselExhPM	4.57E-08	1YrCancerRMP_Inh_FAH16to70	*	4.57E-08
1677	ALL		564433.3	4225574	0.000236	9901	DieselExhPM	4.19E-08	1YrCancerRMP_Inh_FAH16to70	*	4.19E-08
1678	ALL		564433.3	4225475	0.00023	9901	DieselExhPM	4.09E-08	1YrCancerRMP_Inh_FAH16to70	*	4.09E-08
1679	ALL		564525	4227050	0.000682	9901	DieselExhPM	1.21E-07	1YrCancerRMP_Inh_FAH16to70	*	1.21E-07
1680	ALL		564525	4226952	0.000706	9901	DieselExhPM	1.26E-07	1YrCancerRMP_Inh_FAH16to70	*	1.26E-07
1681	ALL		564525	4226853	0.000711	9901	DieselExhPM	1.26E-07	1YrCancerRMP_Inh_FAH16to70	*	1.26E-07
1682	ALL		564525	4226755	0.000668	9901	DieselExhPM	1.19E-07	1YrCancerRMP_Inh_FAH16to70	*	1.19E-07
1683	ALL		564525	4226656	0.000584	9901	DieselExhPM	1.04E-07	1YrCancerRMP_Inh_FAH16to70	*	1.04E-07
1684	ALL		564525	4226558	0.000452	9901	DieselExhPM	8.05E-08	1YrCancerRMP_Inh_FAH16to70	*	8.05E-08
1685	ALL		564525	4226460	0.000341	9901	DieselExhPM	6.06E-08	1YrCancerRMP_Inh_FAH16to70	*	6.06E-08
1686	ALL		564525	4226361	0.000287	9901	DieselExhPM	5.11E-08	1YrCancerRMP_Inh_FAH16to70	*	5.11E-08
1687	ALL		564525	4226263	0.000255	9901	DieselExhPM	4.53E-08	1YrCancerRMP_Inh_FAH16to70	*	4.53E-08
1688	ALL		564525	4226164	0.000224	9901	DieselExhPM	3.99E-08	1YrCancerRMP_Inh_FAH16to70	*	3.99E-08
1689	ALL		564525	4226066	0.000198	9901	DieselExhPM	3.51E-08	1YrCancerRMP_Inh_FAH16to70	*	3.51E-08
1690	ALL		564525	4225967	0.0002	9901	DieselExhPM	3.56E-08	1YrCancerRMP_Inh_FAH16to70	*	3.56E-08
1691	ALL		564525	4225869	0.000216	9901	DieselExhPM	3.84E-08	1YrCancerRMP_Inh_FAH16to70	*	3.84E-08
1692	ALL		564525	4225771	0.00025	9901	DieselExhPM	4.44E-08	1YrCancerRMP_Inh_FAH16to70	*	4.44E-08
1693	ALL		564525	4225672	0.000254	9901	DieselExhPM	4.51E-08	1YrCancerRMP_Inh_FAH16to70	*	4.51E-08
1694	ALL		564525	4225574	0.000227	9901	DieselExhPM	4.04E-08	1YrCancerRMP_Inh_FAH16to70	*	4.04E-08
1695	ALL		564525	4225475	0.000206	9901	DieselExhPM	3.67E-08	1YrCancerRMP_Inh_FAH16to70	*	3.67E-08
1696	ALL		564616.7	4227050	0.000577	9901	DieselExhPM	1.03E-07	1YrCancerRMP_Inh_FAH16to70	*	1.03E-07
1697	ALL		564616.7	4226952	0.00061	9901	DieselExhPM	1.08E-07	1YrCancerRMP_Inh_FAH16to70	*	1.08E-07
1698	ALL		564616.7	4226853	0.000641	9901	DieselExhPM	1.14E-07	1YrCancerRMP_Inh_FAH16to70	*	1.14E-07
1699	ALL		564616.7	4226755	0.000602	9901	DieselExhPM	1.07E-07	1YrCancerRMP_Inh_FAH16to70	*	1.07E-07
1700	ALL		564616.7	4226656	0.000516	9901	DieselExhPM	9.17E-08	1YrCancerRMP_Inh_FAH16to70	*	9.17E-08
1701	ALL		564616.7	4226558	0.000404	9901	DieselExhPM	7.18E-08	1YrCancerRMP_Inh_FAH16to70	*	7.18E-08
1702	ALL		564616.7	4226460	0.000307	9901	DieselExhPM	5.46E-08	1YrCancerRMP_Inh_FAH16to70	*	5.46E-08
1703	ALL		564616.7	4226361	0.00025	9901	DieselExhPM	4.44E-08	1YrCancerRMP_Inh_FAH16to70	*	4.44E-08
1704	ALL		564616.7	4226263	0.00022	9901	DieselExhPM	3.92E-08	1YrCancerRMP_Inh_FAH16to70	*	3.92E-08
1705	ALL		564616.7	4226164	0.000198	9901	DieselExhPM	3.52E-08	1YrCancerRMP_Inh_FAH16to70	*	3.52E-08
1706	ALL		564616.7	4226066	0.000178	9901	DieselExhPM	3.16E-08	1YrCancerRMP_Inh_FAH16to70	*	3.16E-08
1707	ALL		564616.7	4225967	0.000172	9901	DieselExhPM	3.05E-08	1YrCancerRMP_Inh_FAH16to70	*	3.05E-08
1708	ALL		564616.7	4225869	0.000183	9901	DieselExhPM	3.25E-08	1YrCancerRMP_Inh_FAH16to70	*	3.25E-08
1709	ALL		564616.7	4225771	0.000204	9901	DieselExhPM	3.63E-08	1YrCancerRMP_Inh_FAH16to70	*	3.63E-08
1710	ALL		564616.7	4225672	0.00024	9901	DieselExhPM	4.27E-08	1YrCancerRMP_Inh_FAH16to70	*	4.27E-08
1711	ALL		564616.7	4225574	0.000226	9901	DieselExhPM	4.02E-08	1YrCancerRMP_Inh_FAH16to70	*	4.02E-08
1712	ALL		564616.7	4225475	0.000202	9901	DieselExhPM	3.59E-08	1YrCancerRMP_Inh_FAH16to70	*	3.59E-08
1713	ALL		564708.3	4227050	0.000499	9901	DieselExhPM	8.87E-08	1YrCancerRMP_Inh_FAH16to70	*	8.87E-08
1714	ALL		564708.3	4226952	0.000527	9901	DieselExhPM	9.38E-08	1YrCancerRMP_Inh_FAH16to70	*	9.38E-08
1715	ALL		564708.3	4226853	0.000561	9901	DieselExhPM	9.99E-08	1YrCancerRMP_Inh_FAH16to70	*	9.99E-08
1716	ALL		564708.3	4226755	0.000556	9901	DieselExhPM	9.88E-08	1YrCancerRMP_Inh_FAH16to70	*	9.88E-08
1717	ALL		564708.3	4226656	0.000495	9901	DieselExhPM	8.80E-08	1YrCancerRMP_Inh_FAH16to70	*	8.80E-08
1718	ALL		564708.3	4226558	0.000374	9901	DieselExhPM	6.66E-08	1YrCancerRMP_Inh_FAH16to70	*	6.66E-08
1719	ALL		564708.3	4226460	0.000289	9901	DieselExhPM	5.13E-08	1YrCancerRMP_Inh_FAH16to70	*	5.13E-08
1720	ALL		564708.3	4226361	0.000234	9901	DieselExhPM	4.17E-08	1YrCancerRMP_Inh_FAH16to70	*	4.17E-08
1721	ALL		564708.3	4226263	0.000206	9901	DieselExhPM	3.66E-08	1YrCancerRMP_Inh_FAH16to70	*	3.66E-08
1722	ALL		564708.3	4226164	0.000188	9901	DieselExhPM	3.34E-08	1YrCancerRMP_Inh_FAH16to70	*	3.34E-08
1723	ALL		564708.3	4226066	0.00017	9901	DieselExhPM	3.01E-08	1YrCancerRMP_Inh_FAH16to70	*	3.01E-08
1724	ALL		564708.3	4225967	0.000154	9901	DieselExhPM	2.74E-08	1YrCancerRMP_Inh_FAH16to70	*	2.74E-08
1725	ALL		564708.3	4225869	0.00016	9901	DieselExhPM	2.85E-08	1YrCancerRMP_Inh_FAH16to70	*	2.85E-08
1726	ALL		564708.3	4225771	0.000185	9901	DieselExhPM	3.30E-08	1YrCancerRMP_Inh_FAH16to70	*	3.30E-08
1727	ALL		564708.3	4225672	0.000215	9901	DieselExhPM	3.82E-08	1YrCancerRMP_Inh_FAH16to70	*	3.82E-08
1728	ALL		564708.3	4225574	0.000218	9901	DieselExhPM	3.88E-08	1YrCancerRMP_Inh_FAH16to70	*	3.88E-08
1729	ALL		564708.3	4225475	0.000202	9901	DieselExhPM	3.60E-08	1YrCancerRMP_Inh_FAH16to70	*	3.60E-08
1730	ALL		564800	4227050	0.000446	9901	DieselExhPM	7.92E-08	1YrCancerRMP_Inh_FAH16to70	*	7.92E-08
1731	ALL		564800	4226952	0.000472	9901	DieselExhPM	8.39E-08	1YrCancerRMP_Inh_FAH16to70	*	8.39E-08
1732	ALL		564800	4226853	0.000495	9901	DieselExhPM	8.81E-08	1YrCancerRMP_Inh_FAH16to70	*	8.81E-08
1733	ALL		564800	4226755	0.00051	9901	DieselExhPM	9.08E-08	1YrCancerRMP_Inh_FAH16to70	*	9.08E-08
1734	ALL		564800	4226656	0.000461	9901	DieselExhPM	8.21E-08	1YrCancerRMP_Inh_FAH16to70	*	8.21E-08
1735	ALL		564800	4226558	0.000354	9901	DieselExhPM	6.29E-08	1YrCancerRMP_Inh_FAH16to70	*	6.29E-08
1736	ALL		564800	4226460	0.000282	9901	DieselExhPM	5.01E-08	1YrCancerRMP_Inh_FAH16to70	*	5.01E-08

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1737	ALL		564800	4226361	0.000233	9901	DieselExhPM	4.15E-08	1YrCancerRMP_Inh_FAH16to70	*	4.15E-08
1738	ALL		564800	4226263	0.000201	9901	DieselExhPM	3.57E-08	1YrCancerRMP_Inh_FAH16to70	*	3.57E-08
1739	ALL		564800	4226164	0.000183	9901	DieselExhPM	3.25E-08	1YrCancerRMP_Inh_FAH16to70	*	3.25E-08
1740	ALL		564800	4226066	0.000163	9901	DieselExhPM	2.89E-08	1YrCancerRMP_Inh_FAH16to70	*	2.89E-08
1741	ALL		564800	4225967	0.000145	9901	DieselExhPM	2.57E-08	1YrCancerRMP_Inh_FAH16to70	*	2.57E-08
1742	ALL		564800	4225869	0.000139	9901	DieselExhPM	2.48E-08	1YrCancerRMP_Inh_FAH16to70	*	2.48E-08
1743	ALL		564800	4225771	0.000156	9901	DieselExhPM	2.77E-08	1YrCancerRMP_Inh_FAH16to70	*	2.77E-08
1744	ALL		564800	4225672	0.000172	9901	DieselExhPM	3.07E-08	1YrCancerRMP_Inh_FAH16to70	*	3.07E-08
1745	ALL		564800	4225574	0.000193	9901	DieselExhPM	3.44E-08	1YrCancerRMP_Inh_FAH16to70	*	3.44E-08
1746	ALL		564800	4225475	0.000197	9901	DieselExhPM	3.50E-08	1YrCancerRMP_Inh_FAH16to70	*	3.50E-08
1747	ALL		563975	4226209	0.000908	9901	DieselExhPM	1.61E-07	1YrCancerRMP_Inh_FAH16to70	*	1.61E-07
1748	ALL		563975	4226117	0.000773	9901	DieselExhPM	1.37E-07	1YrCancerRMP_Inh_FAH16to70	*	1.37E-07
1749	ALL		563975	4226025	0.000688	9901	DieselExhPM	1.22E-07	1YrCancerRMP_Inh_FAH16to70	*	1.22E-07
1750	ALL		563975	4225934	0.000619	9901	DieselExhPM	1.10E-07	1YrCancerRMP_Inh_FAH16to70	*	1.10E-07
1751	ALL		563975	4225842	0.000575	9901	DieselExhPM	1.02E-07	1YrCancerRMP_Inh_FAH16to70	*	1.02E-07
1752	ALL		563975	4225750	0.000525	9901	DieselExhPM	9.34E-08	1YrCancerRMP_Inh_FAH16to70	*	9.34E-08
1753	ALL		563975	4225659	0.000484	9901	DieselExhPM	8.60E-08	1YrCancerRMP_Inh_FAH16to70	*	8.60E-08
1754	ALL		563975	4225567	0.000446	9901	DieselExhPM	7.92E-08	1YrCancerRMP_Inh_FAH16to70	*	7.92E-08
1755	ALL		563975	4225475	0.000415	9901	DieselExhPM	7.38E-08	1YrCancerRMP_Inh_FAH16to70	*	7.38E-08
1756	ALL		563876.6	4226209	0.001205	9901	DieselExhPM	2.14E-07	1YrCancerRMP_Inh_FAH16to70	*	2.14E-07
1757	ALL		563876.6	4226117	0.000998	9901	DieselExhPM	1.77E-07	1YrCancerRMP_Inh_FAH16to70	*	1.77E-07
1758	ALL		563876.6	4226025	0.000887	9901	DieselExhPM	1.58E-07	1YrCancerRMP_Inh_FAH16to70	*	1.58E-07
1759	ALL		563876.6	4225934	0.000782	9901	DieselExhPM	1.39E-07	1YrCancerRMP_Inh_FAH16to70	*	1.39E-07
1760	ALL		563876.6	4225842	0.000698	9901	DieselExhPM	1.24E-07	1YrCancerRMP_Inh_FAH16to70	*	1.24E-07
1761	ALL		563876.6	4225750	0.000631	9901	DieselExhPM	1.12E-07	1YrCancerRMP_Inh_FAH16to70	*	1.12E-07
1762	ALL		563876.6	4225659	0.000573	9901	DieselExhPM	1.02E-07	1YrCancerRMP_Inh_FAH16to70	*	1.02E-07
1763	ALL		563876.6	4225567	0.000523	9901	DieselExhPM	9.29E-08	1YrCancerRMP_Inh_FAH16to70	*	9.29E-08
1764	ALL		563876.6	4225475	0.000483	9901	DieselExhPM	8.58E-08	1YrCancerRMP_Inh_FAH16to70	*	8.58E-08
1765	ALL		563778.1	4226209	0.001754	9901	DieselExhPM	3.12E-07	1YrCancerRMP_Inh_FAH16to70	*	3.12E-07
1766	ALL		563778.1	4226117	0.001405	9901	DieselExhPM	2.50E-07	1YrCancerRMP_Inh_FAH16to70	*	2.50E-07
1767	ALL		563778.1	4226025	0.001162	9901	DieselExhPM	2.07E-07	1YrCancerRMP_Inh_FAH16to70	*	2.07E-07
1768	ALL		563778.1	4225934	0.000986	9901	DieselExhPM	1.75E-07	1YrCancerRMP_Inh_FAH16to70	*	1.75E-07
1769	ALL		563778.1	4225842	0.000854	9901	DieselExhPM	1.52E-07	1YrCancerRMP_Inh_FAH16to70	*	1.52E-07
1770	ALL		563778.1	4225750	0.00075	9901	DieselExhPM	1.33E-07	1YrCancerRMP_Inh_FAH16to70	*	1.33E-07
1771	ALL		563778.1	4225659	0.000665	9901	DieselExhPM	1.18E-07	1YrCancerRMP_Inh_FAH16to70	*	1.18E-07
1772	ALL		563778.1	4225567	0.000592	9901	DieselExhPM	1.05E-07	1YrCancerRMP_Inh_FAH16to70	*	1.05E-07
1773	ALL		563778.1	4225475	0.000535	9901	DieselExhPM	9.51E-08	1YrCancerRMP_Inh_FAH16to70	*	9.51E-08
1774	ALL		563679.7	4226209	0.002498	9901	DieselExhPM	4.44E-07	1YrCancerRMP_Inh_FAH16to70	*	4.44E-07
1775	ALL		563679.7	4226117	0.001881	9901	DieselExhPM	3.35E-07	1YrCancerRMP_Inh_FAH16to70	*	3.35E-07
1776	ALL		563679.7	4226025	0.001494	9901	DieselExhPM	2.66E-07	1YrCancerRMP_Inh_FAH16to70	*	2.66E-07
1777	ALL		563679.7	4225934	0.001225	9901	DieselExhPM	2.18E-07	1YrCancerRMP_Inh_FAH16to70	*	2.18E-07
1778	ALL		563679.7	4225842	0.001024	9901	DieselExhPM	1.82E-07	1YrCancerRMP_Inh_FAH16to70	*	1.82E-07
1779	ALL		563679.7	4225750	0.000873	9901	DieselExhPM	1.55E-07	1YrCancerRMP_Inh_FAH16to70	*	1.55E-07
1780	ALL		563679.7	4225659	0.000759	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
1781	ALL		563679.7	4225567	0.000664	9901	DieselExhPM	1.18E-07	1YrCancerRMP_Inh_FAH16to70	*	1.18E-07
1782	ALL		563679.7	4225475	0.00059	9901	DieselExhPM	1.05E-07	1YrCancerRMP_Inh_FAH16to70	*	1.05E-07
1783	ALL		563581.3	4226209	0.003035	9901	DieselExhPM	5.40E-07	1YrCancerRMP_Inh_FAH16to70	*	5.40E-07
1784	ALL		563581.3	4226117	0.002256	9901	DieselExhPM	4.01E-07	1YrCancerRMP_Inh_FAH16to70	*	4.01E-07
1785	ALL		563581.3	4226025	0.001756	9901	DieselExhPM	3.12E-07	1YrCancerRMP_Inh_FAH16to70	*	3.12E-07
1786	ALL		563581.3	4225934	0.00141	9901	DieselExhPM	2.51E-07	1YrCancerRMP_Inh_FAH16to70	*	2.51E-07
1787	ALL		563581.3	4225842	0.001158	9901	DieselExhPM	2.06E-07	1YrCancerRMP_Inh_FAH16to70	*	2.06E-07
1788	ALL		563581.3	4225750	0.000981	9901	DieselExhPM	1.74E-07	1YrCancerRMP_Inh_FAH16to70	*	1.74E-07
1789	ALL		563581.3	4225659	0.000846	9901	DieselExhPM	1.50E-07	1YrCancerRMP_Inh_FAH16to70	*	1.50E-07
1790	ALL		563581.3	4225567	0.00074	9901	DieselExhPM	1.32E-07	1YrCancerRMP_Inh_FAH16to70	*	1.32E-07
1791	ALL		563581.3	4225475	0.000656	9901	DieselExhPM	1.17E-07	1YrCancerRMP_Inh_FAH16to70	*	1.17E-07
1792	ALL		563482.8	4226209	0.002801	9901	DieselExhPM	4.98E-07	1YrCancerRMP_Inh_FAH16to70	*	4.98E-07
1793	ALL		563482.8	4226117	0.002151	9901	DieselExhPM	3.82E-07	1YrCancerRMP_Inh_FAH16to70	*	3.82E-07
1794	ALL		563482.8	4226025	0.001725	9901	DieselExhPM	3.07E-07	1YrCancerRMP_Inh_FAH16to70	*	3.07E-07
1795	ALL		563482.8	4225934	0.001414	9901	DieselExhPM	2.52E-07	1YrCancerRMP_Inh_FAH16to70	*	2.52E-07
1796	ALL		563482.8	4225842	0.001193	9901	DieselExhPM	2.12E-07	1YrCancerRMP_Inh_FAH16to70	*	2.12E-07
1797	ALL		563482.8	4225750	0.001025	9901	DieselExhPM	1.82E-07	1YrCancerRMP_Inh_FAH16to70	*	1.82E-07
1798	ALL		563482.8	4225659	0.000893	9901	DieselExhPM	1.59E-07	1YrCancerRMP_Inh_FAH16to70	*	1.59E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1799	ALL		563482.8	4225567	0.000787	9901	DieselExhPM	1.40E-07	1YrCancerRMP_Inh_FAH16to70	*	1.40E-07
1800	ALL		563482.8	4225475	0.000701	9901	DieselExhPM	1.25E-07	1YrCancerRMP_Inh_FAH16to70	*	1.25E-07
1801	ALL		563384.4	4226209	0.001951	9901	DieselExhPM	3.47E-07	1YrCancerRMP_Inh_FAH16to70	*	3.47E-07
1802	ALL		563384.4	4226117	0.001662	9901	DieselExhPM	2.96E-07	1YrCancerRMP_Inh_FAH16to70	*	2.96E-07
1803	ALL		563384.4	4226025	0.00141	9901	DieselExhPM	2.51E-07	1YrCancerRMP_Inh_FAH16to70	*	2.51E-07
1804	ALL		563384.4	4225934	0.001211	9901	DieselExhPM	2.15E-07	1YrCancerRMP_Inh_FAH16to70	*	2.15E-07
1805	ALL		563384.4	4225842	0.001053	9901	DieselExhPM	1.87E-07	1YrCancerRMP_Inh_FAH16to70	*	1.87E-07
1806	ALL		563384.4	4225750	0.000931	9901	DieselExhPM	1.65E-07	1YrCancerRMP_Inh_FAH16to70	*	1.65E-07
1807	ALL		563384.4	4225659	0.000832	9901	DieselExhPM	1.48E-07	1YrCancerRMP_Inh_FAH16to70	*	1.48E-07
1808	ALL		563384.4	4225567	0.000749	9901	DieselExhPM	1.33E-07	1YrCancerRMP_Inh_FAH16to70	*	1.33E-07
1809	ALL		563384.4	4225475	0.00068	9901	DieselExhPM	1.21E-07	1YrCancerRMP_Inh_FAH16to70	*	1.21E-07
1810	ALL		563285.9	4226209	0.001107	9901	DieselExhPM	1.97E-07	1YrCancerRMP_Inh_FAH16to70	*	1.97E-07
1811	ALL		563285.9	4226117	0.001069	9901	DieselExhPM	1.90E-07	1YrCancerRMP_Inh_FAH16to70	*	1.90E-07
1812	ALL		563285.9	4226025	0.001007	9901	DieselExhPM	1.79E-07	1YrCancerRMP_Inh_FAH16to70	*	1.79E-07
1813	ALL		563285.9	4225934	0.000931	9901	DieselExhPM	1.66E-07	1YrCancerRMP_Inh_FAH16to70	*	1.66E-07
1814	ALL		563285.9	4225842	0.000845	9901	DieselExhPM	1.50E-07	1YrCancerRMP_Inh_FAH16to70	*	1.50E-07
1815	ALL		563285.9	4225750	0.000764	9901	DieselExhPM	1.36E-07	1YrCancerRMP_Inh_FAH16to70	*	1.36E-07
1816	ALL		563285.9	4225659	0.000696	9901	DieselExhPM	1.24E-07	1YrCancerRMP_Inh_FAH16to70	*	1.24E-07
1817	ALL		563285.9	4225567	0.00064	9901	DieselExhPM	1.14E-07	1YrCancerRMP_Inh_FAH16to70	*	1.14E-07
1818	ALL		563285.9	4225475	0.000593	9901	DieselExhPM	1.05E-07	1YrCancerRMP_Inh_FAH16to70	*	1.05E-07
1819	ALL		563187.5	4226209	0.00063	9901	DieselExhPM	1.12E-07	1YrCancerRMP_Inh_FAH16to70	*	1.12E-07
1820	ALL		563187.5	4226117	0.000671	9901	DieselExhPM	1.19E-07	1YrCancerRMP_Inh_FAH16to70	*	1.19E-07
1821	ALL		563187.5	4226025	0.000684	9901	DieselExhPM	1.22E-07	1YrCancerRMP_Inh_FAH16to70	*	1.22E-07
1822	ALL		563187.5	4225934	0.000676	9901	DieselExhPM	1.20E-07	1YrCancerRMP_Inh_FAH16to70	*	1.20E-07
1823	ALL		563187.5	4225842	0.000654	9901	DieselExhPM	1.16E-07	1YrCancerRMP_Inh_FAH16to70	*	1.16E-07
1824	ALL		563187.5	4225750	0.000617	9901	DieselExhPM	1.10E-07	1YrCancerRMP_Inh_FAH16to70	*	1.10E-07
1825	ALL		563187.5	4225659	0.000573	9901	DieselExhPM	1.02E-07	1YrCancerRMP_Inh_FAH16to70	*	1.02E-07
1826	ALL		563187.5	4225567	0.00053	9901	DieselExhPM	9.42E-08	1YrCancerRMP_Inh_FAH16to70	*	9.42E-08
1827	ALL		563187.5	4225475	0.000493	9901	DieselExhPM	8.77E-08	1YrCancerRMP_Inh_FAH16to70	*	8.77E-08
1828	ALL		563089.1	4226209	0.00042	9901	DieselExhPM	7.47E-08	1YrCancerRMP_Inh_FAH16to70	*	7.47E-08
1829	ALL		563089.1	4226117	0.000423	9901	DieselExhPM	7.52E-08	1YrCancerRMP_Inh_FAH16to70	*	7.52E-08
1830	ALL		563089.1	4226025	0.000384	9901	DieselExhPM	6.84E-08	1YrCancerRMP_Inh_FAH16to70	*	6.84E-08
1831	ALL		563089.1	4225934	0.000423	9901	DieselExhPM	7.51E-08	1YrCancerRMP_Inh_FAH16to70	*	7.51E-08
1832	ALL		563089.1	4225842	0.000462	9901	DieselExhPM	8.22E-08	1YrCancerRMP_Inh_FAH16to70	*	8.22E-08
1833	ALL		563089.1	4225750	0.000477	9901	DieselExhPM	8.48E-08	1YrCancerRMP_Inh_FAH16to70	*	8.48E-08
1834	ALL		563089.1	4225659	0.000477	9901	DieselExhPM	8.48E-08	1YrCancerRMP_Inh_FAH16to70	*	8.48E-08
1835	ALL		563089.1	4225567	0.000449	9901	DieselExhPM	7.99E-08	1YrCancerRMP_Inh_FAH16to70	*	7.99E-08
1836	ALL		563089.1	4225475	0.00042	9901	DieselExhPM	7.47E-08	1YrCancerRMP_Inh_FAH16to70	*	7.47E-08
1837	ALL		562990.6	4226209	0.000315	9901	DieselExhPM	5.60E-08	1YrCancerRMP_Inh_FAH16to70	*	5.60E-08
1838	ALL		562990.6	4226117	0.000321	9901	DieselExhPM	5.70E-08	1YrCancerRMP_Inh_FAH16to70	*	5.70E-08
1839	ALL		562990.6	4226025	0.000282	9901	DieselExhPM	5.02E-08	1YrCancerRMP_Inh_FAH16to70	*	5.02E-08
1840	ALL		562990.6	4225934	0.00027	9901	DieselExhPM	4.81E-08	1YrCancerRMP_Inh_FAH16to70	*	4.81E-08
1841	ALL		562990.6	4225842	0.000286	9901	DieselExhPM	5.08E-08	1YrCancerRMP_Inh_FAH16to70	*	5.08E-08
1842	ALL		562990.6	4225750	0.000327	9901	DieselExhPM	5.81E-08	1YrCancerRMP_Inh_FAH16to70	*	5.81E-08
1843	ALL		562990.6	4225659	0.000356	9901	DieselExhPM	6.33E-08	1YrCancerRMP_Inh_FAH16to70	*	6.33E-08
1844	ALL		562990.6	4225567	0.00037	9901	DieselExhPM	6.59E-08	1YrCancerRMP_Inh_FAH16to70	*	6.59E-08
1845	ALL		562990.6	4225475	0.000366	9901	DieselExhPM	6.51E-08	1YrCancerRMP_Inh_FAH16to70	*	6.51E-08
1846	ALL		562892.2	4226209	0.000238	9901	DieselExhPM	4.23E-08	1YrCancerRMP_Inh_FAH16to70	*	4.23E-08
1847	ALL		562892.2	4226117	0.00025	9901	DieselExhPM	4.44E-08	1YrCancerRMP_Inh_FAH16to70	*	4.44E-08
1848	ALL		562892.2	4226025	0.000247	9901	DieselExhPM	4.40E-08	1YrCancerRMP_Inh_FAH16to70	*	4.40E-08
1849	ALL		562892.2	4225934	0.000236	9901	DieselExhPM	4.20E-08	1YrCancerRMP_Inh_FAH16to70	*	4.20E-08
1850	ALL		562892.2	4225842	0.00022	9901	DieselExhPM	3.91E-08	1YrCancerRMP_Inh_FAH16to70	*	3.91E-08
1851	ALL		562892.2	4225750	0.000215	9901	DieselExhPM	3.83E-08	1YrCancerRMP_Inh_FAH16to70	*	3.83E-08
1852	ALL		562892.2	4225659	0.000231	9901	DieselExhPM	4.11E-08	1YrCancerRMP_Inh_FAH16to70	*	4.11E-08
1853	ALL		562892.2	4225567	0.00026	9901	DieselExhPM	4.63E-08	1YrCancerRMP_Inh_FAH16to70	*	4.63E-08
1854	ALL		562892.2	4225475	0.000291	9901	DieselExhPM	5.18E-08	1YrCancerRMP_Inh_FAH16to70	*	5.18E-08
1855	ALL		562793.8	4226209	0.00019	9901	DieselExhPM	3.38E-08	1YrCancerRMP_Inh_FAH16to70	*	3.38E-08
1856	ALL		562793.8	4226117	0.000193	9901	DieselExhPM	3.43E-08	1YrCancerRMP_Inh_FAH16to70	*	3.43E-08
1857	ALL		562793.8	4226025	0.000207	9901	DieselExhPM	3.67E-08	1YrCancerRMP_Inh_FAH16to70	*	3.67E-08
1858	ALL		562793.8	4225934	0.000215	9901	DieselExhPM	3.83E-08	1YrCancerRMP_Inh_FAH16to70	*	3.83E-08
1859	ALL		562793.8	4225842	0.000209	9901	DieselExhPM	3.72E-08	1YrCancerRMP_Inh_FAH16to70	*	3.72E-08
1860	ALL		562793.8	4225750	0.000198	9901	DieselExhPM	3.52E-08	1YrCancerRMP_Inh_FAH16to70	*	3.52E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1861	ALL		562793.8	4225659	0.000178	9901	DieselExhPM	3.17E-08	1YrCancerRMP_Inh_FAH16to70	*	3.17E-08
1862	ALL		562793.8	4225567	0.00018	9901	DieselExhPM	3.20E-08	1YrCancerRMP_Inh_FAH16to70	*	3.20E-08
1863	ALL		562793.8	4225475	0.000204	9901	DieselExhPM	3.62E-08	1YrCancerRMP_Inh_FAH16to70	*	3.62E-08
1864	ALL		562695.3	4226209	0.000161	9901	DieselExhPM	2.86E-08	1YrCancerRMP_Inh_FAH16to70	*	2.86E-08
1865	ALL		562695.3	4226117	0.000156	9901	DieselExhPM	2.77E-08	1YrCancerRMP_Inh_FAH16to70	*	2.77E-08
1866	ALL		562695.3	4226025	0.000163	9901	DieselExhPM	2.90E-08	1YrCancerRMP_Inh_FAH16to70	*	2.90E-08
1867	ALL		562695.3	4225934	0.000175	9901	DieselExhPM	3.11E-08	1YrCancerRMP_Inh_FAH16to70	*	3.11E-08
1868	ALL		562695.3	4225842	0.000183	9901	DieselExhPM	3.26E-08	1YrCancerRMP_Inh_FAH16to70	*	3.26E-08
1869	ALL		562695.3	4225750	0.000181	9901	DieselExhPM	3.22E-08	1YrCancerRMP_Inh_FAH16to70	*	3.22E-08
1870	ALL		562695.3	4225659	0.000172	9901	DieselExhPM	3.06E-08	1YrCancerRMP_Inh_FAH16to70	*	3.06E-08
1871	ALL		562695.3	4225567	0.000163	9901	DieselExhPM	2.90E-08	1YrCancerRMP_Inh_FAH16to70	*	2.90E-08
1872	ALL		562695.3	4225475	0.000165	9901	DieselExhPM	2.94E-08	1YrCancerRMP_Inh_FAH16to70	*	2.94E-08
1873	ALL		562596.9	4226209	0.00014	9901	DieselExhPM	2.50E-08	1YrCancerRMP_Inh_FAH16to70	*	2.50E-08
1874	ALL		562596.9	4226117	0.000133	9901	DieselExhPM	2.36E-08	1YrCancerRMP_Inh_FAH16to70	*	2.36E-08
1875	ALL		562596.9	4226025	0.000132	9901	DieselExhPM	2.35E-08	1YrCancerRMP_Inh_FAH16to70	*	2.35E-08
1876	ALL		562596.9	4225934	0.000141	9901	DieselExhPM	2.50E-08	1YrCancerRMP_Inh_FAH16to70	*	2.50E-08
1877	ALL		562596.9	4225842	0.000152	9901	DieselExhPM	2.71E-08	1YrCancerRMP_Inh_FAH16to70	*	2.71E-08
1878	ALL		562596.9	4225750	0.00016	9901	DieselExhPM	2.85E-08	1YrCancerRMP_Inh_FAH16to70	*	2.85E-08
1879	ALL		562596.9	4225659	0.00016	9901	DieselExhPM	2.84E-08	1YrCancerRMP_Inh_FAH16to70	*	2.84E-08
1880	ALL		562596.9	4225567	0.000153	9901	DieselExhPM	2.71E-08	1YrCancerRMP_Inh_FAH16to70	*	2.71E-08
1881	ALL		562596.9	4225475	0.000142	9901	DieselExhPM	2.53E-08	1YrCancerRMP_Inh_FAH16to70	*	2.53E-08
1882	ALL		562498.4	4226209	0.000125	9901	DieselExhPM	2.22E-08	1YrCancerRMP_Inh_FAH16to70	*	2.22E-08
1883	ALL		562498.4	4226117	0.000117	9901	DieselExhPM	2.09E-08	1YrCancerRMP_Inh_FAH16to70	*	2.09E-08
1884	ALL		562498.4	4226025	0.000113	9901	DieselExhPM	2.01E-08	1YrCancerRMP_Inh_FAH16to70	*	2.01E-08
1885	ALL		562498.4	4225934	0.000115	9901	DieselExhPM	2.05E-08	1YrCancerRMP_Inh_FAH16to70	*	2.05E-08
1886	ALL		562498.4	4225842	0.000124	9901	DieselExhPM	2.21E-08	1YrCancerRMP_Inh_FAH16to70	*	2.21E-08
1887	ALL		562498.4	4225750	0.000135	9901	DieselExhPM	2.40E-08	1YrCancerRMP_Inh_FAH16to70	*	2.40E-08
1888	ALL		562498.4	4225659	0.000142	9901	DieselExhPM	2.52E-08	1YrCancerRMP_Inh_FAH16to70	*	2.52E-08
1889	ALL		562498.4	4225567	0.000142	9901	DieselExhPM	2.53E-08	1YrCancerRMP_Inh_FAH16to70	*	2.53E-08
1890	ALL		562498.4	4225475	0.000136	9901	DieselExhPM	2.41E-08	1YrCancerRMP_Inh_FAH16to70	*	2.41E-08
1891	ALL		562400	4226209	0.000113	9901	DieselExhPM	2.01E-08	1YrCancerRMP_Inh_FAH16to70	*	2.01E-08
1892	ALL		562400	4226117	0.000105	9901	DieselExhPM	1.88E-08	1YrCancerRMP_Inh_FAH16to70	*	1.88E-08
1893	ALL		562400	4226025	0.000101	9901	DieselExhPM	1.80E-08	1YrCancerRMP_Inh_FAH16to70	*	1.80E-08
1894	ALL		562400	4225934	9.88E-05	9901	DieselExhPM	1.76E-08	1YrCancerRMP_Inh_FAH16to70	*	1.76E-08
1895	ALL		562400	4225842	0.000103	9901	DieselExhPM	1.83E-08	1YrCancerRMP_Inh_FAH16to70	*	1.83E-08
1896	ALL		562400	4225750	0.000111	9901	DieselExhPM	1.98E-08	1YrCancerRMP_Inh_FAH16to70	*	1.98E-08
1897	ALL		562400	4225659	0.00012	9901	DieselExhPM	2.14E-08	1YrCancerRMP_Inh_FAH16to70	*	2.14E-08
1898	ALL		562400	4225567	0.000127	9901	DieselExhPM	2.26E-08	1YrCancerRMP_Inh_FAH16to70	*	2.26E-08
1899	ALL		562400	4225475	0.000128	9901	DieselExhPM	2.29E-08	1YrCancerRMP_Inh_FAH16to70	*	2.29E-08
1900	ALL		563133.3	4226300	0.000497	9901	DieselExhPM	8.84E-08	1YrCancerRMP_Inh_FAH16to70	*	8.84E-08
1901	ALL		563133.3	4226399	0.000531	9901	DieselExhPM	9.45E-08	1YrCancerRMP_Inh_FAH16to70	*	9.45E-08
1902	ALL		563133.3	4226497	0.000831	9901	DieselExhPM	1.48E-07	1YrCancerRMP_Inh_FAH16to70	*	1.48E-07
1903	ALL		563133.3	4226596	0.002327	9901	DieselExhPM	4.14E-07	1YrCancerRMP_Inh_FAH16to70	*	4.14E-07
1904	ALL		563133.3	4226694	0.003923	9901	DieselExhPM	6.98E-07	1YrCancerRMP_Inh_FAH16to70	*	6.98E-07
1905	ALL		563133.3	4226792	0.002944	9901	DieselExhPM	5.24E-07	1YrCancerRMP_Inh_FAH16to70	*	5.24E-07
1906	ALL		563133.3	4226891	0.0015	9901	DieselExhPM	2.67E-07	1YrCancerRMP_Inh_FAH16to70	*	2.67E-07
1907	ALL		563133.3	4226989	0.000774	9901	DieselExhPM	1.38E-07	1YrCancerRMP_Inh_FAH16to70	*	1.38E-07
1908	ALL		563133.3	4227088	0.000462	9901	DieselExhPM	8.22E-08	1YrCancerRMP_Inh_FAH16to70	*	8.22E-08
1909	ALL		563133.3	4227186	0.000348	9901	DieselExhPM	6.18E-08	1YrCancerRMP_Inh_FAH16to70	*	6.18E-08
1910	ALL		563133.3	4227285	0.000295	9901	DieselExhPM	5.24E-08	1YrCancerRMP_Inh_FAH16to70	*	5.24E-08
1911	ALL		563133.3	4227383	0.000266	9901	DieselExhPM	4.72E-08	1YrCancerRMP_Inh_FAH16to70	*	4.72E-08
1912	ALL		563133.3	4227481	0.000243	9901	DieselExhPM	4.32E-08	1YrCancerRMP_Inh_FAH16to70	*	4.32E-08
1913	ALL		563133.3	4227580	0.000221	9901	DieselExhPM	3.93E-08	1YrCancerRMP_Inh_FAH16to70	*	3.93E-08
1914	ALL		563133.3	4227678	0.0002	9901	DieselExhPM	3.57E-08	1YrCancerRMP_Inh_FAH16to70	*	3.57E-08
1915	ALL		563133.3	4227777	0.00018	9901	DieselExhPM	3.21E-08	1YrCancerRMP_Inh_FAH16to70	*	3.21E-08
1916	ALL		563133.3	4227875	0.000159	9901	DieselExhPM	2.84E-08	1YrCancerRMP_Inh_FAH16to70	*	2.84E-08
1917	ALL		563041.7	4226300	0.000364	9901	DieselExhPM	6.47E-08	1YrCancerRMP_Inh_FAH16to70	*	6.47E-08
1918	ALL		563041.7	4226399	0.000405	9901	DieselExhPM	7.19E-08	1YrCancerRMP_Inh_FAH16to70	*	7.19E-08
1919	ALL		563041.7	4226497	0.000694	9901	DieselExhPM	1.23E-07	1YrCancerRMP_Inh_FAH16to70	*	1.23E-07
1920	ALL		563041.7	4226596	0.001742	9901	DieselExhPM	3.10E-07	1YrCancerRMP_Inh_FAH16to70	*	3.10E-07
1921	ALL		563041.7	4226694	0.002779	9901	DieselExhPM	4.94E-07	1YrCancerRMP_Inh_FAH16to70	*	4.94E-07
1922	ALL		563041.7	4226792	0.002279	9901	DieselExhPM	4.05E-07	1YrCancerRMP_Inh_FAH16to70	*	4.05E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1923	ALL		563041.7	4226891	0.001352	9901	DieselExhPM	2.40E-07	1YrCancerRMP_Inh_FAH16to70	*	2.40E-07
1924	ALL		563041.7	4226989	0.000782	9901	DieselExhPM	1.39E-07	1YrCancerRMP_Inh_FAH16to70	*	1.39E-07
1925	ALL		563041.7	4227088	0.000441	9901	DieselExhPM	7.85E-08	1YrCancerRMP_Inh_FAH16to70	*	7.85E-08
1926	ALL		563041.7	4227186	0.000296	9901	DieselExhPM	5.27E-08	1YrCancerRMP_Inh_FAH16to70	*	5.27E-08
1927	ALL		563041.7	4227285	0.00024	9901	DieselExhPM	4.27E-08	1YrCancerRMP_Inh_FAH16to70	*	4.27E-08
1928	ALL		563041.7	4227383	0.000209	9901	DieselExhPM	3.72E-08	1YrCancerRMP_Inh_FAH16to70	*	3.72E-08
1929	ALL		563041.7	4227481	0.000192	9901	DieselExhPM	3.42E-08	1YrCancerRMP_Inh_FAH16to70	*	3.42E-08
1930	ALL		563041.7	4227580	0.000182	9901	DieselExhPM	3.24E-08	1YrCancerRMP_Inh_FAH16to70	*	3.24E-08
1931	ALL		563041.7	4227678	0.000171	9901	DieselExhPM	3.04E-08	1YrCancerRMP_Inh_FAH16to70	*	3.04E-08
1932	ALL		563041.7	4227777	0.000161	9901	DieselExhPM	2.86E-08	1YrCancerRMP_Inh_FAH16to70	*	2.86E-08
1933	ALL		563041.7	4227875	0.000149	9901	DieselExhPM	2.65E-08	1YrCancerRMP_Inh_FAH16to70	*	2.65E-08
1934	ALL		562950	4226300	0.000279	9901	DieselExhPM	4.97E-08	1YrCancerRMP_Inh_FAH16to70	*	4.97E-08
1935	ALL		562950	4226399	0.000336	9901	DieselExhPM	5.98E-08	1YrCancerRMP_Inh_FAH16to70	*	5.98E-08
1936	ALL		562950	4226497	0.000602	9901	DieselExhPM	1.07E-07	1YrCancerRMP_Inh_FAH16to70	*	1.07E-07
1937	ALL		562950	4226596	0.001359	9901	DieselExhPM	2.42E-07	1YrCancerRMP_Inh_FAH16to70	*	2.42E-07
1938	ALL		562950	4226694	0.002059	9901	DieselExhPM	3.66E-07	1YrCancerRMP_Inh_FAH16to70	*	3.66E-07
1939	ALL		562950	4226792	0.001817	9901	DieselExhPM	3.23E-07	1YrCancerRMP_Inh_FAH16to70	*	3.23E-07
1940	ALL		562950	4226891	0.001164	9901	DieselExhPM	2.07E-07	1YrCancerRMP_Inh_FAH16to70	*	2.07E-07
1941	ALL		562950	4226989	0.000761	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
1942	ALL		562950	4227088	0.000459	9901	DieselExhPM	8.16E-08	1YrCancerRMP_Inh_FAH16to70	*	8.16E-08
1943	ALL		562950	4227186	0.000278	9901	DieselExhPM	4.95E-08	1YrCancerRMP_Inh_FAH16to70	*	4.95E-08
1944	ALL		562950	4227285	0.000206	9901	DieselExhPM	3.66E-08	1YrCancerRMP_Inh_FAH16to70	*	3.66E-08
1945	ALL		562950	4227383	0.000171	9901	DieselExhPM	3.05E-08	1YrCancerRMP_Inh_FAH16to70	*	3.05E-08
1946	ALL		562950	4227481	0.000157	9901	DieselExhPM	2.79E-08	1YrCancerRMP_Inh_FAH16to70	*	2.79E-08
1947	ALL		562950	4227580	0.000148	9901	DieselExhPM	2.63E-08	1YrCancerRMP_Inh_FAH16to70	*	2.63E-08
1948	ALL		562950	4227678	0.00014	9901	DieselExhPM	2.50E-08	1YrCancerRMP_Inh_FAH16to70	*	2.50E-08
1949	ALL		562950	4227777	0.000135	9901	DieselExhPM	2.40E-08	1YrCancerRMP_Inh_FAH16to70	*	2.40E-08
1950	ALL		562950	4227875	0.000131	9901	DieselExhPM	2.32E-08	1YrCancerRMP_Inh_FAH16to70	*	2.32E-08
1951	ALL		562858.3	4226300	0.00023	9901	DieselExhPM	4.08E-08	1YrCancerRMP_Inh_FAH16to70	*	4.08E-08
1952	ALL		562858.3	4226399	0.000291	9901	DieselExhPM	5.18E-08	1YrCancerRMP_Inh_FAH16to70	*	5.18E-08
1953	ALL		562858.3	4226497	0.00053	9901	DieselExhPM	9.43E-08	1YrCancerRMP_Inh_FAH16to70	*	9.43E-08
1954	ALL		562858.3	4226596	0.001093	9901	DieselExhPM	1.94E-07	1YrCancerRMP_Inh_FAH16to70	*	1.94E-07
1955	ALL		562858.3	4226694	0.001596	9901	DieselExhPM	2.84E-07	1YrCancerRMP_Inh_FAH16to70	*	2.84E-07
1956	ALL		562858.3	4226792	0.001476	9901	DieselExhPM	2.63E-07	1YrCancerRMP_Inh_FAH16to70	*	2.63E-07
1957	ALL		562858.3	4226891	0.001008	9901	DieselExhPM	1.79E-07	1YrCancerRMP_Inh_FAH16to70	*	1.79E-07
1958	ALL		562858.3	4226989	0.000704	9901	DieselExhPM	1.25E-07	1YrCancerRMP_Inh_FAH16to70	*	1.25E-07
1959	ALL		562858.3	4227088	0.000479	9901	DieselExhPM	8.51E-08	1YrCancerRMP_Inh_FAH16to70	*	8.51E-08
1960	ALL		562858.3	4227186	0.000288	9901	DieselExhPM	5.11E-08	1YrCancerRMP_Inh_FAH16to70	*	5.11E-08
1961	ALL		562858.3	4227285	0.000193	9901	DieselExhPM	3.43E-08	1YrCancerRMP_Inh_FAH16to70	*	3.43E-08
1962	ALL		562858.3	4227383	0.000155	9901	DieselExhPM	2.76E-08	1YrCancerRMP_Inh_FAH16to70	*	2.76E-08
1963	ALL		562858.3	4227481	0.000135	9901	DieselExhPM	2.41E-08	1YrCancerRMP_Inh_FAH16to70	*	2.41E-08
1964	ALL		562858.3	4227580	0.000124	9901	DieselExhPM	2.21E-08	1YrCancerRMP_Inh_FAH16to70	*	2.21E-08
1965	ALL		562858.3	4227678	0.000118	9901	DieselExhPM	2.09E-08	1YrCancerRMP_Inh_FAH16to70	*	2.09E-08
1966	ALL		562858.3	4227777	0.000113	9901	DieselExhPM	2.02E-08	1YrCancerRMP_Inh_FAH16to70	*	2.02E-08
1967	ALL		562858.3	4227875	0.000111	9901	DieselExhPM	1.97E-08	1YrCancerRMP_Inh_FAH16to70	*	1.97E-08
1968	ALL		562766.7	4226300	0.000198	9901	DieselExhPM	3.52E-08	1YrCancerRMP_Inh_FAH16to70	*	3.52E-08
1969	ALL		562766.7	4226399	0.00026	9901	DieselExhPM	4.62E-08	1YrCancerRMP_Inh_FAH16to70	*	4.62E-08
1970	ALL		562766.7	4226497	0.000472	9901	DieselExhPM	8.39E-08	1YrCancerRMP_Inh_FAH16to70	*	8.39E-08
1971	ALL		562766.7	4226596	0.0009	9901	DieselExhPM	1.60E-07	1YrCancerRMP_Inh_FAH16to70	*	1.60E-07
1972	ALL		562766.7	4226694	0.001266	9901	DieselExhPM	2.25E-07	1YrCancerRMP_Inh_FAH16to70	*	2.25E-07
1973	ALL		562766.7	4226792	0.001225	9901	DieselExhPM	2.18E-07	1YrCancerRMP_Inh_FAH16to70	*	2.18E-07
1974	ALL		562766.7	4226891	0.000877	9901	DieselExhPM	1.56E-07	1YrCancerRMP_Inh_FAH16to70	*	1.56E-07
1975	ALL		562766.7	4226989	0.00063	9901	DieselExhPM	1.12E-07	1YrCancerRMP_Inh_FAH16to70	*	1.12E-07
1976	ALL		562766.7	4227088	0.00048	9901	DieselExhPM	8.54E-08	1YrCancerRMP_Inh_FAH16to70	*	8.54E-08
1977	ALL		562766.7	4227186	0.000313	9901	DieselExhPM	5.56E-08	1YrCancerRMP_Inh_FAH16to70	*	5.56E-08
1978	ALL		562766.7	4227285	0.000197	9901	DieselExhPM	3.50E-08	1YrCancerRMP_Inh_FAH16to70	*	3.50E-08
1979	ALL		562766.7	4227383	0.000146	9901	DieselExhPM	2.60E-08	1YrCancerRMP_Inh_FAH16to70	*	2.60E-08
1980	ALL		562766.7	4227481	0.000124	9901	DieselExhPM	2.21E-08	1YrCancerRMP_Inh_FAH16to70	*	2.21E-08
1981	ALL		562766.7	4227580	0.00011	9901	DieselExhPM	1.96E-08	1YrCancerRMP_Inh_FAH16to70	*	1.96E-08
1982	ALL		562766.7	4227678	0.000101	9901	DieselExhPM	1.80E-08	1YrCancerRMP_Inh_FAH16to70	*	1.80E-08
1983	ALL		562766.7	4227777	9.67E-05	9901	DieselExhPM	1.72E-08	1YrCancerRMP_Inh_FAH16to70	*	1.72E-08
1984	ALL		562766.7	4227875	9.49E-05	9901	DieselExhPM	1.69E-08	1YrCancerRMP_Inh_FAH16to70	*	1.69E-08

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1985	ALL		562675	4226300	0.000174	9901	DieselExhPM	3.09E-08	1YrCancerRMP_Inh_FAH16to70	*	3.09E-08
1986	ALL		562675	4226399	0.000237	9901	DieselExhPM	4.21E-08	1YrCancerRMP_Inh_FAH16to70	*	4.21E-08
1987	ALL		562675	4226497	0.000425	9901	DieselExhPM	7.55E-08	1YrCancerRMP_Inh_FAH16to70	*	7.55E-08
1988	ALL		562675	4226596	0.000758	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
1989	ALL		562675	4226694	0.001033	9901	DieselExhPM	1.84E-07	1YrCancerRMP_Inh_FAH16to70	*	1.84E-07
1990	ALL		562675	4226792	0.001033	9901	DieselExhPM	1.84E-07	1YrCancerRMP_Inh_FAH16to70	*	1.84E-07
1991	ALL		562675	4226891	0.000774	9901	DieselExhPM	1.38E-07	1YrCancerRMP_Inh_FAH16to70	*	1.38E-07
1992	ALL		562675	4226989	0.000555	9901	DieselExhPM	9.88E-08	1YrCancerRMP_Inh_FAH16to70	*	9.88E-08
1993	ALL		562675	4227088	0.000455	9901	DieselExhPM	8.10E-08	1YrCancerRMP_Inh_FAH16to70	*	8.10E-08
1994	ALL		562675	4227186	0.000336	9901	DieselExhPM	5.97E-08	1YrCancerRMP_Inh_FAH16to70	*	5.97E-08
1995	ALL		562675	4227285	0.000215	9901	DieselExhPM	3.82E-08	1YrCancerRMP_Inh_FAH16to70	*	3.82E-08
1996	ALL		562675	4227383	0.000145	9901	DieselExhPM	2.59E-08	1YrCancerRMP_Inh_FAH16to70	*	2.59E-08
1997	ALL		562675	4227481	0.000117	9901	DieselExhPM	2.08E-08	1YrCancerRMP_Inh_FAH16to70	*	2.08E-08
1998	ALL		562675	4227580	0.000102	9901	DieselExhPM	1.82E-08	1YrCancerRMP_Inh_FAH16to70	*	1.82E-08
1999	ALL		562675	4227678	9.03E-05	9901	DieselExhPM	1.61E-08	1YrCancerRMP_Inh_FAH16to70	*	1.61E-08
2000	ALL		562675	4227777	8.21E-05	9901	DieselExhPM	1.46E-08	1YrCancerRMP_Inh_FAH16to70	*	1.46E-08
2001	ALL		562675	4227875	7.99E-05	9901	DieselExhPM	1.42E-08	1YrCancerRMP_Inh_FAH16to70	*	1.42E-08
2002	ALL		562583.3	4226300	0.000157	9901	DieselExhPM	2.78E-08	1YrCancerRMP_Inh_FAH16to70	*	2.78E-08
2003	ALL		562583.3	4226399	0.000219	9901	DieselExhPM	3.89E-08	1YrCancerRMP_Inh_FAH16to70	*	3.89E-08
2004	ALL		562583.3	4226497	0.000385	9901	DieselExhPM	6.84E-08	1YrCancerRMP_Inh_FAH16to70	*	6.84E-08
2005	ALL		562583.3	4226596	0.000648	9901	DieselExhPM	1.15E-07	1YrCancerRMP_Inh_FAH16to70	*	1.15E-07
2006	ALL		562583.3	4226694	0.00086	9901	DieselExhPM	1.53E-07	1YrCancerRMP_Inh_FAH16to70	*	1.53E-07
2007	ALL		562583.3	4226792	0.000882	9901	DieselExhPM	1.57E-07	1YrCancerRMP_Inh_FAH16to70	*	1.57E-07
2008	ALL		562583.3	4226891	0.000691	9901	DieselExhPM	1.23E-07	1YrCancerRMP_Inh_FAH16to70	*	1.23E-07
2009	ALL		562583.3	4226989	0.000495	9901	DieselExhPM	8.80E-08	1YrCancerRMP_Inh_FAH16to70	*	8.80E-08
2010	ALL		562583.3	4227088	0.000414	9901	DieselExhPM	7.36E-08	1YrCancerRMP_Inh_FAH16to70	*	7.36E-08
2011	ALL		562583.3	4227186	0.000343	9901	DieselExhPM	6.09E-08	1YrCancerRMP_Inh_FAH16to70	*	6.09E-08
2012	ALL		562583.3	4227285	0.000236	9901	DieselExhPM	4.20E-08	1YrCancerRMP_Inh_FAH16to70	*	4.20E-08
2013	ALL		562583.3	4227383	0.000153	9901	DieselExhPM	2.72E-08	1YrCancerRMP_Inh_FAH16to70	*	2.72E-08
2014	ALL		562583.3	4227481	0.000113	9901	DieselExhPM	2.00E-08	1YrCancerRMP_Inh_FAH16to70	*	2.00E-08
2015	ALL		562583.3	4227580	9.62E-05	9901	DieselExhPM	1.71E-08	1YrCancerRMP_Inh_FAH16to70	*	1.71E-08
2016	ALL		562583.3	4227678	8.58E-05	9901	DieselExhPM	1.53E-08	1YrCancerRMP_Inh_FAH16to70	*	1.53E-08
2017	ALL		562583.3	4227777	7.73E-05	9901	DieselExhPM	1.37E-08	1YrCancerRMP_Inh_FAH16to70	*	1.37E-08
2018	ALL		562583.3	4227875	7.17E-05	9901	DieselExhPM	1.28E-08	1YrCancerRMP_Inh_FAH16to70	*	1.28E-08
2019	ALL		562491.7	4226300	0.000143	9901	DieselExhPM	2.55E-08	1YrCancerRMP_Inh_FAH16to70	*	2.55E-08
2020	ALL		562491.7	4226399	0.000205	9901	DieselExhPM	3.64E-08	1YrCancerRMP_Inh_FAH16to70	*	3.64E-08
2021	ALL		562491.7	4226497	0.000351	9901	DieselExhPM	6.24E-08	1YrCancerRMP_Inh_FAH16to70	*	6.24E-08
2022	ALL		562491.7	4226596	0.000562	9901	DieselExhPM	1.00E-07	1YrCancerRMP_Inh_FAH16to70	*	1.00E-07
2023	ALL		562491.7	4226694	0.000728	9901	DieselExhPM	1.30E-07	1YrCancerRMP_Inh_FAH16to70	*	1.30E-07
2024	ALL		562491.7	4226792	0.000762	9901	DieselExhPM	1.35E-07	1YrCancerRMP_Inh_FAH16to70	*	1.35E-07
2025	ALL		562491.7	4226891	0.000624	9901	DieselExhPM	1.11E-07	1YrCancerRMP_Inh_FAH16to70	*	1.11E-07
2026	ALL		562491.7	4226989	0.000448	9901	DieselExhPM	7.96E-08	1YrCancerRMP_Inh_FAH16to70	*	7.96E-08
2027	ALL		562491.7	4227088	0.000368	9901	DieselExhPM	6.55E-08	1YrCancerRMP_Inh_FAH16to70	*	6.55E-08
2028	ALL		562491.7	4227186	0.000329	9901	DieselExhPM	5.85E-08	1YrCancerRMP_Inh_FAH16to70	*	5.85E-08
2029	ALL		562491.7	4227285	0.000253	9901	DieselExhPM	4.50E-08	1YrCancerRMP_Inh_FAH16to70	*	4.50E-08
2030	ALL		562491.7	4227383	0.000169	9901	DieselExhPM	3.01E-08	1YrCancerRMP_Inh_FAH16to70	*	3.01E-08
2031	ALL		562491.7	4227481	0.000116	9901	DieselExhPM	2.06E-08	1YrCancerRMP_Inh_FAH16to70	*	2.06E-08
2032	ALL		562491.7	4227580	9.17E-05	9901	DieselExhPM	1.63E-08	1YrCancerRMP_Inh_FAH16to70	*	1.63E-08
2033	ALL		562491.7	4227678	8.14E-05	9901	DieselExhPM	1.45E-08	1YrCancerRMP_Inh_FAH16to70	*	1.45E-08
2034	ALL		562491.7	4227777	7.38E-05	9901	DieselExhPM	1.31E-08	1YrCancerRMP_Inh_FAH16to70	*	1.31E-08
2035	ALL		562491.7	4227875	6.68E-05	9901	DieselExhPM	1.19E-08	1YrCancerRMP_Inh_FAH16to70	*	1.19E-08
2036	ALL		562400	4226300	0.000133	9901	DieselExhPM	2.37E-08	1YrCancerRMP_Inh_FAH16to70	*	2.37E-08
2037	ALL		562400	4226399	0.000193	9901	DieselExhPM	3.43E-08	1YrCancerRMP_Inh_FAH16to70	*	3.43E-08
2038	ALL		562400	4226497	0.000321	9901	DieselExhPM	5.72E-08	1YrCancerRMP_Inh_FAH16to70	*	5.72E-08
2039	ALL		562400	4226596	0.000493	9901	DieselExhPM	8.77E-08	1YrCancerRMP_Inh_FAH16to70	*	8.77E-08
2040	ALL		562400	4226694	0.000626	9901	DieselExhPM	1.11E-07	1YrCancerRMP_Inh_FAH16to70	*	1.11E-07
2041	ALL		562400	4226792	0.000664	9901	DieselExhPM	1.18E-07	1YrCancerRMP_Inh_FAH16to70	*	1.18E-07
2042	ALL		562400	4226891	0.000567	9901	DieselExhPM	1.01E-07	1YrCancerRMP_Inh_FAH16to70	*	1.01E-07
2043	ALL		562400	4226989	0.000412	9901	DieselExhPM	7.33E-08	1YrCancerRMP_Inh_FAH16to70	*	7.33E-08
2044	ALL		562400	4227088	0.000329	9901	DieselExhPM	5.84E-08	1YrCancerRMP_Inh_FAH16to70	*	5.84E-08
2045	ALL		562400	4227186	0.000303	9901	DieselExhPM	5.40E-08	1YrCancerRMP_Inh_FAH16to70	*	5.40E-08
2046	ALL		562400	4227285	0.00026	9901	DieselExhPM	4.63E-08	1YrCancerRMP_Inh_FAH16to70	*	4.63E-08

*HARP - HRACalc v22118 11/21/2023 4:03:11 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220ResidentHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
2047	ALL		562400	4227383	0.000188	9901	DieselExhPM	3.34E-08	1YrCancerRMP_Inh_FAH16to70	*	3.34E-08
2048	ALL		562400	4227481	0.000126	9901	DieselExhPM	2.24E-08	1YrCancerRMP_Inh_FAH16to70	*	2.24E-08
2049	ALL		562400	4227580	9.18E-05	9901	DieselExhPM	1.63E-08	1YrCancerRMP_Inh_FAH16to70	*	1.63E-08
2050	ALL		562400	4227678	7.72E-05	9901	DieselExhPM	1.37E-08	1YrCancerRMP_Inh_FAH16to70	*	1.37E-08
2051	ALL		562400	4227777	7.05E-05	9901	DieselExhPM	1.25E-08	1YrCancerRMP_Inh_FAH16to70	*	1.25E-08
2052	ALL		562400	4227875	6.45E-05	9901	DieselExhPM	1.15E-08	1YrCancerRMP_Inh_FAH16to70	*	1.15E-08

HARP2 - HRACalc (dated 22118) 11/21/2023 4:16:13 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: Cancer
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 25

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 4.2
Exposure frequency: 250

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS
Tier2 not used.

****

Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerCancerRisk.csv
Cancer risk total by receptor saved to: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerCancerRiskSumByRec.csv
HRA ran successfully

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	ALL		564003	4225605	0.00044	9901	DieselExhPM	1.14E-07	25YrCancerDerived_InhSoilDerm	*	1.14E-07
2	ALL		564234.8	4225878	0.000363	9901	DieselExhPM	9.44E-08	25YrCancerDerived_InhSoilDerm	*	9.44E-08
3	ALL		563950.2	4225784	0.000567	9901	DieselExhPM	1.47E-07	25YrCancerDerived_InhSoilDerm	*	1.47E-07
4	ALL		564471.2	4225998	0.000222	9901	DieselExhPM	5.77E-08	25YrCancerDerived_InhSoilDerm	*	5.77E-08
5	ALL		564028.5	4225888	0.000544	9901	DieselExhPM	1.42E-07	25YrCancerDerived_InhSoilDerm	*	1.42E-07
6	ALL		564072.8	4225789	0.000462	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
7	ALL		564333	4225909	0.000331	9901	DieselExhPM	8.61E-08	25YrCancerDerived_InhSoilDerm	*	8.61E-08
8	ALL		564734.1	4225544	0.000212	9901	DieselExhPM	5.50E-08	25YrCancerDerived_InhSoilDerm	*	5.50E-08
9	ALL		564375.3	4225648	0.00026	9901	DieselExhPM	6.76E-08	25YrCancerDerived_InhSoilDerm	*	6.76E-08
10	ALL		563319.6	4227454	0.000333	9901	DieselExhPM	8.65E-08	25YrCancerDerived_InhSoilDerm	*	8.65E-08
11	ALL		564405.5	4225726	0.000272	9901	DieselExhPM	7.07E-08	25YrCancerDerived_InhSoilDerm	*	7.07E-08
12	ALL		564406.9	4225753	0.000274	9901	DieselExhPM	7.13E-08	25YrCancerDerived_InhSoilDerm	*	7.13E-08
13	ALL		563642.9	4226248	0.003208	9901	DieselExhPM	8.34E-07	25YrCancerDerived_InhSoilDerm	*	8.34E-07
14	ALL		564403.5	4225776	0.000276	9901	DieselExhPM	7.18E-08	25YrCancerDerived_InhSoilDerm	*	7.18E-08
15	ALL		564647.6	4225612	0.00023	9901	DieselExhPM	5.99E-08	25YrCancerDerived_InhSoilDerm	*	5.99E-08
16	ALL		564318.8	4225771	0.0003	9901	DieselExhPM	7.79E-08	25YrCancerDerived_InhSoilDerm	*	7.79E-08
17	ALL		564400.6	4225801	0.000275	9901	DieselExhPM	7.15E-08	25YrCancerDerived_InhSoilDerm	*	7.15E-08
18	ALL		564399.8	4225824	0.000275	9901	DieselExhPM	7.15E-08	25YrCancerDerived_InhSoilDerm	*	7.15E-08
19	ALL		564220.7	4225999	0.000433	9901	DieselExhPM	1.13E-07	25YrCancerDerived_InhSoilDerm	*	1.13E-07
20	ALL		564396.8	4225861	0.000274	9901	DieselExhPM	7.12E-08	25YrCancerDerived_InhSoilDerm	*	7.12E-08
21	ALL		564308.2	4225814	0.000317	9901	DieselExhPM	8.25E-08	25YrCancerDerived_InhSoilDerm	*	8.25E-08
22	ALL		564370.6	4225652	0.000262	9901	DieselExhPM	6.81E-08	25YrCancerDerived_InhSoilDerm	*	6.81E-08
23	ALL		564401.9	4225843	0.000271	9901	DieselExhPM	7.04E-08	25YrCancerDerived_InhSoilDerm	*	7.04E-08
24	ALL		564179.4	4225995	0.00045	9901	DieselExhPM	1.17E-07	25YrCancerDerived_InhSoilDerm	*	1.17E-07
25	ALL		564443.9	4225890	0.000257	9901	DieselExhPM	6.68E-08	25YrCancerDerived_InhSoilDerm	*	6.68E-08
26	ALL		564473.4	4225843	0.000242	9901	DieselExhPM	6.30E-08	25YrCancerDerived_InhSoilDerm	*	6.30E-08
27	ALL		564466	4225898	0.00024	9901	DieselExhPM	6.25E-08	25YrCancerDerived_InhSoilDerm	*	6.25E-08
28	ALL		564497.6	4225846	0.00023	9901	DieselExhPM	5.98E-08	25YrCancerDerived_InhSoilDerm	*	5.98E-08
29	ALL		564487.5	4225902	0.000229	9901	DieselExhPM	5.96E-08	25YrCancerDerived_InhSoilDerm	*	5.96E-08
30	ALL		564373	4225665	0.000264	9901	DieselExhPM	6.85E-08	25YrCancerDerived_InhSoilDerm	*	6.85E-08
31	ALL		564518.7	4225849	0.000221	9901	DieselExhPM	5.74E-08	25YrCancerDerived_InhSoilDerm	*	5.74E-08
32	ALL		564509.6	4225905	0.000217	9901	DieselExhPM	5.64E-08	25YrCancerDerived_InhSoilDerm	*	5.64E-08
33	ALL		564541	4225852	0.000211	9901	DieselExhPM	5.49E-08	25YrCancerDerived_InhSoilDerm	*	5.49E-08
34	ALL		564532.7	4225908	0.000205	9901	DieselExhPM	5.34E-08	25YrCancerDerived_InhSoilDerm	*	5.34E-08
35	ALL		564298.4	4225768	0.000307	9901	DieselExhPM	7.98E-08	25YrCancerDerived_InhSoilDerm	*	7.98E-08
36	ALL		564635.1	4225597	0.00023	9901	DieselExhPM	5.97E-08	25YrCancerDerived_InhSoilDerm	*	5.97E-08
37	ALL		564745.2	4225773	0.000174	9901	DieselExhPM	4.53E-08	25YrCancerDerived_InhSoilDerm	*	4.53E-08
38	ALL		563353.2	4227487	0.000319	9901	DieselExhPM	8.30E-08	25YrCancerDerived_InhSoilDerm	*	8.30E-08
39	ALL		564563.4	4225856	0.000203	9901	DieselExhPM	5.27E-08	25YrCancerDerived_InhSoilDerm	*	5.27E-08
40	ALL		564556.9	4225911	0.000195	9901	DieselExhPM	5.07E-08	25YrCancerDerived_InhSoilDerm	*	5.07E-08
41	ALL		564584.9	4225859	0.000195	9901	DieselExhPM	5.07E-08	25YrCancerDerived_InhSoilDerm	*	5.07E-08
42	ALL		564578.9	4225917	0.000187	9901	DieselExhPM	4.86E-08	25YrCancerDerived_InhSoilDerm	*	4.86E-08
43	ALL		563634.4	4226382	0.006099	9901	DieselExhPM	1.59E-06	25YrCancerDerived_InhSoilDerm	*	1.59E-06
44	ALL		564217.7	4226020	0.000445	9901	DieselExhPM	1.16E-07	25YrCancerDerived_InhSoilDerm	*	1.16E-07
45	ALL		564393	4225878	0.000277	9901	DieselExhPM	7.20E-08	25YrCancerDerived_InhSoilDerm	*	7.20E-08
46	ALL		564287.9	4225811	0.000324	9901	DieselExhPM	8.43E-08	25YrCancerDerived_InhSoilDerm	*	8.43E-08
47	ALL		564638.5	4225880	0.000174	9901	DieselExhPM	4.53E-08	25YrCancerDerived_InhSoilDerm	*	4.53E-08
48	ALL		564658.1	4225902	0.000166	9901	DieselExhPM	4.32E-08	25YrCancerDerived_InhSoilDerm	*	4.32E-08
49	ALL		564176	4226014	0.000463	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
50	ALL		564648.6	4225972	0.000165	9901	DieselExhPM	4.29E-08	25YrCancerDerived_InhSoilDerm	*	4.29E-08
51	ALL		564691.6	4225950	0.000156	9901	DieselExhPM	4.06E-08	25YrCancerDerived_InhSoilDerm	*	4.06E-08
52	ALL		563637	4226485	0.012281	9901	DieselExhPM	3.19E-06	25YrCancerDerived_InhSoilDerm	*	3.19E-06
53	ALL		564704.5	4225969	0.000155	9901	DieselExhPM	4.03E-08	25YrCancerDerived_InhSoilDerm	*	4.03E-08
54	ALL		564659.3	4226002	0.000165	9901	DieselExhPM	4.29E-08	25YrCancerDerived_InhSoilDerm	*	4.29E-08
55	ALL		564370.3	4225681	0.000268	9901	DieselExhPM	6.97E-08	25YrCancerDerived_InhSoilDerm	*	6.97E-08
56	ALL		564713.5	4225987	0.000155	9901	DieselExhPM	4.04E-08	25YrCancerDerived_InhSoilDerm	*	4.04E-08
57	ALL		564667	4226017	0.000166	9901	DieselExhPM	4.31E-08	25YrCancerDerived_InhSoilDerm	*	4.31E-08
58	ALL		564715.2	4226005	0.000158	9901	DieselExhPM	4.10E-08	25YrCancerDerived_InhSoilDerm	*	4.10E-08
59	ALL		564675	4226034	0.000167	9901	DieselExhPM	4.34E-08	25YrCancerDerived_InhSoilDerm	*	4.34E-08
60	ALL		564727.5	4226025	0.000159	9901	DieselExhPM	4.14E-08	25YrCancerDerived_InhSoilDerm	*	4.14E-08
61	ALL		564682.5	4226052	0.000169	9901	DieselExhPM	4.39E-08	25YrCancerDerived_InhSoilDerm	*	4.39E-08
62	ALL		564734.9	4225793	0.000172	9901	DieselExhPM	4.47E-08	25YrCancerDerived_InhSoilDerm	*	4.47E-08
63	ALL		564278.8	4225765	0.000316	9901	DieselExhPM	8.21E-08	25YrCancerDerived_InhSoilDerm	*	8.21E-08
64	ALL		564621.9	4225585	0.000228	9901	DieselExhPM	5.93E-08	25YrCancerDerived_InhSoilDerm	*	5.93E-08
65	ALL		564727.2	4226038	0.000162	9901	DieselExhPM	4.20E-08	25YrCancerDerived_InhSoilDerm	*	4.20E-08
66	ALL		564008.2	4225550	0.000418	9901	DieselExhPM	1.09E-07	25YrCancerDerived_InhSoilDerm	*	1.09E-07
67	ALL		564031.6	4225759	0.000481	9901	DieselExhPM	1.25E-07	25YrCancerDerived_InhSoilDerm	*	1.25E-07

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
68	ALL		563884.9	4225808	0.00066	9901	DieselExhPM	1.72E-07	25YrCancerDerived_InhSoilDerm	*	1.72E-07
69	ALL		564194.8	4225891	0.000382	9901	DieselExhPM	9.92E-08	25YrCancerDerived_InhSoilDerm	*	9.92E-08
70	ALL		564476.1	4225941	0.000231	9901	DieselExhPM	6.00E-08	25YrCancerDerived_InhSoilDerm	*	6.00E-08
71	ALL		564282.5	4225915	0.000346	9901	DieselExhPM	9.00E-08	25YrCancerDerived_InhSoilDerm	*	9.00E-08
72	ALL		563959	4225735	0.000531	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
73	ALL		564725.9	4225933	0.000151	9901	DieselExhPM	3.93E-08	25YrCancerDerived_InhSoilDerm	*	3.93E-08
74	ALL		564214.9	4226040	0.000455	9901	DieselExhPM	1.18E-07	25YrCancerDerived_InhSoilDerm	*	1.18E-07
75	ALL		564390.5	4225895	0.000279	9901	DieselExhPM	7.26E-08	25YrCancerDerived_InhSoilDerm	*	7.26E-08
76	ALL		564268.3	4225808	0.000333	9901	DieselExhPM	8.66E-08	25YrCancerDerived_InhSoilDerm	*	8.66E-08
77	ALL		563519.3	4227451	0.000559	9901	DieselExhPM	1.45E-07	25YrCancerDerived_InhSoilDerm	*	1.45E-07
78	ALL		564608.5	4225629	0.000236	9901	DieselExhPM	6.15E-08	25YrCancerDerived_InhSoilDerm	*	6.15E-08
79	ALL		564173.3	4226034	0.000477	9901	DieselExhPM	1.24E-07	25YrCancerDerived_InhSoilDerm	*	1.24E-07
80	ALL		564366.8	4225698	0.000274	9901	DieselExhPM	7.11E-08	25YrCancerDerived_InhSoilDerm	*	7.11E-08
81	ALL		564729.6	4225812	0.000168	9901	DieselExhPM	4.37E-08	25YrCancerDerived_InhSoilDerm	*	4.37E-08
82	ALL		564260	4225762	0.000326	9901	DieselExhPM	8.47E-08	25YrCancerDerived_InhSoilDerm	*	8.47E-08
83	ALL		564604.8	4225574	0.000226	9901	DieselExhPM	5.88E-08	25YrCancerDerived_InhSoilDerm	*	5.88E-08
84	ALL		564212.2	4226060	0.000463	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
85	ALL		564392.8	4225914	0.00028	9901	DieselExhPM	7.27E-08	25YrCancerDerived_InhSoilDerm	*	7.27E-08
86	ALL		564253.7	4225800	0.000338	9901	DieselExhPM	8.79E-08	25YrCancerDerived_InhSoilDerm	*	8.79E-08
87	ALL		564587.9	4225639	0.00024	9901	DieselExhPM	6.23E-08	25YrCancerDerived_InhSoilDerm	*	6.23E-08
88	ALL		564170.5	4226054	0.000491	9901	DieselExhPM	1.28E-07	25YrCancerDerived_InhSoilDerm	*	1.28E-07
89	ALL		563691.1	4226973	0.01568	9901	DieselExhPM	4.08E-06	25YrCancerDerived_InhSoilDerm	*	4.08E-06
90	ALL		564629	4225674	0.000237	9901	DieselExhPM	6.16E-08	25YrCancerDerived_InhSoilDerm	*	6.16E-08
91	ALL		564364.4	4225715	0.000279	9901	DieselExhPM	7.25E-08	25YrCancerDerived_InhSoilDerm	*	7.25E-08
92	ALL		563915.2	4227131	0.005659	9901	DieselExhPM	1.47E-06	25YrCancerDerived_InhSoilDerm	*	1.47E-06
93	ALL		564724.8	4225832	0.000165	9901	DieselExhPM	4.28E-08	25YrCancerDerived_InhSoilDerm	*	4.28E-08
94	ALL		564586.8	4225565	0.000224	9901	DieselExhPM	5.83E-08	25YrCancerDerived_InhSoilDerm	*	5.83E-08
95	ALL		564242.6	4225760	0.000334	9901	DieselExhPM	8.69E-08	25YrCancerDerived_InhSoilDerm	*	8.69E-08
96	ALL		563742.3	4227210	0.005169	9901	DieselExhPM	1.34E-06	25YrCancerDerived_InhSoilDerm	*	1.34E-06
97	ALL		564573.2	4225602	0.000234	9901	DieselExhPM	6.09E-08	25YrCancerDerived_InhSoilDerm	*	6.09E-08
98	ALL		564209.2	4226080	0.00047	9901	DieselExhPM	1.22E-07	25YrCancerDerived_InhSoilDerm	*	1.22E-07
99	ALL		564390.8	4225932	0.00028	9901	DieselExhPM	7.28E-08	25YrCancerDerived_InhSoilDerm	*	7.28E-08
100	ALL		564150.5	4225532	0.000349	9901	DieselExhPM	9.08E-08	25YrCancerDerived_InhSoilDerm	*	9.08E-08
101	ALL		564236.3	4225798	0.000347	9901	DieselExhPM	9.01E-08	25YrCancerDerived_InhSoilDerm	*	9.01E-08
102	ALL		564567.5	4225638	0.000241	9901	DieselExhPM	6.27E-08	25YrCancerDerived_InhSoilDerm	*	6.27E-08
103	ALL		564166.5	4226074	0.000504	9901	DieselExhPM	1.31E-07	25YrCancerDerived_InhSoilDerm	*	1.31E-07
104	ALL		564285.6	4225722	0.000306	9901	DieselExhPM	7.94E-08	25YrCancerDerived_InhSoilDerm	*	7.94E-08
105	ALL		564607.3	4225684	0.000243	9901	DieselExhPM	6.30E-08	25YrCancerDerived_InhSoilDerm	*	6.30E-08
106	ALL		564362	4225733	0.000284	9901	DieselExhPM	7.37E-08	25YrCancerDerived_InhSoilDerm	*	7.37E-08
107	ALL		564563.4	4225599	0.000234	9901	DieselExhPM	6.08E-08	25YrCancerDerived_InhSoilDerm	*	6.08E-08
108	ALL		563496.8	4227224	0.001024	9901	DieselExhPM	2.66E-07	25YrCancerDerived_InhSoilDerm	*	2.66E-07
109	ALL		564720.4	4225854	0.00016	9901	DieselExhPM	4.16E-08	25YrCancerDerived_InhSoilDerm	*	4.16E-08
110	ALL		564574.6	4225559	0.000222	9901	DieselExhPM	5.78E-08	25YrCancerDerived_InhSoilDerm	*	5.78E-08
111	ALL		564226.1	4225757	0.000343	9901	DieselExhPM	8.91E-08	25YrCancerDerived_InhSoilDerm	*	8.91E-08
112	ALL		564111.2	4225532	0.000364	9901	DieselExhPM	9.46E-08	25YrCancerDerived_InhSoilDerm	*	9.46E-08
113	ALL		564388.3	4225949	0.000281	9901	DieselExhPM	7.29E-08	25YrCancerDerived_InhSoilDerm	*	7.29E-08
114	ALL		564219.7	4225795	0.000355	9901	DieselExhPM	9.23E-08	25YrCancerDerived_InhSoilDerm	*	9.23E-08
115	ALL		564548.3	4225597	0.000233	9901	DieselExhPM	6.07E-08	25YrCancerDerived_InhSoilDerm	*	6.07E-08
116	ALL		564206.6	4226100	0.000476	9901	DieselExhPM	1.24E-07	25YrCancerDerived_InhSoilDerm	*	1.24E-07
117	ALL		564141.1	4225556	0.000359	9901	DieselExhPM	9.33E-08	25YrCancerDerived_InhSoilDerm	*	9.33E-08
118	ALL		564550	4225635	0.000242	9901	DieselExhPM	6.28E-08	25YrCancerDerived_InhSoilDerm	*	6.28E-08
119	ALL		564582.3	4225683	0.000248	9901	DieselExhPM	6.44E-08	25YrCancerDerived_InhSoilDerm	*	6.44E-08
120	ALL		564359.5	4225750	0.000288	9901	DieselExhPM	7.49E-08	25YrCancerDerived_InhSoilDerm	*	7.49E-08
121	ALL		564385.8	4225967	0.00028	9901	DieselExhPM	7.28E-08	25YrCancerDerived_InhSoilDerm	*	7.28E-08
122	ALL		563634.4	4227497	0.001004	9901	DieselExhPM	2.61E-07	25YrCancerDerived_InhSoilDerm	*	2.61E-07
123	ALL		564209.5	4225755	0.000352	9901	DieselExhPM	9.15E-08	25YrCancerDerived_InhSoilDerm	*	9.15E-08
124	ALL		564554	4225552	0.000221	9901	DieselExhPM	5.73E-08	25YrCancerDerived_InhSoilDerm	*	5.73E-08
125	ALL		564706.8	4225875	0.000159	9901	DieselExhPM	4.14E-08	25YrCancerDerived_InhSoilDerm	*	4.14E-08
126	ALL		564107.4	4225552	0.000371	9901	DieselExhPM	9.64E-08	25YrCancerDerived_InhSoilDerm	*	9.64E-08
127	ALL		563295.7	4227226	0.000508	9901	DieselExhPM	1.32E-07	25YrCancerDerived_InhSoilDerm	*	1.32E-07
128	ALL		564205.8	4226122	0.000475	9901	DieselExhPM	1.24E-07	25YrCancerDerived_InhSoilDerm	*	1.24E-07
129	ALL		564383.3	4225984	0.000279	9901	DieselExhPM	7.25E-08	25YrCancerDerived_InhSoilDerm	*	7.25E-08
130	ALL		564203.2	4225793	0.000364	9901	DieselExhPM	9.47E-08	25YrCancerDerived_InhSoilDerm	*	9.47E-08
131	ALL		564138.1	4225575	0.000365	9901	DieselExhPM	9.48E-08	25YrCancerDerived_InhSoilDerm	*	9.48E-08
132	ALL		564532.5	4225633	0.000242	9901	DieselExhPM	6.28E-08	25YrCancerDerived_InhSoilDerm	*	6.28E-08
133	ALL		563577.6	4227631	0.000488	9901	DieselExhPM	1.27E-07	25YrCancerDerived_InhSoilDerm	*	1.27E-07
134	ALL		564526.3	4225589	0.000232	9901	DieselExhPM	6.02E-08	25YrCancerDerived_InhSoilDerm	*	6.02E-08

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
135	ALL		564356.8	4225769	0.000293	9901	DieselExhPM	7.61E-08	25YrCancerDerived_InhSoilDerm	*	7.61E-08
136	ALL		564565.9	4225683	0.000251	9901	DieselExhPM	6.52E-08	25YrCancerDerived_InhSoilDerm	*	6.52E-08
137	ALL		564687.4	4225890	0.000162	9901	DieselExhPM	4.20E-08	25YrCancerDerived_InhSoilDerm	*	4.20E-08
138	ALL		564193.2	4225752	0.000362	9901	DieselExhPM	9.41E-08	25YrCancerDerived_InhSoilDerm	*	9.41E-08
139	ALL		564103.1	4225572	0.000379	9901	DieselExhPM	9.84E-08	25YrCancerDerived_InhSoilDerm	*	9.84E-08
140	ALL		564537.1	4225547	0.000219	9901	DieselExhPM	5.70E-08	25YrCancerDerived_InhSoilDerm	*	5.70E-08
141	ALL		564296.1	4225686	0.000295	9901	DieselExhPM	7.66E-08	25YrCancerDerived_InhSoilDerm	*	7.66E-08
142	ALL		564380.8	4226002	0.000277	9901	DieselExhPM	7.21E-08	25YrCancerDerived_InhSoilDerm	*	7.21E-08
143	ALL		564186.6	4225791	0.000375	9901	DieselExhPM	9.74E-08	25YrCancerDerived_InhSoilDerm	*	9.74E-08
144	ALL		564124.2	4225609	0.00038	9901	DieselExhPM	9.87E-08	25YrCancerDerived_InhSoilDerm	*	9.87E-08
145	ALL		564172.6	4226118	0.000517	9901	DieselExhPM	1.34E-07	25YrCancerDerived_InhSoilDerm	*	1.34E-07
146	ALL		564426	4226004	0.00025	9901	DieselExhPM	6.49E-08	25YrCancerDerived_InhSoilDerm	*	6.49E-08
147	ALL		564515.1	4225630	0.000241	9901	DieselExhPM	6.27E-08	25YrCancerDerived_InhSoilDerm	*	6.27E-08
148	ALL		564354.1	4225788	0.000297	9901	DieselExhPM	7.71E-08	25YrCancerDerived_InhSoilDerm	*	7.71E-08
149	ALL		564549	4225681	0.000253	9901	DieselExhPM	6.57E-08	25YrCancerDerived_InhSoilDerm	*	6.57E-08
150	ALL		564176.6	4225750	0.000372	9901	DieselExhPM	9.68E-08	25YrCancerDerived_InhSoilDerm	*	9.68E-08
151	ALL		564090.9	4225587	0.000389	9901	DieselExhPM	1.01E-07	25YrCancerDerived_InhSoilDerm	*	1.01E-07
152	ALL		564518.1	4225542	0.000218	9901	DieselExhPM	5.68E-08	25YrCancerDerived_InhSoilDerm	*	5.68E-08
153	ALL		564112.6	4225626	0.00039	9901	DieselExhPM	1.01E-07	25YrCancerDerived_InhSoilDerm	*	1.01E-07
154	ALL		564508.2	4225583	0.00023	9901	DieselExhPM	5.98E-08	25YrCancerDerived_InhSoilDerm	*	5.98E-08
155	ALL		564378.3	4226019	0.000275	9901	DieselExhPM	7.16E-08	25YrCancerDerived_InhSoilDerm	*	7.16E-08
156	ALL		564170	4225789	0.000385	9901	DieselExhPM	1.00E-07	25YrCancerDerived_InhSoilDerm	*	1.00E-07
157	ALL		564151.7	4226117	0.000541	9901	DieselExhPM	1.41E-07	25YrCancerDerived_InhSoilDerm	*	1.41E-07
158	ALL		564428.2	4226025	0.000242	9901	DieselExhPM	6.29E-08	25YrCancerDerived_InhSoilDerm	*	6.29E-08
159	ALL		564497.7	4225627	0.000241	9901	DieselExhPM	6.25E-08	25YrCancerDerived_InhSoilDerm	*	6.25E-08
160	ALL		564531.9	4225678	0.000254	9901	DieselExhPM	6.61E-08	25YrCancerDerived_InhSoilDerm	*	6.61E-08
161	ALL		564353.3	4225803	0.0003	9901	DieselExhPM	7.79E-08	25YrCancerDerived_InhSoilDerm	*	7.79E-08
162	ALL		564159.3	4225747	0.000384	9901	DieselExhPM	9.98E-08	25YrCancerDerived_InhSoilDerm	*	9.98E-08
163	ALL		564499.4	4225539	0.000219	9901	DieselExhPM	5.70E-08	25YrCancerDerived_InhSoilDerm	*	5.70E-08
164	ALL		564082.4	4225608	0.000399	9901	DieselExhPM	1.04E-07	25YrCancerDerived_InhSoilDerm	*	1.04E-07
165	ALL		564375.9	4226035	0.000271	9901	DieselExhPM	7.05E-08	25YrCancerDerived_InhSoilDerm	*	7.05E-08
166	ALL		564152.6	4225786	0.000396	9901	DieselExhPM	1.03E-07	25YrCancerDerived_InhSoilDerm	*	1.03E-07
167	ALL		564131.6	4226117	0.000564	9901	DieselExhPM	1.47E-07	25YrCancerDerived_InhSoilDerm	*	1.47E-07
168	ALL		564097.3	4225643	0.000403	9901	DieselExhPM	1.05E-07	25YrCancerDerived_InhSoilDerm	*	1.05E-07
169	ALL		564480.2	4225624	0.00024	9901	DieselExhPM	6.24E-08	25YrCancerDerived_InhSoilDerm	*	6.24E-08
170	ALL		564322.8	4225930	0.000341	9901	DieselExhPM	8.87E-08	25YrCancerDerived_InhSoilDerm	*	8.87E-08
171	ALL		564023.2	4225606	0.000429	9901	DieselExhPM	1.11E-07	25YrCancerDerived_InhSoilDerm	*	1.11E-07
172	ALL		564036.7	4225520	0.000392	9901	DieselExhPM	1.02E-07	25YrCancerDerived_InhSoilDerm	*	1.02E-07
173	ALL		564067.7	4225809	0.000474	9901	DieselExhPM	1.23E-07	25YrCancerDerived_InhSoilDerm	*	1.23E-07
174	ALL		563931.3	4225781	0.000586	9901	DieselExhPM	1.52E-07	25YrCancerDerived_InhSoilDerm	*	1.52E-07
175	ALL		564491.2	4225998	0.000211	9901	DieselExhPM	5.48E-08	25YrCancerDerived_InhSoilDerm	*	5.48E-08
176	ALL		564008.6	4225885	0.000564	9901	DieselExhPM	1.47E-07	25YrCancerDerived_InhSoilDerm	*	1.47E-07
177	ALL		564237.7	4225900	0.000374	9901	DieselExhPM	9.71E-08	25YrCancerDerived_InhSoilDerm	*	9.71E-08
178	ALL		564730.8	4225520	0.000209	9901	DieselExhPM	5.44E-08	25YrCancerDerived_InhSoilDerm	*	5.44E-08
179	ALL		564491	4225580	0.00023	9901	DieselExhPM	5.98E-08	25YrCancerDerived_InhSoilDerm	*	5.98E-08
180	ALL		564514.8	4225675	0.000255	9901	DieselExhPM	6.62E-08	25YrCancerDerived_InhSoilDerm	*	6.62E-08
181	ALL		564351.6	4225823	0.000303	9901	DieselExhPM	7.89E-08	25YrCancerDerived_InhSoilDerm	*	7.89E-08
182	ALL		564482	4225536	0.00022	9901	DieselExhPM	5.73E-08	25YrCancerDerived_InhSoilDerm	*	5.73E-08
183	ALL		564064	4225621	0.000413	9901	DieselExhPM	1.07E-07	25YrCancerDerived_InhSoilDerm	*	1.07E-07
184	ALL		564373.4	4226052	0.00027	9901	DieselExhPM	7.01E-08	25YrCancerDerived_InhSoilDerm	*	7.01E-08
185	ALL		564082.9	4225657	0.000414	9901	DieselExhPM	1.08E-07	25YrCancerDerived_InhSoilDerm	*	1.08E-07
186	ALL		564111.5	4226117	0.000587	9901	DieselExhPM	1.53E-07	25YrCancerDerived_InhSoilDerm	*	1.53E-07
187	ALL		564460.5	4225620	0.00024	9901	DieselExhPM	6.23E-08	25YrCancerDerived_InhSoilDerm	*	6.23E-08
188	ALL		564496.8	4225671	0.000255	9901	DieselExhPM	6.62E-08	25YrCancerDerived_InhSoilDerm	*	6.62E-08
189	ALL		564379.5	4226073	0.000261	9901	DieselExhPM	6.79E-08	25YrCancerDerived_InhSoilDerm	*	6.79E-08
190	ALL		564464.5	4225534	0.000223	9901	DieselExhPM	5.79E-08	25YrCancerDerived_InhSoilDerm	*	5.79E-08
191	ALL		564044.8	4225635	0.000428	9901	DieselExhPM	1.11E-07	25YrCancerDerived_InhSoilDerm	*	1.11E-07
192	ALL		564473.9	4225578	0.000231	9901	DieselExhPM	5.99E-08	25YrCancerDerived_InhSoilDerm	*	5.99E-08
193	ALL		564064.5	4225668	0.000428	9901	DieselExhPM	1.11E-07	25YrCancerDerived_InhSoilDerm	*	1.11E-07
194	ALL		564093.4	4226117	0.000608	9901	DieselExhPM	1.58E-07	25YrCancerDerived_InhSoilDerm	*	1.58E-07
195	ALL		564384.8	4226093	0.000255	9901	DieselExhPM	6.63E-08	25YrCancerDerived_InhSoilDerm	*	6.63E-08
196	ALL		564446.2	4225531	0.000226	9901	DieselExhPM	5.87E-08	25YrCancerDerived_InhSoilDerm	*	5.87E-08
197	ALL		564022.2	4225644	0.000444	9901	DieselExhPM	1.15E-07	25YrCancerDerived_InhSoilDerm	*	1.15E-07
198	ALL		564033	4225560	0.000407	9901	DieselExhPM	1.06E-07	25YrCancerDerived_InhSoilDerm	*	1.06E-07
199	ALL		564025.9	4225778	0.000494	9901	DieselExhPM	1.28E-07	25YrCancerDerived_InhSoilDerm	*	1.28E-07
200	ALL		564495.8	4225935	0.000221	9901	DieselExhPM	5.74E-08	25YrCancerDerived_InhSoilDerm	*	5.74E-08
201	ALL		564743.3	4225954	0.000149	9901	DieselExhPM	3.88E-08	25YrCancerDerived_InhSoilDerm	*	3.88E-08

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
202	ALL		564279.1	4225939	0.000358	9901	DieselExhPM	9.31E-08	25YrCancerDerived_InhSoilDerm	*	9.31E-08
203	ALL		564191.8	4225913	0.000395	9901	DieselExhPM	1.03E-07	25YrCancerDerived_InhSoilDerm	*	1.03E-07
204	ALL		563939	4225732	0.00055	9901	DieselExhPM	1.43E-07	25YrCancerDerived_InhSoilDerm	*	1.43E-07
205	ALL		563882.1	4225828	0.000679	9901	DieselExhPM	1.77E-07	25YrCancerDerived_InhSoilDerm	*	1.77E-07
206	ALL		564046.4	4225677	0.000442	9901	DieselExhPM	1.15E-07	25YrCancerDerived_InhSoilDerm	*	1.15E-07
207	ALL		564051.7	4226111	0.000654	9901	DieselExhPM	1.70E-07	25YrCancerDerived_InhSoilDerm	*	1.70E-07
208	ALL		563288.4	4227121	0.000621	9901	DieselExhPM	1.61E-07	25YrCancerDerived_InhSoilDerm	*	1.61E-07
209	ALL		564454.6	4225575	0.000232	9901	DieselExhPM	6.03E-08	25YrCancerDerived_InhSoilDerm	*	6.03E-08
210	ALL		564183.3	4225535	0.000335	9901	DieselExhPM	8.71E-08	25YrCancerDerived_InhSoilDerm	*	8.71E-08
211	ALL		564181	4225551	0.000339	9901	DieselExhPM	8.81E-08	25YrCancerDerived_InhSoilDerm	*	8.81E-08
212	ALL		564178.6	4225568	0.000343	9901	DieselExhPM	8.92E-08	25YrCancerDerived_InhSoilDerm	*	8.92E-08
213	ALL		563998.9	4225647	0.000461	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
214	ALL		564176.1	4225585	0.000348	9901	DieselExhPM	9.04E-08	25YrCancerDerived_InhSoilDerm	*	9.04E-08
215	ALL		564026.7	4225685	0.000457	9901	DieselExhPM	1.19E-07	25YrCancerDerived_InhSoilDerm	*	1.19E-07
216	ALL		564030.1	4226111	0.000682	9901	DieselExhPM	1.77E-07	25YrCancerDerived_InhSoilDerm	*	1.77E-07
217	ALL		563978.8	4225647	0.000475	9901	DieselExhPM	1.23E-07	25YrCancerDerived_InhSoilDerm	*	1.23E-07
218	ALL		564005.6	4225688	0.000473	9901	DieselExhPM	1.23E-07	25YrCancerDerived_InhSoilDerm	*	1.23E-07
219	ALL		564010	4226111	0.000711	9901	DieselExhPM	1.85E-07	25YrCancerDerived_InhSoilDerm	*	1.85E-07
220	ALL		564266.7	4225719	0.000314	9901	DieselExhPM	8.17E-08	25YrCancerDerived_InhSoilDerm	*	8.17E-08
221	ALL		564169.8	4225622	0.000357	9901	DieselExhPM	9.28E-08	25YrCancerDerived_InhSoilDerm	*	9.28E-08
222	ALL		564159.1	4225634	0.000365	9901	DieselExhPM	9.48E-08	25YrCancerDerived_InhSoilDerm	*	9.48E-08
223	ALL		563958	4225645	0.00049	9901	DieselExhPM	1.27E-07	25YrCancerDerived_InhSoilDerm	*	1.27E-07
224	ALL		564148	4225648	0.000373	9901	DieselExhPM	9.70E-08	25YrCancerDerived_InhSoilDerm	*	9.70E-08
225	ALL		564136.7	4225662	0.000382	9901	DieselExhPM	9.93E-08	25YrCancerDerived_InhSoilDerm	*	9.93E-08
226	ALL		564125.5	4225677	0.000392	9901	DieselExhPM	1.02E-07	25YrCancerDerived_InhSoilDerm	*	1.02E-07
227	ALL		563983.7	4225689	0.00049	9901	DieselExhPM	1.27E-07	25YrCancerDerived_InhSoilDerm	*	1.27E-07
228	ALL		563989.9	4226111	0.000742	9901	DieselExhPM	1.93E-07	25YrCancerDerived_InhSoilDerm	*	1.93E-07
229	ALL		564119.9	4225695	0.0004	9901	DieselExhPM	1.04E-07	25YrCancerDerived_InhSoilDerm	*	1.04E-07
230	ALL		564114.5	4225711	0.000407	9901	DieselExhPM	1.06E-07	25YrCancerDerived_InhSoilDerm	*	1.06E-07
231	ALL		563970.9	4226116	0.000779	9901	DieselExhPM	2.02E-07	25YrCancerDerived_InhSoilDerm	*	2.02E-07
232	ALL		563963.1	4225689	0.000506	9901	DieselExhPM	1.32E-07	25YrCancerDerived_InhSoilDerm	*	1.32E-07
233	ALL		562858.9	4227546	0.000127	9901	DieselExhPM	3.31E-08	25YrCancerDerived_InhSoilDerm	*	3.31E-08
234	ALL		564278.9	4225684	0.000303	9901	DieselExhPM	7.87E-08	25YrCancerDerived_InhSoilDerm	*	7.87E-08
235	ALL		563945.2	4226113	0.000822	9901	DieselExhPM	2.14E-07	25YrCancerDerived_InhSoilDerm	*	2.14E-07
236	ALL		563942.9	4225686	0.000522	9901	DieselExhPM	1.36E-07	25YrCancerDerived_InhSoilDerm	*	1.36E-07
237	ALL		564154.4	4225821	0.000403	9901	DieselExhPM	1.05E-07	25YrCancerDerived_InhSoilDerm	*	1.05E-07
238	ALL		564103.1	4225812	0.000438	9901	DieselExhPM	1.14E-07	25YrCancerDerived_InhSoilDerm	*	1.14E-07
239	ALL		564150.9	4225843	0.000412	9901	DieselExhPM	1.07E-07	25YrCancerDerived_InhSoilDerm	*	1.07E-07
240	ALL		564109.1	4225837	0.000442	9901	DieselExhPM	1.15E-07	25YrCancerDerived_InhSoilDerm	*	1.15E-07
241	ALL		564147.9	4225864	0.000422	9901	DieselExhPM	1.10E-07	25YrCancerDerived_InhSoilDerm	*	1.10E-07
242	ALL		564097.7	4225853	0.000457	9901	DieselExhPM	1.19E-07	25YrCancerDerived_InhSoilDerm	*	1.19E-07
243	ALL		564144.8	4225885	0.000432	9901	DieselExhPM	1.12E-07	25YrCancerDerived_InhSoilDerm	*	1.12E-07
244	ALL		564097.2	4225894	0.000472	9901	DieselExhPM	1.23E-07	25YrCancerDerived_InhSoilDerm	*	1.23E-07
245	ALL		564141.9	4225906	0.000442	9901	DieselExhPM	1.15E-07	25YrCancerDerived_InhSoilDerm	*	1.15E-07
246	ALL		564092.3	4225918	0.000483	9901	DieselExhPM	1.26E-07	25YrCancerDerived_InhSoilDerm	*	1.26E-07
247	ALL		564139	4225927	0.000453	9901	DieselExhPM	1.18E-07	25YrCancerDerived_InhSoilDerm	*	1.18E-07
248	ALL		564087.4	4225941	0.000497	9901	DieselExhPM	1.29E-07	25YrCancerDerived_InhSoilDerm	*	1.29E-07
249	ALL		564137.4	4225949	0.000465	9901	DieselExhPM	1.21E-07	25YrCancerDerived_InhSoilDerm	*	1.21E-07
250	ALL		563933.4	4226096	0.000821	9901	DieselExhPM	2.13E-07	25YrCancerDerived_InhSoilDerm	*	2.13E-07
251	ALL		563921.6	4225682	0.000541	9901	DieselExhPM	1.41E-07	25YrCancerDerived_InhSoilDerm	*	1.41E-07
252	ALL		563917.9	4225642	0.000524	9901	DieselExhPM	1.36E-07	25YrCancerDerived_InhSoilDerm	*	1.36E-07
253	ALL		563938.1	4226075	0.000789	9901	DieselExhPM	2.05E-07	25YrCancerDerived_InhSoilDerm	*	2.05E-07
254	ALL		563902.5	4225680	0.000558	9901	DieselExhPM	1.45E-07	25YrCancerDerived_InhSoilDerm	*	1.45E-07
255	ALL		564320	4225950	0.000348	9901	DieselExhPM	9.04E-08	25YrCancerDerived_InhSoilDerm	*	9.04E-08
256	ALL		564038.2	4225594	0.000416	9901	DieselExhPM	1.08E-07	25YrCancerDerived_InhSoilDerm	*	1.08E-07
257	ALL		564235	4225920	0.000386	9901	DieselExhPM	1.00E-07	25YrCancerDerived_InhSoilDerm	*	1.00E-07
258	ALL		564514.1	4225989	0.000202	9901	DieselExhPM	5.25E-08	25YrCancerDerived_InhSoilDerm	*	5.25E-08
259	ALL		563988.7	4225883	0.000584	9901	DieselExhPM	1.52E-07	25YrCancerDerived_InhSoilDerm	*	1.52E-07
260	ALL		564064.9	4225829	0.000485	9901	DieselExhPM	1.26E-07	25YrCancerDerived_InhSoilDerm	*	1.26E-07
261	ALL		564060.6	4225530	0.000384	9901	DieselExhPM	9.98E-08	25YrCancerDerived_InhSoilDerm	*	9.98E-08
262	ALL		564129	4225986	0.000491	9901	DieselExhPM	1.28E-07	25YrCancerDerived_InhSoilDerm	*	1.28E-07
263	ALL		564126.1	4226007	0.000506	9901	DieselExhPM	1.32E-07	25YrCancerDerived_InhSoilDerm	*	1.32E-07
264	ALL		564081.3	4226017	0.000546	9901	DieselExhPM	1.42E-07	25YrCancerDerived_InhSoilDerm	*	1.42E-07
265	ALL		563895.8	4225638	0.000542	9901	DieselExhPM	1.41E-07	25YrCancerDerived_InhSoilDerm	*	1.41E-07
266	ALL		564123.3	4226027	0.000522	9901	DieselExhPM	1.36E-07	25YrCancerDerived_InhSoilDerm	*	1.36E-07
267	ALL		564078.5	4226037	0.000563	9901	DieselExhPM	1.46E-07	25YrCancerDerived_InhSoilDerm	*	1.46E-07
268	ALL		564120.6	4226047	0.000537	9901	DieselExhPM	1.40E-07	25YrCancerDerived_InhSoilDerm	*	1.40E-07

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
269	ALL		564121.7	4226067	0.00055	9901	DieselExhPM	1.43E-07	25YrCancerDerived_InhSoilDerm	*	1.43E-07
270	ALL		563942.9	4226056	0.000762	9901	DieselExhPM	1.98E-07	25YrCancerDerived_InhSoilDerm	*	1.98E-07
271	ALL		563882.2	4225678	0.000577	9901	DieselExhPM	1.50E-07	25YrCancerDerived_InhSoilDerm	*	1.50E-07
272	ALL		563873.3	4225636	0.000562	9901	DieselExhPM	1.46E-07	25YrCancerDerived_InhSoilDerm	*	1.46E-07
273	ALL		563861.3	4225675	0.000596	9901	DieselExhPM	1.55E-07	25YrCancerDerived_InhSoilDerm	*	1.55E-07
274	ALL		563946.3	4226037	0.000738	9901	DieselExhPM	1.92E-07	25YrCancerDerived_InhSoilDerm	*	1.92E-07
275	ALL		564275.8	4225964	0.00037	9901	DieselExhPM	9.61E-08	25YrCancerDerived_InhSoilDerm	*	9.61E-08
276	ALL		564189	4225933	0.000407	9901	DieselExhPM	1.06E-07	25YrCancerDerived_InhSoilDerm	*	1.06E-07
277	ALL		563984.4	4225830	0.000558	9901	DieselExhPM	1.45E-07	25YrCancerDerived_InhSoilDerm	*	1.45E-07
278	ALL		564519.8	4225948	0.000206	9901	DieselExhPM	5.36E-08	25YrCancerDerived_InhSoilDerm	*	5.36E-08
279	ALL		563918.4	4225731	0.00057	9901	DieselExhPM	1.48E-07	25YrCancerDerived_InhSoilDerm	*	1.48E-07
280	ALL		564022.8	4225798	0.000506	9901	DieselExhPM	1.31E-07	25YrCancerDerived_InhSoilDerm	*	1.31E-07
281	ALL		563879.4	4225848	0.000699	9901	DieselExhPM	1.82E-07	25YrCancerDerived_InhSoilDerm	*	1.82E-07
282	ALL		564042.8	4225578	0.000408	9901	DieselExhPM	1.06E-07	25YrCancerDerived_InhSoilDerm	*	1.06E-07
283	ALL		564261.7	4225682	0.000312	9901	DieselExhPM	8.10E-08	25YrCancerDerived_InhSoilDerm	*	8.10E-08
284	ALL		563949.5	4226017	0.000716	9901	DieselExhPM	1.86E-07	25YrCancerDerived_InhSoilDerm	*	1.86E-07
285	ALL		563953.6	4225991	0.000688	9901	DieselExhPM	1.79E-07	25YrCancerDerived_InhSoilDerm	*	1.79E-07
286	ALL		563995.2	4225991	0.000632	9901	DieselExhPM	1.64E-07	25YrCancerDerived_InhSoilDerm	*	1.64E-07
287	ALL		563998.2	4225969	0.000614	9901	DieselExhPM	1.60E-07	25YrCancerDerived_InhSoilDerm	*	1.60E-07
288	ALL		564069	4225895	0.000506	9901	DieselExhPM	1.32E-07	25YrCancerDerived_InhSoilDerm	*	1.32E-07
289	ALL		564256	4225842	0.00034	9901	DieselExhPM	8.83E-08	25YrCancerDerived_InhSoilDerm	*	8.83E-08
290	ALL		564323.7	4225856	0.000313	9901	DieselExhPM	8.14E-08	25YrCancerDerived_InhSoilDerm	*	8.14E-08
291	ALL		563964.8	4225597	0.000464	9901	DieselExhPM	1.21E-07	25YrCancerDerived_InhSoilDerm	*	1.21E-07
292	ALL		564430.7	4225981	0.000251	9901	DieselExhPM	6.54E-08	25YrCancerDerived_InhSoilDerm	*	6.54E-08
293	ALL		564091.4	4225750	0.000435	9901	DieselExhPM	1.13E-07	25YrCancerDerived_InhSoilDerm	*	1.13E-07
294	ALL		563988.9	4225787	0.000531	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
295	ALL		563979	4226674	0.004405	9901	DieselExhPM	1.15E-06	25YrCancerDerived_InhSoilDerm	*	1.15E-06
296	ALL		564249.4	4225717	0.000323	9901	DieselExhPM	8.40E-08	25YrCancerDerived_InhSoilDerm	*	8.40E-08
297	ALL		564456.1	4225788	0.00028	9901	DieselExhPM	7.27E-08	25YrCancerDerived_InhSoilDerm	*	7.27E-08
298	ALL		564116.4	4225781	0.000422	9901	DieselExhPM	1.10E-07	25YrCancerDerived_InhSoilDerm	*	1.10E-07
299	ALL		564613	4225922	0.000177	9901	DieselExhPM	4.61E-08	25YrCancerDerived_InhSoilDerm	*	4.61E-08
300	ALL		564454.5	4225744	0.00027	9901	DieselExhPM	7.02E-08	25YrCancerDerived_InhSoilDerm	*	7.02E-08
301	ALL		564408.4	4225527	0.000236	9901	DieselExhPM	6.14E-08	25YrCancerDerived_InhSoilDerm	*	6.14E-08
302	ALL		564120.6	4225742	0.000412	9901	DieselExhPM	1.07E-07	25YrCancerDerived_InhSoilDerm	*	1.07E-07
303	ALL		564405.9	4225565	0.000241	9901	DieselExhPM	6.27E-08	25YrCancerDerived_InhSoilDerm	*	6.27E-08
304	ALL		564415.4	4225609	0.000243	9901	DieselExhPM	6.31E-08	25YrCancerDerived_InhSoilDerm	*	6.31E-08
305	ALL		564626.5	4225981	0.000168	9901	DieselExhPM	4.38E-08	25YrCancerDerived_InhSoilDerm	*	4.38E-08
306	ALL		564485	4225792	0.00027	9901	DieselExhPM	7.01E-08	25YrCancerDerived_InhSoilDerm	*	7.01E-08
307	ALL		563253.8	4227637	0.00023	9901	DieselExhPM	5.99E-08	25YrCancerDerived_InhSoilDerm	*	5.99E-08
308	ALL		564475.2	4225747	0.000267	9901	DieselExhPM	6.93E-08	25YrCancerDerived_InhSoilDerm	*	6.93E-08
309	ALL		564390.1	4225524	0.000243	9901	DieselExhPM	6.32E-08	25YrCancerDerived_InhSoilDerm	*	6.32E-08
310	ALL		564394.2	4225566	0.000244	9901	DieselExhPM	6.35E-08	25YrCancerDerived_InhSoilDerm	*	6.35E-08
311	ALL		564596.4	4225943	0.000179	9901	DieselExhPM	4.66E-08	25YrCancerDerived_InhSoilDerm	*	4.66E-08
312	ALL		564397.7	4225607	0.000247	9901	DieselExhPM	6.42E-08	25YrCancerDerived_InhSoilDerm	*	6.42E-08
313	ALL		564495.4	4225750	0.000261	9901	DieselExhPM	6.78E-08	25YrCancerDerived_InhSoilDerm	*	6.78E-08
314	ALL		564372.9	4225522	0.00025	9901	DieselExhPM	6.49E-08	25YrCancerDerived_InhSoilDerm	*	6.49E-08
315	ALL		564372.3	4225561	0.000252	9901	DieselExhPM	6.54E-08	25YrCancerDerived_InhSoilDerm	*	6.54E-08
316	ALL		564577.4	4225961	0.000183	9901	DieselExhPM	4.76E-08	25YrCancerDerived_InhSoilDerm	*	4.76E-08
317	ALL		564380.5	4225605	0.000252	9901	DieselExhPM	6.54E-08	25YrCancerDerived_InhSoilDerm	*	6.54E-08
318	ALL		564509.7	4225795	0.000256	9901	DieselExhPM	6.66E-08	25YrCancerDerived_InhSoilDerm	*	6.66E-08
319	ALL		564613.4	4225998	0.000171	9901	DieselExhPM	4.44E-08	25YrCancerDerived_InhSoilDerm	*	4.44E-08
320	ALL		564516.5	4225753	0.000252	9901	DieselExhPM	6.54E-08	25YrCancerDerived_InhSoilDerm	*	6.54E-08
321	ALL		564354.5	4225558	0.000259	9901	DieselExhPM	6.72E-08	25YrCancerDerived_InhSoilDerm	*	6.72E-08
322	ALL		564567	4225976	0.000185	9901	DieselExhPM	4.81E-08	25YrCancerDerived_InhSoilDerm	*	4.81E-08
323	ALL		564363.3	4225603	0.000257	9901	DieselExhPM	6.68E-08	25YrCancerDerived_InhSoilDerm	*	6.68E-08
324	ALL		564534.1	4225799	0.000241	9901	DieselExhPM	6.25E-08	25YrCancerDerived_InhSoilDerm	*	6.25E-08
325	ALL		564601.5	4226015	0.000174	9901	DieselExhPM	4.53E-08	25YrCancerDerived_InhSoilDerm	*	4.53E-08
326	ALL		564537.4	4225757	0.00024	9901	DieselExhPM	6.25E-08	25YrCancerDerived_InhSoilDerm	*	6.25E-08
327	ALL		563932.4	4225532	0.000463	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
328	ALL		564336.7	4225556	0.000266	9901	DieselExhPM	6.91E-08	25YrCancerDerived_InhSoilDerm	*	6.91E-08
329	ALL		564560.8	4225996	0.000186	9901	DieselExhPM	4.82E-08	25YrCancerDerived_InhSoilDerm	*	4.82E-08
330	ALL		564346.1	4225600	0.000264	9901	DieselExhPM	6.85E-08	25YrCancerDerived_InhSoilDerm	*	6.85E-08
331	ALL		564317.2	4225970	0.000353	9901	DieselExhPM	9.16E-08	25YrCancerDerived_InhSoilDerm	*	9.16E-08
332	ALL		564232.2	4225940	0.000398	9901	DieselExhPM	1.03E-07	25YrCancerDerived_InhSoilDerm	*	1.03E-07
333	ALL		563923	4225872	0.000656	9901	DieselExhPM	1.71E-07	25YrCancerDerived_InhSoilDerm	*	1.71E-07
334	ALL		564065	4225849	0.000493	9901	DieselExhPM	1.28E-07	25YrCancerDerived_InhSoilDerm	*	1.28E-07
335	ALL		563968.8	4225880	0.000605	9901	DieselExhPM	1.57E-07	25YrCancerDerived_InhSoilDerm	*	1.57E-07

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
336	ALL		564558.6	4225803	0.000226	9901	DieselExhPM	5.87E-08	25YrCancerDerived_InhSoilDerm	*	5.87E-08
337	ALL		564587	4226034	0.000179	9901	DieselExhPM	4.64E-08	25YrCancerDerived_InhSoilDerm	*	4.64E-08
338	ALL		564336.8	4225647	0.000272	9901	DieselExhPM	7.07E-08	25YrCancerDerived_InhSoilDerm	*	7.07E-08
339	ALL		564561.3	4225753	0.000228	9901	DieselExhPM	5.94E-08	25YrCancerDerived_InhSoilDerm	*	5.94E-08
340	ALL		563929.7	4225552	0.000474	9901	DieselExhPM	1.23E-07	25YrCancerDerived_InhSoilDerm	*	1.23E-07
341	ALL		564318.9	4225553	0.000274	9901	DieselExhPM	7.12E-08	25YrCancerDerived_InhSoilDerm	*	7.12E-08
342	ALL		564328.9	4225598	0.000271	9901	DieselExhPM	7.03E-08	25YrCancerDerived_InhSoilDerm	*	7.03E-08
343	ALL		564550.2	4226013	0.000188	9901	DieselExhPM	4.88E-08	25YrCancerDerived_InhSoilDerm	*	4.88E-08
344	ALL		564572.9	4226049	0.000183	9901	DieselExhPM	4.75E-08	25YrCancerDerived_InhSoilDerm	*	4.75E-08
345	ALL		564322	4225648	0.000278	9901	DieselExhPM	7.23E-08	25YrCancerDerived_InhSoilDerm	*	7.23E-08
346	ALL		564576.6	4225761	0.000221	9901	DieselExhPM	5.75E-08	25YrCancerDerived_InhSoilDerm	*	5.75E-08
347	ALL		563927.5	4225573	0.000484	9901	DieselExhPM	1.26E-07	25YrCancerDerived_InhSoilDerm	*	1.26E-07
348	ALL		564301.1	4225551	0.000283	9901	DieselExhPM	7.34E-08	25YrCancerDerived_InhSoilDerm	*	7.34E-08
349	ALL		564533.9	4226019	0.000193	9901	DieselExhPM	5.02E-08	25YrCancerDerived_InhSoilDerm	*	5.02E-08
350	ALL		564311.7	4225595	0.000279	9901	DieselExhPM	7.25E-08	25YrCancerDerived_InhSoilDerm	*	7.25E-08
351	ALL		564301.7	4225642	0.000287	9901	DieselExhPM	7.45E-08	25YrCancerDerived_InhSoilDerm	*	7.45E-08
352	ALL		564595.2	4225767	0.000214	9901	DieselExhPM	5.56E-08	25YrCancerDerived_InhSoilDerm	*	5.56E-08
353	ALL		563924.9	4225593	0.000495	9901	DieselExhPM	1.29E-07	25YrCancerDerived_InhSoilDerm	*	1.29E-07
354	ALL		564186.1	4225954	0.000421	9901	DieselExhPM	1.10E-07	25YrCancerDerived_InhSoilDerm	*	1.10E-07
355	ALL		564524.9	4225968	0.0002	9901	DieselExhPM	5.20E-08	25YrCancerDerived_InhSoilDerm	*	5.20E-08
356	ALL		563964.5	4225827	0.000576	9901	DieselExhPM	1.50E-07	25YrCancerDerived_InhSoilDerm	*	1.50E-07
357	ALL		563899.1	4225727	0.000588	9901	DieselExhPM	1.53E-07	25YrCancerDerived_InhSoilDerm	*	1.53E-07
358	ALL		564020.1	4225818	0.000518	9901	DieselExhPM	1.35E-07	25YrCancerDerived_InhSoilDerm	*	1.35E-07
359	ALL		563876.6	4225867	0.00072	9901	DieselExhPM	1.87E-07	25YrCancerDerived_InhSoilDerm	*	1.87E-07
360	ALL		564244.5	4225679	0.00032	9901	DieselExhPM	8.33E-08	25YrCancerDerived_InhSoilDerm	*	8.33E-08
361	ALL		564553.3	4226067	0.000191	9901	DieselExhPM	4.96E-08	25YrCancerDerived_InhSoilDerm	*	4.96E-08
362	ALL		564283.3	4225548	0.000291	9901	DieselExhPM	7.57E-08	25YrCancerDerived_InhSoilDerm	*	7.57E-08
363	ALL		564294.5	4225593	0.000287	9901	DieselExhPM	7.46E-08	25YrCancerDerived_InhSoilDerm	*	7.46E-08
364	ALL		564284.5	4225640	0.000295	9901	DieselExhPM	7.67E-08	25YrCancerDerived_InhSoilDerm	*	7.67E-08
365	ALL		564613.9	4225783	0.000203	9901	DieselExhPM	5.26E-08	25YrCancerDerived_InhSoilDerm	*	5.26E-08
366	ALL		563921.5	4225613	0.000506	9901	DieselExhPM	1.32E-07	25YrCancerDerived_InhSoilDerm	*	1.32E-07
367	ALL		564518	4226040	0.000198	9901	DieselExhPM	5.15E-08	25YrCancerDerived_InhSoilDerm	*	5.15E-08
368	ALL		564265.5	4225545	0.0003	9901	DieselExhPM	7.79E-08	25YrCancerDerived_InhSoilDerm	*	7.79E-08
369	ALL		564277.3	4225590	0.000296	9901	DieselExhPM	7.68E-08	25YrCancerDerived_InhSoilDerm	*	7.68E-08
370	ALL		564577.6	4225812	0.000212	9901	DieselExhPM	5.51E-08	25YrCancerDerived_InhSoilDerm	*	5.51E-08
371	ALL		564670.1	4225824	0.00018	9901	DieselExhPM	4.67E-08	25YrCancerDerived_InhSoilDerm	*	4.67E-08
372	ALL		564267.3	4225637	0.000304	9901	DieselExhPM	7.90E-08	25YrCancerDerived_InhSoilDerm	*	7.90E-08
373	ALL		564267.3	4225637	0.000304	9901	DieselExhPM	7.90E-08	25YrCancerDerived_InhSoilDerm	*	7.90E-08
374	ALL		564623.2	4225805	0.000195	9901	DieselExhPM	5.07E-08	25YrCancerDerived_InhSoilDerm	*	5.07E-08
375	ALL		564500.6	4226050	0.000204	9901	DieselExhPM	5.31E-08	25YrCancerDerived_InhSoilDerm	*	5.31E-08
376	ALL		564247.7	4225543	0.000308	9901	DieselExhPM	8.02E-08	25YrCancerDerived_InhSoilDerm	*	8.02E-08
377	ALL		564260.2	4225588	0.000304	9901	DieselExhPM	7.91E-08	25YrCancerDerived_InhSoilDerm	*	7.91E-08
378	ALL		564232.8	4225714	0.000332	9901	DieselExhPM	8.63E-08	25YrCancerDerived_InhSoilDerm	*	8.63E-08
379	ALL		564499.2	4226101	0.000208	9901	DieselExhPM	5.41E-08	25YrCancerDerived_InhSoilDerm	*	5.41E-08
380	ALL		564688.7	4225735	0.000205	9901	DieselExhPM	5.32E-08	25YrCancerDerived_InhSoilDerm	*	5.32E-08
381	ALL		564250.1	4225635	0.000313	9901	DieselExhPM	8.15E-08	25YrCancerDerived_InhSoilDerm	*	8.15E-08
382	ALL		564483.1	4226052	0.000211	9901	DieselExhPM	5.48E-08	25YrCancerDerived_InhSoilDerm	*	5.48E-08
383	ALL		564628.2	4225826	0.000188	9901	DieselExhPM	4.90E-08	25YrCancerDerived_InhSoilDerm	*	4.90E-08
384	ALL		564229	4225540	0.000317	9901	DieselExhPM	8.23E-08	25YrCancerDerived_InhSoilDerm	*	8.23E-08
385	ALL		564243	4225585	0.000313	9901	DieselExhPM	8.14E-08	25YrCancerDerived_InhSoilDerm	*	8.14E-08
386	ALL		564481.4	4226100	0.000213	9901	DieselExhPM	5.54E-08	25YrCancerDerived_InhSoilDerm	*	5.54E-08
387	ALL		564232.9	4225632	0.000323	9901	DieselExhPM	8.39E-08	25YrCancerDerived_InhSoilDerm	*	8.39E-08
388	ALL		564627.5	4225858	0.000182	9901	DieselExhPM	4.73E-08	25YrCancerDerived_InhSoilDerm	*	4.73E-08
389	ALL		564463.8	4226053	0.000219	9901	DieselExhPM	5.69E-08	25YrCancerDerived_InhSoilDerm	*	5.69E-08
390	ALL		564224.6	4225583	0.000322	9901	DieselExhPM	8.37E-08	25YrCancerDerived_InhSoilDerm	*	8.37E-08
391	ALL		564460.9	4226102	0.000221	9901	DieselExhPM	5.73E-08	25YrCancerDerived_InhSoilDerm	*	5.73E-08
392	ALL		564216.1	4225630	0.000332	9901	DieselExhPM	8.63E-08	25YrCancerDerived_InhSoilDerm	*	8.63E-08
393	ALL		564445	4226050	0.000228	9901	DieselExhPM	5.93E-08	25YrCancerDerived_InhSoilDerm	*	5.93E-08
394	ALL		564442.1	4226102	0.000228	9901	DieselExhPM	5.92E-08	25YrCancerDerived_InhSoilDerm	*	5.92E-08
395	ALL		564424.8	4226098	0.000235	9901	DieselExhPM	6.11E-08	25YrCancerDerived_InhSoilDerm	*	6.11E-08
396	ALL		564423.1	4226047	0.00024	9901	DieselExhPM	6.24E-08	25YrCancerDerived_InhSoilDerm	*	6.24E-08
397	ALL		564314.3	4225990	0.000356	9901	DieselExhPM	9.25E-08	25YrCancerDerived_InhSoilDerm	*	9.25E-08
398	ALL		564230.7	4225961	0.00041	9901	DieselExhPM	1.06E-07	25YrCancerDerived_InhSoilDerm	*	1.06E-07
399	ALL		563948.9	4225877	0.000627	9901	DieselExhPM	1.63E-07	25YrCancerDerived_InhSoilDerm	*	1.63E-07
400	ALL		563921.6	4225898	0.000678	9901	DieselExhPM	1.76E-07	25YrCancerDerived_InhSoilDerm	*	1.76E-07
401	ALL		564407.1	4226092	0.000244	9901	DieselExhPM	6.34E-08	25YrCancerDerived_InhSoilDerm	*	6.34E-08
402	ALL		564689.5	4227110	0.000505	9901	DieselExhPM	1.31E-07	25YrCancerDerived_InhSoilDerm	*	1.31E-07

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
403	ALL		564017.1	4225840	0.000531	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
404	ALL		563944.5	4225824	0.000597	9901	DieselExhPM	1.55E-07	25YrCancerDerived_InhSoilDerm	*	1.55E-07
405	ALL		563879.2	4225724	0.000609	9901	DieselExhPM	1.58E-07	25YrCancerDerived_InhSoilDerm	*	1.58E-07
406	ALL		563874.7	4225887	0.00074	9901	DieselExhPM	1.92E-07	25YrCancerDerived_InhSoilDerm	*	1.92E-07
407	ALL		564224.1	4225671	0.000331	9901	DieselExhPM	8.60E-08	25YrCancerDerived_InhSoilDerm	*	8.60E-08
408	ALL		564216.2	4225712	0.000341	9901	DieselExhPM	8.87E-08	25YrCancerDerived_InhSoilDerm	*	8.87E-08
409	ALL		564194.8	4225840	0.00036	9901	DieselExhPM	9.35E-08	25YrCancerDerived_InhSoilDerm	*	9.35E-08
410	ALL		564435.4	4225931	0.000257	9901	DieselExhPM	6.67E-08	25YrCancerDerived_InhSoilDerm	*	6.67E-08
411	ALL		564066.3	4225725	0.000443	9901	DieselExhPM	1.15E-07	25YrCancerDerived_InhSoilDerm	*	1.15E-07
412	ALL		564299.2	4225854	0.000315	9901	DieselExhPM	8.18E-08	25YrCancerDerived_InhSoilDerm	*	8.18E-08
413	ALL		563964.8	4225551	0.000447	9901	DieselExhPM	1.16E-07	25YrCancerDerived_InhSoilDerm	*	1.16E-07
414	ALL		564000.6	4225736	0.000496	9901	DieselExhPM	1.29E-07	25YrCancerDerived_InhSoilDerm	*	1.29E-07
415	ALL		563889.6	4225765	0.000625	9901	DieselExhPM	1.62E-07	25YrCancerDerived_InhSoilDerm	*	1.62E-07
416	ALL		564740.9	4225601	0.000212	9901	DieselExhPM	5.50E-08	25YrCancerDerived_InhSoilDerm	*	5.50E-08
417	ALL		563917.5	4225920	0.000701	9901	DieselExhPM	1.82E-07	25YrCancerDerived_InhSoilDerm	*	1.82E-07
418	ALL		564311.6	4226010	0.000357	9901	DieselExhPM	9.28E-08	25YrCancerDerived_InhSoilDerm	*	9.28E-08
419	ALL		564677.6	4225596	0.000225	9901	DieselExhPM	5.85E-08	25YrCancerDerived_InhSoilDerm	*	5.85E-08
420	ALL		564089.7	4225988	0.000522	9901	DieselExhPM	1.36E-07	25YrCancerDerived_InhSoilDerm	*	1.36E-07
421	ALL		564754.8	4227597	0.000486	9901	DieselExhPM	1.26E-07	25YrCancerDerived_InhSoilDerm	*	1.26E-07
422	ALL		564708.6	4225550	0.000216	9901	DieselExhPM	5.61E-08	25YrCancerDerived_InhSoilDerm	*	5.61E-08
423	ALL		564664	4225579	0.000225	9901	DieselExhPM	5.84E-08	25YrCancerDerived_InhSoilDerm	*	5.84E-08
424	ALL		564068.9	4225984	0.00054	9901	DieselExhPM	1.40E-07	25YrCancerDerived_InhSoilDerm	*	1.40E-07
425	ALL		564063.3	4225930	0.000514	9901	DieselExhPM	1.34E-07	25YrCancerDerived_InhSoilDerm	*	1.34E-07
426	ALL		564695.6	4225538	0.000215	9901	DieselExhPM	5.60E-08	25YrCancerDerived_InhSoilDerm	*	5.60E-08
427	ALL		563858.1	4225722	0.000631	9901	DieselExhPM	1.64E-07	25YrCancerDerived_InhSoilDerm	*	1.64E-07
428	ALL		564274.4	4226006	0.00038	9901	DieselExhPM	9.89E-08	25YrCancerDerived_InhSoilDerm	*	9.89E-08
429	ALL		563926.3	4225822	0.000617	9901	DieselExhPM	1.60E-07	25YrCancerDerived_InhSoilDerm	*	1.60E-07
430	ALL		563872	4225907	0.000763	9901	DieselExhPM	1.98E-07	25YrCancerDerived_InhSoilDerm	*	1.98E-07
431	ALL		564048.2	4225981	0.000559	9901	DieselExhPM	1.45E-07	25YrCancerDerived_InhSoilDerm	*	1.45E-07
432	ALL		564651.2	4225566	0.000223	9901	DieselExhPM	5.81E-08	25YrCancerDerived_InhSoilDerm	*	5.81E-08
433	ALL		564042.3	4225932	0.000537	9901	DieselExhPM	1.40E-07	25YrCancerDerived_InhSoilDerm	*	1.40E-07
434	ALL		564683.5	4225523	0.000213	9901	DieselExhPM	5.55E-08	25YrCancerDerived_InhSoilDerm	*	5.55E-08
435	ALL		564029.9	4225977	0.000577	9901	DieselExhPM	1.50E-07	25YrCancerDerived_InhSoilDerm	*	1.50E-07
436	ALL		564021.5	4225928	0.000558	9901	DieselExhPM	1.45E-07	25YrCancerDerived_InhSoilDerm	*	1.45E-07
437	ALL		564636.4	4225553	0.000221	9901	DieselExhPM	5.75E-08	25YrCancerDerived_InhSoilDerm	*	5.75E-08
438	ALL		564007.4	4225930	0.000576	9901	DieselExhPM	1.50E-07	25YrCancerDerived_InhSoilDerm	*	1.50E-07
439	ALL		564199	4225710	0.000352	9901	DieselExhPM	9.14E-08	25YrCancerDerived_InhSoilDerm	*	9.14E-08
440	ALL		564620.5	4225543	0.000219	9901	DieselExhPM	5.69E-08	25YrCancerDerived_InhSoilDerm	*	5.69E-08
441	ALL		563987.4	4225927	0.000599	9901	DieselExhPM	1.56E-07	25YrCancerDerived_InhSoilDerm	*	1.56E-07
442	ALL		564603.4	4225533	0.000216	9901	DieselExhPM	5.63E-08	25YrCancerDerived_InhSoilDerm	*	5.63E-08
443	ALL		563967.5	4225925	0.000622	9901	DieselExhPM	1.62E-07	25YrCancerDerived_InhSoilDerm	*	1.62E-07
444	ALL		563947.9	4225968	0.000681	9901	DieselExhPM	1.77E-07	25YrCancerDerived_InhSoilDerm	*	1.77E-07
445	ALL		564213.7	4225670	0.000337	9901	DieselExhPM	8.76E-08	25YrCancerDerived_InhSoilDerm	*	8.76E-08
446	ALL		563947.6	4225922	0.000655	9901	DieselExhPM	1.70E-07	25YrCancerDerived_InhSoilDerm	*	1.70E-07
447	ALL		564586.3	4225526	0.000214	9901	DieselExhPM	5.57E-08	25YrCancerDerived_InhSoilDerm	*	5.57E-08
448	ALL		563934.2	4225961	0.000706	9901	DieselExhPM	1.84E-07	25YrCancerDerived_InhSoilDerm	*	1.84E-07
449	ALL		563910.1	4225958	0.000747	9901	DieselExhPM	1.94E-07	25YrCancerDerived_InhSoilDerm	*	1.94E-07
450	ALL		564570.2	4225520	0.000213	9901	DieselExhPM	5.53E-08	25YrCancerDerived_InhSoilDerm	*	5.53E-08
451	ALL		564308.8	4226030	0.000357	9901	DieselExhPM	9.27E-08	25YrCancerDerived_InhSoilDerm	*	9.27E-08
452	ALL		564271.6	4226035	0.000384	9901	DieselExhPM	9.98E-08	25YrCancerDerived_InhSoilDerm	*	9.98E-08
453	ALL		563869.2	4225927	0.000788	9901	DieselExhPM	2.05E-07	25YrCancerDerived_InhSoilDerm	*	2.05E-07
454	ALL		564573.6	4227865	0.000612	9901	DieselExhPM	1.59E-07	25YrCancerDerived_InhSoilDerm	*	1.59E-07
455	ALL		564182.4	4225708	0.000362	9901	DieselExhPM	9.41E-08	25YrCancerDerived_InhSoilDerm	*	9.41E-08
456	ALL		564192.8	4225664	0.000349	9901	DieselExhPM	9.07E-08	25YrCancerDerived_InhSoilDerm	*	9.07E-08
457	ALL		564306	4226050	0.000355	9901	DieselExhPM	9.23E-08	25YrCancerDerived_InhSoilDerm	*	9.23E-08
458	ALL		564268.8	4226052	0.000385	9901	DieselExhPM	1.00E-07	25YrCancerDerived_InhSoilDerm	*	1.00E-07
459	ALL		563866.5	4225947	0.000814	9901	DieselExhPM	2.12E-07	25YrCancerDerived_InhSoilDerm	*	2.12E-07
460	ALL		564325.8	4225727	0.000292	9901	DieselExhPM	7.58E-08	25YrCancerDerived_InhSoilDerm	*	7.58E-08
461	ALL		564165	4225705	0.000372	9901	DieselExhPM	9.68E-08	25YrCancerDerived_InhSoilDerm	*	9.68E-08
462	ALL		564513.6	4227681	0.000711	9901	DieselExhPM	1.85E-07	25YrCancerDerived_InhSoilDerm	*	1.85E-07
463	ALL		563884.1	4225543	0.000506	9901	DieselExhPM	1.31E-07	25YrCancerDerived_InhSoilDerm	*	1.31E-07
464	ALL		564303.2	4226070	0.000352	9901	DieselExhPM	9.16E-08	25YrCancerDerived_InhSoilDerm	*	9.16E-08
465	ALL		563881.2	4225564	0.000518	9901	DieselExhPM	1.35E-07	25YrCancerDerived_InhSoilDerm	*	1.35E-07
466	ALL		563878.3	4225586	0.00053	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
467	ALL		563875.4	4225607	0.000544	9901	DieselExhPM	1.41E-07	25YrCancerDerived_InhSoilDerm	*	1.41E-07
468	ALL		564265.6	4226075	0.000385	9901	DieselExhPM	1.00E-07	25YrCancerDerived_InhSoilDerm	*	1.00E-07
469	ALL		563863.7	4225967	0.000842	9901	DieselExhPM	2.19E-07	25YrCancerDerived_InhSoilDerm	*	2.19E-07

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
470	ALL		564383.4	4227830	0.000872	9901	DieselExhPM	2.27E-07	25YrCancerDerived_InhSoilDerm	*	2.27E-07
471	ALL		564743.6	4226650	0.000471	9901	DieselExhPM	1.23E-07	25YrCancerDerived_InhSoilDerm	*	1.23E-07
472	ALL		564742.2	4226686	0.0005	9901	DieselExhPM	1.30E-07	25YrCancerDerived_InhSoilDerm	*	1.30E-07
473	ALL		564739	4226724	0.000524	9901	DieselExhPM	1.36E-07	25YrCancerDerived_InhSoilDerm	*	1.36E-07
474	ALL		564733	4226764	0.000538	9901	DieselExhPM	1.40E-07	25YrCancerDerived_InhSoilDerm	*	1.40E-07
475	ALL		564638.3	4226847	0.000619	9901	DieselExhPM	1.61E-07	25YrCancerDerived_InhSoilDerm	*	1.61E-07
476	ALL		564714.9	4226896	0.000543	9901	DieselExhPM	1.41E-07	25YrCancerDerived_InhSoilDerm	*	1.41E-07
477	ALL		563906.3	4225984	0.000777	9901	DieselExhPM	2.02E-07	25YrCancerDerived_InhSoilDerm	*	2.02E-07
478	ALL		564303.8	4226090	0.000346	9901	DieselExhPM	8.99E-08	25YrCancerDerived_InhSoilDerm	*	8.99E-08
479	ALL		564262.5	4226098	0.000384	9901	DieselExhPM	9.98E-08	25YrCancerDerived_InhSoilDerm	*	9.98E-08
480	ALL		563860.9	4225987	0.000872	9901	DieselExhPM	2.27E-07	25YrCancerDerived_InhSoilDerm	*	2.27E-07
481	ALL		564329.2	4225692	0.000282	9901	DieselExhPM	7.34E-08	25YrCancerDerived_InhSoilDerm	*	7.34E-08
482	ALL		564315.2	4226118	0.000325	9901	DieselExhPM	8.46E-08	25YrCancerDerived_InhSoilDerm	*	8.46E-08
483	ALL		563904.8	4226004	0.000799	9901	DieselExhPM	2.08E-07	25YrCancerDerived_InhSoilDerm	*	2.08E-07
484	ALL		563846.5	4225759	0.000672	9901	DieselExhPM	1.75E-07	25YrCancerDerived_InhSoilDerm	*	1.75E-07
485	ALL		563922.1	4226258	0.001158	9901	DieselExhPM	3.01E-07	25YrCancerDerived_InhSoilDerm	*	3.01E-07
486	ALL		564325.6	4227695	0.001039	9901	DieselExhPM	2.70E-07	25YrCancerDerived_InhSoilDerm	*	2.70E-07
487	ALL		563844.4	4225782	0.000694	9901	DieselExhPM	1.80E-07	25YrCancerDerived_InhSoilDerm	*	1.80E-07
488	ALL		564215.1	4227694	0.001302	9901	DieselExhPM	3.39E-07	25YrCancerDerived_InhSoilDerm	*	3.39E-07
489	ALL		563841.5	4225802	0.000715	9901	DieselExhPM	1.86E-07	25YrCancerDerived_InhSoilDerm	*	1.86E-07
490	ALL		564255.1	4226121	0.000387	9901	DieselExhPM	1.01E-07	25YrCancerDerived_InhSoilDerm	*	1.01E-07
491	ALL		563857.6	4226013	0.000899	9901	DieselExhPM	2.34E-07	25YrCancerDerived_InhSoilDerm	*	2.34E-07
492	ALL		563838.8	4225822	0.000737	9901	DieselExhPM	1.92E-07	25YrCancerDerived_InhSoilDerm	*	1.92E-07
493	ALL		563836	4225842	0.000761	9901	DieselExhPM	1.98E-07	25YrCancerDerived_InhSoilDerm	*	1.98E-07
494	ALL		563833.2	4225862	0.000786	9901	DieselExhPM	2.04E-07	25YrCancerDerived_InhSoilDerm	*	2.04E-07
495	ALL		563830.5	4225882	0.000812	9901	DieselExhPM	2.11E-07	25YrCancerDerived_InhSoilDerm	*	2.11E-07
496	ALL		563827.7	4225902	0.000841	9901	DieselExhPM	2.19E-07	25YrCancerDerived_InhSoilDerm	*	2.19E-07
497	ALL		563825	4225922	0.000871	9901	DieselExhPM	2.26E-07	25YrCancerDerived_InhSoilDerm	*	2.26E-07
498	ALL		563822.2	4225942	0.000904	9901	DieselExhPM	2.35E-07	25YrCancerDerived_InhSoilDerm	*	2.35E-07
499	ALL		563900.5	4226026	0.000819	9901	DieselExhPM	2.13E-07	25YrCancerDerived_InhSoilDerm	*	2.13E-07
500	ALL		563819.5	4225961	0.000938	9901	DieselExhPM	2.44E-07	25YrCancerDerived_InhSoilDerm	*	2.44E-07
501	ALL		563816.7	4225981	0.000976	9901	DieselExhPM	2.54E-07	25YrCancerDerived_InhSoilDerm	*	2.54E-07
502	ALL		563813.9	4226001	0.001016	9901	DieselExhPM	2.64E-07	25YrCancerDerived_InhSoilDerm	*	2.64E-07
503	ALL		563855.4	4226026	0.000922	9901	DieselExhPM	2.40E-07	25YrCancerDerived_InhSoilDerm	*	2.40E-07
504	ALL		563379.2	4227699	0.000215	9901	DieselExhPM	5.60E-08	25YrCancerDerived_InhSoilDerm	*	5.60E-08
505	ALL		563811.2	4226021	0.001058	9901	DieselExhPM	2.75E-07	25YrCancerDerived_InhSoilDerm	*	2.75E-07
506	ALL		563808.4	4226041	0.001104	9901	DieselExhPM	2.87E-07	25YrCancerDerived_InhSoilDerm	*	2.87E-07
507	ALL		563805.6	4226061	0.001154	9901	DieselExhPM	3.00E-07	25YrCancerDerived_InhSoilDerm	*	3.00E-07
508	ALL		563802.7	4226083	0.001213	9901	DieselExhPM	3.15E-07	25YrCancerDerived_InhSoilDerm	*	3.15E-07
509	ALL		563803.7	4226109	0.001273	9901	DieselExhPM	3.31E-07	25YrCancerDerived_InhSoilDerm	*	3.31E-07
510	ALL		563802.9	4226131	0.001335	9901	DieselExhPM	3.47E-07	25YrCancerDerived_InhSoilDerm	*	3.47E-07
511	ALL		563897.8	4226046	0.000846	9901	DieselExhPM	2.20E-07	25YrCancerDerived_InhSoilDerm	*	2.20E-07
512	ALL		563852.7	4226046	0.000957	9901	DieselExhPM	2.49E-07	25YrCancerDerived_InhSoilDerm	*	2.49E-07
513	ALL		564348.9	4225864	0.000311	9901	DieselExhPM	8.09E-08	25YrCancerDerived_InhSoilDerm	*	8.09E-08
514	ALL		564453.9	4225985	0.000235	9901	DieselExhPM	6.11E-08	25YrCancerDerived_InhSoilDerm	*	6.11E-08
515	ALL		563983.6	4225600	0.000451	9901	DieselExhPM	1.17E-07	25YrCancerDerived_InhSoilDerm	*	1.17E-07
516	ALL		564721	4225563	0.000215	9901	DieselExhPM	5.60E-08	25YrCancerDerived_InhSoilDerm	*	5.60E-08
517	ALL		564088.5	4225771	0.000444	9901	DieselExhPM	1.16E-07	25YrCancerDerived_InhSoilDerm	*	1.16E-07
518	ALL		564047.5	4225892	0.000527	9901	DieselExhPM	1.37E-07	25YrCancerDerived_InhSoilDerm	*	1.37E-07
519	ALL		564250	4225860	0.000349	9901	DieselExhPM	9.08E-08	25YrCancerDerived_InhSoilDerm	*	9.08E-08
520	ALL		563968.7	4225785	0.000549	9901	DieselExhPM	1.43E-07	25YrCancerDerived_InhSoilDerm	*	1.43E-07
521	ALL		563895.7	4226066	0.000875	9901	DieselExhPM	2.28E-07	25YrCancerDerived_InhSoilDerm	*	2.28E-07
522	ALL		563849.8	4226067	0.000995	9901	DieselExhPM	2.59E-07	25YrCancerDerived_InhSoilDerm	*	2.59E-07
523	ALL		564183.3	4227322	0.001762	9901	DieselExhPM	4.58E-07	25YrCancerDerived_InhSoilDerm	*	4.58E-07
524	ALL		564394.4	4227205	0.000943	9901	DieselExhPM	2.45E-07	25YrCancerDerived_InhSoilDerm	*	2.45E-07
525	ALL		564286.2	4227788	0.001069	9901	DieselExhPM	2.78E-07	25YrCancerDerived_InhSoilDerm	*	2.78E-07
526	ALL		563904.4	4226105	0.000907	9901	DieselExhPM	2.36E-07	25YrCancerDerived_InhSoilDerm	*	2.36E-07
527	ALL		563837.9	4226095	0.001077	9901	DieselExhPM	2.80E-07	25YrCancerDerived_InhSoilDerm	*	2.80E-07
528	ALL		564115	4227201	0.00221	9901	DieselExhPM	5.74E-07	25YrCancerDerived_InhSoilDerm	*	5.74E-07
529	ALL		563988.2	4225566	0.000436	9901	DieselExhPM	1.13E-07	25YrCancerDerived_InhSoilDerm	*	1.13E-07
530	ALL		563979.4	4225733	0.000512	9901	DieselExhPM	1.33E-07	25YrCancerDerived_InhSoilDerm	*	1.33E-07
531	ALL		564036.2	4225740	0.000469	9901	DieselExhPM	1.22E-07	25YrCancerDerived_InhSoilDerm	*	1.22E-07
532	ALL		563887.7	4225787	0.000642	9901	DieselExhPM	1.67E-07	25YrCancerDerived_InhSoilDerm	*	1.67E-07
533	ALL		564285.8	4225893	0.000334	9901	DieselExhPM	8.69E-08	25YrCancerDerived_InhSoilDerm	*	8.69E-08
534	ALL		564192.9	4225863	0.00037	9901	DieselExhPM	9.63E-08	25YrCancerDerived_InhSoilDerm	*	9.63E-08
535	ALL		564456	4225934	0.000244	9901	DieselExhPM	6.34E-08	25YrCancerDerived_InhSoilDerm	*	6.34E-08
536	ALL		563888	4226122	0.000976	9901	DieselExhPM	2.54E-07	25YrCancerDerived_InhSoilDerm	*	2.54E-07

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
537	ALL		564305	4227437	0.00121	9901	DieselExhPM	3.15E-07	25YrCancerDerived_InhSoilDerm	*	3.15E-07
538	ALL		563740.6	4226229	0.002154	9901	DieselExhPM	5.60E-07	25YrCancerDerived_InhSoilDerm	*	5.60E-07
539	ALL		563855.6	4226119	0.001065	9901	DieselExhPM	2.77E-07	25YrCancerDerived_InhSoilDerm	*	2.77E-07
540	ALL		563420.2	4227596	0.000279	9901	DieselExhPM	7.26E-08	25YrCancerDerived_InhSoilDerm	*	7.26E-08
541	ALL		564122.8	4227576	0.001736	9901	DieselExhPM	4.51E-07	25YrCancerDerived_InhSoilDerm	*	4.51E-07
542	ALL		564306.1	4225724	0.000298	9901	DieselExhPM	7.74E-08	25YrCancerDerived_InhSoilDerm	*	7.74E-08
543	ALL		564038	4227445	0.002423	9901	DieselExhPM	6.30E-07	25YrCancerDerived_InhSoilDerm	*	6.30E-07
544	ALL		563939.9	4227649	0.001776	9901	DieselExhPM	4.62E-07	25YrCancerDerived_InhSoilDerm	*	4.62E-07
545	ALL		563913	4227508	0.00243	9901	DieselExhPM	6.32E-07	25YrCancerDerived_InhSoilDerm	*	6.32E-07
546	ALL		563850.8	4227763	0.001173	9901	DieselExhPM	3.05E-07	25YrCancerDerived_InhSoilDerm	*	3.05E-07
547	ALL		563813.8	4227761	0.001057	9901	DieselExhPM	2.75E-07	25YrCancerDerived_InhSoilDerm	*	2.75E-07
548	ALL		563781.1	4227768	0.000922	9901	DieselExhPM	2.40E-07	25YrCancerDerived_InhSoilDerm	*	2.40E-07
549	ALL		563796.3	4227476	0.002252	9901	DieselExhPM	5.85E-07	25YrCancerDerived_InhSoilDerm	*	5.85E-07
550	ALL		563745.5	4227812	0.00071	9901	DieselExhPM	1.84E-07	25YrCancerDerived_InhSoilDerm	*	1.84E-07
551	ALL		563780.6	4227655	0.001251	9901	DieselExhPM	3.25E-07	25YrCancerDerived_InhSoilDerm	*	3.25E-07
552	ALL		564312.9	4225689	0.000288	9901	DieselExhPM	7.48E-08	25YrCancerDerived_InhSoilDerm	*	7.48E-08
553	ALL		564414.6	4225659	0.000253	9901	DieselExhPM	6.58E-08	25YrCancerDerived_InhSoilDerm	*	6.58E-08
554	ALL		564469.1	4225665	0.000254	9901	DieselExhPM	6.60E-08	25YrCancerDerived_InhSoilDerm	*	6.60E-08
555	ALL		564417.1	4225677	0.000258	9901	DieselExhPM	6.70E-08	25YrCancerDerived_InhSoilDerm	*	6.70E-08
556	ALL		564461.7	4225680	0.000258	9901	DieselExhPM	6.70E-08	25YrCancerDerived_InhSoilDerm	*	6.70E-08
557	ALL		564410.2	4225697	0.000263	9901	DieselExhPM	6.83E-08	25YrCancerDerived_InhSoilDerm	*	6.83E-08
558	ALL		564463.2	4225707	0.000265	9901	DieselExhPM	6.89E-08	25YrCancerDerived_InhSoilDerm	*	6.89E-08
559	ALL		563225	4226300	0.00075	9901	DieselExhPM	1.95E-07	25YrCancerDerived_InhSoilDerm	*	1.95E-07
560	ALL		563225	4226325	0.000747	9901	DieselExhPM	1.94E-07	25YrCancerDerived_InhSoilDerm	*	1.94E-07
561	ALL		563225	4226350	0.000749	9901	DieselExhPM	1.95E-07	25YrCancerDerived_InhSoilDerm	*	1.95E-07
562	ALL		563225	4226375	0.000758	9901	DieselExhPM	1.97E-07	25YrCancerDerived_InhSoilDerm	*	1.97E-07
563	ALL		563225	4226400	0.000776	9901	DieselExhPM	2.02E-07	25YrCancerDerived_InhSoilDerm	*	2.02E-07
564	ALL		563225	4226425	0.000803	9901	DieselExhPM	2.09E-07	25YrCancerDerived_InhSoilDerm	*	2.09E-07
565	ALL		563225	4226450	0.000853	9901	DieselExhPM	2.22E-07	25YrCancerDerived_InhSoilDerm	*	2.22E-07
566	ALL		563225	4226475	0.000937	9901	DieselExhPM	2.43E-07	25YrCancerDerived_InhSoilDerm	*	2.43E-07
567	ALL		563225	4226500	0.001091	9901	DieselExhPM	2.84E-07	25YrCancerDerived_InhSoilDerm	*	2.84E-07
568	ALL		563225	4226525	0.001375	9901	DieselExhPM	3.57E-07	25YrCancerDerived_InhSoilDerm	*	3.57E-07
569	ALL		563225	4226550	0.001857	9901	DieselExhPM	4.83E-07	25YrCancerDerived_InhSoilDerm	*	4.83E-07
570	ALL		563225	4226575	0.002598	9901	DieselExhPM	6.75E-07	25YrCancerDerived_InhSoilDerm	*	6.75E-07
571	ALL		563225	4226600	0.003548	9901	DieselExhPM	9.22E-07	25YrCancerDerived_InhSoilDerm	*	9.22E-07
572	ALL		563225	4226625	0.00454	9901	DieselExhPM	1.18E-06	25YrCancerDerived_InhSoilDerm	*	1.18E-06
573	ALL		563225	4226650	0.005353	9901	DieselExhPM	1.39E-06	25YrCancerDerived_InhSoilDerm	*	1.39E-06
574	ALL		563225	4226675	0.00586	9901	DieselExhPM	1.52E-06	25YrCancerDerived_InhSoilDerm	*	1.52E-06
575	ALL		563225	4226700	0.006001	9901	DieselExhPM	1.56E-06	25YrCancerDerived_InhSoilDerm	*	1.56E-06
576	ALL		563225	4226725	0.005776	9901	DieselExhPM	1.50E-06	25YrCancerDerived_InhSoilDerm	*	1.50E-06
577	ALL		563225	4226750	0.005236	9901	DieselExhPM	1.36E-06	25YrCancerDerived_InhSoilDerm	*	1.36E-06
578	ALL		563225	4226775	0.004481	9901	DieselExhPM	1.16E-06	25YrCancerDerived_InhSoilDerm	*	1.16E-06
579	ALL		563225	4226800	0.003653	9901	DieselExhPM	9.49E-07	25YrCancerDerived_InhSoilDerm	*	9.49E-07
580	ALL		563225	4226825	0.002917	9901	DieselExhPM	7.58E-07	25YrCancerDerived_InhSoilDerm	*	7.58E-07
581	ALL		563225	4226850	0.002339	9901	DieselExhPM	6.08E-07	25YrCancerDerived_InhSoilDerm	*	6.08E-07
582	ALL		563225	4226875	0.001858	9901	DieselExhPM	4.83E-07	25YrCancerDerived_InhSoilDerm	*	4.83E-07
583	ALL		563225	4226900	0.001511	9901	DieselExhPM	3.93E-07	25YrCancerDerived_InhSoilDerm	*	3.93E-07
584	ALL		563225	4226925	0.001247	9901	DieselExhPM	3.24E-07	25YrCancerDerived_InhSoilDerm	*	3.24E-07
585	ALL		563225	4226950	0.001043	9901	DieselExhPM	2.71E-07	25YrCancerDerived_InhSoilDerm	*	2.71E-07
586	ALL		563225	4226975	0.000887	9901	DieselExhPM	2.31E-07	25YrCancerDerived_InhSoilDerm	*	2.31E-07
587	ALL		563225	4227000	0.000769	9901	DieselExhPM	2.00E-07	25YrCancerDerived_InhSoilDerm	*	2.00E-07
588	ALL		563225	4227025	0.000684	9901	DieselExhPM	1.78E-07	25YrCancerDerived_InhSoilDerm	*	1.78E-07
589	ALL		563225	4227050	0.000617	9901	DieselExhPM	1.60E-07	25YrCancerDerived_InhSoilDerm	*	1.60E-07
590	ALL		563250	4226300	0.000877	9901	DieselExhPM	2.28E-07	25YrCancerDerived_InhSoilDerm	*	2.28E-07
591	ALL		563250	4226325	0.00087	9901	DieselExhPM	2.26E-07	25YrCancerDerived_InhSoilDerm	*	2.26E-07
592	ALL		563250	4226350	0.000867	9901	DieselExhPM	2.25E-07	25YrCancerDerived_InhSoilDerm	*	2.25E-07
593	ALL		563250	4226375	0.00087	9901	DieselExhPM	2.26E-07	25YrCancerDerived_InhSoilDerm	*	2.26E-07
594	ALL		563250	4226400	0.000882	9901	DieselExhPM	2.29E-07	25YrCancerDerived_InhSoilDerm	*	2.29E-07
595	ALL		563250	4226425	0.00091	9901	DieselExhPM	2.37E-07	25YrCancerDerived_InhSoilDerm	*	2.37E-07
596	ALL		563250	4226450	0.000958	9901	DieselExhPM	2.49E-07	25YrCancerDerived_InhSoilDerm	*	2.49E-07
597	ALL		563250	4226475	0.001042	9901	DieselExhPM	2.71E-07	25YrCancerDerived_InhSoilDerm	*	2.71E-07
598	ALL		563250	4226500	0.001199	9901	DieselExhPM	3.12E-07	25YrCancerDerived_InhSoilDerm	*	3.12E-07
599	ALL		563250	4226525	0.001493	9901	DieselExhPM	3.88E-07	25YrCancerDerived_InhSoilDerm	*	3.88E-07
600	ALL		563250	4226550	0.002017	9901	DieselExhPM	5.24E-07	25YrCancerDerived_InhSoilDerm	*	5.24E-07
601	ALL		563250	4226575	0.002874	9901	DieselExhPM	7.47E-07	25YrCancerDerived_InhSoilDerm	*	7.47E-07
602	ALL		563250	4226600	0.00401	9901	DieselExhPM	1.04E-06	25YrCancerDerived_InhSoilDerm	*	1.04E-06
603	ALL		563250	4226625	0.005191	9901	DieselExhPM	1.35E-06	25YrCancerDerived_InhSoilDerm	*	1.35E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
604	ALL		563250	4226650	0.006145	9901	DieselExhPM	1.60E-06	25YrCancerDerived_InhSoilDerm	*	1.60E-06
605	ALL		563250	4226675	0.006711	9901	DieselExhPM	1.74E-06	25YrCancerDerived_InhSoilDerm	*	1.74E-06
606	ALL		563250	4226700	0.006807	9901	DieselExhPM	1.77E-06	25YrCancerDerived_InhSoilDerm	*	1.77E-06
607	ALL		563250	4226725	0.006521	9901	DieselExhPM	1.70E-06	25YrCancerDerived_InhSoilDerm	*	1.70E-06
608	ALL		563250	4226750	0.00585	9901	DieselExhPM	1.52E-06	25YrCancerDerived_InhSoilDerm	*	1.52E-06
609	ALL		563250	4226775	0.004935	9901	DieselExhPM	1.28E-06	25YrCancerDerived_InhSoilDerm	*	1.28E-06
610	ALL		563250	4226800	0.00397	9901	DieselExhPM	1.03E-06	25YrCancerDerived_InhSoilDerm	*	1.03E-06
611	ALL		563250	4226825	0.003109	9901	DieselExhPM	8.08E-07	25YrCancerDerived_InhSoilDerm	*	8.08E-07
612	ALL		563250	4226850	0.00241	9901	DieselExhPM	6.26E-07	25YrCancerDerived_InhSoilDerm	*	6.26E-07
613	ALL		563250	4226875	0.001915	9901	DieselExhPM	4.98E-07	25YrCancerDerived_InhSoilDerm	*	4.98E-07
614	ALL		563250	4226900	0.001552	9901	DieselExhPM	4.03E-07	25YrCancerDerived_InhSoilDerm	*	4.03E-07
615	ALL		563250	4226925	0.001279	9901	DieselExhPM	3.32E-07	25YrCancerDerived_InhSoilDerm	*	3.32E-07
616	ALL		563250	4226950	0.001076	9901	DieselExhPM	2.80E-07	25YrCancerDerived_InhSoilDerm	*	2.80E-07
617	ALL		563250	4226975	0.00092	9901	DieselExhPM	2.39E-07	25YrCancerDerived_InhSoilDerm	*	2.39E-07
618	ALL		563250	4227000	0.000806	9901	DieselExhPM	2.09E-07	25YrCancerDerived_InhSoilDerm	*	2.09E-07
619	ALL		563250	4227025	0.000724	9901	DieselExhPM	1.88E-07	25YrCancerDerived_InhSoilDerm	*	1.88E-07
620	ALL		563250	4227050	0.000659	9901	DieselExhPM	1.71E-07	25YrCancerDerived_InhSoilDerm	*	1.71E-07
621	ALL		563275	4226300	0.001038	9901	DieselExhPM	2.70E-07	25YrCancerDerived_InhSoilDerm	*	2.70E-07
622	ALL		563275	4226325	0.00103	9901	DieselExhPM	2.68E-07	25YrCancerDerived_InhSoilDerm	*	2.68E-07
623	ALL		563275	4226350	0.001024	9901	DieselExhPM	2.66E-07	25YrCancerDerived_InhSoilDerm	*	2.66E-07
624	ALL		563275	4226375	0.001024	9901	DieselExhPM	2.66E-07	25YrCancerDerived_InhSoilDerm	*	2.66E-07
625	ALL		563275	4226400	0.001032	9901	DieselExhPM	2.68E-07	25YrCancerDerived_InhSoilDerm	*	2.68E-07
626	ALL		563275	4226425	0.001054	9901	DieselExhPM	2.74E-07	25YrCancerDerived_InhSoilDerm	*	2.74E-07
627	ALL		563275	4226450	0.001098	9901	DieselExhPM	2.85E-07	25YrCancerDerived_InhSoilDerm	*	2.85E-07
628	ALL		563275	4226475	0.001178	9901	DieselExhPM	3.06E-07	25YrCancerDerived_InhSoilDerm	*	3.06E-07
629	ALL		563275	4226500	0.001334	9901	DieselExhPM	3.47E-07	25YrCancerDerived_InhSoilDerm	*	3.47E-07
630	ALL		563275	4226525	0.001637	9901	DieselExhPM	4.25E-07	25YrCancerDerived_InhSoilDerm	*	4.25E-07
631	ALL		563275	4226550	0.00221	9901	DieselExhPM	5.74E-07	25YrCancerDerived_InhSoilDerm	*	5.74E-07
632	ALL		563275	4226575	0.003198	9901	DieselExhPM	8.31E-07	25YrCancerDerived_InhSoilDerm	*	8.31E-07
633	ALL		563275	4226600	0.004571	9901	DieselExhPM	1.19E-06	25YrCancerDerived_InhSoilDerm	*	1.19E-06
634	ALL		563275	4226625	0.006007	9901	DieselExhPM	1.56E-06	25YrCancerDerived_InhSoilDerm	*	1.56E-06
635	ALL		563275	4226650	0.007118	9901	DieselExhPM	1.85E-06	25YrCancerDerived_InhSoilDerm	*	1.85E-06
636	ALL		563275	4226675	0.007728	9901	DieselExhPM	2.01E-06	25YrCancerDerived_InhSoilDerm	*	2.01E-06
637	ALL		563275	4226700	0.007838	9901	DieselExhPM	2.04E-06	25YrCancerDerived_InhSoilDerm	*	2.04E-06
638	ALL		563275	4226725	0.007444	9901	DieselExhPM	1.93E-06	25YrCancerDerived_InhSoilDerm	*	1.93E-06
639	ALL		563275	4226750	0.006558	9901	DieselExhPM	1.70E-06	25YrCancerDerived_InhSoilDerm	*	1.70E-06
640	ALL		563275	4226775	0.005414	9901	DieselExhPM	1.41E-06	25YrCancerDerived_InhSoilDerm	*	1.41E-06
641	ALL		563275	4226800	0.004289	9901	DieselExhPM	1.11E-06	25YrCancerDerived_InhSoilDerm	*	1.11E-06
642	ALL		563275	4226825	0.003317	9901	DieselExhPM	8.62E-07	25YrCancerDerived_InhSoilDerm	*	8.62E-07
643	ALL		563275	4226850	0.002565	9901	DieselExhPM	6.67E-07	25YrCancerDerived_InhSoilDerm	*	6.67E-07
644	ALL		563275	4226875	0.001999	9901	DieselExhPM	5.19E-07	25YrCancerDerived_InhSoilDerm	*	5.19E-07
645	ALL		563275	4226900	0.001602	9901	DieselExhPM	4.16E-07	25YrCancerDerived_InhSoilDerm	*	4.16E-07
646	ALL		563275	4226925	0.001323	9901	DieselExhPM	3.44E-07	25YrCancerDerived_InhSoilDerm	*	3.44E-07
647	ALL		563275	4226950	0.001118	9901	DieselExhPM	2.91E-07	25YrCancerDerived_InhSoilDerm	*	2.91E-07
648	ALL		563275	4226975	0.000967	9901	DieselExhPM	2.51E-07	25YrCancerDerived_InhSoilDerm	*	2.51E-07
649	ALL		563275	4227000	0.000857	9901	DieselExhPM	2.23E-07	25YrCancerDerived_InhSoilDerm	*	2.23E-07
650	ALL		563275	4227025	0.000778	9901	DieselExhPM	2.02E-07	25YrCancerDerived_InhSoilDerm	*	2.02E-07
651	ALL		563275	4227050	0.000712	9901	DieselExhPM	1.85E-07	25YrCancerDerived_InhSoilDerm	*	1.85E-07
652	ALL		563300	4226300	0.001235	9901	DieselExhPM	3.21E-07	25YrCancerDerived_InhSoilDerm	*	3.21E-07
653	ALL		563300	4226325	0.001236	9901	DieselExhPM	3.21E-07	25YrCancerDerived_InhSoilDerm	*	3.21E-07
654	ALL		563300	4226350	0.001235	9901	DieselExhPM	3.21E-07	25YrCancerDerived_InhSoilDerm	*	3.21E-07
655	ALL		563300	4226375	0.001233	9901	DieselExhPM	3.21E-07	25YrCancerDerived_InhSoilDerm	*	3.21E-07
656	ALL		563300	4226400	0.001236	9901	DieselExhPM	3.21E-07	25YrCancerDerived_InhSoilDerm	*	3.21E-07
657	ALL		563300	4226425	0.001251	9901	DieselExhPM	3.25E-07	25YrCancerDerived_InhSoilDerm	*	3.25E-07
658	ALL		563300	4226450	0.001289	9901	DieselExhPM	3.35E-07	25YrCancerDerived_InhSoilDerm	*	3.35E-07
659	ALL		563300	4226475	0.001365	9901	DieselExhPM	3.55E-07	25YrCancerDerived_InhSoilDerm	*	3.55E-07
660	ALL		563300	4226500	0.001519	9901	DieselExhPM	3.95E-07	25YrCancerDerived_InhSoilDerm	*	3.95E-07
661	ALL		563300	4226525	0.001822	9901	DieselExhPM	4.74E-07	25YrCancerDerived_InhSoilDerm	*	4.74E-07
662	ALL		563300	4226550	0.002442	9901	DieselExhPM	6.35E-07	25YrCancerDerived_InhSoilDerm	*	6.35E-07
663	ALL		563300	4226575	0.003606	9901	DieselExhPM	9.37E-07	25YrCancerDerived_InhSoilDerm	*	9.37E-07
664	ALL		563300	4226600	0.005313	9901	DieselExhPM	1.38E-06	25YrCancerDerived_InhSoilDerm	*	1.38E-06
665	ALL		563300	4226625	0.007072	9901	DieselExhPM	1.84E-06	25YrCancerDerived_InhSoilDerm	*	1.84E-06
666	ALL		563300	4226650	0.008364	9901	DieselExhPM	2.17E-06	25YrCancerDerived_InhSoilDerm	*	2.17E-06
667	ALL		563300	4226675	0.009027	9901	DieselExhPM	2.35E-06	25YrCancerDerived_InhSoilDerm	*	2.35E-06
668	ALL		563300	4226700	0.009085	9901	DieselExhPM	2.36E-06	25YrCancerDerived_InhSoilDerm	*	2.36E-06
669	ALL		563300	4226725	0.008556	9901	DieselExhPM	2.22E-06	25YrCancerDerived_InhSoilDerm	*	2.22E-06
670	ALL		563300	4226750	0.00746	9901	DieselExhPM	1.94E-06	25YrCancerDerived_InhSoilDerm	*	1.94E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
671	ALL		563300	4226775	0.006008	9901	DieselExhPM	1.56E-06	25YrCancerDerived_InhSoilDerm	*	1.56E-06
672	ALL		563300	4226800	0.004587	9901	DieselExhPM	1.19E-06	25YrCancerDerived_InhSoilDerm	*	1.19E-06
673	ALL		563300	4226825	0.003521	9901	DieselExhPM	9.15E-07	25YrCancerDerived_InhSoilDerm	*	9.15E-07
674	ALL		563300	4226850	0.002703	9901	DieselExhPM	7.03E-07	25YrCancerDerived_InhSoilDerm	*	7.03E-07
675	ALL		563300	4226875	0.002116	9901	DieselExhPM	5.50E-07	25YrCancerDerived_InhSoilDerm	*	5.50E-07
676	ALL		563300	4226900	0.001694	9901	DieselExhPM	4.40E-07	25YrCancerDerived_InhSoilDerm	*	4.40E-07
677	ALL		563300	4226925	0.00139	9901	DieselExhPM	3.61E-07	25YrCancerDerived_InhSoilDerm	*	3.61E-07
678	ALL		563300	4226950	0.001183	9901	DieselExhPM	3.08E-07	25YrCancerDerived_InhSoilDerm	*	3.08E-07
679	ALL		563300	4226975	0.001031	9901	DieselExhPM	2.68E-07	25YrCancerDerived_InhSoilDerm	*	2.68E-07
680	ALL		563300	4227000	0.000924	9901	DieselExhPM	2.40E-07	25YrCancerDerived_InhSoilDerm	*	2.40E-07
681	ALL		563300	4227025	0.000845	9901	DieselExhPM	2.20E-07	25YrCancerDerived_InhSoilDerm	*	2.20E-07
682	ALL		563300	4227050	0.000776	9901	DieselExhPM	2.02E-07	25YrCancerDerived_InhSoilDerm	*	2.02E-07
683	ALL		563325	4226300	0.001481	9901	DieselExhPM	3.85E-07	25YrCancerDerived_InhSoilDerm	*	3.85E-07
684	ALL		563325	4226325	0.001501	9901	DieselExhPM	3.90E-07	25YrCancerDerived_InhSoilDerm	*	3.90E-07
685	ALL		563325	4226350	0.001515	9901	DieselExhPM	3.94E-07	25YrCancerDerived_InhSoilDerm	*	3.94E-07
686	ALL		563325	4226375	0.001524	9901	DieselExhPM	3.96E-07	25YrCancerDerived_InhSoilDerm	*	3.96E-07
687	ALL		563325	4226400	0.001531	9901	DieselExhPM	3.98E-07	25YrCancerDerived_InhSoilDerm	*	3.98E-07
688	ALL		563325	4226425	0.001541	9901	DieselExhPM	4.01E-07	25YrCancerDerived_InhSoilDerm	*	4.01E-07
689	ALL		563325	4226450	0.001569	9901	DieselExhPM	4.08E-07	25YrCancerDerived_InhSoilDerm	*	4.08E-07
690	ALL		563325	4226475	0.001637	9901	DieselExhPM	4.26E-07	25YrCancerDerived_InhSoilDerm	*	4.26E-07
691	ALL		563325	4226500	0.001788	9901	DieselExhPM	4.65E-07	25YrCancerDerived_InhSoilDerm	*	4.65E-07
692	ALL		563325	4226525	0.002082	9901	DieselExhPM	5.41E-07	25YrCancerDerived_InhSoilDerm	*	5.41E-07
693	ALL		563325	4226550	0.002744	9901	DieselExhPM	7.13E-07	25YrCancerDerived_InhSoilDerm	*	7.13E-07
694	ALL		563325	4226575	0.004107	9901	DieselExhPM	1.07E-06	25YrCancerDerived_InhSoilDerm	*	1.07E-06
695	ALL		563325	4226600	0.006298	9901	DieselExhPM	1.64E-06	25YrCancerDerived_InhSoilDerm	*	1.64E-06
696	ALL		563325	4226625	0.00851	9901	DieselExhPM	2.21E-06	25YrCancerDerived_InhSoilDerm	*	2.21E-06
697	ALL		563325	4226650	0.009978	9901	DieselExhPM	2.59E-06	25YrCancerDerived_InhSoilDerm	*	2.59E-06
698	ALL		563325	4226675	0.010672	9901	DieselExhPM	2.77E-06	25YrCancerDerived_InhSoilDerm	*	2.77E-06
699	ALL		563325	4226700	0.010663	9901	DieselExhPM	2.77E-06	25YrCancerDerived_InhSoilDerm	*	2.77E-06
700	ALL		563325	4226725	0.009944	9901	DieselExhPM	2.58E-06	25YrCancerDerived_InhSoilDerm	*	2.58E-06
701	ALL		563325	4226750	0.008524	9901	DieselExhPM	2.22E-06	25YrCancerDerived_InhSoilDerm	*	2.22E-06
702	ALL		563325	4226775	0.006721	9901	DieselExhPM	1.75E-06	25YrCancerDerived_InhSoilDerm	*	1.75E-06
703	ALL		563325	4226800	0.005023	9901	DieselExhPM	1.31E-06	25YrCancerDerived_InhSoilDerm	*	1.31E-06
704	ALL		563325	4226825	0.003707	9901	DieselExhPM	9.63E-07	25YrCancerDerived_InhSoilDerm	*	9.63E-07
705	ALL		563325	4226850	0.002828	9901	DieselExhPM	7.35E-07	25YrCancerDerived_InhSoilDerm	*	7.35E-07
706	ALL		563325	4226875	0.002239	9901	DieselExhPM	5.82E-07	25YrCancerDerived_InhSoilDerm	*	5.82E-07
707	ALL		563325	4226900	0.001815	9901	DieselExhPM	4.72E-07	25YrCancerDerived_InhSoilDerm	*	4.72E-07
708	ALL		563325	4226925	0.001494	9901	DieselExhPM	3.88E-07	25YrCancerDerived_InhSoilDerm	*	3.88E-07
709	ALL		563325	4226950	0.001286	9901	DieselExhPM	3.34E-07	25YrCancerDerived_InhSoilDerm	*	3.34E-07
710	ALL		563325	4226975	0.001121	9901	DieselExhPM	2.92E-07	25YrCancerDerived_InhSoilDerm	*	2.92E-07
711	ALL		563325	4227000	0.001008	9901	DieselExhPM	2.62E-07	25YrCancerDerived_InhSoilDerm	*	2.62E-07
712	ALL		563325	4227025	0.000923	9901	DieselExhPM	2.40E-07	25YrCancerDerived_InhSoilDerm	*	2.40E-07
713	ALL		563325	4227050	0.000849	9901	DieselExhPM	2.21E-07	25YrCancerDerived_InhSoilDerm	*	2.21E-07
714	ALL		563350	4226300	0.001775	9901	DieselExhPM	4.61E-07	25YrCancerDerived_InhSoilDerm	*	4.61E-07
715	ALL		563350	4226325	0.001817	9901	DieselExhPM	4.72E-07	25YrCancerDerived_InhSoilDerm	*	4.72E-07
716	ALL		563350	4226350	0.001855	9901	DieselExhPM	4.82E-07	25YrCancerDerived_InhSoilDerm	*	4.82E-07
717	ALL		563350	4226375	0.001888	9901	DieselExhPM	4.91E-07	25YrCancerDerived_InhSoilDerm	*	4.91E-07
718	ALL		563350	4226400	0.001921	9901	DieselExhPM	4.99E-07	25YrCancerDerived_InhSoilDerm	*	4.99E-07
719	ALL		563350	4226425	0.001947	9901	DieselExhPM	5.06E-07	25YrCancerDerived_InhSoilDerm	*	5.06E-07
720	ALL		563350	4226450	0.001984	9901	DieselExhPM	5.16E-07	25YrCancerDerived_InhSoilDerm	*	5.16E-07
721	ALL		563350	4226475	0.002051	9901	DieselExhPM	5.33E-07	25YrCancerDerived_InhSoilDerm	*	5.33E-07
722	ALL		563350	4226500	0.002189	9901	DieselExhPM	5.69E-07	25YrCancerDerived_InhSoilDerm	*	5.69E-07
723	ALL		563350	4226525	0.002488	9901	DieselExhPM	6.47E-07	25YrCancerDerived_InhSoilDerm	*	6.47E-07
724	ALL		563350	4226550	0.003182	9901	DieselExhPM	8.27E-07	25YrCancerDerived_InhSoilDerm	*	8.27E-07
725	ALL		563350	4226575	0.004783	9901	DieselExhPM	1.24E-06	25YrCancerDerived_InhSoilDerm	*	1.24E-06
726	ALL		563350	4226600	0.007626	9901	DieselExhPM	1.98E-06	25YrCancerDerived_InhSoilDerm	*	1.98E-06
727	ALL		563350	4226625	0.010488	9901	DieselExhPM	2.73E-06	25YrCancerDerived_InhSoilDerm	*	2.73E-06
728	ALL		563350	4226650	0.012125	9901	DieselExhPM	3.15E-06	25YrCancerDerived_InhSoilDerm	*	3.15E-06
729	ALL		563350	4226675	0.012805	9901	DieselExhPM	3.33E-06	25YrCancerDerived_InhSoilDerm	*	3.33E-06
730	ALL		563350	4226700	0.012688	9901	DieselExhPM	3.30E-06	25YrCancerDerived_InhSoilDerm	*	3.30E-06
731	ALL		563350	4226725	0.011773	9901	DieselExhPM	3.06E-06	25YrCancerDerived_InhSoilDerm	*	3.06E-06
732	ALL		563350	4226750	0.009915	9901	DieselExhPM	2.58E-06	25YrCancerDerived_InhSoilDerm	*	2.58E-06
733	ALL		563350	4226775	0.00755	9901	DieselExhPM	1.96E-06	25YrCancerDerived_InhSoilDerm	*	1.96E-06
734	ALL		563350	4226800	0.005473	9901	DieselExhPM	1.42E-06	25YrCancerDerived_InhSoilDerm	*	1.42E-06
735	ALL		563350	4226825	0.004009	9901	DieselExhPM	1.04E-06	25YrCancerDerived_InhSoilDerm	*	1.04E-06
736	ALL		563350	4226850	0.003042	9901	DieselExhPM	7.91E-07	25YrCancerDerived_InhSoilDerm	*	7.91E-07
737	ALL		563350	4226875	0.002399	9901	DieselExhPM	6.24E-07	25YrCancerDerived_InhSoilDerm	*	6.24E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
738	ALL		563350	4226900	0.001959	9901	DieselExhPM	5.09E-07	25YrCancerDerived_InhSoilDerm	*	5.09E-07
739	ALL		563350	4226925	0.001637	9901	DieselExhPM	4.26E-07	25YrCancerDerived_InhSoilDerm	*	4.26E-07
740	ALL		563350	4226950	0.00143	9901	DieselExhPM	3.72E-07	25YrCancerDerived_InhSoilDerm	*	3.72E-07
741	ALL		563350	4226975	0.001259	9901	DieselExhPM	3.27E-07	25YrCancerDerived_InhSoilDerm	*	3.27E-07
742	ALL		563350	4227000	0.001112	9901	DieselExhPM	2.89E-07	25YrCancerDerived_InhSoilDerm	*	2.89E-07
743	ALL		563350	4227025	0.001015	9901	DieselExhPM	2.64E-07	25YrCancerDerived_InhSoilDerm	*	2.64E-07
744	ALL		563350	4227050	0.00093	9901	DieselExhPM	2.42E-07	25YrCancerDerived_InhSoilDerm	*	2.42E-07
745	ALL		563375	4226300	0.002127	9901	DieselExhPM	5.53E-07	25YrCancerDerived_InhSoilDerm	*	5.53E-07
746	ALL		563375	4226325	0.002203	9901	DieselExhPM	5.73E-07	25YrCancerDerived_InhSoilDerm	*	5.73E-07
747	ALL		563375	4226350	0.002282	9901	DieselExhPM	5.93E-07	25YrCancerDerived_InhSoilDerm	*	5.93E-07
748	ALL		563375	4226375	0.002361	9901	DieselExhPM	6.14E-07	25YrCancerDerived_InhSoilDerm	*	6.14E-07
749	ALL		563375	4226400	0.00244	9901	DieselExhPM	6.34E-07	25YrCancerDerived_InhSoilDerm	*	6.34E-07
750	ALL		563375	4226425	0.002518	9901	DieselExhPM	6.55E-07	25YrCancerDerived_InhSoilDerm	*	6.55E-07
751	ALL		563375	4226450	0.0026	9901	DieselExhPM	6.76E-07	25YrCancerDerived_InhSoilDerm	*	6.76E-07
752	ALL		563375	4226475	0.002691	9901	DieselExhPM	7.00E-07	25YrCancerDerived_InhSoilDerm	*	7.00E-07
753	ALL		563375	4226500	0.002829	9901	DieselExhPM	7.35E-07	25YrCancerDerived_InhSoilDerm	*	7.35E-07
754	ALL		563375	4226525	0.003126	9901	DieselExhPM	8.13E-07	25YrCancerDerived_InhSoilDerm	*	8.13E-07
755	ALL		563375	4226550	0.003843	9901	DieselExhPM	9.99E-07	25YrCancerDerived_InhSoilDerm	*	9.99E-07
756	ALL		563375	4226575	0.005697	9901	DieselExhPM	1.48E-06	25YrCancerDerived_InhSoilDerm	*	1.48E-06
757	ALL		563375	4226600	0.009572	9901	DieselExhPM	2.49E-06	25YrCancerDerived_InhSoilDerm	*	2.49E-06
758	ALL		563375	4226625	0.013288	9901	DieselExhPM	3.45E-06	25YrCancerDerived_InhSoilDerm	*	3.45E-06
759	ALL		563375	4226650	0.015125	9901	DieselExhPM	3.93E-06	25YrCancerDerived_InhSoilDerm	*	3.93E-06
760	ALL		563375	4226675	0.015674	9901	DieselExhPM	4.07E-06	25YrCancerDerived_InhSoilDerm	*	4.07E-06
761	ALL		563375	4226700	0.015394	9901	DieselExhPM	4.00E-06	25YrCancerDerived_InhSoilDerm	*	4.00E-06
762	ALL		563375	4226725	0.014195	9901	DieselExhPM	3.69E-06	25YrCancerDerived_InhSoilDerm	*	3.69E-06
763	ALL		563375	4226750	0.011752	9901	DieselExhPM	3.05E-06	25YrCancerDerived_InhSoilDerm	*	3.05E-06
764	ALL		563375	4226775	0.008586	9901	DieselExhPM	2.23E-06	25YrCancerDerived_InhSoilDerm	*	2.23E-06
765	ALL		563375	4226800	0.00601	9901	DieselExhPM	1.56E-06	25YrCancerDerived_InhSoilDerm	*	1.56E-06
766	ALL		563375	4226825	0.00434	9901	DieselExhPM	1.13E-06	25YrCancerDerived_InhSoilDerm	*	1.13E-06
767	ALL		563375	4226850	0.003294	9901	DieselExhPM	8.56E-07	25YrCancerDerived_InhSoilDerm	*	8.56E-07
768	ALL		563375	4226875	0.002612	9901	DieselExhPM	6.79E-07	25YrCancerDerived_InhSoilDerm	*	6.79E-07
769	ALL		563375	4226900	0.002149	9901	DieselExhPM	5.58E-07	25YrCancerDerived_InhSoilDerm	*	5.58E-07
770	ALL		563375	4226925	0.001813	9901	DieselExhPM	4.71E-07	25YrCancerDerived_InhSoilDerm	*	4.71E-07
771	ALL		563375	4226950	0.001585	9901	DieselExhPM	4.12E-07	25YrCancerDerived_InhSoilDerm	*	4.12E-07
772	ALL		563375	4226975	0.001405	9901	DieselExhPM	3.65E-07	25YrCancerDerived_InhSoilDerm	*	3.65E-07
773	ALL		563375	4227000	0.001242	9901	DieselExhPM	3.23E-07	25YrCancerDerived_InhSoilDerm	*	3.23E-07
774	ALL		563375	4227025	0.001123	9901	DieselExhPM	2.92E-07	25YrCancerDerived_InhSoilDerm	*	2.92E-07
775	ALL		563375	4227050	0.001025	9901	DieselExhPM	2.67E-07	25YrCancerDerived_InhSoilDerm	*	2.67E-07
776	ALL		563400	4226300	0.002523	9901	DieselExhPM	6.56E-07	25YrCancerDerived_InhSoilDerm	*	6.56E-07
777	ALL		563400	4226325	0.002654	9901	DieselExhPM	6.90E-07	25YrCancerDerived_InhSoilDerm	*	6.90E-07
778	ALL		563400	4226350	0.002792	9901	DieselExhPM	7.26E-07	25YrCancerDerived_InhSoilDerm	*	7.26E-07
779	ALL		563400	4226375	0.002939	9901	DieselExhPM	7.64E-07	25YrCancerDerived_InhSoilDerm	*	7.64E-07
780	ALL		563400	4226400	0.003104	9901	DieselExhPM	8.07E-07	25YrCancerDerived_InhSoilDerm	*	8.07E-07
781	ALL		563400	4226425	0.003282	9901	DieselExhPM	8.53E-07	25YrCancerDerived_InhSoilDerm	*	8.53E-07
782	ALL		563400	4226450	0.003468	9901	DieselExhPM	9.01E-07	25YrCancerDerived_InhSoilDerm	*	9.01E-07
783	ALL		563400	4226475	0.003671	9901	DieselExhPM	9.54E-07	25YrCancerDerived_InhSoilDerm	*	9.54E-07
784	ALL		563400	4226500	0.00391	9901	DieselExhPM	1.02E-06	25YrCancerDerived_InhSoilDerm	*	1.02E-06
785	ALL		563400	4226525	0.00425	9901	DieselExhPM	1.10E-06	25YrCancerDerived_InhSoilDerm	*	1.10E-06
786	ALL		563400	4226550	0.005004	9901	DieselExhPM	1.30E-06	25YrCancerDerived_InhSoilDerm	*	1.30E-06
787	ALL		563400	4226575	0.007074	9901	DieselExhPM	1.84E-06	25YrCancerDerived_InhSoilDerm	*	1.84E-06
788	ALL		563400	4226600	0.012367	9901	DieselExhPM	3.21E-06	25YrCancerDerived_InhSoilDerm	*	3.21E-06
789	ALL		563400	4226625	0.01718	9901	DieselExhPM	4.47E-06	25YrCancerDerived_InhSoilDerm	*	4.47E-06
790	ALL		563400	4226650	0.019195	9901	DieselExhPM	4.99E-06	25YrCancerDerived_InhSoilDerm	*	4.99E-06
791	ALL		563400	4226675	0.01964	9901	DieselExhPM	5.11E-06	25YrCancerDerived_InhSoilDerm	*	5.11E-06
792	ALL		563400	4226700	0.019118	9901	DieselExhPM	4.97E-06	25YrCancerDerived_InhSoilDerm	*	4.97E-06
793	ALL		563400	4226725	0.017555	9901	DieselExhPM	4.56E-06	25YrCancerDerived_InhSoilDerm	*	4.56E-06
794	ALL		563400	4226750	0.014258	9901	DieselExhPM	3.71E-06	25YrCancerDerived_InhSoilDerm	*	3.71E-06
795	ALL		563400	4226775	0.009884	9901	DieselExhPM	2.57E-06	25YrCancerDerived_InhSoilDerm	*	2.57E-06
796	ALL		563400	4226800	0.006693	9901	DieselExhPM	1.74E-06	25YrCancerDerived_InhSoilDerm	*	1.74E-06
797	ALL		563400	4226825	0.004805	9901	DieselExhPM	1.25E-06	25YrCancerDerived_InhSoilDerm	*	1.25E-06
798	ALL		563400	4226850	0.003662	9901	DieselExhPM	9.52E-07	25YrCancerDerived_InhSoilDerm	*	9.52E-07
799	ALL		563400	4226875	0.002922	9901	DieselExhPM	7.60E-07	25YrCancerDerived_InhSoilDerm	*	7.60E-07
800	ALL		563400	4226900	0.002414	9901	DieselExhPM	6.28E-07	25YrCancerDerived_InhSoilDerm	*	6.28E-07
801	ALL		563400	4226925	0.002048	9901	DieselExhPM	5.32E-07	25YrCancerDerived_InhSoilDerm	*	5.32E-07
802	ALL		563400	4226950	0.001788	9901	DieselExhPM	4.65E-07	25YrCancerDerived_InhSoilDerm	*	4.65E-07
803	ALL		563400	4226975	0.001585	9901	DieselExhPM	4.12E-07	25YrCancerDerived_InhSoilDerm	*	4.12E-07
804	ALL		563400	4227000	0.001409	9901	DieselExhPM	3.66E-07	25YrCancerDerived_InhSoilDerm	*	3.66E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
805	ALL		563400	4227025	0.001253	9901	DieselExhPM	3.26E-07	25YrCancerDerived_InhSoilDerm	*	3.26E-07
806	ALL		563400	4227050	0.001143	9901	DieselExhPM	2.97E-07	25YrCancerDerived_InhSoilDerm	*	2.97E-07
807	ALL		563425	4226300	0.002935	9901	DieselExhPM	7.63E-07	25YrCancerDerived_InhSoilDerm	*	7.63E-07
808	ALL		563425	4226325	0.003133	9901	DieselExhPM	8.14E-07	25YrCancerDerived_InhSoilDerm	*	8.14E-07
809	ALL		563425	4226350	0.003353	9901	DieselExhPM	8.71E-07	25YrCancerDerived_InhSoilDerm	*	8.71E-07
810	ALL		563425	4226375	0.003599	9901	DieselExhPM	9.35E-07	25YrCancerDerived_InhSoilDerm	*	9.35E-07
811	ALL		563425	4226400	0.003886	9901	DieselExhPM	1.01E-06	25YrCancerDerived_InhSoilDerm	*	1.01E-06
812	ALL		563425	4226425	0.004226	9901	DieselExhPM	1.10E-06	25YrCancerDerived_InhSoilDerm	*	1.10E-06
813	ALL		563425	4226450	0.004625	9901	DieselExhPM	1.20E-06	25YrCancerDerived_InhSoilDerm	*	1.20E-06
814	ALL		563425	4226475	0.005091	9901	DieselExhPM	1.32E-06	25YrCancerDerived_InhSoilDerm	*	1.32E-06
815	ALL		563425	4226500	0.005662	9901	DieselExhPM	1.47E-06	25YrCancerDerived_InhSoilDerm	*	1.47E-06
816	ALL		563425	4226525	0.006377	9901	DieselExhPM	1.66E-06	25YrCancerDerived_InhSoilDerm	*	1.66E-06
817	ALL		563425	4226550	0.007465	9901	DieselExhPM	1.94E-06	25YrCancerDerived_InhSoilDerm	*	1.94E-06
818	ALL		563425	4226575	0.009786	9901	DieselExhPM	2.54E-06	25YrCancerDerived_InhSoilDerm	*	2.54E-06
819	ALL		563425	4226600	0.0163	9901	DieselExhPM	4.24E-06	25YrCancerDerived_InhSoilDerm	*	4.24E-06
820	ALL		563425	4226625	0.022235	9901	DieselExhPM	5.78E-06	25YrCancerDerived_InhSoilDerm	*	5.78E-06
821	ALL		563425	4226650	0.024386	9901	DieselExhPM	6.34E-06	25YrCancerDerived_InhSoilDerm	*	6.34E-06
822	ALL		563425	4226675	0.024775	9901	DieselExhPM	6.44E-06	25YrCancerDerived_InhSoilDerm	*	6.44E-06
823	ALL		563425	4226700	0.024229	9901	DieselExhPM	6.30E-06	25YrCancerDerived_InhSoilDerm	*	6.30E-06
824	ALL		563425	4226725	0.022342	9901	DieselExhPM	5.81E-06	25YrCancerDerived_InhSoilDerm	*	5.81E-06
825	ALL		563425	4226750	0.017907	9901	DieselExhPM	4.65E-06	25YrCancerDerived_InhSoilDerm	*	4.65E-06
826	ALL		563425	4226775	0.011677	9901	DieselExhPM	3.04E-06	25YrCancerDerived_InhSoilDerm	*	3.04E-06
827	ALL		563425	4226800	0.007737	9901	DieselExhPM	2.01E-06	25YrCancerDerived_InhSoilDerm	*	2.01E-06
828	ALL		563425	4226825	0.005575	9901	DieselExhPM	1.45E-06	25YrCancerDerived_InhSoilDerm	*	1.45E-06
829	ALL		563425	4226850	0.004275	9901	DieselExhPM	1.11E-06	25YrCancerDerived_InhSoilDerm	*	1.11E-06
830	ALL		563425	4226875	0.003429	9901	DieselExhPM	8.91E-07	25YrCancerDerived_InhSoilDerm	*	8.91E-07
831	ALL		563425	4226900	0.002838	9901	DieselExhPM	7.38E-07	25YrCancerDerived_InhSoilDerm	*	7.38E-07
832	ALL		563425	4226925	0.002406	9901	DieselExhPM	6.25E-07	25YrCancerDerived_InhSoilDerm	*	6.25E-07
833	ALL		563425	4226950	0.002089	9901	DieselExhPM	5.43E-07	25YrCancerDerived_InhSoilDerm	*	5.43E-07
834	ALL		563425	4226975	0.001839	9901	DieselExhPM	4.78E-07	25YrCancerDerived_InhSoilDerm	*	4.78E-07
835	ALL		563425	4227000	0.001629	9901	DieselExhPM	4.24E-07	25YrCancerDerived_InhSoilDerm	*	4.24E-07
836	ALL		563425	4227025	0.001448	9901	DieselExhPM	3.76E-07	25YrCancerDerived_InhSoilDerm	*	3.76E-07
837	ALL		563425	4227050	0.001292	9901	DieselExhPM	3.36E-07	25YrCancerDerived_InhSoilDerm	*	3.36E-07
838	ALL		563450	4226300	0.00333	9901	DieselExhPM	8.66E-07	25YrCancerDerived_InhSoilDerm	*	8.66E-07
839	ALL		563450	4226325	0.003597	9901	DieselExhPM	9.35E-07	25YrCancerDerived_InhSoilDerm	*	9.35E-07
840	ALL		563450	4226350	0.003905	9901	DieselExhPM	1.02E-06	25YrCancerDerived_InhSoilDerm	*	1.02E-06
841	ALL		563450	4226375	0.004262	9901	DieselExhPM	1.11E-06	25YrCancerDerived_InhSoilDerm	*	1.11E-06
842	ALL		563450	4226400	0.004688	9901	DieselExhPM	1.22E-06	25YrCancerDerived_InhSoilDerm	*	1.22E-06
843	ALL		563450	4226425	0.005223	9901	DieselExhPM	1.36E-06	25YrCancerDerived_InhSoilDerm	*	1.36E-06
844	ALL		563450	4226450	0.005886	9901	DieselExhPM	1.53E-06	25YrCancerDerived_InhSoilDerm	*	1.53E-06
845	ALL		563450	4226475	0.006736	9901	DieselExhPM	1.75E-06	25YrCancerDerived_InhSoilDerm	*	1.75E-06
846	ALL		563450	4226500	0.007917	9901	DieselExhPM	2.06E-06	25YrCancerDerived_InhSoilDerm	*	2.06E-06
847	ALL		563450	4226525	0.0096	9901	DieselExhPM	2.50E-06	25YrCancerDerived_InhSoilDerm	*	2.50E-06
848	ALL		563450	4226550	0.012291	9901	DieselExhPM	3.19E-06	25YrCancerDerived_InhSoilDerm	*	3.19E-06
849	ALL		563450	4226575	0.016749	9901	DieselExhPM	4.35E-06	25YrCancerDerived_InhSoilDerm	*	4.35E-06
850	ALL		563450	4226650	0.033574	9901	DieselExhPM	8.73E-06	25YrCancerDerived_InhSoilDerm	*	8.73E-06
851	ALL		563450	4226675	0.033387	9901	DieselExhPM	8.68E-06	25YrCancerDerived_InhSoilDerm	*	8.68E-06
852	ALL		563450	4226700	0.031887	9901	DieselExhPM	8.29E-06	25YrCancerDerived_InhSoilDerm	*	8.29E-06
853	ALL		563450	4226725	0.029269	9901	DieselExhPM	7.61E-06	25YrCancerDerived_InhSoilDerm	*	7.61E-06
854	ALL		563450	4226750	0.023607	9901	DieselExhPM	6.14E-06	25YrCancerDerived_InhSoilDerm	*	6.14E-06
855	ALL		563450	4226775	0.014939	9901	DieselExhPM	3.88E-06	25YrCancerDerived_InhSoilDerm	*	3.88E-06
856	ALL		563450	4226800	0.0099	9901	DieselExhPM	2.57E-06	25YrCancerDerived_InhSoilDerm	*	2.57E-06
857	ALL		563450	4226825	0.007136	9901	DieselExhPM	1.86E-06	25YrCancerDerived_InhSoilDerm	*	1.86E-06
858	ALL		563450	4226850	0.005472	9901	DieselExhPM	1.42E-06	25YrCancerDerived_InhSoilDerm	*	1.42E-06
859	ALL		563450	4226875	0.004379	9901	DieselExhPM	1.14E-06	25YrCancerDerived_InhSoilDerm	*	1.14E-06
860	ALL		563450	4226900	0.003599	9901	DieselExhPM	9.35E-07	25YrCancerDerived_InhSoilDerm	*	9.35E-07
861	ALL		563450	4226925	0.003017	9901	DieselExhPM	7.84E-07	25YrCancerDerived_InhSoilDerm	*	7.84E-07
862	ALL		563450	4226950	0.002579	9901	DieselExhPM	6.70E-07	25YrCancerDerived_InhSoilDerm	*	6.70E-07
863	ALL		563450	4226975	0.00225	9901	DieselExhPM	5.85E-07	25YrCancerDerived_InhSoilDerm	*	5.85E-07
864	ALL		563450	4227000	0.001971	9901	DieselExhPM	5.12E-07	25YrCancerDerived_InhSoilDerm	*	5.12E-07
865	ALL		563450	4227025	0.001741	9901	DieselExhPM	4.53E-07	25YrCancerDerived_InhSoilDerm	*	4.53E-07
866	ALL		563450	4227050	0.001499	9901	DieselExhPM	3.90E-07	25YrCancerDerived_InhSoilDerm	*	3.90E-07
867	ALL		563475	4226300	0.003679	9901	DieselExhPM	9.56E-07	25YrCancerDerived_InhSoilDerm	*	9.56E-07
868	ALL		563475	4226325	0.004013	9901	DieselExhPM	1.04E-06	25YrCancerDerived_InhSoilDerm	*	1.04E-06
869	ALL		563475	4226350	0.004401	9901	DieselExhPM	1.14E-06	25YrCancerDerived_InhSoilDerm	*	1.14E-06
870	ALL		563475	4226375	0.004866	9901	DieselExhPM	1.26E-06	25YrCancerDerived_InhSoilDerm	*	1.26E-06
871	ALL		563475	4226400	0.005426	9901	DieselExhPM	1.41E-06	25YrCancerDerived_InhSoilDerm	*	1.41E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
872	ALL		563475	4226425	0.006142	9901	DieselExhPM	1.60E-06	25YrCancerDerived_InhSoilDerm	*	1.60E-06
873	ALL		563475	4226450	0.007053	9901	DieselExhPM	1.83E-06	25YrCancerDerived_InhSoilDerm	*	1.83E-06
874	ALL		563475	4226475	0.008267	9901	DieselExhPM	2.15E-06	25YrCancerDerived_InhSoilDerm	*	2.15E-06
875	ALL		563475	4226500	0.010008	9901	DieselExhPM	2.60E-06	25YrCancerDerived_InhSoilDerm	*	2.60E-06
876	ALL		563475	4226525	0.01264	9901	DieselExhPM	3.29E-06	25YrCancerDerived_InhSoilDerm	*	3.29E-06
877	ALL		563475	4226550	0.017113	9901	DieselExhPM	4.45E-06	25YrCancerDerived_InhSoilDerm	*	4.45E-06
878	ALL		563475	4226575	0.024581	9901	DieselExhPM	6.39E-06	25YrCancerDerived_InhSoilDerm	*	6.39E-06
879	ALL		563475	4226775	0.024408	9901	DieselExhPM	6.34E-06	25YrCancerDerived_InhSoilDerm	*	6.34E-06
880	ALL		563475	4226800	0.015748	9901	DieselExhPM	4.09E-06	25YrCancerDerived_InhSoilDerm	*	4.09E-06
881	ALL		563475	4226825	0.010932	9901	DieselExhPM	2.84E-06	25YrCancerDerived_InhSoilDerm	*	2.84E-06
882	ALL		563475	4226850	0.008116	9901	DieselExhPM	2.11E-06	25YrCancerDerived_InhSoilDerm	*	2.11E-06
883	ALL		563475	4226875	0.006202	9901	DieselExhPM	1.61E-06	25YrCancerDerived_InhSoilDerm	*	1.61E-06
884	ALL		563475	4226900	0.004989	9901	DieselExhPM	1.30E-06	25YrCancerDerived_InhSoilDerm	*	1.30E-06
885	ALL		563475	4226925	0.004087	9901	DieselExhPM	1.06E-06	25YrCancerDerived_InhSoilDerm	*	1.06E-06
886	ALL		563475	4226950	0.003434	9901	DieselExhPM	8.93E-07	25YrCancerDerived_InhSoilDerm	*	8.93E-07
887	ALL		563475	4226975	0.002926	9901	DieselExhPM	7.61E-07	25YrCancerDerived_InhSoilDerm	*	7.61E-07
888	ALL		563475	4227000	0.002512	9901	DieselExhPM	6.53E-07	25YrCancerDerived_InhSoilDerm	*	6.53E-07
889	ALL		563475	4227025	0.002184	9901	DieselExhPM	5.68E-07	25YrCancerDerived_InhSoilDerm	*	5.68E-07
890	ALL		563475	4227050	0.001845	9901	DieselExhPM	4.80E-07	25YrCancerDerived_InhSoilDerm	*	4.80E-07
891	ALL		563500	4226300	0.00396	9901	DieselExhPM	1.03E-06	25YrCancerDerived_InhSoilDerm	*	1.03E-06
892	ALL		563500	4226325	0.004353	9901	DieselExhPM	1.13E-06	25YrCancerDerived_InhSoilDerm	*	1.13E-06
893	ALL		563500	4226350	0.00482	9901	DieselExhPM	1.25E-06	25YrCancerDerived_InhSoilDerm	*	1.25E-06
894	ALL		563500	4226375	0.005372	9901	DieselExhPM	1.40E-06	25YrCancerDerived_InhSoilDerm	*	1.40E-06
895	ALL		563500	4226400	0.006048	9901	DieselExhPM	1.57E-06	25YrCancerDerived_InhSoilDerm	*	1.57E-06
896	ALL		563500	4226425	0.006899	9901	DieselExhPM	1.79E-06	25YrCancerDerived_InhSoilDerm	*	1.79E-06
897	ALL		563500	4226450	0.008003	9901	DieselExhPM	2.08E-06	25YrCancerDerived_InhSoilDerm	*	2.08E-06
898	ALL		563500	4226475	0.009488	9901	DieselExhPM	2.47E-06	25YrCancerDerived_InhSoilDerm	*	2.47E-06
899	ALL		563500	4226500	0.011608	9901	DieselExhPM	3.02E-06	25YrCancerDerived_InhSoilDerm	*	3.02E-06
900	ALL		563500	4226525	0.014816	9901	DieselExhPM	3.85E-06	25YrCancerDerived_InhSoilDerm	*	3.85E-06
901	ALL		563500	4226550	0.020092	9901	DieselExhPM	5.22E-06	25YrCancerDerived_InhSoilDerm	*	5.22E-06
902	ALL		563500	4226575	0.029191	9901	DieselExhPM	7.59E-06	25YrCancerDerived_InhSoilDerm	*	7.59E-06
903	ALL		563500	4226775	0.051366	9901	DieselExhPM	1.34E-05	25YrCancerDerived_InhSoilDerm	*	1.34E-05
904	ALL		563500	4226800	0.029735	9901	DieselExhPM	7.73E-06	25YrCancerDerived_InhSoilDerm	*	7.73E-06
905	ALL		563500	4226825	0.018757	9901	DieselExhPM	4.88E-06	25YrCancerDerived_InhSoilDerm	*	4.88E-06
906	ALL		563500	4226850	0.013004	9901	DieselExhPM	3.38E-06	25YrCancerDerived_InhSoilDerm	*	3.38E-06
907	ALL		563500	4226875	0.009496	9901	DieselExhPM	2.47E-06	25YrCancerDerived_InhSoilDerm	*	2.47E-06
908	ALL		563500	4226900	0.007281	9901	DieselExhPM	1.89E-06	25YrCancerDerived_InhSoilDerm	*	1.89E-06
909	ALL		563500	4226925	0.00571	9901	DieselExhPM	1.48E-06	25YrCancerDerived_InhSoilDerm	*	1.48E-06
910	ALL		563500	4226950	0.004716	9901	DieselExhPM	1.23E-06	25YrCancerDerived_InhSoilDerm	*	1.23E-06
911	ALL		563500	4226975	0.00398	9901	DieselExhPM	1.03E-06	25YrCancerDerived_InhSoilDerm	*	1.03E-06
912	ALL		563500	4227000	0.003344	9901	DieselExhPM	8.69E-07	25YrCancerDerived_InhSoilDerm	*	8.69E-07
913	ALL		563500	4227025	0.002843	9901	DieselExhPM	7.39E-07	25YrCancerDerived_InhSoilDerm	*	7.39E-07
914	ALL		563500	4227050	0.002363	9901	DieselExhPM	6.14E-07	25YrCancerDerived_InhSoilDerm	*	6.14E-07
915	ALL		563525	4226300	0.004172	9901	DieselExhPM	1.08E-06	25YrCancerDerived_InhSoilDerm	*	1.08E-06
916	ALL		563525	4226325	0.004618	9901	DieselExhPM	1.20E-06	25YrCancerDerived_InhSoilDerm	*	1.20E-06
917	ALL		563525	4226350	0.005141	9901	DieselExhPM	1.34E-06	25YrCancerDerived_InhSoilDerm	*	1.34E-06
918	ALL		563525	4226375	0.005758	9901	DieselExhPM	1.50E-06	25YrCancerDerived_InhSoilDerm	*	1.50E-06
919	ALL		563525	4226400	0.006533	9901	DieselExhPM	1.70E-06	25YrCancerDerived_InhSoilDerm	*	1.70E-06
920	ALL		563525	4226425	0.007485	9901	DieselExhPM	1.95E-06	25YrCancerDerived_InhSoilDerm	*	1.95E-06
921	ALL		563525	4226450	0.008719	9901	DieselExhPM	2.27E-06	25YrCancerDerived_InhSoilDerm	*	2.27E-06
922	ALL		563525	4226475	0.010401	9901	DieselExhPM	2.70E-06	25YrCancerDerived_InhSoilDerm	*	2.70E-06
923	ALL		563525	4226500	0.012726	9901	DieselExhPM	3.31E-06	25YrCancerDerived_InhSoilDerm	*	3.31E-06
924	ALL		563525	4226525	0.016247	9901	DieselExhPM	4.22E-06	25YrCancerDerived_InhSoilDerm	*	4.22E-06
925	ALL		563525	4226550	0.021909	9901	DieselExhPM	5.69E-06	25YrCancerDerived_InhSoilDerm	*	5.69E-06
926	ALL		563525	4226575	0.03183	9901	DieselExhPM	8.27E-06	25YrCancerDerived_InhSoilDerm	*	8.27E-06
927	ALL		563525	4226775	0.074574	9901	DieselExhPM	1.94E-05	25YrCancerDerived_InhSoilDerm	*	1.94E-05
928	ALL		563525	4226800	0.045725	9901	DieselExhPM	1.19E-05	25YrCancerDerived_InhSoilDerm	*	1.19E-05
929	ALL		563525	4226825	0.029029	9901	DieselExhPM	7.55E-06	25YrCancerDerived_InhSoilDerm	*	7.55E-06
930	ALL		563525	4226850	0.01974	9901	DieselExhPM	5.13E-06	25YrCancerDerived_InhSoilDerm	*	5.13E-06
931	ALL		563525	4226875	0.014094	9901	DieselExhPM	3.66E-06	25YrCancerDerived_InhSoilDerm	*	3.66E-06
932	ALL		563525	4226900	0.010548	9901	DieselExhPM	2.74E-06	25YrCancerDerived_InhSoilDerm	*	2.74E-06
933	ALL		563525	4226925	0.008118	9901	DieselExhPM	2.11E-06	25YrCancerDerived_InhSoilDerm	*	2.11E-06
934	ALL		563525	4226950	0.006454	9901	DieselExhPM	1.68E-06	25YrCancerDerived_InhSoilDerm	*	1.68E-06
935	ALL		563525	4226975	0.005319	9901	DieselExhPM	1.38E-06	25YrCancerDerived_InhSoilDerm	*	1.38E-06
936	ALL		563525	4227000	0.004514	9901	DieselExhPM	1.17E-06	25YrCancerDerived_InhSoilDerm	*	1.17E-06
937	ALL		563525	4227025	0.003771	9901	DieselExhPM	9.80E-07	25YrCancerDerived_InhSoilDerm	*	9.80E-07
938	ALL		563525	4227050	0.003091	9901	DieselExhPM	8.03E-07	25YrCancerDerived_InhSoilDerm	*	8.03E-07

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
939	ALL		563550	4226300	0.004294	9901	DieselExhPM	1.12E-06	25YrCancerDerived_InhSoilDerm	*	1.12E-06
940	ALL		563550	4226325	0.004778	9901	DieselExhPM	1.24E-06	25YrCancerDerived_InhSoilDerm	*	1.24E-06
941	ALL		563550	4226350	0.005349	9901	DieselExhPM	1.39E-06	25YrCancerDerived_InhSoilDerm	*	1.39E-06
942	ALL		563550	4226375	0.006032	9901	DieselExhPM	1.57E-06	25YrCancerDerived_InhSoilDerm	*	1.57E-06
943	ALL		563550	4226400	0.006865	9901	DieselExhPM	1.78E-06	25YrCancerDerived_InhSoilDerm	*	1.78E-06
944	ALL		563550	4226425	0.007898	9901	DieselExhPM	2.05E-06	25YrCancerDerived_InhSoilDerm	*	2.05E-06
945	ALL		563550	4226450	0.009231	9901	DieselExhPM	2.40E-06	25YrCancerDerived_InhSoilDerm	*	2.40E-06
946	ALL		563550	4226475	0.011037	9901	DieselExhPM	2.87E-06	25YrCancerDerived_InhSoilDerm	*	2.87E-06
947	ALL		563550	4226500	0.013486	9901	DieselExhPM	3.51E-06	25YrCancerDerived_InhSoilDerm	*	3.51E-06
948	ALL		563550	4226525	0.017156	9901	DieselExhPM	4.46E-06	25YrCancerDerived_InhSoilDerm	*	4.46E-06
949	ALL		563550	4226550	0.023033	9901	DieselExhPM	5.99E-06	25YrCancerDerived_InhSoilDerm	*	5.99E-06
950	ALL		563550	4226575	0.033431	9901	DieselExhPM	8.69E-06	25YrCancerDerived_InhSoilDerm	*	8.69E-06
951	ALL		563550	4226775	0.084391	9901	DieselExhPM	2.19E-05	25YrCancerDerived_InhSoilDerm	*	2.19E-05
952	ALL		563550	4226800	0.056057	9901	DieselExhPM	1.46E-05	25YrCancerDerived_InhSoilDerm	*	1.46E-05
953	ALL		563550	4226825	0.03757	9901	DieselExhPM	9.77E-06	25YrCancerDerived_InhSoilDerm	*	9.77E-06
954	ALL		563550	4226850	0.026307	9901	DieselExhPM	6.84E-06	25YrCancerDerived_InhSoilDerm	*	6.84E-06
955	ALL		563550	4226875	0.019087	9901	DieselExhPM	4.96E-06	25YrCancerDerived_InhSoilDerm	*	4.96E-06
956	ALL		563550	4226900	0.014317	9901	DieselExhPM	3.72E-06	25YrCancerDerived_InhSoilDerm	*	3.72E-06
957	ALL		563550	4226925	0.010956	9901	DieselExhPM	2.85E-06	25YrCancerDerived_InhSoilDerm	*	2.85E-06
958	ALL		563550	4226950	0.008509	9901	DieselExhPM	2.21E-06	25YrCancerDerived_InhSoilDerm	*	2.21E-06
959	ALL		563550	4226975	0.006741	9901	DieselExhPM	1.75E-06	25YrCancerDerived_InhSoilDerm	*	1.75E-06
960	ALL		563550	4227000	0.00585	9901	DieselExhPM	1.52E-06	25YrCancerDerived_InhSoilDerm	*	1.52E-06
961	ALL		563550	4227025	0.004947	9901	DieselExhPM	1.29E-06	25YrCancerDerived_InhSoilDerm	*	1.29E-06
962	ALL		563550	4227050	0.004024	9901	DieselExhPM	1.05E-06	25YrCancerDerived_InhSoilDerm	*	1.05E-06
963	ALL		563575	4226300	0.004333	9901	DieselExhPM	1.13E-06	25YrCancerDerived_InhSoilDerm	*	1.13E-06
964	ALL		563575	4226325	0.004835	9901	DieselExhPM	1.26E-06	25YrCancerDerived_InhSoilDerm	*	1.26E-06
965	ALL		563575	4226350	0.005434	9901	DieselExhPM	1.41E-06	25YrCancerDerived_InhSoilDerm	*	1.41E-06
966	ALL		563575	4226375	0.006156	9901	DieselExhPM	1.60E-06	25YrCancerDerived_InhSoilDerm	*	1.60E-06
967	ALL		563575	4226400	0.007041	9901	DieselExhPM	1.83E-06	25YrCancerDerived_InhSoilDerm	*	1.83E-06
968	ALL		563575	4226425	0.008133	9901	DieselExhPM	2.11E-06	25YrCancerDerived_InhSoilDerm	*	2.11E-06
969	ALL		563575	4226450	0.00954	9901	DieselExhPM	2.48E-06	25YrCancerDerived_InhSoilDerm	*	2.48E-06
970	ALL		563575	4226475	0.011423	9901	DieselExhPM	2.97E-06	25YrCancerDerived_InhSoilDerm	*	2.97E-06
971	ALL		563575	4226500	0.013979	9901	DieselExhPM	3.63E-06	25YrCancerDerived_InhSoilDerm	*	3.63E-06
972	ALL		563575	4226525	0.017742	9901	DieselExhPM	4.61E-06	25YrCancerDerived_InhSoilDerm	*	4.61E-06
973	ALL		563575	4226550	0.023736	9901	DieselExhPM	6.17E-06	25YrCancerDerived_InhSoilDerm	*	6.17E-06
974	ALL		563575	4226575	0.0344	9901	DieselExhPM	8.94E-06	25YrCancerDerived_InhSoilDerm	*	8.94E-06
975	ALL		563575	4226775	0.088898	9901	DieselExhPM	2.31E-05	25YrCancerDerived_InhSoilDerm	*	2.31E-05
976	ALL		563575	4226800	0.060988	9901	DieselExhPM	1.59E-05	25YrCancerDerived_InhSoilDerm	*	1.59E-05
977	ALL		563575	4226825	0.042981	9901	DieselExhPM	1.12E-05	25YrCancerDerived_InhSoilDerm	*	1.12E-05
978	ALL		563575	4226850	0.031325	9901	DieselExhPM	8.14E-06	25YrCancerDerived_InhSoilDerm	*	8.14E-06
979	ALL		563575	4226875	0.023421	9901	DieselExhPM	6.09E-06	25YrCancerDerived_InhSoilDerm	*	6.09E-06
980	ALL		563575	4226900	0.017922	9901	DieselExhPM	4.66E-06	25YrCancerDerived_InhSoilDerm	*	4.66E-06
981	ALL		563575	4226925	0.013876	9901	DieselExhPM	3.61E-06	25YrCancerDerived_InhSoilDerm	*	3.61E-06
982	ALL		563575	4226950	0.010824	9901	DieselExhPM	2.81E-06	25YrCancerDerived_InhSoilDerm	*	2.81E-06
983	ALL		563575	4226975	0.008637	9901	DieselExhPM	2.25E-06	25YrCancerDerived_InhSoilDerm	*	2.25E-06
984	ALL		563575	4227000	0.007101	9901	DieselExhPM	1.85E-06	25YrCancerDerived_InhSoilDerm	*	1.85E-06
985	ALL		563575	4227025	0.006134	9901	DieselExhPM	1.59E-06	25YrCancerDerived_InhSoilDerm	*	1.59E-06
986	ALL		563575	4227050	0.00522	9901	DieselExhPM	1.36E-06	25YrCancerDerived_InhSoilDerm	*	1.36E-06
987	ALL		563600	4226300	0.004284	9901	DieselExhPM	1.11E-06	25YrCancerDerived_InhSoilDerm	*	1.11E-06
988	ALL		563600	4226325	0.004794	9901	DieselExhPM	1.25E-06	25YrCancerDerived_InhSoilDerm	*	1.25E-06
989	ALL		563600	4226350	0.005402	9901	DieselExhPM	1.40E-06	25YrCancerDerived_InhSoilDerm	*	1.40E-06
990	ALL		563600	4226375	0.006129	9901	DieselExhPM	1.59E-06	25YrCancerDerived_InhSoilDerm	*	1.59E-06
991	ALL		563600	4226400	0.007053	9901	DieselExhPM	1.83E-06	25YrCancerDerived_InhSoilDerm	*	1.83E-06
992	ALL		563600	4226425	0.008198	9901	DieselExhPM	2.13E-06	25YrCancerDerived_InhSoilDerm	*	2.13E-06
993	ALL		563600	4226450	0.009639	9901	DieselExhPM	2.51E-06	25YrCancerDerived_InhSoilDerm	*	2.51E-06
994	ALL		563600	4226475	0.011555	9901	DieselExhPM	3.00E-06	25YrCancerDerived_InhSoilDerm	*	3.00E-06
995	ALL		563600	4226500	0.014195	9901	DieselExhPM	3.69E-06	25YrCancerDerived_InhSoilDerm	*	3.69E-06
996	ALL		563600	4226525	0.01801	9901	DieselExhPM	4.68E-06	25YrCancerDerived_InhSoilDerm	*	4.68E-06
997	ALL		563600	4226550	0.024059	9901	DieselExhPM	6.25E-06	25YrCancerDerived_InhSoilDerm	*	6.25E-06
998	ALL		563600	4226575	0.034863	9901	DieselExhPM	9.06E-06	25YrCancerDerived_InhSoilDerm	*	9.06E-06
999	ALL		563600	4226775	0.091716	9901	DieselExhPM	2.38E-05	25YrCancerDerived_InhSoilDerm	*	2.38E-05
1000	ALL		563600	4226800	0.064009	9901	DieselExhPM	1.66E-05	25YrCancerDerived_InhSoilDerm	*	1.66E-05
1001	ALL		563600	4226825	0.046322	9901	DieselExhPM	1.20E-05	25YrCancerDerived_InhSoilDerm	*	1.20E-05
1002	ALL		563600	4226850	0.034722	9901	DieselExhPM	9.03E-06	25YrCancerDerived_InhSoilDerm	*	9.03E-06
1003	ALL		563600	4226875	0.026695	9901	DieselExhPM	6.94E-06	25YrCancerDerived_InhSoilDerm	*	6.94E-06
1004	ALL		563600	4226900	0.020877	9901	DieselExhPM	5.43E-06	25YrCancerDerived_InhSoilDerm	*	5.43E-06
1005	ALL		563600	4226925	0.016428	9901	DieselExhPM	4.27E-06	25YrCancerDerived_InhSoilDerm	*	4.27E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1006	ALL		563600	4226950	0.013111	9901	DieselExhPM	3.41E-06	25YrCancerDerived_InhSoilDerm	*	3.41E-06
1007	ALL		563600	4226975	0.010606	9901	DieselExhPM	2.76E-06	25YrCancerDerived_InhSoilDerm	*	2.76E-06
1008	ALL		563600	4227000	0.008716	9901	DieselExhPM	2.27E-06	25YrCancerDerived_InhSoilDerm	*	2.27E-06
1009	ALL		563600	4227025	0.007305	9901	DieselExhPM	1.90E-06	25YrCancerDerived_InhSoilDerm	*	1.90E-06
1010	ALL		563600	4227050	0.006296	9901	DieselExhPM	1.64E-06	25YrCancerDerived_InhSoilDerm	*	1.64E-06
1011	ALL		563625	4226300	0.004135	9901	DieselExhPM	1.07E-06	25YrCancerDerived_InhSoilDerm	*	1.07E-06
1012	ALL		563625	4226325	0.00464	9901	DieselExhPM	1.21E-06	25YrCancerDerived_InhSoilDerm	*	1.21E-06
1013	ALL		563625	4226350	0.005247	9901	DieselExhPM	1.36E-06	25YrCancerDerived_InhSoilDerm	*	1.36E-06
1014	ALL		563625	4226375	0.005974	9901	DieselExhPM	1.55E-06	25YrCancerDerived_InhSoilDerm	*	1.55E-06
1015	ALL		563625	4226400	0.00689	9901	DieselExhPM	1.79E-06	25YrCancerDerived_InhSoilDerm	*	1.79E-06
1016	ALL		563625	4226425	0.008045	9901	DieselExhPM	2.09E-06	25YrCancerDerived_InhSoilDerm	*	2.09E-06
1017	ALL		563625	4226450	0.009516	9901	DieselExhPM	2.47E-06	25YrCancerDerived_InhSoilDerm	*	2.47E-06
1018	ALL		563625	4226475	0.011451	9901	DieselExhPM	2.98E-06	25YrCancerDerived_InhSoilDerm	*	2.98E-06
1019	ALL		563625	4226500	0.0141	9901	DieselExhPM	3.67E-06	25YrCancerDerived_InhSoilDerm	*	3.67E-06
1020	ALL		563625	4226525	0.01797	9901	DieselExhPM	4.67E-06	25YrCancerDerived_InhSoilDerm	*	4.67E-06
1021	ALL		563625	4226550	0.024012	9901	DieselExhPM	6.24E-06	25YrCancerDerived_InhSoilDerm	*	6.24E-06
1022	ALL		563625	4226575	0.03485	9901	DieselExhPM	9.06E-06	25YrCancerDerived_InhSoilDerm	*	9.06E-06
1023	ALL		563625	4226775	0.092544	9901	DieselExhPM	2.41E-05	25YrCancerDerived_InhSoilDerm	*	2.41E-05
1024	ALL		563625	4226800	0.065627	9901	DieselExhPM	1.71E-05	25YrCancerDerived_InhSoilDerm	*	1.71E-05
1025	ALL		563625	4226825	0.048481	9901	DieselExhPM	1.26E-05	25YrCancerDerived_InhSoilDerm	*	1.26E-05
1026	ALL		563625	4226850	0.037004	9901	DieselExhPM	9.62E-06	25YrCancerDerived_InhSoilDerm	*	9.62E-06
1027	ALL		563625	4226875	0.029011	9901	DieselExhPM	7.54E-06	25YrCancerDerived_InhSoilDerm	*	7.54E-06
1028	ALL		563625	4226900	0.023109	9901	DieselExhPM	6.01E-06	25YrCancerDerived_InhSoilDerm	*	6.01E-06
1029	ALL		563625	4226925	0.018491	9901	DieselExhPM	4.81E-06	25YrCancerDerived_InhSoilDerm	*	4.81E-06
1030	ALL		563625	4226950	0.015078	9901	DieselExhPM	3.92E-06	25YrCancerDerived_InhSoilDerm	*	3.92E-06
1031	ALL		563625	4226975	0.012411	9901	DieselExhPM	3.23E-06	25YrCancerDerived_InhSoilDerm	*	3.23E-06
1032	ALL		563625	4227000	0.010311	9901	DieselExhPM	2.68E-06	25YrCancerDerived_InhSoilDerm	*	2.68E-06
1033	ALL		563625	4227025	0.008664	9901	DieselExhPM	2.25E-06	25YrCancerDerived_InhSoilDerm	*	2.25E-06
1034	ALL		563625	4227050	0.007391	9901	DieselExhPM	1.92E-06	25YrCancerDerived_InhSoilDerm	*	1.92E-06
1035	ALL		563650	4226300	0.003911	9901	DieselExhPM	1.02E-06	25YrCancerDerived_InhSoilDerm	*	1.02E-06
1036	ALL		563650	4226325	0.004383	9901	DieselExhPM	1.14E-06	25YrCancerDerived_InhSoilDerm	*	1.14E-06
1037	ALL		563650	4226350	0.004964	9901	DieselExhPM	1.29E-06	25YrCancerDerived_InhSoilDerm	*	1.29E-06
1038	ALL		563650	4226375	0.00567	9901	DieselExhPM	1.47E-06	25YrCancerDerived_InhSoilDerm	*	1.47E-06
1039	ALL		563650	4226400	0.006545	9901	DieselExhPM	1.70E-06	25YrCancerDerived_InhSoilDerm	*	1.70E-06
1040	ALL		563650	4226425	0.007665	9901	DieselExhPM	1.99E-06	25YrCancerDerived_InhSoilDerm	*	1.99E-06
1041	ALL		563650	4226450	0.009105	9901	DieselExhPM	2.37E-06	25YrCancerDerived_InhSoilDerm	*	2.37E-06
1042	ALL		563650	4226475	0.011016	9901	DieselExhPM	2.86E-06	25YrCancerDerived_InhSoilDerm	*	2.86E-06
1043	ALL		563650	4226500	0.013661	9901	DieselExhPM	3.55E-06	25YrCancerDerived_InhSoilDerm	*	3.55E-06
1044	ALL		563650	4226525	0.017521	9901	DieselExhPM	4.55E-06	25YrCancerDerived_InhSoilDerm	*	4.55E-06
1045	ALL		563650	4226550	0.023529	9901	DieselExhPM	6.12E-06	25YrCancerDerived_InhSoilDerm	*	6.12E-06
1046	ALL		563650	4226575	0.034299	9901	DieselExhPM	8.92E-06	25YrCancerDerived_InhSoilDerm	*	8.92E-06
1047	ALL		563650	4226775	0.092088	9901	DieselExhPM	2.39E-05	25YrCancerDerived_InhSoilDerm	*	2.39E-05
1048	ALL		563650	4226800	0.066407	9901	DieselExhPM	1.73E-05	25YrCancerDerived_InhSoilDerm	*	1.73E-05
1049	ALL		563650	4226825	0.049689	9901	DieselExhPM	1.29E-05	25YrCancerDerived_InhSoilDerm	*	1.29E-05
1050	ALL		563650	4226850	0.038529	9901	DieselExhPM	1.00E-05	25YrCancerDerived_InhSoilDerm	*	1.00E-05
1051	ALL		563650	4226875	0.030621	9901	DieselExhPM	7.96E-06	25YrCancerDerived_InhSoilDerm	*	7.96E-06
1052	ALL		563650	4226900	0.024746	9901	DieselExhPM	6.43E-06	25YrCancerDerived_InhSoilDerm	*	6.43E-06
1053	ALL		563650	4226925	0.020031	9901	DieselExhPM	5.21E-06	25YrCancerDerived_InhSoilDerm	*	5.21E-06
1054	ALL		563650	4226950	0.016604	9901	DieselExhPM	4.32E-06	25YrCancerDerived_InhSoilDerm	*	4.32E-06
1055	ALL		563650	4226975	0.013835	9901	DieselExhPM	3.60E-06	25YrCancerDerived_InhSoilDerm	*	3.60E-06
1056	ALL		563650	4227000	0.011621	9901	DieselExhPM	3.02E-06	25YrCancerDerived_InhSoilDerm	*	3.02E-06
1057	ALL		563650	4227025	0.009866	9901	DieselExhPM	2.56E-06	25YrCancerDerived_InhSoilDerm	*	2.56E-06
1058	ALL		563650	4227050	0.008451	9901	DieselExhPM	2.20E-06	25YrCancerDerived_InhSoilDerm	*	2.20E-06
1059	ALL		563675	4226300	0.003614	9901	DieselExhPM	9.39E-07	25YrCancerDerived_InhSoilDerm	*	9.39E-07
1060	ALL		563675	4226325	0.004038	9901	DieselExhPM	1.05E-06	25YrCancerDerived_InhSoilDerm	*	1.05E-06
1061	ALL		563675	4226350	0.004562	9901	DieselExhPM	1.19E-06	25YrCancerDerived_InhSoilDerm	*	1.19E-06
1062	ALL		563675	4226375	0.005208	9901	DieselExhPM	1.35E-06	25YrCancerDerived_InhSoilDerm	*	1.35E-06
1063	ALL		563675	4226400	0.006013	9901	DieselExhPM	1.56E-06	25YrCancerDerived_InhSoilDerm	*	1.56E-06
1064	ALL		563675	4226425	0.007031	9901	DieselExhPM	1.83E-06	25YrCancerDerived_InhSoilDerm	*	1.83E-06
1065	ALL		563675	4226450	0.008361	9901	DieselExhPM	2.17E-06	25YrCancerDerived_InhSoilDerm	*	2.17E-06
1066	ALL		563675	4226475	0.010159	9901	DieselExhPM	2.64E-06	25YrCancerDerived_InhSoilDerm	*	2.64E-06
1067	ALL		563675	4226500	0.012694	9901	DieselExhPM	3.30E-06	25YrCancerDerived_InhSoilDerm	*	3.30E-06
1068	ALL		563675	4226525	0.016439	9901	DieselExhPM	4.27E-06	25YrCancerDerived_InhSoilDerm	*	4.27E-06
1069	ALL		563675	4226550	0.022415	9901	DieselExhPM	5.83E-06	25YrCancerDerived_InhSoilDerm	*	5.83E-06
1070	ALL		563675	4226575	0.033036	9901	DieselExhPM	8.59E-06	25YrCancerDerived_InhSoilDerm	*	8.59E-06
1071	ALL		563675	4226775	0.090438	9901	DieselExhPM	2.35E-05	25YrCancerDerived_InhSoilDerm	*	2.35E-05
1072	ALL		563675	4226800	0.066157	9901	DieselExhPM	1.72E-05	25YrCancerDerived_InhSoilDerm	*	1.72E-05

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1073	ALL		563675	4226825	0.050063	9901	DieselExhPM	1.30E-05	25YrCancerDerived_InhSoilDerm	*	1.30E-05
1074	ALL		563675	4226850	0.039274	9901	DieselExhPM	1.02E-05	25YrCancerDerived_InhSoilDerm	*	1.02E-05
1075	ALL		563675	4226875	0.031613	9901	DieselExhPM	8.22E-06	25YrCancerDerived_InhSoilDerm	*	8.22E-06
1076	ALL		563675	4226900	0.025841	9901	DieselExhPM	6.72E-06	25YrCancerDerived_InhSoilDerm	*	6.72E-06
1077	ALL		563675	4226925	0.02114	9901	DieselExhPM	5.49E-06	25YrCancerDerived_InhSoilDerm	*	5.49E-06
1078	ALL		563675	4226950	0.01772	9901	DieselExhPM	4.61E-06	25YrCancerDerived_InhSoilDerm	*	4.61E-06
1079	ALL		563675	4226975	0.014899	9901	DieselExhPM	3.87E-06	25YrCancerDerived_InhSoilDerm	*	3.87E-06
1080	ALL		563675	4227000	0.012634	9901	DieselExhPM	3.28E-06	25YrCancerDerived_InhSoilDerm	*	3.28E-06
1081	ALL		563675	4227025	0.010838	9901	DieselExhPM	2.82E-06	25YrCancerDerived_InhSoilDerm	*	2.82E-06
1082	ALL		563675	4227050	0.009358	9901	DieselExhPM	2.43E-06	25YrCancerDerived_InhSoilDerm	*	2.43E-06
1083	ALL		563700	4226300	0.00328	9901	DieselExhPM	8.53E-07	25YrCancerDerived_InhSoilDerm	*	8.53E-07
1084	ALL		563700	4226325	0.00365	9901	DieselExhPM	9.49E-07	25YrCancerDerived_InhSoilDerm	*	9.49E-07
1085	ALL		563700	4226350	0.004096	9901	DieselExhPM	1.06E-06	25YrCancerDerived_InhSoilDerm	*	1.06E-06
1086	ALL		563700	4226375	0.004642	9901	DieselExhPM	1.21E-06	25YrCancerDerived_InhSoilDerm	*	1.21E-06
1087	ALL		563700	4226400	0.005343	9901	DieselExhPM	1.39E-06	25YrCancerDerived_InhSoilDerm	*	1.39E-06
1088	ALL		563700	4226425	0.006195	9901	DieselExhPM	1.61E-06	25YrCancerDerived_InhSoilDerm	*	1.61E-06
1089	ALL		563700	4226450	0.007315	9901	DieselExhPM	1.90E-06	25YrCancerDerived_InhSoilDerm	*	1.90E-06
1090	ALL		563700	4226475	0.008832	9901	DieselExhPM	2.30E-06	25YrCancerDerived_InhSoilDerm	*	2.30E-06
1091	ALL		563700	4226500	0.010979	9901	DieselExhPM	2.85E-06	25YrCancerDerived_InhSoilDerm	*	2.85E-06
1092	ALL		563700	4226525	0.01427	9901	DieselExhPM	3.71E-06	25YrCancerDerived_InhSoilDerm	*	3.71E-06
1093	ALL		563700	4226550	0.019722	9901	DieselExhPM	5.13E-06	25YrCancerDerived_InhSoilDerm	*	5.13E-06
1094	ALL		563700	4226575	0.029928	9901	DieselExhPM	7.78E-06	25YrCancerDerived_InhSoilDerm	*	7.78E-06
1095	ALL		563700	4226775	0.087222	9901	DieselExhPM	2.27E-05	25YrCancerDerived_InhSoilDerm	*	2.27E-05
1096	ALL		563700	4226800	0.06484	9901	DieselExhPM	1.69E-05	25YrCancerDerived_InhSoilDerm	*	1.69E-05
1097	ALL		563700	4226825	0.049604	9901	DieselExhPM	1.29E-05	25YrCancerDerived_InhSoilDerm	*	1.29E-05
1098	ALL		563700	4226850	0.039307	9901	DieselExhPM	1.02E-05	25YrCancerDerived_InhSoilDerm	*	1.02E-05
1099	ALL		563700	4226875	0.031911	9901	DieselExhPM	8.29E-06	25YrCancerDerived_InhSoilDerm	*	8.29E-06
1100	ALL		563700	4226900	0.026309	9901	DieselExhPM	6.84E-06	25YrCancerDerived_InhSoilDerm	*	6.84E-06
1101	ALL		563700	4226925	0.021809	9901	DieselExhPM	5.67E-06	25YrCancerDerived_InhSoilDerm	*	5.67E-06
1102	ALL		563700	4226950	0.018506	9901	DieselExhPM	4.81E-06	25YrCancerDerived_InhSoilDerm	*	4.81E-06
1103	ALL		563700	4226975	0.015731	9901	DieselExhPM	4.09E-06	25YrCancerDerived_InhSoilDerm	*	4.09E-06
1104	ALL		563700	4227000	0.013498	9901	DieselExhPM	3.51E-06	25YrCancerDerived_InhSoilDerm	*	3.51E-06
1105	ALL		563700	4227025	0.011676	9901	DieselExhPM	3.03E-06	25YrCancerDerived_InhSoilDerm	*	3.03E-06
1106	ALL		563700	4227050	0.010109	9901	DieselExhPM	2.63E-06	25YrCancerDerived_InhSoilDerm	*	2.63E-06
1107	ALL		563725	4226300	0.002948	9901	DieselExhPM	7.66E-07	25YrCancerDerived_InhSoilDerm	*	7.66E-07
1108	ALL		563725	4226325	0.003258	9901	DieselExhPM	8.47E-07	25YrCancerDerived_InhSoilDerm	*	8.47E-07
1109	ALL		563725	4226350	0.003629	9901	DieselExhPM	9.43E-07	25YrCancerDerived_InhSoilDerm	*	9.43E-07
1110	ALL		563725	4226375	0.004064	9901	DieselExhPM	1.06E-06	25YrCancerDerived_InhSoilDerm	*	1.06E-06
1111	ALL		563725	4226400	0.00463	9901	DieselExhPM	1.20E-06	25YrCancerDerived_InhSoilDerm	*	1.20E-06
1112	ALL		563725	4226425	0.005304	9901	DieselExhPM	1.38E-06	25YrCancerDerived_InhSoilDerm	*	1.38E-06
1113	ALL		563725	4226450	0.006161	9901	DieselExhPM	1.60E-06	25YrCancerDerived_InhSoilDerm	*	1.60E-06
1114	ALL		563725	4226475	0.007291	9901	DieselExhPM	1.90E-06	25YrCancerDerived_InhSoilDerm	*	1.90E-06
1115	ALL		563725	4226500	0.008851	9901	DieselExhPM	2.30E-06	25YrCancerDerived_InhSoilDerm	*	2.30E-06
1116	ALL		563725	4226525	0.011148	9901	DieselExhPM	2.90E-06	25YrCancerDerived_InhSoilDerm	*	2.90E-06
1117	ALL		563725	4226550	0.01457	9901	DieselExhPM	3.79E-06	25YrCancerDerived_InhSoilDerm	*	3.79E-06
1118	ALL		563725	4226575	0.02112	9901	DieselExhPM	5.49E-06	25YrCancerDerived_InhSoilDerm	*	5.49E-06
1119	ALL		563725	4226775	0.079691	9901	DieselExhPM	2.07E-05	25YrCancerDerived_InhSoilDerm	*	2.07E-05
1120	ALL		563725	4226800	0.060596	9901	DieselExhPM	1.58E-05	25YrCancerDerived_InhSoilDerm	*	1.58E-05
1121	ALL		563725	4226825	0.047433	9901	DieselExhPM	1.23E-05	25YrCancerDerived_InhSoilDerm	*	1.23E-05
1122	ALL		563725	4226850	0.038132	9901	DieselExhPM	9.91E-06	25YrCancerDerived_InhSoilDerm	*	9.91E-06
1123	ALL		563725	4226875	0.031256	9901	DieselExhPM	8.12E-06	25YrCancerDerived_InhSoilDerm	*	8.12E-06
1124	ALL		563725	4226900	0.026016	9901	DieselExhPM	6.76E-06	25YrCancerDerived_InhSoilDerm	*	6.76E-06
1125	ALL		563725	4226925	0.021869	9901	DieselExhPM	5.68E-06	25YrCancerDerived_InhSoilDerm	*	5.68E-06
1126	ALL		563725	4226950	0.018778	9901	DieselExhPM	4.88E-06	25YrCancerDerived_InhSoilDerm	*	4.88E-06
1127	ALL		563725	4226975	0.016181	9901	DieselExhPM	4.21E-06	25YrCancerDerived_InhSoilDerm	*	4.21E-06
1128	ALL		563725	4227000	0.014043	9901	DieselExhPM	3.65E-06	25YrCancerDerived_InhSoilDerm	*	3.65E-06
1129	ALL		563725	4227025	0.012237	9901	DieselExhPM	3.18E-06	25YrCancerDerived_InhSoilDerm	*	3.18E-06
1130	ALL		563725	4227050	0.01065	9901	DieselExhPM	2.77E-06	25YrCancerDerived_InhSoilDerm	*	2.77E-06
1131	ALL		563750	4226300	0.002622	9901	DieselExhPM	6.82E-07	25YrCancerDerived_InhSoilDerm	*	6.82E-07
1132	ALL		563750	4226325	0.00288	9901	DieselExhPM	7.49E-07	25YrCancerDerived_InhSoilDerm	*	7.49E-07
1133	ALL		563750	4226350	0.00318	9901	DieselExhPM	8.27E-07	25YrCancerDerived_InhSoilDerm	*	8.27E-07
1134	ALL		563750	4226375	0.003536	9901	DieselExhPM	9.19E-07	25YrCancerDerived_InhSoilDerm	*	9.19E-07
1135	ALL		563750	4226400	0.003968	9901	DieselExhPM	1.03E-06	25YrCancerDerived_InhSoilDerm	*	1.03E-06
1136	ALL		563750	4226425	0.004484	9901	DieselExhPM	1.17E-06	25YrCancerDerived_InhSoilDerm	*	1.17E-06
1137	ALL		563750	4226450	0.005118	9901	DieselExhPM	1.33E-06	25YrCancerDerived_InhSoilDerm	*	1.33E-06
1138	ALL		563750	4226475	0.00592	9901	DieselExhPM	1.54E-06	25YrCancerDerived_InhSoilDerm	*	1.54E-06
1139	ALL		563750	4226500	0.006857	9901	DieselExhPM	1.78E-06	25YrCancerDerived_InhSoilDerm	*	1.78E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1140	ALL		563750	4226525	0.008316	9901	DieselExhPM	2.16E-06	25YrCancerDerived_InhSoilDerm	*	2.16E-06
1141	ALL		563750	4226550	0.010588	9901	DieselExhPM	2.75E-06	25YrCancerDerived_InhSoilDerm	*	2.75E-06
1142	ALL		563750	4226575	0.014513	9901	DieselExhPM	3.77E-06	25YrCancerDerived_InhSoilDerm	*	3.77E-06
1143	ALL		563750	4226600	0.022375	9901	DieselExhPM	5.82E-06	25YrCancerDerived_InhSoilDerm	*	5.82E-06
1144	ALL		563750	4226625	0.033531	9901	DieselExhPM	8.72E-06	25YrCancerDerived_InhSoilDerm	*	8.72E-06
1145	ALL		563750	4226650	0.045026	9901	DieselExhPM	1.17E-05	25YrCancerDerived_InhSoilDerm	*	1.17E-05
1146	ALL		563750	4226675	0.054397	9901	DieselExhPM	1.41E-05	25YrCancerDerived_InhSoilDerm	*	1.41E-05
1147	ALL		563750	4226700	0.0606	9901	DieselExhPM	1.58E-05	25YrCancerDerived_InhSoilDerm	*	1.58E-05
1148	ALL		563750	4226725	0.064029	9901	DieselExhPM	1.66E-05	25YrCancerDerived_InhSoilDerm	*	1.66E-05
1149	ALL		563750	4226750	0.063785	9901	DieselExhPM	1.66E-05	25YrCancerDerived_InhSoilDerm	*	1.66E-05
1150	ALL		563750	4226775	0.057722	9901	DieselExhPM	1.50E-05	25YrCancerDerived_InhSoilDerm	*	1.50E-05
1151	ALL		563750	4226800	0.049428	9901	DieselExhPM	1.28E-05	25YrCancerDerived_InhSoilDerm	*	1.28E-05
1152	ALL		563750	4226825	0.041353	9901	DieselExhPM	1.07E-05	25YrCancerDerived_InhSoilDerm	*	1.07E-05
1153	ALL		563750	4226850	0.034603	9901	DieselExhPM	8.99E-06	25YrCancerDerived_InhSoilDerm	*	8.99E-06
1154	ALL		563750	4226875	0.029144	9901	DieselExhPM	7.58E-06	25YrCancerDerived_InhSoilDerm	*	7.58E-06
1155	ALL		563750	4226900	0.024797	9901	DieselExhPM	6.45E-06	25YrCancerDerived_InhSoilDerm	*	6.45E-06
1156	ALL		563750	4226925	0.021222	9901	DieselExhPM	5.52E-06	25YrCancerDerived_InhSoilDerm	*	5.52E-06
1157	ALL		563750	4226950	0.018439	9901	DieselExhPM	4.79E-06	25YrCancerDerived_InhSoilDerm	*	4.79E-06
1158	ALL		563750	4226975	0.016103	9901	DieselExhPM	4.19E-06	25YrCancerDerived_InhSoilDerm	*	4.19E-06
1159	ALL		563750	4227000	0.014133	9901	DieselExhPM	3.67E-06	25YrCancerDerived_InhSoilDerm	*	3.67E-06
1160	ALL		563750	4227025	0.012445	9901	DieselExhPM	3.23E-06	25YrCancerDerived_InhSoilDerm	*	3.23E-06
1161	ALL		563750	4227050	0.010923	9901	DieselExhPM	2.84E-06	25YrCancerDerived_InhSoilDerm	*	2.84E-06
1162	ALL		563775	4226300	0.002346	9901	DieselExhPM	6.10E-07	25YrCancerDerived_InhSoilDerm	*	6.10E-07
1163	ALL		563775	4226325	0.002558	9901	DieselExhPM	6.65E-07	25YrCancerDerived_InhSoilDerm	*	6.65E-07
1164	ALL		563775	4226350	0.002802	9901	DieselExhPM	7.28E-07	25YrCancerDerived_InhSoilDerm	*	7.28E-07
1165	ALL		563775	4226375	0.003078	9901	DieselExhPM	8.00E-07	25YrCancerDerived_InhSoilDerm	*	8.00E-07
1166	ALL		563775	4226400	0.003403	9901	DieselExhPM	8.85E-07	25YrCancerDerived_InhSoilDerm	*	8.85E-07
1167	ALL		563775	4226425	0.003781	9901	DieselExhPM	9.83E-07	25YrCancerDerived_InhSoilDerm	*	9.83E-07
1168	ALL		563775	4226450	0.004242	9901	DieselExhPM	1.10E-06	25YrCancerDerived_InhSoilDerm	*	1.10E-06
1169	ALL		563775	4226475	0.004735	9901	DieselExhPM	1.23E-06	25YrCancerDerived_InhSoilDerm	*	1.23E-06
1170	ALL		563775	4226500	0.005487	9901	DieselExhPM	1.43E-06	25YrCancerDerived_InhSoilDerm	*	1.43E-06
1171	ALL		563775	4226525	0.006499	9901	DieselExhPM	1.69E-06	25YrCancerDerived_InhSoilDerm	*	1.69E-06
1172	ALL		563775	4226550	0.008075	9901	DieselExhPM	2.10E-06	25YrCancerDerived_InhSoilDerm	*	2.10E-06
1173	ALL		563775	4226575	0.010757	9901	DieselExhPM	2.80E-06	25YrCancerDerived_InhSoilDerm	*	2.80E-06
1174	ALL		563775	4226600	0.015264	9901	DieselExhPM	3.97E-06	25YrCancerDerived_InhSoilDerm	*	3.97E-06
1175	ALL		563775	4226625	0.02101	9901	DieselExhPM	5.46E-06	25YrCancerDerived_InhSoilDerm	*	5.46E-06
1176	ALL		563775	4226650	0.026932	9901	DieselExhPM	7.00E-06	25YrCancerDerived_InhSoilDerm	*	7.00E-06
1177	ALL		563775	4226675	0.032524	9901	DieselExhPM	8.45E-06	25YrCancerDerived_InhSoilDerm	*	8.45E-06
1178	ALL		563775	4226700	0.037118	9901	DieselExhPM	9.65E-06	25YrCancerDerived_InhSoilDerm	*	9.65E-06
1179	ALL		563775	4226725	0.04027	9901	DieselExhPM	1.05E-05	25YrCancerDerived_InhSoilDerm	*	1.05E-05
1180	ALL		563775	4226750	0.041109	9901	DieselExhPM	1.07E-05	25YrCancerDerived_InhSoilDerm	*	1.07E-05
1181	ALL		563775	4226775	0.039443	9901	DieselExhPM	1.03E-05	25YrCancerDerived_InhSoilDerm	*	1.03E-05
1182	ALL		563775	4226800	0.036596	9901	DieselExhPM	9.51E-06	25YrCancerDerived_InhSoilDerm	*	9.51E-06
1183	ALL		563775	4226825	0.032729	9901	DieselExhPM	8.51E-06	25YrCancerDerived_InhSoilDerm	*	8.51E-06
1184	ALL		563775	4226850	0.029148	9901	DieselExhPM	7.58E-06	25YrCancerDerived_InhSoilDerm	*	7.58E-06
1185	ALL		563775	4226875	0.02564	9901	DieselExhPM	6.66E-06	25YrCancerDerived_InhSoilDerm	*	6.66E-06
1186	ALL		563775	4226900	0.022417	9901	DieselExhPM	5.83E-06	25YrCancerDerived_InhSoilDerm	*	5.83E-06
1187	ALL		563775	4226925	0.019764	9901	DieselExhPM	5.14E-06	25YrCancerDerived_InhSoilDerm	*	5.14E-06
1188	ALL		563775	4226950	0.017487	9901	DieselExhPM	4.55E-06	25YrCancerDerived_InhSoilDerm	*	4.55E-06
1189	ALL		563775	4226975	0.015492	9901	DieselExhPM	4.03E-06	25YrCancerDerived_InhSoilDerm	*	4.03E-06
1190	ALL		563775	4227000	0.013773	9901	DieselExhPM	3.58E-06	25YrCancerDerived_InhSoilDerm	*	3.58E-06
1191	ALL		563775	4227025	0.012258	9901	DieselExhPM	3.19E-06	25YrCancerDerived_InhSoilDerm	*	3.19E-06
1192	ALL		563775	4227050	0.010888	9901	DieselExhPM	2.83E-06	25YrCancerDerived_InhSoilDerm	*	2.83E-06
1193	ALL		563800	4226300	0.002093	9901	DieselExhPM	5.44E-07	25YrCancerDerived_InhSoilDerm	*	5.44E-07
1194	ALL		563800	4226325	0.002264	9901	DieselExhPM	5.88E-07	25YrCancerDerived_InhSoilDerm	*	5.88E-07
1195	ALL		563800	4226350	0.002456	9901	DieselExhPM	6.39E-07	25YrCancerDerived_InhSoilDerm	*	6.39E-07
1196	ALL		563800	4226375	0.002675	9901	DieselExhPM	6.95E-07	25YrCancerDerived_InhSoilDerm	*	6.95E-07
1197	ALL		563800	4226400	0.002927	9901	DieselExhPM	7.61E-07	25YrCancerDerived_InhSoilDerm	*	7.61E-07
1198	ALL		563800	4226425	0.003162	9901	DieselExhPM	8.22E-07	25YrCancerDerived_InhSoilDerm	*	8.22E-07
1199	ALL		563800	4226450	0.003497	9901	DieselExhPM	9.09E-07	25YrCancerDerived_InhSoilDerm	*	9.09E-07
1200	ALL		563800	4226475	0.003916	9901	DieselExhPM	1.02E-06	25YrCancerDerived_InhSoilDerm	*	1.02E-06
1201	ALL		563800	4226500	0.004479	9901	DieselExhPM	1.16E-06	25YrCancerDerived_InhSoilDerm	*	1.16E-06
1202	ALL		563800	4226525	0.005223	9901	DieselExhPM	1.36E-06	25YrCancerDerived_InhSoilDerm	*	1.36E-06
1203	ALL		563800	4226550	0.006403	9901	DieselExhPM	1.66E-06	25YrCancerDerived_InhSoilDerm	*	1.66E-06
1204	ALL		563800	4226575	0.008342	9901	DieselExhPM	2.17E-06	25YrCancerDerived_InhSoilDerm	*	2.17E-06
1205	ALL		563800	4226600	0.011249	9901	DieselExhPM	2.92E-06	25YrCancerDerived_InhSoilDerm	*	2.92E-06
1206	ALL		563800	4226625	0.01477	9901	DieselExhPM	3.84E-06	25YrCancerDerived_InhSoilDerm	*	3.84E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1207	ALL		563800	4226650	0.018289	9901	DieselExhPM	4.75E-06	25YrCancerDerived_InhSoilDerm	*	4.75E-06
1208	ALL		563800	4226675	0.021624	9901	DieselExhPM	5.62E-06	25YrCancerDerived_InhSoilDerm	*	5.62E-06
1209	ALL		563800	4226700	0.024528	9901	DieselExhPM	6.38E-06	25YrCancerDerived_InhSoilDerm	*	6.38E-06
1210	ALL		563800	4226725	0.026731	9901	DieselExhPM	6.95E-06	25YrCancerDerived_InhSoilDerm	*	6.95E-06
1211	ALL		563800	4226750	0.027555	9901	DieselExhPM	7.16E-06	25YrCancerDerived_InhSoilDerm	*	7.16E-06
1212	ALL		563800	4226775	0.027243	9901	DieselExhPM	7.08E-06	25YrCancerDerived_InhSoilDerm	*	7.08E-06
1213	ALL		563800	4226800	0.02633	9901	DieselExhPM	6.84E-06	25YrCancerDerived_InhSoilDerm	*	6.84E-06
1214	ALL		563800	4226825	0.024985	9901	DieselExhPM	6.49E-06	25YrCancerDerived_InhSoilDerm	*	6.49E-06
1215	ALL		563800	4226850	0.023413	9901	DieselExhPM	6.09E-06	25YrCancerDerived_InhSoilDerm	*	6.09E-06
1216	ALL		563800	4226875	0.021445	9901	DieselExhPM	5.57E-06	25YrCancerDerived_InhSoilDerm	*	5.57E-06
1217	ALL		563800	4226900	0.019432	9901	DieselExhPM	5.05E-06	25YrCancerDerived_InhSoilDerm	*	5.05E-06
1218	ALL		563800	4226925	0.017664	9901	DieselExhPM	4.59E-06	25YrCancerDerived_InhSoilDerm	*	4.59E-06
1219	ALL		563800	4226950	0.015868	9901	DieselExhPM	4.12E-06	25YrCancerDerived_InhSoilDerm	*	4.12E-06
1220	ALL		563800	4226975	0.014377	9901	DieselExhPM	3.74E-06	25YrCancerDerived_InhSoilDerm	*	3.74E-06
1221	ALL		563800	4227000	0.012915	9901	DieselExhPM	3.36E-06	25YrCancerDerived_InhSoilDerm	*	3.36E-06
1222	ALL		563800	4227025	0.011693	9901	DieselExhPM	3.04E-06	25YrCancerDerived_InhSoilDerm	*	3.04E-06
1223	ALL		563800	4227050	0.010511	9901	DieselExhPM	2.73E-06	25YrCancerDerived_InhSoilDerm	*	2.73E-06
1224	ALL		563825	4226300	0.001844	9901	DieselExhPM	4.79E-07	25YrCancerDerived_InhSoilDerm	*	4.79E-07
1225	ALL		563825	4226325	0.001984	9901	DieselExhPM	5.16E-07	25YrCancerDerived_InhSoilDerm	*	5.16E-07
1226	ALL		563825	4226350	0.002136	9901	DieselExhPM	5.55E-07	25YrCancerDerived_InhSoilDerm	*	5.55E-07
1227	ALL		563825	4226375	0.002305	9901	DieselExhPM	5.99E-07	25YrCancerDerived_InhSoilDerm	*	5.99E-07
1228	ALL		563825	4226400	0.002499	9901	DieselExhPM	6.50E-07	25YrCancerDerived_InhSoilDerm	*	6.50E-07
1229	ALL		563825	4226425	0.002717	9901	DieselExhPM	7.06E-07	25YrCancerDerived_InhSoilDerm	*	7.06E-07
1230	ALL		563825	4226450	0.002979	9901	DieselExhPM	7.74E-07	25YrCancerDerived_InhSoilDerm	*	7.74E-07
1231	ALL		563825	4226475	0.003304	9901	DieselExhPM	8.59E-07	25YrCancerDerived_InhSoilDerm	*	8.59E-07
1232	ALL		563825	4226500	0.003732	9901	DieselExhPM	9.70E-07	25YrCancerDerived_InhSoilDerm	*	9.70E-07
1233	ALL		563825	4226525	0.004321	9901	DieselExhPM	1.12E-06	25YrCancerDerived_InhSoilDerm	*	1.12E-06
1234	ALL		563825	4226550	0.005256	9901	DieselExhPM	1.37E-06	25YrCancerDerived_InhSoilDerm	*	1.37E-06
1235	ALL		563825	4226575	0.006705	9901	DieselExhPM	1.74E-06	25YrCancerDerived_InhSoilDerm	*	1.74E-06
1236	ALL		563825	4226600	0.008745	9901	DieselExhPM	2.27E-06	25YrCancerDerived_InhSoilDerm	*	2.27E-06
1237	ALL		563825	4226625	0.011118	9901	DieselExhPM	2.89E-06	25YrCancerDerived_InhSoilDerm	*	2.89E-06
1238	ALL		563825	4226650	0.013454	9901	DieselExhPM	3.50E-06	25YrCancerDerived_InhSoilDerm	*	3.50E-06
1239	ALL		563825	4226675	0.015578	9901	DieselExhPM	4.05E-06	25YrCancerDerived_InhSoilDerm	*	4.05E-06
1240	ALL		563825	4226700	0.017432	9901	DieselExhPM	4.53E-06	25YrCancerDerived_InhSoilDerm	*	4.53E-06
1241	ALL		563825	4226725	0.018817	9901	DieselExhPM	4.89E-06	25YrCancerDerived_InhSoilDerm	*	4.89E-06
1242	ALL		563825	4226750	0.019486	9901	DieselExhPM	5.07E-06	25YrCancerDerived_InhSoilDerm	*	5.07E-06
1243	ALL		563825	4226775	0.019591	9901	DieselExhPM	5.09E-06	25YrCancerDerived_InhSoilDerm	*	5.09E-06
1244	ALL		563825	4226800	0.019285	9901	DieselExhPM	5.01E-06	25YrCancerDerived_InhSoilDerm	*	5.01E-06
1245	ALL		563825	4226825	0.018802	9901	DieselExhPM	4.89E-06	25YrCancerDerived_InhSoilDerm	*	4.89E-06
1246	ALL		563825	4226850	0.018121	9901	DieselExhPM	4.71E-06	25YrCancerDerived_InhSoilDerm	*	4.71E-06
1247	ALL		563825	4226875	0.017225	9901	DieselExhPM	4.48E-06	25YrCancerDerived_InhSoilDerm	*	4.48E-06
1248	ALL		563825	4226900	0.016225	9901	DieselExhPM	4.22E-06	25YrCancerDerived_InhSoilDerm	*	4.22E-06
1249	ALL		563825	4226925	0.01505	9901	DieselExhPM	3.91E-06	25YrCancerDerived_InhSoilDerm	*	3.91E-06
1250	ALL		563825	4226950	0.013749	9901	DieselExhPM	3.57E-06	25YrCancerDerived_InhSoilDerm	*	3.57E-06
1251	ALL		563825	4226975	0.012729	9901	DieselExhPM	3.31E-06	25YrCancerDerived_InhSoilDerm	*	3.31E-06
1252	ALL		563825	4227000	0.011736	9901	DieselExhPM	3.05E-06	25YrCancerDerived_InhSoilDerm	*	3.05E-06
1253	ALL		563825	4227025	0.010803	9901	DieselExhPM	2.81E-06	25YrCancerDerived_InhSoilDerm	*	2.81E-06
1254	ALL		563825	4227050	0.00993	9901	DieselExhPM	2.58E-06	25YrCancerDerived_InhSoilDerm	*	2.58E-06
1255	ALL		563850	4226300	0.001661	9901	DieselExhPM	4.32E-07	25YrCancerDerived_InhSoilDerm	*	4.32E-07
1256	ALL		563850	4226325	0.001777	9901	DieselExhPM	4.62E-07	25YrCancerDerived_InhSoilDerm	*	4.62E-07
1257	ALL		563850	4226350	0.0019	9901	DieselExhPM	4.94E-07	25YrCancerDerived_InhSoilDerm	*	4.94E-07
1258	ALL		563850	4226375	0.002034	9901	DieselExhPM	5.29E-07	25YrCancerDerived_InhSoilDerm	*	5.29E-07
1259	ALL		563850	4226400	0.002185	9901	DieselExhPM	5.68E-07	25YrCancerDerived_InhSoilDerm	*	5.68E-07
1260	ALL		563850	4226425	0.002355	9901	DieselExhPM	6.12E-07	25YrCancerDerived_InhSoilDerm	*	6.12E-07
1261	ALL		563850	4226450	0.00256	9901	DieselExhPM	6.65E-07	25YrCancerDerived_InhSoilDerm	*	6.65E-07
1262	ALL		563850	4226475	0.002814	9901	DieselExhPM	7.31E-07	25YrCancerDerived_InhSoilDerm	*	7.31E-07
1263	ALL		563850	4226500	0.003163	9901	DieselExhPM	8.22E-07	25YrCancerDerived_InhSoilDerm	*	8.22E-07
1264	ALL		563850	4226525	0.003666	9901	DieselExhPM	9.53E-07	25YrCancerDerived_InhSoilDerm	*	9.53E-07
1265	ALL		563850	4226550	0.004433	9901	DieselExhPM	1.15E-06	25YrCancerDerived_InhSoilDerm	*	1.15E-06
1266	ALL		563850	4226575	0.005538	9901	DieselExhPM	1.44E-06	25YrCancerDerived_InhSoilDerm	*	1.44E-06
1267	ALL		563850	4226600	0.007035	9901	DieselExhPM	1.83E-06	25YrCancerDerived_InhSoilDerm	*	1.83E-06
1268	ALL		563850	4226625	0.008743	9901	DieselExhPM	2.27E-06	25YrCancerDerived_InhSoilDerm	*	2.27E-06
1269	ALL		563850	4226650	0.010394	9901	DieselExhPM	2.70E-06	25YrCancerDerived_InhSoilDerm	*	2.70E-06
1270	ALL		563850	4226675	0.01186	9901	DieselExhPM	3.08E-06	25YrCancerDerived_InhSoilDerm	*	3.08E-06
1271	ALL		563850	4226700	0.013089	9901	DieselExhPM	3.40E-06	25YrCancerDerived_InhSoilDerm	*	3.40E-06
1272	ALL		563850	4226725	0.014038	9901	DieselExhPM	3.65E-06	25YrCancerDerived_InhSoilDerm	*	3.65E-06
1273	ALL		563850	4226750	0.014517	9901	DieselExhPM	3.77E-06	25YrCancerDerived_InhSoilDerm	*	3.77E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1274	ALL		563850	4226775	0.014627	9901	DieselExhPM	3.80E-06	25YrCancerDerived_InhSoilDerm	*	3.80E-06
1275	ALL		563850	4226800	0.014522	9901	DieselExhPM	3.77E-06	25YrCancerDerived_InhSoilDerm	*	3.77E-06
1276	ALL		563850	4226825	0.01437	9901	DieselExhPM	3.74E-06	25YrCancerDerived_InhSoilDerm	*	3.74E-06
1277	ALL		563850	4226850	0.014074	9901	DieselExhPM	3.66E-06	25YrCancerDerived_InhSoilDerm	*	3.66E-06
1278	ALL		563850	4226875	0.013646	9901	DieselExhPM	3.55E-06	25YrCancerDerived_InhSoilDerm	*	3.55E-06
1279	ALL		563850	4226900	0.013093	9901	DieselExhPM	3.40E-06	25YrCancerDerived_InhSoilDerm	*	3.40E-06
1280	ALL		563850	4226925	0.012362	9901	DieselExhPM	3.21E-06	25YrCancerDerived_InhSoilDerm	*	3.21E-06
1281	ALL		563850	4226950	0.011501	9901	DieselExhPM	2.99E-06	25YrCancerDerived_InhSoilDerm	*	2.99E-06
1282	ALL		563850	4226975	0.010923	9901	DieselExhPM	2.84E-06	25YrCancerDerived_InhSoilDerm	*	2.84E-06
1283	ALL		563850	4227000	0.01027	9901	DieselExhPM	2.67E-06	25YrCancerDerived_InhSoilDerm	*	2.67E-06
1284	ALL		563850	4227025	0.00957	9901	DieselExhPM	2.49E-06	25YrCancerDerived_InhSoilDerm	*	2.49E-06
1285	ALL		563850	4227050	0.008916	9901	DieselExhPM	2.32E-06	25YrCancerDerived_InhSoilDerm	*	2.32E-06
1286	ALL		563875	4226300	0.001506	9901	DieselExhPM	3.91E-07	25YrCancerDerived_InhSoilDerm	*	3.91E-07
1287	ALL		563875	4226325	0.001599	9901	DieselExhPM	4.16E-07	25YrCancerDerived_InhSoilDerm	*	4.16E-07
1288	ALL		563875	4226350	0.001699	9901	DieselExhPM	4.42E-07	25YrCancerDerived_InhSoilDerm	*	4.42E-07
1289	ALL		563875	4226375	0.001803	9901	DieselExhPM	4.69E-07	25YrCancerDerived_InhSoilDerm	*	4.69E-07
1290	ALL		563875	4226400	0.001923	9901	DieselExhPM	5.00E-07	25YrCancerDerived_InhSoilDerm	*	5.00E-07
1291	ALL		563875	4226425	0.002057	9901	DieselExhPM	5.35E-07	25YrCancerDerived_InhSoilDerm	*	5.35E-07
1292	ALL		563875	4226450	0.002216	9901	DieselExhPM	5.76E-07	25YrCancerDerived_InhSoilDerm	*	5.76E-07
1293	ALL		563875	4226475	0.002431	9901	DieselExhPM	6.32E-07	25YrCancerDerived_InhSoilDerm	*	6.32E-07
1294	ALL		563875	4226500	0.002729	9901	DieselExhPM	7.09E-07	25YrCancerDerived_InhSoilDerm	*	7.09E-07
1295	ALL		563875	4226525	0.003172	9901	DieselExhPM	8.25E-07	25YrCancerDerived_InhSoilDerm	*	8.25E-07
1296	ALL		563875	4226550	0.0038	9901	DieselExhPM	9.88E-07	25YrCancerDerived_InhSoilDerm	*	9.88E-07
1297	ALL		563875	4226575	0.00468	9901	DieselExhPM	1.22E-06	25YrCancerDerived_InhSoilDerm	*	1.22E-06
1298	ALL		563875	4226600	0.005811	9901	DieselExhPM	1.51E-06	25YrCancerDerived_InhSoilDerm	*	1.51E-06
1299	ALL		563875	4226625	0.007101	9901	DieselExhPM	1.85E-06	25YrCancerDerived_InhSoilDerm	*	1.85E-06
1300	ALL		563875	4226650	0.00832	9901	DieselExhPM	2.16E-06	25YrCancerDerived_InhSoilDerm	*	2.16E-06
1301	ALL		563875	4226675	0.009391	9901	DieselExhPM	2.44E-06	25YrCancerDerived_InhSoilDerm	*	2.44E-06
1302	ALL		563875	4226700	0.010239	9901	DieselExhPM	2.66E-06	25YrCancerDerived_InhSoilDerm	*	2.66E-06
1303	ALL		563875	4226725	0.010861	9901	DieselExhPM	2.82E-06	25YrCancerDerived_InhSoilDerm	*	2.82E-06
1304	ALL		563875	4226750	0.011186	9901	DieselExhPM	2.91E-06	25YrCancerDerived_InhSoilDerm	*	2.91E-06
1305	ALL		563875	4226775	0.01127	9901	DieselExhPM	2.93E-06	25YrCancerDerived_InhSoilDerm	*	2.93E-06
1306	ALL		563875	4226800	0.011228	9901	DieselExhPM	2.92E-06	25YrCancerDerived_InhSoilDerm	*	2.92E-06
1307	ALL		563875	4226825	0.011168	9901	DieselExhPM	2.90E-06	25YrCancerDerived_InhSoilDerm	*	2.90E-06
1308	ALL		563875	4226850	0.011038	9901	DieselExhPM	2.87E-06	25YrCancerDerived_InhSoilDerm	*	2.87E-06
1309	ALL		563875	4226875	0.010842	9901	DieselExhPM	2.82E-06	25YrCancerDerived_InhSoilDerm	*	2.82E-06
1310	ALL		563875	4226900	0.01054	9901	DieselExhPM	2.74E-06	25YrCancerDerived_InhSoilDerm	*	2.74E-06
1311	ALL		563875	4226925	0.010149	9901	DieselExhPM	2.64E-06	25YrCancerDerived_InhSoilDerm	*	2.64E-06
1312	ALL		563875	4226950	0.009656	9901	DieselExhPM	2.51E-06	25YrCancerDerived_InhSoilDerm	*	2.51E-06
1313	ALL		563875	4226975	0.009324	9901	DieselExhPM	2.42E-06	25YrCancerDerived_InhSoilDerm	*	2.42E-06
1314	ALL		563875	4227000	0.0089	9901	DieselExhPM	2.31E-06	25YrCancerDerived_InhSoilDerm	*	2.31E-06
1315	ALL		563875	4227025	0.00845	9901	DieselExhPM	2.20E-06	25YrCancerDerived_InhSoilDerm	*	2.20E-06
1316	ALL		563875	4227050	0.007986	9901	DieselExhPM	2.08E-06	25YrCancerDerived_InhSoilDerm	*	2.08E-06
1317	ALL		563900	4226300	0.001369	9901	DieselExhPM	3.56E-07	25YrCancerDerived_InhSoilDerm	*	3.56E-07
1318	ALL		563900	4226325	0.001445	9901	DieselExhPM	3.76E-07	25YrCancerDerived_InhSoilDerm	*	3.76E-07
1319	ALL		563900	4226350	0.001521	9901	DieselExhPM	3.95E-07	25YrCancerDerived_InhSoilDerm	*	3.95E-07
1320	ALL		563900	4226375	0.001602	9901	DieselExhPM	4.16E-07	25YrCancerDerived_InhSoilDerm	*	4.16E-07
1321	ALL		563900	4226400	0.001693	9901	DieselExhPM	4.40E-07	25YrCancerDerived_InhSoilDerm	*	4.40E-07
1322	ALL		563900	4226425	0.001803	9901	DieselExhPM	4.69E-07	25YrCancerDerived_InhSoilDerm	*	4.69E-07
1323	ALL		563900	4226450	0.001932	9901	DieselExhPM	5.02E-07	25YrCancerDerived_InhSoilDerm	*	5.02E-07
1324	ALL		563900	4226475	0.002116	9901	DieselExhPM	5.50E-07	25YrCancerDerived_InhSoilDerm	*	5.50E-07
1325	ALL		563900	4226500	0.002391	9901	DieselExhPM	6.21E-07	25YrCancerDerived_InhSoilDerm	*	6.21E-07
1326	ALL		563900	4226525	0.002781	9901	DieselExhPM	7.23E-07	25YrCancerDerived_InhSoilDerm	*	7.23E-07
1327	ALL		563900	4226550	0.003317	9901	DieselExhPM	8.62E-07	25YrCancerDerived_InhSoilDerm	*	8.62E-07
1328	ALL		563900	4226575	0.004036	9901	DieselExhPM	1.05E-06	25YrCancerDerived_InhSoilDerm	*	1.05E-06
1329	ALL		563900	4226600	0.004937	9901	DieselExhPM	1.28E-06	25YrCancerDerived_InhSoilDerm	*	1.28E-06
1330	ALL		563900	4226625	0.005908	9901	DieselExhPM	1.54E-06	25YrCancerDerived_InhSoilDerm	*	1.54E-06
1331	ALL		563900	4226650	0.006837	9901	DieselExhPM	1.78E-06	25YrCancerDerived_InhSoilDerm	*	1.78E-06
1332	ALL		563900	4226675	0.007628	9901	DieselExhPM	1.98E-06	25YrCancerDerived_InhSoilDerm	*	1.98E-06
1333	ALL		563900	4226700	0.00824	9901	DieselExhPM	2.14E-06	25YrCancerDerived_InhSoilDerm	*	2.14E-06
1334	ALL		563900	4226725	0.008674	9901	DieselExhPM	2.25E-06	25YrCancerDerived_InhSoilDerm	*	2.25E-06
1335	ALL		563900	4226750	0.008882	9901	DieselExhPM	2.31E-06	25YrCancerDerived_InhSoilDerm	*	2.31E-06
1336	ALL		563900	4226775	0.00893	9901	DieselExhPM	2.32E-06	25YrCancerDerived_InhSoilDerm	*	2.32E-06
1337	ALL		563900	4226800	0.008906	9901	DieselExhPM	2.32E-06	25YrCancerDerived_InhSoilDerm	*	2.32E-06
1338	ALL		563900	4226825	0.008871	9901	DieselExhPM	2.31E-06	25YrCancerDerived_InhSoilDerm	*	2.31E-06
1339	ALL		563900	4226850	0.008801	9901	DieselExhPM	2.29E-06	25YrCancerDerived_InhSoilDerm	*	2.29E-06
1340	ALL		563900	4226875	0.008711	9901	DieselExhPM	2.26E-06	25YrCancerDerived_InhSoilDerm	*	2.26E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1341	ALL		563900	4226900	0.00857	9901	DieselExhPM	2.23E-06	25YrCancerDerived_InhSoilDerm	*	2.23E-06
1342	ALL		563900	4226925	0.00836	9901	DieselExhPM	2.17E-06	25YrCancerDerived_InhSoilDerm	*	2.17E-06
1343	ALL		563900	4226950	0.008131	9901	DieselExhPM	2.11E-06	25YrCancerDerived_InhSoilDerm	*	2.11E-06
1344	ALL		563900	4226975	0.007919	9901	DieselExhPM	2.06E-06	25YrCancerDerived_InhSoilDerm	*	2.06E-06
1345	ALL		563900	4227000	0.007668	9901	DieselExhPM	1.99E-06	25YrCancerDerived_InhSoilDerm	*	1.99E-06
1346	ALL		563900	4227025	0.00738	9901	DieselExhPM	1.92E-06	25YrCancerDerived_InhSoilDerm	*	1.92E-06
1347	ALL		563900	4227050	0.007065	9901	DieselExhPM	1.84E-06	25YrCancerDerived_InhSoilDerm	*	1.84E-06
1348	ALL		563925	4226300	0.001247	9901	DieselExhPM	3.24E-07	25YrCancerDerived_InhSoilDerm	*	3.24E-07
1349	ALL		563925	4226325	0.001307	9901	DieselExhPM	3.40E-07	25YrCancerDerived_InhSoilDerm	*	3.40E-07
1350	ALL		563925	4226350	0.001367	9901	DieselExhPM	3.55E-07	25YrCancerDerived_InhSoilDerm	*	3.55E-07
1351	ALL		563925	4226375	0.001428	9901	DieselExhPM	3.71E-07	25YrCancerDerived_InhSoilDerm	*	3.71E-07
1352	ALL		563925	4226400	0.001501	9901	DieselExhPM	3.90E-07	25YrCancerDerived_InhSoilDerm	*	3.90E-07
1353	ALL		563925	4226425	0.001588	9901	DieselExhPM	4.13E-07	25YrCancerDerived_InhSoilDerm	*	4.13E-07
1354	ALL		563925	4226450	0.001704	9901	DieselExhPM	4.43E-07	25YrCancerDerived_InhSoilDerm	*	4.43E-07
1355	ALL		563925	4226475	0.001872	9901	DieselExhPM	4.87E-07	25YrCancerDerived_InhSoilDerm	*	4.87E-07
1356	ALL		563925	4226500	0.002123	9901	DieselExhPM	5.52E-07	25YrCancerDerived_InhSoilDerm	*	5.52E-07
1357	ALL		563925	4226525	0.002473	9901	DieselExhPM	6.43E-07	25YrCancerDerived_InhSoilDerm	*	6.43E-07
1358	ALL		563925	4226550	0.00294	9901	DieselExhPM	7.64E-07	25YrCancerDerived_InhSoilDerm	*	7.64E-07
1359	ALL		563925	4226575	0.003533	9901	DieselExhPM	9.18E-07	25YrCancerDerived_InhSoilDerm	*	9.18E-07
1360	ALL		563925	4226600	0.004249	9901	DieselExhPM	1.10E-06	25YrCancerDerived_InhSoilDerm	*	1.10E-06
1361	ALL		563925	4226625	0.005002	9901	DieselExhPM	1.30E-06	25YrCancerDerived_InhSoilDerm	*	1.30E-06
1362	ALL		563925	4226650	0.005719	9901	DieselExhPM	1.49E-06	25YrCancerDerived_InhSoilDerm	*	1.49E-06
1363	ALL		563925	4226675	0.006321	9901	DieselExhPM	1.64E-06	25YrCancerDerived_InhSoilDerm	*	1.64E-06
1364	ALL		563925	4226700	0.006778	9901	DieselExhPM	1.76E-06	25YrCancerDerived_InhSoilDerm	*	1.76E-06
1365	ALL		563925	4226725	0.007089	9901	DieselExhPM	1.84E-06	25YrCancerDerived_InhSoilDerm	*	1.84E-06
1366	ALL		563925	4226750	0.007222	9901	DieselExhPM	1.88E-06	25YrCancerDerived_InhSoilDerm	*	1.88E-06
1367	ALL		563925	4226775	0.007237	9901	DieselExhPM	1.88E-06	25YrCancerDerived_InhSoilDerm	*	1.88E-06
1368	ALL		563925	4226800	0.007202	9901	DieselExhPM	1.87E-06	25YrCancerDerived_InhSoilDerm	*	1.87E-06
1369	ALL		563925	4226825	0.007163	9901	DieselExhPM	1.86E-06	25YrCancerDerived_InhSoilDerm	*	1.86E-06
1370	ALL		563925	4226850	0.007111	9901	DieselExhPM	1.85E-06	25YrCancerDerived_InhSoilDerm	*	1.85E-06
1371	ALL		563925	4226875	0.007067	9901	DieselExhPM	1.84E-06	25YrCancerDerived_InhSoilDerm	*	1.84E-06
1372	ALL		563925	4226900	0.006992	9901	DieselExhPM	1.82E-06	25YrCancerDerived_InhSoilDerm	*	1.82E-06
1373	ALL		563925	4226925	0.006907	9901	DieselExhPM	1.80E-06	25YrCancerDerived_InhSoilDerm	*	1.80E-06
1374	ALL		563925	4226950	0.006856	9901	DieselExhPM	1.78E-06	25YrCancerDerived_InhSoilDerm	*	1.78E-06
1375	ALL		563925	4226975	0.006737	9901	DieselExhPM	1.75E-06	25YrCancerDerived_InhSoilDerm	*	1.75E-06
1376	ALL		563925	4227000	0.00659	9901	DieselExhPM	1.71E-06	25YrCancerDerived_InhSoilDerm	*	1.71E-06
1377	ALL		563925	4227025	0.006408	9901	DieselExhPM	1.67E-06	25YrCancerDerived_InhSoilDerm	*	1.67E-06
1378	ALL		563925	4227050	0.006202	9901	DieselExhPM	1.61E-06	25YrCancerDerived_InhSoilDerm	*	1.61E-06
1379	ALL		563950	4226300	0.001137	9901	DieselExhPM	2.96E-07	25YrCancerDerived_InhSoilDerm	*	2.96E-07
1380	ALL		563950	4226325	0.001184	9901	DieselExhPM	3.08E-07	25YrCancerDerived_InhSoilDerm	*	3.08E-07
1381	ALL		563950	4226350	0.001228	9901	DieselExhPM	3.19E-07	25YrCancerDerived_InhSoilDerm	*	3.19E-07
1382	ALL		563950	4226375	0.001274	9901	DieselExhPM	3.31E-07	25YrCancerDerived_InhSoilDerm	*	3.31E-07
1383	ALL		563950	4226400	0.00133	9901	DieselExhPM	3.46E-07	25YrCancerDerived_InhSoilDerm	*	3.46E-07
1384	ALL		563950	4226425	0.001405	9901	DieselExhPM	3.65E-07	25YrCancerDerived_InhSoilDerm	*	3.65E-07
1385	ALL		563950	4226450	0.001513	9901	DieselExhPM	3.93E-07	25YrCancerDerived_InhSoilDerm	*	3.93E-07
1386	ALL		563950	4226475	0.001672	9901	DieselExhPM	4.35E-07	25YrCancerDerived_InhSoilDerm	*	4.35E-07
1387	ALL		563950	4226500	0.001902	9901	DieselExhPM	4.94E-07	25YrCancerDerived_InhSoilDerm	*	4.94E-07
1388	ALL		563950	4226525	0.002213	9901	DieselExhPM	5.75E-07	25YrCancerDerived_InhSoilDerm	*	5.75E-07
1389	ALL		563950	4226550	0.002611	9901	DieselExhPM	6.79E-07	25YrCancerDerived_InhSoilDerm	*	6.79E-07
1390	ALL		563950	4226575	0.003111	9901	DieselExhPM	8.09E-07	25YrCancerDerived_InhSoilDerm	*	8.09E-07
1391	ALL		563950	4226600	0.003694	9901	DieselExhPM	9.60E-07	25YrCancerDerived_InhSoilDerm	*	9.60E-07
1392	ALL		563950	4226625	0.004295	9901	DieselExhPM	1.12E-06	25YrCancerDerived_InhSoilDerm	*	1.12E-06
1393	ALL		563950	4226650	0.004852	9901	DieselExhPM	1.26E-06	25YrCancerDerived_InhSoilDerm	*	1.26E-06
1394	ALL		563950	4226675	0.005311	9901	DieselExhPM	1.38E-06	25YrCancerDerived_InhSoilDerm	*	1.38E-06
1395	ALL		563950	4226700	0.00567	9901	DieselExhPM	1.47E-06	25YrCancerDerived_InhSoilDerm	*	1.47E-06
1396	ALL		563950	4226725	0.005895	9901	DieselExhPM	1.53E-06	25YrCancerDerived_InhSoilDerm	*	1.53E-06
1397	ALL		563950	4226750	0.005982	9901	DieselExhPM	1.56E-06	25YrCancerDerived_InhSoilDerm	*	1.56E-06
1398	ALL		563950	4226775	0.005979	9901	DieselExhPM	1.55E-06	25YrCancerDerived_InhSoilDerm	*	1.55E-06
1399	ALL		563950	4226800	0.005942	9901	DieselExhPM	1.54E-06	25YrCancerDerived_InhSoilDerm	*	1.54E-06
1400	ALL		563950	4226825	0.005893	9901	DieselExhPM	1.53E-06	25YrCancerDerived_InhSoilDerm	*	1.53E-06
1401	ALL		563950	4226850	0.005842	9901	DieselExhPM	1.52E-06	25YrCancerDerived_InhSoilDerm	*	1.52E-06
1402	ALL		563950	4226875	0.005791	9901	DieselExhPM	1.51E-06	25YrCancerDerived_InhSoilDerm	*	1.51E-06
1403	ALL		563950	4226900	0.005753	9901	DieselExhPM	1.50E-06	25YrCancerDerived_InhSoilDerm	*	1.50E-06
1404	ALL		563950	4226925	0.005751	9901	DieselExhPM	1.49E-06	25YrCancerDerived_InhSoilDerm	*	1.49E-06
1405	ALL		563950	4226950	0.005824	9901	DieselExhPM	1.51E-06	25YrCancerDerived_InhSoilDerm	*	1.51E-06
1406	ALL		563950	4226975	0.005754	9901	DieselExhPM	1.50E-06	25YrCancerDerived_InhSoilDerm	*	1.50E-06
1407	ALL		563950	4227000	0.00567	9901	DieselExhPM	1.47E-06	25YrCancerDerived_InhSoilDerm	*	1.47E-06

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1408	ALL		563950	4227025	0.005557	9901	DieselExhPM	1.44E-06	25YrCancerDerived_InhSoilDerm	*	1.44E-06
1409	ALL		563950	4227050	0.005425	9901	DieselExhPM	1.41E-06	25YrCancerDerived_InhSoilDerm	*	1.41E-06
1410	ALL		563975	4226300	0.001036	9901	DieselExhPM	2.69E-07	25YrCancerDerived_InhSoilDerm	*	2.69E-07
1411	ALL		563975	4226325	0.00107	9901	DieselExhPM	2.78E-07	25YrCancerDerived_InhSoilDerm	*	2.78E-07
1412	ALL		563975	4226350	0.001103	9901	DieselExhPM	2.87E-07	25YrCancerDerived_InhSoilDerm	*	2.87E-07
1413	ALL		563975	4226375	0.001138	9901	DieselExhPM	2.96E-07	25YrCancerDerived_InhSoilDerm	*	2.96E-07
1414	ALL		563975	4226400	0.001187	9901	DieselExhPM	3.08E-07	25YrCancerDerived_InhSoilDerm	*	3.08E-07
1415	ALL		563975	4226425	0.001254	9901	DieselExhPM	3.26E-07	25YrCancerDerived_InhSoilDerm	*	3.26E-07
1416	ALL		563975	4226450	0.001358	9901	DieselExhPM	3.53E-07	25YrCancerDerived_InhSoilDerm	*	3.53E-07
1417	ALL		563975	4226475	0.001508	9901	DieselExhPM	3.92E-07	25YrCancerDerived_InhSoilDerm	*	3.92E-07
1418	ALL		563975	4226500	0.001717	9901	DieselExhPM	4.46E-07	25YrCancerDerived_InhSoilDerm	*	4.46E-07
1419	ALL		563975	4226525	0.001993	9901	DieselExhPM	5.18E-07	25YrCancerDerived_InhSoilDerm	*	5.18E-07
1420	ALL		563975	4226550	0.002331	9901	DieselExhPM	6.06E-07	25YrCancerDerived_InhSoilDerm	*	6.06E-07
1421	ALL		563975	4226575	0.002748	9901	DieselExhPM	7.14E-07	25YrCancerDerived_InhSoilDerm	*	7.14E-07
1422	ALL		563975	4226600	0.003226	9901	DieselExhPM	8.39E-07	25YrCancerDerived_InhSoilDerm	*	8.39E-07
1423	ALL		563975	4226625	0.003717	9901	DieselExhPM	9.66E-07	25YrCancerDerived_InhSoilDerm	*	9.66E-07
1424	ALL		563975	4226650	0.00416	9901	DieselExhPM	1.08E-06	25YrCancerDerived_InhSoilDerm	*	1.08E-06
1425	ALL		563975	4226675	0.004526	9901	DieselExhPM	1.18E-06	25YrCancerDerived_InhSoilDerm	*	1.18E-06
1426	ALL		563975	4226700	0.004808	9901	DieselExhPM	1.25E-06	25YrCancerDerived_InhSoilDerm	*	1.25E-06
1427	ALL		563975	4226725	0.004988	9901	DieselExhPM	1.30E-06	25YrCancerDerived_InhSoilDerm	*	1.30E-06
1428	ALL		563975	4226750	0.005047	9901	DieselExhPM	1.31E-06	25YrCancerDerived_InhSoilDerm	*	1.31E-06
1429	ALL		563975	4226775	0.005033	9901	DieselExhPM	1.31E-06	25YrCancerDerived_InhSoilDerm	*	1.31E-06
1430	ALL		563975	4226800	0.004981	9901	DieselExhPM	1.29E-06	25YrCancerDerived_InhSoilDerm	*	1.29E-06
1431	ALL		563975	4226825	0.004921	9901	DieselExhPM	1.28E-06	25YrCancerDerived_InhSoilDerm	*	1.28E-06
1432	ALL		563975	4226850	0.004875	9901	DieselExhPM	1.27E-06	25YrCancerDerived_InhSoilDerm	*	1.27E-06
1433	ALL		563975	4226875	0.004834	9901	DieselExhPM	1.26E-06	25YrCancerDerived_InhSoilDerm	*	1.26E-06
1434	ALL		563975	4226900	0.004815	9901	DieselExhPM	1.25E-06	25YrCancerDerived_InhSoilDerm	*	1.25E-06
1435	ALL		563975	4226925	0.004834	9901	DieselExhPM	1.26E-06	25YrCancerDerived_InhSoilDerm	*	1.26E-06
1436	ALL		563975	4226950	0.004981	9901	DieselExhPM	1.29E-06	25YrCancerDerived_InhSoilDerm	*	1.29E-06
1437	ALL		563975	4226975	0.004947	9901	DieselExhPM	1.29E-06	25YrCancerDerived_InhSoilDerm	*	1.29E-06
1438	ALL		563975	4227000	0.004896	9901	DieselExhPM	1.27E-06	25YrCancerDerived_InhSoilDerm	*	1.27E-06
1439	ALL		563975	4227025	0.004827	9901	DieselExhPM	1.25E-06	25YrCancerDerived_InhSoilDerm	*	1.25E-06
1440	ALL		563975	4227050	0.004745	9901	DieselExhPM	1.23E-06	25YrCancerDerived_InhSoilDerm	*	1.23E-06
1441	ALL		563225	4227142	0.000484	9901	DieselExhPM	1.26E-07	25YrCancerDerived_InhSoilDerm	*	1.26E-07
1442	ALL		563225	4227234	0.00041	9901	DieselExhPM	1.07E-07	25YrCancerDerived_InhSoilDerm	*	1.07E-07
1443	ALL		563225	4227325	0.000358	9901	DieselExhPM	9.30E-08	25YrCancerDerived_InhSoilDerm	*	9.30E-08
1444	ALL		563225	4227417	0.000318	9901	DieselExhPM	8.27E-08	25YrCancerDerived_InhSoilDerm	*	8.27E-08
1445	ALL		563225	4227509	0.000276	9901	DieselExhPM	7.18E-08	25YrCancerDerived_InhSoilDerm	*	7.18E-08
1446	ALL		563225	4227600	0.000241	9901	DieselExhPM	6.26E-08	25YrCancerDerived_InhSoilDerm	*	6.26E-08
1447	ALL		563225	4227692	0.000209	9901	DieselExhPM	5.43E-08	25YrCancerDerived_InhSoilDerm	*	5.43E-08
1448	ALL		563225	4227784	0.00018	9901	DieselExhPM	4.68E-08	25YrCancerDerived_InhSoilDerm	*	4.68E-08
1449	ALL		563225	4227875	0.000156	9901	DieselExhPM	4.06E-08	25YrCancerDerived_InhSoilDerm	*	4.06E-08
1450	ALL		563323.4	4227142	0.000663	9901	DieselExhPM	1.72E-07	25YrCancerDerived_InhSoilDerm	*	1.72E-07
1451	ALL		563323.4	4227234	0.000535	9901	DieselExhPM	1.39E-07	25YrCancerDerived_InhSoilDerm	*	1.39E-07
1452	ALL		563323.4	4227325	0.000436	9901	DieselExhPM	1.13E-07	25YrCancerDerived_InhSoilDerm	*	1.13E-07
1453	ALL		563323.4	4227417	0.000362	9901	DieselExhPM	9.40E-08	25YrCancerDerived_InhSoilDerm	*	9.40E-08
1454	ALL		563323.4	4227509	0.0003	9901	DieselExhPM	7.79E-08	25YrCancerDerived_InhSoilDerm	*	7.79E-08
1455	ALL		563323.4	4227600	0.000251	9901	DieselExhPM	6.52E-08	25YrCancerDerived_InhSoilDerm	*	6.52E-08
1456	ALL		563323.4	4227692	0.000211	9901	DieselExhPM	5.48E-08	25YrCancerDerived_InhSoilDerm	*	5.48E-08
1457	ALL		563323.4	4227784	0.000175	9901	DieselExhPM	4.55E-08	25YrCancerDerived_InhSoilDerm	*	4.55E-08
1458	ALL		563323.4	4227875	0.000152	9901	DieselExhPM	3.94E-08	25YrCancerDerived_InhSoilDerm	*	3.94E-08
1459	ALL		563421.9	4227142	0.000904	9901	DieselExhPM	2.35E-07	25YrCancerDerived_InhSoilDerm	*	2.35E-07
1460	ALL		563421.9	4227234	0.000678	9901	DieselExhPM	1.76E-07	25YrCancerDerived_InhSoilDerm	*	1.76E-07
1461	ALL		563421.9	4227325	0.000526	9901	DieselExhPM	1.37E-07	25YrCancerDerived_InhSoilDerm	*	1.37E-07
1462	ALL		563421.9	4227417	0.000416	9901	DieselExhPM	1.08E-07	25YrCancerDerived_InhSoilDerm	*	1.08E-07
1463	ALL		563421.9	4227509	0.000339	9901	DieselExhPM	8.82E-08	25YrCancerDerived_InhSoilDerm	*	8.82E-08
1464	ALL		563421.9	4227600	0.000278	9901	DieselExhPM	7.24E-08	25YrCancerDerived_InhSoilDerm	*	7.24E-08
1465	ALL		563421.9	4227692	0.00023	9901	DieselExhPM	5.99E-08	25YrCancerDerived_InhSoilDerm	*	5.99E-08
1466	ALL		563421.9	4227784	0.000197	9901	DieselExhPM	5.11E-08	25YrCancerDerived_InhSoilDerm	*	5.11E-08
1467	ALL		563421.9	4227875	0.000172	9901	DieselExhPM	4.48E-08	25YrCancerDerived_InhSoilDerm	*	4.48E-08
1468	ALL		563520.3	4227142	0.001746	9901	DieselExhPM	4.54E-07	25YrCancerDerived_InhSoilDerm	*	4.54E-07
1469	ALL		563520.3	4227234	0.001167	9901	DieselExhPM	3.03E-07	25YrCancerDerived_InhSoilDerm	*	3.03E-07
1470	ALL		563520.3	4227325	0.000829	9901	DieselExhPM	2.15E-07	25YrCancerDerived_InhSoilDerm	*	2.15E-07
1471	ALL		563520.3	4227417	0.000618	9901	DieselExhPM	1.61E-07	25YrCancerDerived_InhSoilDerm	*	1.61E-07
1472	ALL		563520.3	4227509	0.000483	9901	DieselExhPM	1.25E-07	25YrCancerDerived_InhSoilDerm	*	1.25E-07
1473	ALL		563520.3	4227600	0.000391	9901	DieselExhPM	1.02E-07	25YrCancerDerived_InhSoilDerm	*	1.02E-07
1474	ALL		563520.3	4227692	0.000319	9901	DieselExhPM	8.28E-08	25YrCancerDerived_InhSoilDerm	*	8.28E-08

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1475	ALL		563520.3	4227784	0.000265	9901	DieselExhPM	6.88E-08	25YrCancerDerived_InhSoilDerm	*	6.88E-08
1476	ALL		563520.3	4227875	0.000228	9901	DieselExhPM	5.93E-08	25YrCancerDerived_InhSoilDerm	*	5.93E-08
1477	ALL		563618.8	4227142	0.004141	9901	DieselExhPM	1.08E-06	25YrCancerDerived_InhSoilDerm	*	1.08E-06
1478	ALL		563618.8	4227234	0.002616	9901	DieselExhPM	6.80E-07	25YrCancerDerived_InhSoilDerm	*	6.80E-07
1479	ALL		563618.8	4227325	0.001714	9901	DieselExhPM	4.46E-07	25YrCancerDerived_InhSoilDerm	*	4.46E-07
1480	ALL		563618.8	4227417	0.001194	9901	DieselExhPM	3.10E-07	25YrCancerDerived_InhSoilDerm	*	3.10E-07
1481	ALL		563618.8	4227509	0.000874	9901	DieselExhPM	2.27E-07	25YrCancerDerived_InhSoilDerm	*	2.27E-07
1482	ALL		563618.8	4227600	0.00067	9901	DieselExhPM	1.74E-07	25YrCancerDerived_InhSoilDerm	*	1.74E-07
1483	ALL		563618.8	4227692	0.00052	9901	DieselExhPM	1.35E-07	25YrCancerDerived_InhSoilDerm	*	1.35E-07
1484	ALL		563618.8	4227784	0.000411	9901	DieselExhPM	1.07E-07	25YrCancerDerived_InhSoilDerm	*	1.07E-07
1485	ALL		563618.8	4227875	0.000339	9901	DieselExhPM	8.82E-08	25YrCancerDerived_InhSoilDerm	*	8.82E-08
1486	ALL		563717.2	4227142	0.006606	9901	DieselExhPM	1.72E-06	25YrCancerDerived_InhSoilDerm	*	1.72E-06
1487	ALL		563717.2	4227234	0.004312	9901	DieselExhPM	1.12E-06	25YrCancerDerived_InhSoilDerm	*	1.12E-06
1488	ALL		563717.2	4227325	0.00294	9901	DieselExhPM	7.64E-07	25YrCancerDerived_InhSoilDerm	*	7.64E-07
1489	ALL		563717.2	4227417	0.002089	9901	DieselExhPM	5.43E-07	25YrCancerDerived_InhSoilDerm	*	5.43E-07
1490	ALL		563717.2	4227509	0.001513	9901	DieselExhPM	3.93E-07	25YrCancerDerived_InhSoilDerm	*	3.93E-07
1491	ALL		563717.2	4227600	0.001127	9901	DieselExhPM	2.93E-07	25YrCancerDerived_InhSoilDerm	*	2.93E-07
1492	ALL		563717.2	4227692	0.000861	9901	DieselExhPM	2.24E-07	25YrCancerDerived_InhSoilDerm	*	2.24E-07
1493	ALL		563717.2	4227784	0.000673	9901	DieselExhPM	1.75E-07	25YrCancerDerived_InhSoilDerm	*	1.75E-07
1494	ALL		563717.2	4227875	0.000534	9901	DieselExhPM	1.39E-07	25YrCancerDerived_InhSoilDerm	*	1.39E-07
1495	ALL		563815.6	4227142	0.007164	9901	DieselExhPM	1.86E-06	25YrCancerDerived_InhSoilDerm	*	1.86E-06
1496	ALL		563815.6	4227234	0.005173	9901	DieselExhPM	1.34E-06	25YrCancerDerived_InhSoilDerm	*	1.34E-06
1497	ALL		563815.6	4227325	0.003832	9901	DieselExhPM	9.96E-07	25YrCancerDerived_InhSoilDerm	*	9.96E-07
1498	ALL		563815.6	4227417	0.002838	9901	DieselExhPM	7.38E-07	25YrCancerDerived_InhSoilDerm	*	7.38E-07
1499	ALL		563815.6	4227509	0.00214	9901	DieselExhPM	5.56E-07	25YrCancerDerived_InhSoilDerm	*	5.56E-07
1500	ALL		563815.6	4227600	0.001643	9901	DieselExhPM	4.27E-07	25YrCancerDerived_InhSoilDerm	*	4.27E-07
1501	ALL		563815.6	4227692	0.001275	9901	DieselExhPM	3.31E-07	25YrCancerDerived_InhSoilDerm	*	3.31E-07
1502	ALL		563815.6	4227784	0.001004	9901	DieselExhPM	2.61E-07	25YrCancerDerived_InhSoilDerm	*	2.61E-07
1503	ALL		563815.6	4227875	0.000803	9901	DieselExhPM	2.09E-07	25YrCancerDerived_InhSoilDerm	*	2.09E-07
1504	ALL		563914.1	4227142	0.005564	9901	DieselExhPM	1.45E-06	25YrCancerDerived_InhSoilDerm	*	1.45E-06
1505	ALL		563914.1	4227234	0.004552	9901	DieselExhPM	1.18E-06	25YrCancerDerived_InhSoilDerm	*	1.18E-06
1506	ALL		563914.1	4227325	0.003793	9901	DieselExhPM	9.86E-07	25YrCancerDerived_InhSoilDerm	*	9.86E-07
1507	ALL		563914.1	4227417	0.003035	9901	DieselExhPM	7.89E-07	25YrCancerDerived_InhSoilDerm	*	7.89E-07
1508	ALL		563914.1	4227509	0.002427	9901	DieselExhPM	6.31E-07	25YrCancerDerived_InhSoilDerm	*	6.31E-07
1509	ALL		563914.1	4227600	0.001947	9901	DieselExhPM	5.06E-07	25YrCancerDerived_InhSoilDerm	*	5.06E-07
1510	ALL		563914.1	4227692	0.001574	9901	DieselExhPM	4.09E-07	25YrCancerDerived_InhSoilDerm	*	4.09E-07
1511	ALL		563914.1	4227784	0.001281	9901	DieselExhPM	3.33E-07	25YrCancerDerived_InhSoilDerm	*	3.33E-07
1512	ALL		563914.1	4227875	0.00105	9901	DieselExhPM	2.73E-07	25YrCancerDerived_InhSoilDerm	*	2.73E-07
1513	ALL		564012.5	4227142	0.003444	9901	DieselExhPM	8.95E-07	25YrCancerDerived_InhSoilDerm	*	8.95E-07
1514	ALL		564012.5	4227234	0.003189	9901	DieselExhPM	8.29E-07	25YrCancerDerived_InhSoilDerm	*	8.29E-07
1515	ALL		564012.5	4227325	0.002977	9901	DieselExhPM	7.74E-07	25YrCancerDerived_InhSoilDerm	*	7.74E-07
1516	ALL		564012.5	4227417	0.002665	9901	DieselExhPM	6.93E-07	25YrCancerDerived_InhSoilDerm	*	6.93E-07
1517	ALL		564012.5	4227509	0.002294	9901	DieselExhPM	5.96E-07	25YrCancerDerived_InhSoilDerm	*	5.96E-07
1518	ALL		564012.5	4227600	0.001944	9901	DieselExhPM	5.05E-07	25YrCancerDerived_InhSoilDerm	*	5.05E-07
1519	ALL		564012.5	4227692	0.001651	9901	DieselExhPM	4.29E-07	25YrCancerDerived_InhSoilDerm	*	4.29E-07
1520	ALL		564012.5	4227784	0.001397	9901	DieselExhPM	3.63E-07	25YrCancerDerived_InhSoilDerm	*	3.63E-07
1521	ALL		564012.5	4227875	0.001183	9901	DieselExhPM	3.07E-07	25YrCancerDerived_InhSoilDerm	*	3.07E-07
1522	ALL		564110.9	4227142	0.002282	9901	DieselExhPM	5.93E-07	25YrCancerDerived_InhSoilDerm	*	5.93E-07
1523	ALL		564110.9	4227234	0.002214	9901	DieselExhPM	5.76E-07	25YrCancerDerived_InhSoilDerm	*	5.76E-07
1524	ALL		564110.9	4227325	0.002179	9901	DieselExhPM	5.66E-07	25YrCancerDerived_InhSoilDerm	*	5.66E-07
1525	ALL		564110.9	4227417	0.002106	9901	DieselExhPM	5.47E-07	25YrCancerDerived_InhSoilDerm	*	5.47E-07
1526	ALL		564110.9	4227509	0.001921	9901	DieselExhPM	4.99E-07	25YrCancerDerived_InhSoilDerm	*	4.99E-07
1527	ALL		564110.9	4227600	0.001727	9901	DieselExhPM	4.49E-07	25YrCancerDerived_InhSoilDerm	*	4.49E-07
1528	ALL		564110.9	4227692	0.001537	9901	DieselExhPM	4.00E-07	25YrCancerDerived_InhSoilDerm	*	4.00E-07
1529	ALL		564110.9	4227784	0.001358	9901	DieselExhPM	3.53E-07	25YrCancerDerived_InhSoilDerm	*	3.53E-07
1530	ALL		564110.9	4227875	0.001192	9901	DieselExhPM	3.10E-07	25YrCancerDerived_InhSoilDerm	*	3.10E-07
1531	ALL		564209.4	4227142	0.001596	9901	DieselExhPM	4.15E-07	25YrCancerDerived_InhSoilDerm	*	4.15E-07
1532	ALL		564209.4	4227234	0.001581	9901	DieselExhPM	4.11E-07	25YrCancerDerived_InhSoilDerm	*	4.11E-07
1533	ALL		564209.4	4227325	0.001621	9901	DieselExhPM	4.21E-07	25YrCancerDerived_InhSoilDerm	*	4.21E-07
1534	ALL		564209.4	4227417	0.001577	9901	DieselExhPM	4.10E-07	25YrCancerDerived_InhSoilDerm	*	4.10E-07
1535	ALL		564209.4	4227509	0.001501	9901	DieselExhPM	3.90E-07	25YrCancerDerived_InhSoilDerm	*	3.90E-07
1536	ALL		564209.4	4227600	0.001419	9901	DieselExhPM	3.69E-07	25YrCancerDerived_InhSoilDerm	*	3.69E-07
1537	ALL		564209.4	4227692	0.001319	9901	DieselExhPM	3.43E-07	25YrCancerDerived_InhSoilDerm	*	3.43E-07
1538	ALL		564209.4	4227784	0.001216	9901	DieselExhPM	3.16E-07	25YrCancerDerived_InhSoilDerm	*	3.16E-07
1539	ALL		564209.4	4227875	0.001109	9901	DieselExhPM	2.88E-07	25YrCancerDerived_InhSoilDerm	*	2.88E-07
1540	ALL		564307.8	4227142	0.001183	9901	DieselExhPM	3.07E-07	25YrCancerDerived_InhSoilDerm	*	3.07E-07
1541	ALL		564307.8	4227234	0.00119	9901	DieselExhPM	3.09E-07	25YrCancerDerived_InhSoilDerm	*	3.09E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1542	ALL		564307.8	4227325	0.001234	9901	DieselExhPM	3.21E-07	25YrCancerDerived_InhSoilDerm	*	3.21E-07
1543	ALL		564307.8	4227417	0.001208	9901	DieselExhPM	3.14E-07	25YrCancerDerived_InhSoilDerm	*	3.14E-07
1544	ALL		564307.8	4227509	0.001169	9901	DieselExhPM	3.04E-07	25YrCancerDerived_InhSoilDerm	*	3.04E-07
1545	ALL		564307.8	4227600	0.001126	9901	DieselExhPM	2.93E-07	25YrCancerDerived_InhSoilDerm	*	2.93E-07
1546	ALL		564307.8	4227692	0.001081	9901	DieselExhPM	2.81E-07	25YrCancerDerived_InhSoilDerm	*	2.81E-07
1547	ALL		564307.8	4227784	0.001031	9901	DieselExhPM	2.68E-07	25YrCancerDerived_InhSoilDerm	*	2.68E-07
1548	ALL		564307.8	4227875	0.000972	9901	DieselExhPM	2.53E-07	25YrCancerDerived_InhSoilDerm	*	2.53E-07
1549	ALL		564406.3	4227142	0.000906	9901	DieselExhPM	2.36E-07	25YrCancerDerived_InhSoilDerm	*	2.36E-07
1550	ALL		564406.3	4227234	0.000918	9901	DieselExhPM	2.39E-07	25YrCancerDerived_InhSoilDerm	*	2.39E-07
1551	ALL		564406.3	4227325	0.000964	9901	DieselExhPM	2.51E-07	25YrCancerDerived_InhSoilDerm	*	2.51E-07
1552	ALL		564406.3	4227417	0.000954	9901	DieselExhPM	2.48E-07	25YrCancerDerived_InhSoilDerm	*	2.48E-07
1553	ALL		564406.3	4227509	0.000928	9901	DieselExhPM	2.41E-07	25YrCancerDerived_InhSoilDerm	*	2.41E-07
1554	ALL		564406.3	4227600	0.000902	9901	DieselExhPM	2.35E-07	25YrCancerDerived_InhSoilDerm	*	2.35E-07
1555	ALL		564406.3	4227692	0.000876	9901	DieselExhPM	2.28E-07	25YrCancerDerived_InhSoilDerm	*	2.28E-07
1556	ALL		564406.3	4227784	0.000848	9901	DieselExhPM	2.20E-07	25YrCancerDerived_InhSoilDerm	*	2.20E-07
1557	ALL		564406.3	4227875	0.000822	9901	DieselExhPM	2.14E-07	25YrCancerDerived_InhSoilDerm	*	2.14E-07
1558	ALL		564504.7	4227142	0.000714	9901	DieselExhPM	1.86E-07	25YrCancerDerived_InhSoilDerm	*	1.86E-07
1559	ALL		564504.7	4227234	0.000736	9901	DieselExhPM	1.91E-07	25YrCancerDerived_InhSoilDerm	*	1.91E-07
1560	ALL		564504.7	4227325	0.000757	9901	DieselExhPM	1.97E-07	25YrCancerDerived_InhSoilDerm	*	1.97E-07
1561	ALL		564504.7	4227417	0.000768	9901	DieselExhPM	2.00E-07	25YrCancerDerived_InhSoilDerm	*	2.00E-07
1562	ALL		564504.7	4227509	0.000757	9901	DieselExhPM	1.97E-07	25YrCancerDerived_InhSoilDerm	*	1.97E-07
1563	ALL		564504.7	4227600	0.00074	9901	DieselExhPM	1.92E-07	25YrCancerDerived_InhSoilDerm	*	1.92E-07
1564	ALL		564504.7	4227692	0.000721	9901	DieselExhPM	1.87E-07	25YrCancerDerived_InhSoilDerm	*	1.87E-07
1565	ALL		564504.7	4227784	0.000706	9901	DieselExhPM	1.83E-07	25YrCancerDerived_InhSoilDerm	*	1.83E-07
1566	ALL		564504.7	4227875	0.000691	9901	DieselExhPM	1.80E-07	25YrCancerDerived_InhSoilDerm	*	1.80E-07
1567	ALL		564603.1	4227142	0.000588	9901	DieselExhPM	1.53E-07	25YrCancerDerived_InhSoilDerm	*	1.53E-07
1568	ALL		564603.1	4227234	0.000612	9901	DieselExhPM	1.59E-07	25YrCancerDerived_InhSoilDerm	*	1.59E-07
1569	ALL		564603.1	4227325	0.000639	9901	DieselExhPM	1.66E-07	25YrCancerDerived_InhSoilDerm	*	1.66E-07
1570	ALL		564603.1	4227417	0.000636	9901	DieselExhPM	1.65E-07	25YrCancerDerived_InhSoilDerm	*	1.65E-07
1571	ALL		564603.1	4227509	0.000625	9901	DieselExhPM	1.62E-07	25YrCancerDerived_InhSoilDerm	*	1.62E-07
1572	ALL		564603.1	4227600	0.000618	9901	DieselExhPM	1.61E-07	25YrCancerDerived_InhSoilDerm	*	1.61E-07
1573	ALL		564603.1	4227692	0.000606	9901	DieselExhPM	1.58E-07	25YrCancerDerived_InhSoilDerm	*	1.58E-07
1574	ALL		564603.1	4227784	0.000594	9901	DieselExhPM	1.55E-07	25YrCancerDerived_InhSoilDerm	*	1.55E-07
1575	ALL		564603.1	4227875	0.000581	9901	DieselExhPM	1.51E-07	25YrCancerDerived_InhSoilDerm	*	1.51E-07
1576	ALL		564701.6	4227142	0.000493	9901	DieselExhPM	1.28E-07	25YrCancerDerived_InhSoilDerm	*	1.28E-07
1577	ALL		564701.6	4227234	0.000511	9901	DieselExhPM	1.33E-07	25YrCancerDerived_InhSoilDerm	*	1.33E-07
1578	ALL		564701.6	4227325	0.000532	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
1579	ALL		564701.6	4227417	0.000537	9901	DieselExhPM	1.40E-07	25YrCancerDerived_InhSoilDerm	*	1.40E-07
1580	ALL		564701.6	4227509	0.000531	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
1581	ALL		564701.6	4227600	0.000526	9901	DieselExhPM	1.37E-07	25YrCancerDerived_InhSoilDerm	*	1.37E-07
1582	ALL		564701.6	4227692	0.00052	9901	DieselExhPM	1.35E-07	25YrCancerDerived_InhSoilDerm	*	1.35E-07
1583	ALL		564701.6	4227784	0.000512	9901	DieselExhPM	1.33E-07	25YrCancerDerived_InhSoilDerm	*	1.33E-07
1584	ALL		564701.6	4227875	0.000502	9901	DieselExhPM	1.30E-07	25YrCancerDerived_InhSoilDerm	*	1.30E-07
1585	ALL		564800	4227142	0.00043	9901	DieselExhPM	1.12E-07	25YrCancerDerived_InhSoilDerm	*	1.12E-07
1586	ALL		564800	4227234	0.000429	9901	DieselExhPM	1.11E-07	25YrCancerDerived_InhSoilDerm	*	1.11E-07
1587	ALL		564800	4227325	0.000444	9901	DieselExhPM	1.16E-07	25YrCancerDerived_InhSoilDerm	*	1.16E-07
1588	ALL		564800	4227417	0.00046	9901	DieselExhPM	1.19E-07	25YrCancerDerived_InhSoilDerm	*	1.19E-07
1589	ALL		564800	4227509	0.000464	9901	DieselExhPM	1.21E-07	25YrCancerDerived_InhSoilDerm	*	1.21E-07
1590	ALL		564800	4227600	0.000458	9901	DieselExhPM	1.19E-07	25YrCancerDerived_InhSoilDerm	*	1.19E-07
1591	ALL		564800	4227692	0.000451	9901	DieselExhPM	1.17E-07	25YrCancerDerived_InhSoilDerm	*	1.17E-07
1592	ALL		564800	4227784	0.000447	9901	DieselExhPM	1.16E-07	25YrCancerDerived_InhSoilDerm	*	1.16E-07
1593	ALL		564800	4227875	0.00044	9901	DieselExhPM	1.14E-07	25YrCancerDerived_InhSoilDerm	*	1.14E-07
1594	ALL		564066.7	4227050	0.002727	9901	DieselExhPM	7.09E-07	25YrCancerDerived_InhSoilDerm	*	7.09E-07
1595	ALL		564066.7	4226952	0.002674	9901	DieselExhPM	6.95E-07	25YrCancerDerived_InhSoilDerm	*	6.95E-07
1596	ALL		564066.7	4226853	0.002728	9901	DieselExhPM	7.09E-07	25YrCancerDerived_InhSoilDerm	*	7.09E-07
1597	ALL		564066.7	4226755	0.002998	9901	DieselExhPM	7.79E-07	25YrCancerDerived_InhSoilDerm	*	7.79E-07
1598	ALL		564066.7	4226656	0.002562	9901	DieselExhPM	6.66E-07	25YrCancerDerived_InhSoilDerm	*	6.66E-07
1599	ALL		564066.7	4226558	0.001641	9901	DieselExhPM	4.27E-07	25YrCancerDerived_InhSoilDerm	*	4.27E-07
1600	ALL		564066.7	4226460	0.001024	9901	DieselExhPM	2.66E-07	25YrCancerDerived_InhSoilDerm	*	2.66E-07
1601	ALL		564066.7	4226361	0.000758	9901	DieselExhPM	1.97E-07	25YrCancerDerived_InhSoilDerm	*	1.97E-07
1602	ALL		564066.7	4226263	0.000722	9901	DieselExhPM	1.88E-07	25YrCancerDerived_InhSoilDerm	*	1.88E-07
1603	ALL		564066.7	4226164	0.000682	9901	DieselExhPM	1.77E-07	25YrCancerDerived_InhSoilDerm	*	1.77E-07
1604	ALL		564066.7	4226066	0.000596	9901	DieselExhPM	1.55E-07	25YrCancerDerived_InhSoilDerm	*	1.55E-07
1605	ALL		564066.7	4225967	0.000533	9901	DieselExhPM	1.39E-07	25YrCancerDerived_InhSoilDerm	*	1.39E-07
1606	ALL		564066.7	4225869	0.000499	9901	DieselExhPM	1.30E-07	25YrCancerDerived_InhSoilDerm	*	1.30E-07
1607	ALL		564066.7	4225771	0.000461	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
1608	ALL		564066.7	4225672	0.000428	9901	DieselExhPM	1.11E-07	25YrCancerDerived_InhSoilDerm	*	1.11E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1609	ALL		564066.7	4225574	0.000395	9901	DieselExhPM	1.03E-07	25YrCancerDerived_InhSoilDerm	*	1.03E-07
1610	ALL		564066.7	4225475	0.000365	9901	DieselExhPM	9.49E-08	25YrCancerDerived_InhSoilDerm	*	9.49E-08
1611	ALL		564158.3	4227050	0.001827	9901	DieselExhPM	4.75E-07	25YrCancerDerived_InhSoilDerm	*	4.75E-07
1612	ALL		564158.3	4226952	0.001693	9901	DieselExhPM	4.40E-07	25YrCancerDerived_InhSoilDerm	*	4.40E-07
1613	ALL		564158.3	4226853	0.00177	9901	DieselExhPM	4.60E-07	25YrCancerDerived_InhSoilDerm	*	4.60E-07
1614	ALL		564158.3	4226755	0.002072	9901	DieselExhPM	5.39E-07	25YrCancerDerived_InhSoilDerm	*	5.39E-07
1615	ALL		564158.3	4226656	0.001808	9901	DieselExhPM	4.70E-07	25YrCancerDerived_InhSoilDerm	*	4.70E-07
1616	ALL		564158.3	4226558	0.00128	9901	DieselExhPM	3.33E-07	25YrCancerDerived_InhSoilDerm	*	3.33E-07
1617	ALL		564158.3	4226460	0.000854	9901	DieselExhPM	2.22E-07	25YrCancerDerived_InhSoilDerm	*	2.22E-07
1618	ALL		564158.3	4226361	0.000589	9901	DieselExhPM	1.53E-07	25YrCancerDerived_InhSoilDerm	*	1.53E-07
1619	ALL		564158.3	4226263	0.000527	9901	DieselExhPM	1.37E-07	25YrCancerDerived_InhSoilDerm	*	1.37E-07
1620	ALL		564158.3	4226164	0.000543	9901	DieselExhPM	1.41E-07	25YrCancerDerived_InhSoilDerm	*	1.41E-07
1621	ALL		564158.3	4226066	0.000506	9901	DieselExhPM	1.31E-07	25YrCancerDerived_InhSoilDerm	*	1.31E-07
1622	ALL		564158.3	4225967	0.000454	9901	DieselExhPM	1.18E-07	25YrCancerDerived_InhSoilDerm	*	1.18E-07
1623	ALL		564158.3	4225869	0.000416	9901	DieselExhPM	1.08E-07	25YrCancerDerived_InhSoilDerm	*	1.08E-07
1624	ALL		564158.3	4225771	0.000389	9901	DieselExhPM	1.01E-07	25YrCancerDerived_InhSoilDerm	*	1.01E-07
1625	ALL		564158.3	4225672	0.000373	9901	DieselExhPM	9.69E-08	25YrCancerDerived_InhSoilDerm	*	9.69E-08
1626	ALL		564158.3	4225574	0.000355	9901	DieselExhPM	9.22E-08	25YrCancerDerived_InhSoilDerm	*	9.22E-08
1627	ALL		564158.3	4225475	0.000333	9901	DieselExhPM	8.65E-08	25YrCancerDerived_InhSoilDerm	*	8.65E-08
1628	ALL		564250	4227050	0.001307	9901	DieselExhPM	3.40E-07	25YrCancerDerived_InhSoilDerm	*	3.40E-07
1629	ALL		564250	4226952	0.001255	9901	DieselExhPM	3.26E-07	25YrCancerDerived_InhSoilDerm	*	3.26E-07
1630	ALL		564250	4226853	0.001288	9901	DieselExhPM	3.35E-07	25YrCancerDerived_InhSoilDerm	*	3.35E-07
1631	ALL		564250	4226755	0.00135	9901	DieselExhPM	3.51E-07	25YrCancerDerived_InhSoilDerm	*	3.51E-07
1632	ALL		564250	4226656	0.001159	9901	DieselExhPM	3.01E-07	25YrCancerDerived_InhSoilDerm	*	3.01E-07
1633	ALL		564250	4226558	0.000823	9901	DieselExhPM	2.14E-07	25YrCancerDerived_InhSoilDerm	*	2.14E-07
1634	ALL		564250	4226460	0.000655	9901	DieselExhPM	1.70E-07	25YrCancerDerived_InhSoilDerm	*	1.70E-07
1635	ALL		564250	4226361	0.000489	9901	DieselExhPM	1.27E-07	25YrCancerDerived_InhSoilDerm	*	1.27E-07
1636	ALL		564250	4226263	0.000403	9901	DieselExhPM	1.05E-07	25YrCancerDerived_InhSoilDerm	*	1.05E-07
1637	ALL		564250	4226164	0.000402	9901	DieselExhPM	1.05E-07	25YrCancerDerived_InhSoilDerm	*	1.05E-07
1638	ALL		564250	4226066	0.000402	9901	DieselExhPM	1.05E-07	25YrCancerDerived_InhSoilDerm	*	1.05E-07
1639	ALL		564250	4225967	0.0004	9901	DieselExhPM	1.04E-07	25YrCancerDerived_InhSoilDerm	*	1.04E-07
1640	ALL		564250	4225869	0.000354	9901	DieselExhPM	9.21E-08	25YrCancerDerived_InhSoilDerm	*	9.21E-08
1641	ALL		564250	4225771	0.000334	9901	DieselExhPM	8.67E-08	25YrCancerDerived_InhSoilDerm	*	8.67E-08
1642	ALL		564250	4225672	0.000316	9901	DieselExhPM	8.22E-08	25YrCancerDerived_InhSoilDerm	*	8.22E-08
1643	ALL		564250	4225574	0.000309	9901	DieselExhPM	8.02E-08	25YrCancerDerived_InhSoilDerm	*	8.02E-08
1644	ALL		564250	4225475	0.000301	9901	DieselExhPM	7.82E-08	25YrCancerDerived_InhSoilDerm	*	7.82E-08
1645	ALL		564341.7	4227050	0.001011	9901	DieselExhPM	2.63E-07	25YrCancerDerived_InhSoilDerm	*	2.63E-07
1646	ALL		564341.7	4226952	0.000977	9901	DieselExhPM	2.54E-07	25YrCancerDerived_InhSoilDerm	*	2.54E-07
1647	ALL		564341.7	4226853	0.000986	9901	DieselExhPM	2.56E-07	25YrCancerDerived_InhSoilDerm	*	2.56E-07
1648	ALL		564341.7	4226755	0.000991	9901	DieselExhPM	2.57E-07	25YrCancerDerived_InhSoilDerm	*	2.57E-07
1649	ALL		564341.7	4226656	0.000887	9901	DieselExhPM	2.31E-07	25YrCancerDerived_InhSoilDerm	*	2.31E-07
1650	ALL		564341.7	4226558	0.000625	9901	DieselExhPM	1.63E-07	25YrCancerDerived_InhSoilDerm	*	1.63E-07
1651	ALL		564341.7	4226460	0.00049	9901	DieselExhPM	1.27E-07	25YrCancerDerived_InhSoilDerm	*	1.27E-07
1652	ALL		564341.7	4226361	0.000414	9901	DieselExhPM	1.08E-07	25YrCancerDerived_InhSoilDerm	*	1.08E-07
1653	ALL		564341.7	4226263	0.000334	9901	DieselExhPM	8.67E-08	25YrCancerDerived_InhSoilDerm	*	8.67E-08
1654	ALL		564341.7	4226164	0.000303	9901	DieselExhPM	7.86E-08	25YrCancerDerived_InhSoilDerm	*	7.86E-08
1655	ALL		564341.7	4226066	0.000303	9901	DieselExhPM	7.87E-08	25YrCancerDerived_InhSoilDerm	*	7.87E-08
1656	ALL		564341.7	4225967	0.000335	9901	DieselExhPM	8.71E-08	25YrCancerDerived_InhSoilDerm	*	8.71E-08
1657	ALL		564341.7	4225869	0.000315	9901	DieselExhPM	8.18E-08	25YrCancerDerived_InhSoilDerm	*	8.18E-08
1658	ALL		564341.7	4225771	0.000296	9901	DieselExhPM	7.70E-08	25YrCancerDerived_InhSoilDerm	*	7.70E-08
1659	ALL		564341.7	4225672	0.000274	9901	DieselExhPM	7.13E-08	25YrCancerDerived_InhSoilDerm	*	7.13E-08
1660	ALL		564341.7	4225574	0.000264	9901	DieselExhPM	6.87E-08	25YrCancerDerived_InhSoilDerm	*	6.87E-08
1661	ALL		564341.7	4225475	0.000263	9901	DieselExhPM	6.85E-08	25YrCancerDerived_InhSoilDerm	*	6.85E-08
1662	ALL		564433.3	4227050	0.000833	9901	DieselExhPM	2.16E-07	25YrCancerDerived_InhSoilDerm	*	2.16E-07
1663	ALL		564433.3	4226952	0.00082	9901	DieselExhPM	2.13E-07	25YrCancerDerived_InhSoilDerm	*	2.13E-07
1664	ALL		564433.3	4226853	0.00081	9901	DieselExhPM	2.11E-07	25YrCancerDerived_InhSoilDerm	*	2.11E-07
1665	ALL		564433.3	4226755	0.000791	9901	DieselExhPM	2.06E-07	25YrCancerDerived_InhSoilDerm	*	2.06E-07
1666	ALL		564433.3	4226656	0.000684	9901	DieselExhPM	1.78E-07	25YrCancerDerived_InhSoilDerm	*	1.78E-07
1667	ALL		564433.3	4226558	0.000514	9901	DieselExhPM	1.34E-07	25YrCancerDerived_InhSoilDerm	*	1.34E-07
1668	ALL		564433.3	4226460	0.000401	9901	DieselExhPM	1.04E-07	25YrCancerDerived_InhSoilDerm	*	1.04E-07
1669	ALL		564433.3	4226361	0.000323	9901	DieselExhPM	8.39E-08	25YrCancerDerived_InhSoilDerm	*	8.39E-08
1670	ALL		564433.3	4226263	0.000288	9901	DieselExhPM	7.49E-08	25YrCancerDerived_InhSoilDerm	*	7.49E-08
1671	ALL		564433.3	4226164	0.000252	9901	DieselExhPM	6.55E-08	25YrCancerDerived_InhSoilDerm	*	6.55E-08
1672	ALL		564433.3	4226066	0.000233	9901	DieselExhPM	6.05E-08	25YrCancerDerived_InhSoilDerm	*	6.05E-08
1673	ALL		564433.3	4225967	0.000254	9901	DieselExhPM	6.61E-08	25YrCancerDerived_InhSoilDerm	*	6.61E-08
1674	ALL		564433.3	4225869	0.000264	9901	DieselExhPM	6.86E-08	25YrCancerDerived_InhSoilDerm	*	6.86E-08
1675	ALL		564433.3	4225771	0.000279	9901	DieselExhPM	7.24E-08	25YrCancerDerived_InhSoilDerm	*	7.24E-08

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1676	ALL		564433.3	4225672	0.000257	9901	DieselExhPM	6.67E-08	25YrCancerDerived_InhSoilDerm	*	6.67E-08
1677	ALL		564433.3	4225574	0.000236	9901	DieselExhPM	6.13E-08	25YrCancerDerived_InhSoilDerm	*	6.13E-08
1678	ALL		564433.3	4225475	0.00023	9901	DieselExhPM	5.97E-08	25YrCancerDerived_InhSoilDerm	*	5.97E-08
1679	ALL		564525	4227050	0.000682	9901	DieselExhPM	1.77E-07	25YrCancerDerived_InhSoilDerm	*	1.77E-07
1680	ALL		564525	4226952	0.000706	9901	DieselExhPM	1.84E-07	25YrCancerDerived_InhSoilDerm	*	1.84E-07
1681	ALL		564525	4226853	0.000711	9901	DieselExhPM	1.85E-07	25YrCancerDerived_InhSoilDerm	*	1.85E-07
1682	ALL		564525	4226755	0.000668	9901	DieselExhPM	1.74E-07	25YrCancerDerived_InhSoilDerm	*	1.74E-07
1683	ALL		564525	4226656	0.000584	9901	DieselExhPM	1.52E-07	25YrCancerDerived_InhSoilDerm	*	1.52E-07
1684	ALL		564525	4226558	0.000452	9901	DieselExhPM	1.18E-07	25YrCancerDerived_InhSoilDerm	*	1.18E-07
1685	ALL		564525	4226460	0.000341	9901	DieselExhPM	8.86E-08	25YrCancerDerived_InhSoilDerm	*	8.86E-08
1686	ALL		564525	4226361	0.000287	9901	DieselExhPM	7.46E-08	25YrCancerDerived_InhSoilDerm	*	7.46E-08
1687	ALL		564525	4226263	0.000255	9901	DieselExhPM	6.62E-08	25YrCancerDerived_InhSoilDerm	*	6.62E-08
1688	ALL		564525	4226164	0.000224	9901	DieselExhPM	5.83E-08	25YrCancerDerived_InhSoilDerm	*	5.83E-08
1689	ALL		564525	4226066	0.000198	9901	DieselExhPM	5.13E-08	25YrCancerDerived_InhSoilDerm	*	5.13E-08
1690	ALL		564525	4225967	0.0002	9901	DieselExhPM	5.21E-08	25YrCancerDerived_InhSoilDerm	*	5.21E-08
1691	ALL		564525	4225869	0.000216	9901	DieselExhPM	5.61E-08	25YrCancerDerived_InhSoilDerm	*	5.61E-08
1692	ALL		564525	4225771	0.00025	9901	DieselExhPM	6.49E-08	25YrCancerDerived_InhSoilDerm	*	6.49E-08
1693	ALL		564525	4225672	0.000254	9901	DieselExhPM	6.59E-08	25YrCancerDerived_InhSoilDerm	*	6.59E-08
1694	ALL		564525	4225574	0.000227	9901	DieselExhPM	5.91E-08	25YrCancerDerived_InhSoilDerm	*	5.91E-08
1695	ALL		564525	4225475	0.000206	9901	DieselExhPM	5.36E-08	25YrCancerDerived_InhSoilDerm	*	5.36E-08
1696	ALL		564616.7	4227050	0.000577	9901	DieselExhPM	1.50E-07	25YrCancerDerived_InhSoilDerm	*	1.50E-07
1697	ALL		564616.7	4226952	0.00061	9901	DieselExhPM	1.58E-07	25YrCancerDerived_InhSoilDerm	*	1.58E-07
1698	ALL		564616.7	4226853	0.000641	9901	DieselExhPM	1.67E-07	25YrCancerDerived_InhSoilDerm	*	1.67E-07
1699	ALL		564616.7	4226755	0.000602	9901	DieselExhPM	1.56E-07	25YrCancerDerived_InhSoilDerm	*	1.56E-07
1700	ALL		564616.7	4226656	0.000516	9901	DieselExhPM	1.34E-07	25YrCancerDerived_InhSoilDerm	*	1.34E-07
1701	ALL		564616.7	4226558	0.000404	9901	DieselExhPM	1.05E-07	25YrCancerDerived_InhSoilDerm	*	1.05E-07
1702	ALL		564616.7	4226460	0.000307	9901	DieselExhPM	7.98E-08	25YrCancerDerived_InhSoilDerm	*	7.98E-08
1703	ALL		564616.7	4226361	0.00025	9901	DieselExhPM	6.50E-08	25YrCancerDerived_InhSoilDerm	*	6.50E-08
1704	ALL		564616.7	4226263	0.00022	9901	DieselExhPM	5.72E-08	25YrCancerDerived_InhSoilDerm	*	5.72E-08
1705	ALL		564616.7	4226164	0.000198	9901	DieselExhPM	5.15E-08	25YrCancerDerived_InhSoilDerm	*	5.15E-08
1706	ALL		564616.7	4226066	0.000178	9901	DieselExhPM	4.62E-08	25YrCancerDerived_InhSoilDerm	*	4.62E-08
1707	ALL		564616.7	4225967	0.000172	9901	DieselExhPM	4.46E-08	25YrCancerDerived_InhSoilDerm	*	4.46E-08
1708	ALL		564616.7	4225869	0.000183	9901	DieselExhPM	4.76E-08	25YrCancerDerived_InhSoilDerm	*	4.76E-08
1709	ALL		564616.7	4225771	0.000204	9901	DieselExhPM	5.30E-08	25YrCancerDerived_InhSoilDerm	*	5.30E-08
1710	ALL		564616.7	4225672	0.00024	9901	DieselExhPM	6.24E-08	25YrCancerDerived_InhSoilDerm	*	6.24E-08
1711	ALL		564616.7	4225574	0.000226	9901	DieselExhPM	5.87E-08	25YrCancerDerived_InhSoilDerm	*	5.87E-08
1712	ALL		564616.7	4225475	0.000202	9901	DieselExhPM	5.25E-08	25YrCancerDerived_InhSoilDerm	*	5.25E-08
1713	ALL		564708.3	4227050	0.000499	9901	DieselExhPM	1.30E-07	25YrCancerDerived_InhSoilDerm	*	1.30E-07
1714	ALL		564708.3	4226952	0.000527	9901	DieselExhPM	1.37E-07	25YrCancerDerived_InhSoilDerm	*	1.37E-07
1715	ALL		564708.3	4226853	0.000561	9901	DieselExhPM	1.46E-07	25YrCancerDerived_InhSoilDerm	*	1.46E-07
1716	ALL		564708.3	4226755	0.000556	9901	DieselExhPM	1.44E-07	25YrCancerDerived_InhSoilDerm	*	1.44E-07
1717	ALL		564708.3	4226656	0.000495	9901	DieselExhPM	1.29E-07	25YrCancerDerived_InhSoilDerm	*	1.29E-07
1718	ALL		564708.3	4226558	0.000374	9901	DieselExhPM	9.73E-08	25YrCancerDerived_InhSoilDerm	*	9.73E-08
1719	ALL		564708.3	4226460	0.000289	9901	DieselExhPM	7.50E-08	25YrCancerDerived_InhSoilDerm	*	7.50E-08
1720	ALL		564708.3	4226361	0.000234	9901	DieselExhPM	6.09E-08	25YrCancerDerived_InhSoilDerm	*	6.09E-08
1721	ALL		564708.3	4226263	0.000206	9901	DieselExhPM	5.34E-08	25YrCancerDerived_InhSoilDerm	*	5.34E-08
1722	ALL		564708.3	4226164	0.000188	9901	DieselExhPM	4.88E-08	25YrCancerDerived_InhSoilDerm	*	4.88E-08
1723	ALL		564708.3	4226066	0.00017	9901	DieselExhPM	4.41E-08	25YrCancerDerived_InhSoilDerm	*	4.41E-08
1724	ALL		564708.3	4225967	0.000154	9901	DieselExhPM	4.01E-08	25YrCancerDerived_InhSoilDerm	*	4.01E-08
1725	ALL		564708.3	4225869	0.00016	9901	DieselExhPM	4.16E-08	25YrCancerDerived_InhSoilDerm	*	4.16E-08
1726	ALL		564708.3	4225771	0.000185	9901	DieselExhPM	4.82E-08	25YrCancerDerived_InhSoilDerm	*	4.82E-08
1727	ALL		564708.3	4225672	0.000215	9901	DieselExhPM	5.58E-08	25YrCancerDerived_InhSoilDerm	*	5.58E-08
1728	ALL		564708.3	4225574	0.000218	9901	DieselExhPM	5.68E-08	25YrCancerDerived_InhSoilDerm	*	5.68E-08
1729	ALL		564708.3	4225475	0.000202	9901	DieselExhPM	5.26E-08	25YrCancerDerived_InhSoilDerm	*	5.26E-08
1730	ALL		564800	4227050	0.000446	9901	DieselExhPM	1.16E-07	25YrCancerDerived_InhSoilDerm	*	1.16E-07
1731	ALL		564800	4226952	0.000472	9901	DieselExhPM	1.23E-07	25YrCancerDerived_InhSoilDerm	*	1.23E-07
1732	ALL		564800	4226853	0.000495	9901	DieselExhPM	1.29E-07	25YrCancerDerived_InhSoilDerm	*	1.29E-07
1733	ALL		564800	4226755	0.00051	9901	DieselExhPM	1.33E-07	25YrCancerDerived_InhSoilDerm	*	1.33E-07
1734	ALL		564800	4226656	0.000461	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
1735	ALL		564800	4226558	0.000354	9901	DieselExhPM	9.19E-08	25YrCancerDerived_InhSoilDerm	*	9.19E-08
1736	ALL		564800	4226460	0.000282	9901	DieselExhPM	7.33E-08	25YrCancerDerived_InhSoilDerm	*	7.33E-08
1737	ALL		564800	4226361	0.000233	9901	DieselExhPM	6.06E-08	25YrCancerDerived_InhSoilDerm	*	6.06E-08
1738	ALL		564800	4226263	0.000201	9901	DieselExhPM	5.21E-08	25YrCancerDerived_InhSoilDerm	*	5.21E-08
1739	ALL		564800	4226164	0.000183	9901	DieselExhPM	4.75E-08	25YrCancerDerived_InhSoilDerm	*	4.75E-08
1740	ALL		564800	4226066	0.000163	9901	DieselExhPM	4.22E-08	25YrCancerDerived_InhSoilDerm	*	4.22E-08
1741	ALL		564800	4225967	0.000145	9901	DieselExhPM	3.76E-08	25YrCancerDerived_InhSoilDerm	*	3.76E-08
1742	ALL		564800	4225869	0.000139	9901	DieselExhPM	3.63E-08	25YrCancerDerived_InhSoilDerm	*	3.63E-08

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1743	ALL		564800	4225771	0.000156	9901	DieselExhPM	4.04E-08	25YrCancerDerived_InhSoilDerm	*	4.04E-08
1744	ALL		564800	4225672	0.000172	9901	DieselExhPM	4.48E-08	25YrCancerDerived_InhSoilDerm	*	4.48E-08
1745	ALL		564800	4225574	0.000193	9901	DieselExhPM	5.03E-08	25YrCancerDerived_InhSoilDerm	*	5.03E-08
1746	ALL		564800	4225475	0.000197	9901	DieselExhPM	5.11E-08	25YrCancerDerived_InhSoilDerm	*	5.11E-08
1747	ALL		563975	4226209	0.000908	9901	DieselExhPM	2.36E-07	25YrCancerDerived_InhSoilDerm	*	2.36E-07
1748	ALL		563975	4226117	0.000773	9901	DieselExhPM	2.01E-07	25YrCancerDerived_InhSoilDerm	*	2.01E-07
1749	ALL		563975	4226025	0.000688	9901	DieselExhPM	1.79E-07	25YrCancerDerived_InhSoilDerm	*	1.79E-07
1750	ALL		563975	4225934	0.000619	9901	DieselExhPM	1.61E-07	25YrCancerDerived_InhSoilDerm	*	1.61E-07
1751	ALL		563975	4225842	0.000575	9901	DieselExhPM	1.49E-07	25YrCancerDerived_InhSoilDerm	*	1.49E-07
1752	ALL		563975	4225750	0.000525	9901	DieselExhPM	1.37E-07	25YrCancerDerived_InhSoilDerm	*	1.37E-07
1753	ALL		563975	4225659	0.000484	9901	DieselExhPM	1.26E-07	25YrCancerDerived_InhSoilDerm	*	1.26E-07
1754	ALL		563975	4225567	0.000446	9901	DieselExhPM	1.16E-07	25YrCancerDerived_InhSoilDerm	*	1.16E-07
1755	ALL		563975	4225475	0.000415	9901	DieselExhPM	1.08E-07	25YrCancerDerived_InhSoilDerm	*	1.08E-07
1756	ALL		563876.6	4226209	0.001205	9901	DieselExhPM	3.13E-07	25YrCancerDerived_InhSoilDerm	*	3.13E-07
1757	ALL		563876.6	4226117	0.000998	9901	DieselExhPM	2.59E-07	25YrCancerDerived_InhSoilDerm	*	2.59E-07
1758	ALL		563876.6	4226025	0.000887	9901	DieselExhPM	2.31E-07	25YrCancerDerived_InhSoilDerm	*	2.31E-07
1759	ALL		563876.6	4225934	0.000782	9901	DieselExhPM	2.03E-07	25YrCancerDerived_InhSoilDerm	*	2.03E-07
1760	ALL		563876.6	4225842	0.000698	9901	DieselExhPM	1.81E-07	25YrCancerDerived_InhSoilDerm	*	1.81E-07
1761	ALL		563876.6	4225750	0.000631	9901	DieselExhPM	1.64E-07	25YrCancerDerived_InhSoilDerm	*	1.64E-07
1762	ALL		563876.6	4225659	0.000573	9901	DieselExhPM	1.49E-07	25YrCancerDerived_InhSoilDerm	*	1.49E-07
1763	ALL		563876.6	4225567	0.000523	9901	DieselExhPM	1.36E-07	25YrCancerDerived_InhSoilDerm	*	1.36E-07
1764	ALL		563876.6	4225475	0.000483	9901	DieselExhPM	1.25E-07	25YrCancerDerived_InhSoilDerm	*	1.25E-07
1765	ALL		563778.1	4226209	0.001754	9901	DieselExhPM	4.56E-07	25YrCancerDerived_InhSoilDerm	*	4.56E-07
1766	ALL		563778.1	4226117	0.001405	9901	DieselExhPM	3.65E-07	25YrCancerDerived_InhSoilDerm	*	3.65E-07
1767	ALL		563778.1	4226025	0.001162	9901	DieselExhPM	3.02E-07	25YrCancerDerived_InhSoilDerm	*	3.02E-07
1768	ALL		563778.1	4225934	0.000986	9901	DieselExhPM	2.56E-07	25YrCancerDerived_InhSoilDerm	*	2.56E-07
1769	ALL		563778.1	4225842	0.000854	9901	DieselExhPM	2.22E-07	25YrCancerDerived_InhSoilDerm	*	2.22E-07
1770	ALL		563778.1	4225750	0.00075	9901	DieselExhPM	1.95E-07	25YrCancerDerived_InhSoilDerm	*	1.95E-07
1771	ALL		563778.1	4225659	0.000665	9901	DieselExhPM	1.73E-07	25YrCancerDerived_InhSoilDerm	*	1.73E-07
1772	ALL		563778.1	4225567	0.000592	9901	DieselExhPM	1.54E-07	25YrCancerDerived_InhSoilDerm	*	1.54E-07
1773	ALL		563778.1	4225475	0.000535	9901	DieselExhPM	1.39E-07	25YrCancerDerived_InhSoilDerm	*	1.39E-07
1774	ALL		563679.7	4226209	0.002498	9901	DieselExhPM	6.49E-07	25YrCancerDerived_InhSoilDerm	*	6.49E-07
1775	ALL		563679.7	4226117	0.001881	9901	DieselExhPM	4.89E-07	25YrCancerDerived_InhSoilDerm	*	4.89E-07
1776	ALL		563679.7	4226025	0.001494	9901	DieselExhPM	3.88E-07	25YrCancerDerived_InhSoilDerm	*	3.88E-07
1777	ALL		563679.7	4225934	0.001225	9901	DieselExhPM	3.18E-07	25YrCancerDerived_InhSoilDerm	*	3.18E-07
1778	ALL		563679.7	4225842	0.001024	9901	DieselExhPM	2.66E-07	25YrCancerDerived_InhSoilDerm	*	2.66E-07
1779	ALL		563679.7	4225750	0.000873	9901	DieselExhPM	2.27E-07	25YrCancerDerived_InhSoilDerm	*	2.27E-07
1780	ALL		563679.7	4225659	0.000759	9901	DieselExhPM	1.97E-07	25YrCancerDerived_InhSoilDerm	*	1.97E-07
1781	ALL		563679.7	4225567	0.000664	9901	DieselExhPM	1.73E-07	25YrCancerDerived_InhSoilDerm	*	1.73E-07
1782	ALL		563679.7	4225475	0.00059	9901	DieselExhPM	1.53E-07	25YrCancerDerived_InhSoilDerm	*	1.53E-07
1783	ALL		563581.3	4226209	0.003035	9901	DieselExhPM	7.89E-07	25YrCancerDerived_InhSoilDerm	*	7.89E-07
1784	ALL		563581.3	4226117	0.002256	9901	DieselExhPM	5.86E-07	25YrCancerDerived_InhSoilDerm	*	5.86E-07
1785	ALL		563581.3	4226025	0.001756	9901	DieselExhPM	4.56E-07	25YrCancerDerived_InhSoilDerm	*	4.56E-07
1786	ALL		563581.3	4225934	0.00141	9901	DieselExhPM	3.66E-07	25YrCancerDerived_InhSoilDerm	*	3.66E-07
1787	ALL		563581.3	4225842	0.001158	9901	DieselExhPM	3.01E-07	25YrCancerDerived_InhSoilDerm	*	3.01E-07
1788	ALL		563581.3	4225750	0.000981	9901	DieselExhPM	2.55E-07	25YrCancerDerived_InhSoilDerm	*	2.55E-07
1789	ALL		563581.3	4225659	0.000846	9901	DieselExhPM	2.20E-07	25YrCancerDerived_InhSoilDerm	*	2.20E-07
1790	ALL		563581.3	4225567	0.00074	9901	DieselExhPM	1.92E-07	25YrCancerDerived_InhSoilDerm	*	1.92E-07
1791	ALL		563581.3	4225475	0.000656	9901	DieselExhPM	1.71E-07	25YrCancerDerived_InhSoilDerm	*	1.71E-07
1792	ALL		563482.8	4226209	0.002801	9901	DieselExhPM	7.28E-07	25YrCancerDerived_InhSoilDerm	*	7.28E-07
1793	ALL		563482.8	4226117	0.002151	9901	DieselExhPM	5.59E-07	25YrCancerDerived_InhSoilDerm	*	5.59E-07
1794	ALL		563482.8	4226025	0.001725	9901	DieselExhPM	4.48E-07	25YrCancerDerived_InhSoilDerm	*	4.48E-07
1795	ALL		563482.8	4225934	0.001414	9901	DieselExhPM	3.68E-07	25YrCancerDerived_InhSoilDerm	*	3.68E-07
1796	ALL		563482.8	4225842	0.001193	9901	DieselExhPM	3.10E-07	25YrCancerDerived_InhSoilDerm	*	3.10E-07
1797	ALL		563482.8	4225750	0.001025	9901	DieselExhPM	2.66E-07	25YrCancerDerived_InhSoilDerm	*	2.66E-07
1798	ALL		563482.8	4225659	0.000893	9901	DieselExhPM	2.32E-07	25YrCancerDerived_InhSoilDerm	*	2.32E-07
1799	ALL		563482.8	4225567	0.000787	9901	DieselExhPM	2.05E-07	25YrCancerDerived_InhSoilDerm	*	2.05E-07
1800	ALL		563482.8	4225475	0.000701	9901	DieselExhPM	1.82E-07	25YrCancerDerived_InhSoilDerm	*	1.82E-07
1801	ALL		563384.4	4226209	0.001951	9901	DieselExhPM	5.07E-07	25YrCancerDerived_InhSoilDerm	*	5.07E-07
1802	ALL		563384.4	4226117	0.001662	9901	DieselExhPM	4.32E-07	25YrCancerDerived_InhSoilDerm	*	4.32E-07
1803	ALL		563384.4	4226025	0.00141	9901	DieselExhPM	3.67E-07	25YrCancerDerived_InhSoilDerm	*	3.67E-07
1804	ALL		563384.4	4225934	0.001211	9901	DieselExhPM	3.15E-07	25YrCancerDerived_InhSoilDerm	*	3.15E-07
1805	ALL		563384.4	4225842	0.001053	9901	DieselExhPM	2.74E-07	25YrCancerDerived_InhSoilDerm	*	2.74E-07
1806	ALL		563384.4	4225750	0.000931	9901	DieselExhPM	2.42E-07	25YrCancerDerived_InhSoilDerm	*	2.42E-07
1807	ALL		563384.4	4225659	0.000832	9901	DieselExhPM	2.16E-07	25YrCancerDerived_InhSoilDerm	*	2.16E-07
1808	ALL		563384.4	4225567	0.000749	9901	DieselExhPM	1.95E-07	25YrCancerDerived_InhSoilDerm	*	1.95E-07
1809	ALL		563384.4	4225475	0.00068	9901	DieselExhPM	1.77E-07	25YrCancerDerived_InhSoilDerm	*	1.77E-07

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1810	ALL		563285.9	4226209	0.001107	9901	DieselExhPM	2.88E-07	25YrCancerDerived_InhSoilDerm	*	2.88E-07
1811	ALL		563285.9	4226117	0.001069	9901	DieselExhPM	2.78E-07	25YrCancerDerived_InhSoilDerm	*	2.78E-07
1812	ALL		563285.9	4226025	0.001007	9901	DieselExhPM	2.62E-07	25YrCancerDerived_InhSoilDerm	*	2.62E-07
1813	ALL		563285.9	4225934	0.000931	9901	DieselExhPM	2.42E-07	25YrCancerDerived_InhSoilDerm	*	2.42E-07
1814	ALL		563285.9	4225842	0.000845	9901	DieselExhPM	2.20E-07	25YrCancerDerived_InhSoilDerm	*	2.20E-07
1815	ALL		563285.9	4225750	0.000764	9901	DieselExhPM	1.99E-07	25YrCancerDerived_InhSoilDerm	*	1.99E-07
1816	ALL		563285.9	4225659	0.000696	9901	DieselExhPM	1.81E-07	25YrCancerDerived_InhSoilDerm	*	1.81E-07
1817	ALL		563285.9	4225567	0.00064	9901	DieselExhPM	1.66E-07	25YrCancerDerived_InhSoilDerm	*	1.66E-07
1818	ALL		563285.9	4225475	0.000593	9901	DieselExhPM	1.54E-07	25YrCancerDerived_InhSoilDerm	*	1.54E-07
1819	ALL		563187.5	4226209	0.00063	9901	DieselExhPM	1.64E-07	25YrCancerDerived_InhSoilDerm	*	1.64E-07
1820	ALL		563187.5	4226117	0.000671	9901	DieselExhPM	1.75E-07	25YrCancerDerived_InhSoilDerm	*	1.75E-07
1821	ALL		563187.5	4226025	0.000684	9901	DieselExhPM	1.78E-07	25YrCancerDerived_InhSoilDerm	*	1.78E-07
1822	ALL		563187.5	4225934	0.000676	9901	DieselExhPM	1.76E-07	25YrCancerDerived_InhSoilDerm	*	1.76E-07
1823	ALL		563187.5	4225842	0.000654	9901	DieselExhPM	1.70E-07	25YrCancerDerived_InhSoilDerm	*	1.70E-07
1824	ALL		563187.5	4225750	0.000617	9901	DieselExhPM	1.60E-07	25YrCancerDerived_InhSoilDerm	*	1.60E-07
1825	ALL		563187.5	4225659	0.000573	9901	DieselExhPM	1.49E-07	25YrCancerDerived_InhSoilDerm	*	1.49E-07
1826	ALL		563187.5	4225567	0.00053	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
1827	ALL		563187.5	4225475	0.000493	9901	DieselExhPM	1.28E-07	25YrCancerDerived_InhSoilDerm	*	1.28E-07
1828	ALL		563089.1	4226209	0.00042	9901	DieselExhPM	1.09E-07	25YrCancerDerived_InhSoilDerm	*	1.09E-07
1829	ALL		563089.1	4226117	0.000423	9901	DieselExhPM	1.10E-07	25YrCancerDerived_InhSoilDerm	*	1.10E-07
1830	ALL		563089.1	4226025	0.000384	9901	DieselExhPM	9.99E-08	25YrCancerDerived_InhSoilDerm	*	9.99E-08
1831	ALL		563089.1	4225934	0.000423	9901	DieselExhPM	1.10E-07	25YrCancerDerived_InhSoilDerm	*	1.10E-07
1832	ALL		563089.1	4225842	0.000462	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
1833	ALL		563089.1	4225750	0.000477	9901	DieselExhPM	1.24E-07	25YrCancerDerived_InhSoilDerm	*	1.24E-07
1834	ALL		563089.1	4225659	0.000477	9901	DieselExhPM	1.24E-07	25YrCancerDerived_InhSoilDerm	*	1.24E-07
1835	ALL		563089.1	4225567	0.000449	9901	DieselExhPM	1.17E-07	25YrCancerDerived_InhSoilDerm	*	1.17E-07
1836	ALL		563089.1	4225475	0.00042	9901	DieselExhPM	1.09E-07	25YrCancerDerived_InhSoilDerm	*	1.09E-07
1837	ALL		562990.6	4226209	0.000315	9901	DieselExhPM	8.18E-08	25YrCancerDerived_InhSoilDerm	*	8.18E-08
1838	ALL		562990.6	4226117	0.000321	9901	DieselExhPM	8.33E-08	25YrCancerDerived_InhSoilDerm	*	8.33E-08
1839	ALL		562990.6	4226025	0.000282	9901	DieselExhPM	7.33E-08	25YrCancerDerived_InhSoilDerm	*	7.33E-08
1840	ALL		562990.6	4225934	0.00027	9901	DieselExhPM	7.03E-08	25YrCancerDerived_InhSoilDerm	*	7.03E-08
1841	ALL		562990.6	4225842	0.000286	9901	DieselExhPM	7.42E-08	25YrCancerDerived_InhSoilDerm	*	7.42E-08
1842	ALL		562990.6	4225750	0.000327	9901	DieselExhPM	8.50E-08	25YrCancerDerived_InhSoilDerm	*	8.50E-08
1843	ALL		562990.6	4225659	0.000356	9901	DieselExhPM	9.25E-08	25YrCancerDerived_InhSoilDerm	*	9.25E-08
1844	ALL		562990.6	4225567	0.00037	9901	DieselExhPM	9.63E-08	25YrCancerDerived_InhSoilDerm	*	9.63E-08
1845	ALL		562990.6	4225475	0.000366	9901	DieselExhPM	9.51E-08	25YrCancerDerived_InhSoilDerm	*	9.51E-08
1846	ALL		562892.2	4226209	0.000238	9901	DieselExhPM	6.18E-08	25YrCancerDerived_InhSoilDerm	*	6.18E-08
1847	ALL		562892.2	4226117	0.00025	9901	DieselExhPM	6.49E-08	25YrCancerDerived_InhSoilDerm	*	6.49E-08
1848	ALL		562892.2	4226025	0.000247	9901	DieselExhPM	6.43E-08	25YrCancerDerived_InhSoilDerm	*	6.43E-08
1849	ALL		562892.2	4225934	0.000236	9901	DieselExhPM	6.15E-08	25YrCancerDerived_InhSoilDerm	*	6.15E-08
1850	ALL		562892.2	4225842	0.00022	9901	DieselExhPM	5.72E-08	25YrCancerDerived_InhSoilDerm	*	5.72E-08
1851	ALL		562892.2	4225750	0.000215	9901	DieselExhPM	5.59E-08	25YrCancerDerived_InhSoilDerm	*	5.59E-08
1852	ALL		562892.2	4225659	0.000231	9901	DieselExhPM	6.01E-08	25YrCancerDerived_InhSoilDerm	*	6.01E-08
1853	ALL		562892.2	4225567	0.00026	9901	DieselExhPM	6.77E-08	25YrCancerDerived_InhSoilDerm	*	6.77E-08
1854	ALL		562892.2	4225475	0.000291	9901	DieselExhPM	7.56E-08	25YrCancerDerived_InhSoilDerm	*	7.56E-08
1855	ALL		562793.8	4226209	0.00019	9901	DieselExhPM	4.94E-08	25YrCancerDerived_InhSoilDerm	*	4.94E-08
1856	ALL		562793.8	4226117	0.000193	9901	DieselExhPM	5.02E-08	25YrCancerDerived_InhSoilDerm	*	5.02E-08
1857	ALL		562793.8	4226025	0.000207	9901	DieselExhPM	5.37E-08	25YrCancerDerived_InhSoilDerm	*	5.37E-08
1858	ALL		562793.8	4225934	0.000215	9901	DieselExhPM	5.59E-08	25YrCancerDerived_InhSoilDerm	*	5.59E-08
1859	ALL		562793.8	4225842	0.000209	9901	DieselExhPM	5.43E-08	25YrCancerDerived_InhSoilDerm	*	5.43E-08
1860	ALL		562793.8	4225750	0.000198	9901	DieselExhPM	5.15E-08	25YrCancerDerived_InhSoilDerm	*	5.15E-08
1861	ALL		562793.8	4225659	0.000178	9901	DieselExhPM	4.63E-08	25YrCancerDerived_InhSoilDerm	*	4.63E-08
1862	ALL		562793.8	4225567	0.00018	9901	DieselExhPM	4.68E-08	25YrCancerDerived_InhSoilDerm	*	4.68E-08
1863	ALL		562793.8	4225475	0.000204	9901	DieselExhPM	5.29E-08	25YrCancerDerived_InhSoilDerm	*	5.29E-08
1864	ALL		562695.3	4226209	0.000161	9901	DieselExhPM	4.17E-08	25YrCancerDerived_InhSoilDerm	*	4.17E-08
1865	ALL		562695.3	4226117	0.000156	9901	DieselExhPM	4.05E-08	25YrCancerDerived_InhSoilDerm	*	4.05E-08
1866	ALL		562695.3	4226025	0.000163	9901	DieselExhPM	4.24E-08	25YrCancerDerived_InhSoilDerm	*	4.24E-08
1867	ALL		562695.3	4225934	0.000175	9901	DieselExhPM	4.55E-08	25YrCancerDerived_InhSoilDerm	*	4.55E-08
1868	ALL		562695.3	4225842	0.000183	9901	DieselExhPM	4.76E-08	25YrCancerDerived_InhSoilDerm	*	4.76E-08
1869	ALL		562695.3	4225750	0.000181	9901	DieselExhPM	4.70E-08	25YrCancerDerived_InhSoilDerm	*	4.70E-08
1870	ALL		562695.3	4225659	0.000172	9901	DieselExhPM	4.47E-08	25YrCancerDerived_InhSoilDerm	*	4.47E-08
1871	ALL		562695.3	4225567	0.000163	9901	DieselExhPM	4.24E-08	25YrCancerDerived_InhSoilDerm	*	4.24E-08
1872	ALL		562695.3	4225475	0.000165	9901	DieselExhPM	4.30E-08	25YrCancerDerived_InhSoilDerm	*	4.30E-08
1873	ALL		562596.9	4226209	0.00014	9901	DieselExhPM	3.65E-08	25YrCancerDerived_InhSoilDerm	*	3.65E-08
1874	ALL		562596.9	4226117	0.000133	9901	DieselExhPM	3.45E-08	25YrCancerDerived_InhSoilDerm	*	3.45E-08
1875	ALL		562596.9	4226025	0.000132	9901	DieselExhPM	3.44E-08	25YrCancerDerived_InhSoilDerm	*	3.44E-08
1876	ALL		562596.9	4225934	0.000141	9901	DieselExhPM	3.65E-08	25YrCancerDerived_InhSoilDerm	*	3.65E-08

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1877	ALL		562596.9	4225842	0.000152	9901	DieselExhPM	3.96E-08	25YrCancerDerived_InhSoilDerm	*	3.96E-08
1878	ALL		562596.9	4225750	0.00016	9901	DieselExhPM	4.16E-08	25YrCancerDerived_InhSoilDerm	*	4.16E-08
1879	ALL		562596.9	4225659	0.00016	9901	DieselExhPM	4.15E-08	25YrCancerDerived_InhSoilDerm	*	4.15E-08
1880	ALL		562596.9	4225567	0.000153	9901	DieselExhPM	3.97E-08	25YrCancerDerived_InhSoilDerm	*	3.97E-08
1881	ALL		562596.9	4225475	0.000142	9901	DieselExhPM	3.70E-08	25YrCancerDerived_InhSoilDerm	*	3.70E-08
1882	ALL		562498.4	4226209	0.000125	9901	DieselExhPM	3.25E-08	25YrCancerDerived_InhSoilDerm	*	3.25E-08
1883	ALL		562498.4	4226117	0.000117	9901	DieselExhPM	3.05E-08	25YrCancerDerived_InhSoilDerm	*	3.05E-08
1884	ALL		562498.4	4226025	0.000113	9901	DieselExhPM	2.94E-08	25YrCancerDerived_InhSoilDerm	*	2.94E-08
1885	ALL		562498.4	4225934	0.000115	9901	DieselExhPM	3.00E-08	25YrCancerDerived_InhSoilDerm	*	3.00E-08
1886	ALL		562498.4	4225842	0.000124	9901	DieselExhPM	3.23E-08	25YrCancerDerived_InhSoilDerm	*	3.23E-08
1887	ALL		562498.4	4225750	0.000135	9901	DieselExhPM	3.51E-08	25YrCancerDerived_InhSoilDerm	*	3.51E-08
1888	ALL		562498.4	4225659	0.000142	9901	DieselExhPM	3.68E-08	25YrCancerDerived_InhSoilDerm	*	3.68E-08
1889	ALL		562498.4	4225567	0.000142	9901	DieselExhPM	3.69E-08	25YrCancerDerived_InhSoilDerm	*	3.69E-08
1890	ALL		562498.4	4225475	0.000136	9901	DieselExhPM	3.52E-08	25YrCancerDerived_InhSoilDerm	*	3.52E-08
1891	ALL		562400	4226209	0.000113	9901	DieselExhPM	2.93E-08	25YrCancerDerived_InhSoilDerm	*	2.93E-08
1892	ALL		562400	4226117	0.000105	9901	DieselExhPM	2.74E-08	25YrCancerDerived_InhSoilDerm	*	2.74E-08
1893	ALL		562400	4226025	0.000101	9901	DieselExhPM	2.63E-08	25YrCancerDerived_InhSoilDerm	*	2.63E-08
1894	ALL		562400	4225934	9.88E-05	9901	DieselExhPM	2.57E-08	25YrCancerDerived_InhSoilDerm	*	2.57E-08
1895	ALL		562400	4225842	0.000103	9901	DieselExhPM	2.68E-08	25YrCancerDerived_InhSoilDerm	*	2.68E-08
1896	ALL		562400	4225750	0.000111	9901	DieselExhPM	2.89E-08	25YrCancerDerived_InhSoilDerm	*	2.89E-08
1897	ALL		562400	4225659	0.00012	9901	DieselExhPM	3.13E-08	25YrCancerDerived_InhSoilDerm	*	3.13E-08
1898	ALL		562400	4225567	0.000127	9901	DieselExhPM	3.30E-08	25YrCancerDerived_InhSoilDerm	*	3.30E-08
1899	ALL		562400	4225475	0.000128	9901	DieselExhPM	3.34E-08	25YrCancerDerived_InhSoilDerm	*	3.34E-08
1900	ALL		563133.3	4226300	0.000497	9901	DieselExhPM	1.29E-07	25YrCancerDerived_InhSoilDerm	*	1.29E-07
1901	ALL		563133.3	4226399	0.000531	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
1902	ALL		563133.3	4226497	0.000831	9901	DieselExhPM	2.16E-07	25YrCancerDerived_InhSoilDerm	*	2.16E-07
1903	ALL		563133.3	4226596	0.002327	9901	DieselExhPM	6.05E-07	25YrCancerDerived_InhSoilDerm	*	6.05E-07
1904	ALL		563133.3	4226694	0.003923	9901	DieselExhPM	1.02E-06	25YrCancerDerived_InhSoilDerm	*	1.02E-06
1905	ALL		563133.3	4226792	0.002944	9901	DieselExhPM	7.65E-07	25YrCancerDerived_InhSoilDerm	*	7.65E-07
1906	ALL		563133.3	4226891	0.0015	9901	DieselExhPM	3.90E-07	25YrCancerDerived_InhSoilDerm	*	3.90E-07
1907	ALL		563133.3	4226989	0.000774	9901	DieselExhPM	2.01E-07	25YrCancerDerived_InhSoilDerm	*	2.01E-07
1908	ALL		563133.3	4227088	0.000462	9901	DieselExhPM	1.20E-07	25YrCancerDerived_InhSoilDerm	*	1.20E-07
1909	ALL		563133.3	4227186	0.000348	9901	DieselExhPM	9.04E-08	25YrCancerDerived_InhSoilDerm	*	9.04E-08
1910	ALL		563133.3	4227285	0.000295	9901	DieselExhPM	7.66E-08	25YrCancerDerived_InhSoilDerm	*	7.66E-08
1911	ALL		563133.3	4227383	0.000266	9901	DieselExhPM	6.90E-08	25YrCancerDerived_InhSoilDerm	*	6.90E-08
1912	ALL		563133.3	4227481	0.000243	9901	DieselExhPM	6.31E-08	25YrCancerDerived_InhSoilDerm	*	6.31E-08
1913	ALL		563133.3	4227580	0.000221	9901	DieselExhPM	5.75E-08	25YrCancerDerived_InhSoilDerm	*	5.75E-08
1914	ALL		563133.3	4227678	0.0002	9901	DieselExhPM	5.21E-08	25YrCancerDerived_InhSoilDerm	*	5.21E-08
1915	ALL		563133.3	4227777	0.00018	9901	DieselExhPM	4.69E-08	25YrCancerDerived_InhSoilDerm	*	4.69E-08
1916	ALL		563133.3	4227875	0.000159	9901	DieselExhPM	4.15E-08	25YrCancerDerived_InhSoilDerm	*	4.15E-08
1917	ALL		563041.7	4226300	0.000364	9901	DieselExhPM	9.46E-08	25YrCancerDerived_InhSoilDerm	*	9.46E-08
1918	ALL		563041.7	4226399	0.000405	9901	DieselExhPM	1.05E-07	25YrCancerDerived_InhSoilDerm	*	1.05E-07
1919	ALL		563041.7	4226497	0.000694	9901	DieselExhPM	1.80E-07	25YrCancerDerived_InhSoilDerm	*	1.80E-07
1920	ALL		563041.7	4226596	0.001742	9901	DieselExhPM	4.53E-07	25YrCancerDerived_InhSoilDerm	*	4.53E-07
1921	ALL		563041.7	4226694	0.002779	9901	DieselExhPM	7.22E-07	25YrCancerDerived_InhSoilDerm	*	7.22E-07
1922	ALL		563041.7	4226792	0.002279	9901	DieselExhPM	5.92E-07	25YrCancerDerived_InhSoilDerm	*	5.92E-07
1923	ALL		563041.7	4226891	0.001352	9901	DieselExhPM	3.51E-07	25YrCancerDerived_InhSoilDerm	*	3.51E-07
1924	ALL		563041.7	4226989	0.000782	9901	DieselExhPM	2.03E-07	25YrCancerDerived_InhSoilDerm	*	2.03E-07
1925	ALL		563041.7	4227088	0.000441	9901	DieselExhPM	1.15E-07	25YrCancerDerived_InhSoilDerm	*	1.15E-07
1926	ALL		563041.7	4227186	0.000296	9901	DieselExhPM	7.70E-08	25YrCancerDerived_InhSoilDerm	*	7.70E-08
1927	ALL		563041.7	4227285	0.00024	9901	DieselExhPM	6.24E-08	25YrCancerDerived_InhSoilDerm	*	6.24E-08
1928	ALL		563041.7	4227383	0.000209	9901	DieselExhPM	5.43E-08	25YrCancerDerived_InhSoilDerm	*	5.43E-08
1929	ALL		563041.7	4227481	0.000192	9901	DieselExhPM	5.00E-08	25YrCancerDerived_InhSoilDerm	*	5.00E-08
1930	ALL		563041.7	4227580	0.000182	9901	DieselExhPM	4.73E-08	25YrCancerDerived_InhSoilDerm	*	4.73E-08
1931	ALL		563041.7	4227678	0.000171	9901	DieselExhPM	4.44E-08	25YrCancerDerived_InhSoilDerm	*	4.44E-08
1932	ALL		563041.7	4227777	0.000161	9901	DieselExhPM	4.18E-08	25YrCancerDerived_InhSoilDerm	*	4.18E-08
1933	ALL		563041.7	4227875	0.000149	9901	DieselExhPM	3.88E-08	25YrCancerDerived_InhSoilDerm	*	3.88E-08
1934	ALL		562950	4226300	0.000279	9901	DieselExhPM	7.26E-08	25YrCancerDerived_InhSoilDerm	*	7.26E-08
1935	ALL		562950	4226399	0.000336	9901	DieselExhPM	8.74E-08	25YrCancerDerived_InhSoilDerm	*	8.74E-08
1936	ALL		562950	4226497	0.000602	9901	DieselExhPM	1.56E-07	25YrCancerDerived_InhSoilDerm	*	1.56E-07
1937	ALL		562950	4226596	0.001359	9901	DieselExhPM	3.53E-07	25YrCancerDerived_InhSoilDerm	*	3.53E-07
1938	ALL		562950	4226694	0.002059	9901	DieselExhPM	5.35E-07	25YrCancerDerived_InhSoilDerm	*	5.35E-07
1939	ALL		562950	4226792	0.001817	9901	DieselExhPM	4.72E-07	25YrCancerDerived_InhSoilDerm	*	4.72E-07
1940	ALL		562950	4226891	0.001164	9901	DieselExhPM	3.03E-07	25YrCancerDerived_InhSoilDerm	*	3.03E-07
1941	ALL		562950	4226989	0.000761	9901	DieselExhPM	1.98E-07	25YrCancerDerived_InhSoilDerm	*	1.98E-07
1942	ALL		562950	4227088	0.000459	9901	DieselExhPM	1.19E-07	25YrCancerDerived_InhSoilDerm	*	1.19E-07
1943	ALL		562950	4227186	0.000278	9901	DieselExhPM	7.23E-08	25YrCancerDerived_InhSoilDerm	*	7.23E-08

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REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1944	ALL		562950	4227285	0.000206	9901	DieselExhPM	5.35E-08	25YrCancerDerived_InhSoilDerm	*	5.35E-08
1945	ALL		562950	4227383	0.000171	9901	DieselExhPM	4.45E-08	25YrCancerDerived_InhSoilDerm	*	4.45E-08
1946	ALL		562950	4227481	0.000157	9901	DieselExhPM	4.08E-08	25YrCancerDerived_InhSoilDerm	*	4.08E-08
1947	ALL		562950	4227580	0.000148	9901	DieselExhPM	3.85E-08	25YrCancerDerived_InhSoilDerm	*	3.85E-08
1948	ALL		562950	4227678	0.00014	9901	DieselExhPM	3.65E-08	25YrCancerDerived_InhSoilDerm	*	3.65E-08
1949	ALL		562950	4227777	0.000135	9901	DieselExhPM	3.51E-08	25YrCancerDerived_InhSoilDerm	*	3.51E-08
1950	ALL		562950	4227875	0.000131	9901	DieselExhPM	3.40E-08	25YrCancerDerived_InhSoilDerm	*	3.40E-08
1951	ALL		562858.3	4226300	0.00023	9901	DieselExhPM	5.97E-08	25YrCancerDerived_InhSoilDerm	*	5.97E-08
1952	ALL		562858.3	4226399	0.000291	9901	DieselExhPM	7.57E-08	25YrCancerDerived_InhSoilDerm	*	7.57E-08
1953	ALL		562858.3	4226497	0.00053	9901	DieselExhPM	1.38E-07	25YrCancerDerived_InhSoilDerm	*	1.38E-07
1954	ALL		562858.3	4226596	0.001093	9901	DieselExhPM	2.84E-07	25YrCancerDerived_InhSoilDerm	*	2.84E-07
1955	ALL		562858.3	4226694	0.001596	9901	DieselExhPM	4.15E-07	25YrCancerDerived_InhSoilDerm	*	4.15E-07
1956	ALL		562858.3	4226792	0.001476	9901	DieselExhPM	3.84E-07	25YrCancerDerived_InhSoilDerm	*	3.84E-07
1957	ALL		562858.3	4226891	0.001008	9901	DieselExhPM	2.62E-07	25YrCancerDerived_InhSoilDerm	*	2.62E-07
1958	ALL		562858.3	4226989	0.000704	9901	DieselExhPM	1.83E-07	25YrCancerDerived_InhSoilDerm	*	1.83E-07
1959	ALL		562858.3	4227088	0.000479	9901	DieselExhPM	1.24E-07	25YrCancerDerived_InhSoilDerm	*	1.24E-07
1960	ALL		562858.3	4227186	0.000288	9901	DieselExhPM	7.47E-08	25YrCancerDerived_InhSoilDerm	*	7.47E-08
1961	ALL		562858.3	4227285	0.000193	9901	DieselExhPM	5.01E-08	25YrCancerDerived_InhSoilDerm	*	5.01E-08
1962	ALL		562858.3	4227383	0.000155	9901	DieselExhPM	4.04E-08	25YrCancerDerived_InhSoilDerm	*	4.04E-08
1963	ALL		562858.3	4227481	0.000135	9901	DieselExhPM	3.52E-08	25YrCancerDerived_InhSoilDerm	*	3.52E-08
1964	ALL		562858.3	4227580	0.000124	9901	DieselExhPM	3.23E-08	25YrCancerDerived_InhSoilDerm	*	3.23E-08
1965	ALL		562858.3	4227678	0.000118	9901	DieselExhPM	3.06E-08	25YrCancerDerived_InhSoilDerm	*	3.06E-08
1966	ALL		562858.3	4227777	0.000113	9901	DieselExhPM	2.95E-08	25YrCancerDerived_InhSoilDerm	*	2.95E-08
1967	ALL		562858.3	4227875	0.000111	9901	DieselExhPM	2.87E-08	25YrCancerDerived_InhSoilDerm	*	2.87E-08
1968	ALL		562766.7	4226300	0.000198	9901	DieselExhPM	5.15E-08	25YrCancerDerived_InhSoilDerm	*	5.15E-08
1969	ALL		562766.7	4226399	0.00026	9901	DieselExhPM	6.75E-08	25YrCancerDerived_InhSoilDerm	*	6.75E-08
1970	ALL		562766.7	4226497	0.000472	9901	DieselExhPM	1.23E-07	25YrCancerDerived_InhSoilDerm	*	1.23E-07
1971	ALL		562766.7	4226596	0.0009	9901	DieselExhPM	2.34E-07	25YrCancerDerived_InhSoilDerm	*	2.34E-07
1972	ALL		562766.7	4226694	0.001266	9901	DieselExhPM	3.29E-07	25YrCancerDerived_InhSoilDerm	*	3.29E-07
1973	ALL		562766.7	4226792	0.001225	9901	DieselExhPM	3.18E-07	25YrCancerDerived_InhSoilDerm	*	3.18E-07
1974	ALL		562766.7	4226891	0.000877	9901	DieselExhPM	2.28E-07	25YrCancerDerived_InhSoilDerm	*	2.28E-07
1975	ALL		562766.7	4226989	0.00063	9901	DieselExhPM	1.64E-07	25YrCancerDerived_InhSoilDerm	*	1.64E-07
1976	ALL		562766.7	4227088	0.00048	9901	DieselExhPM	1.25E-07	25YrCancerDerived_InhSoilDerm	*	1.25E-07
1977	ALL		562766.7	4227186	0.000313	9901	DieselExhPM	8.12E-08	25YrCancerDerived_InhSoilDerm	*	8.12E-08
1978	ALL		562766.7	4227285	0.000197	9901	DieselExhPM	5.11E-08	25YrCancerDerived_InhSoilDerm	*	5.11E-08
1979	ALL		562766.7	4227383	0.000146	9901	DieselExhPM	3.80E-08	25YrCancerDerived_InhSoilDerm	*	3.80E-08
1980	ALL		562766.7	4227481	0.000124	9901	DieselExhPM	3.23E-08	25YrCancerDerived_InhSoilDerm	*	3.23E-08
1981	ALL		562766.7	4227580	0.00011	9901	DieselExhPM	2.87E-08	25YrCancerDerived_InhSoilDerm	*	2.87E-08
1982	ALL		562766.7	4227678	0.000101	9901	DieselExhPM	2.63E-08	25YrCancerDerived_InhSoilDerm	*	2.63E-08
1983	ALL		562766.7	4227777	9.67E-05	9901	DieselExhPM	2.51E-08	25YrCancerDerived_InhSoilDerm	*	2.51E-08
1984	ALL		562766.7	4227875	9.49E-05	9901	DieselExhPM	2.47E-08	25YrCancerDerived_InhSoilDerm	*	2.47E-08
1985	ALL		562675	4226300	0.000174	9901	DieselExhPM	4.52E-08	25YrCancerDerived_InhSoilDerm	*	4.52E-08
1986	ALL		562675	4226399	0.000237	9901	DieselExhPM	6.15E-08	25YrCancerDerived_InhSoilDerm	*	6.15E-08
1987	ALL		562675	4226497	0.000425	9901	DieselExhPM	1.10E-07	25YrCancerDerived_InhSoilDerm	*	1.10E-07
1988	ALL		562675	4226596	0.000758	9901	DieselExhPM	1.97E-07	25YrCancerDerived_InhSoilDerm	*	1.97E-07
1989	ALL		562675	4226694	0.001033	9901	DieselExhPM	2.68E-07	25YrCancerDerived_InhSoilDerm	*	2.68E-07
1990	ALL		562675	4226792	0.001033	9901	DieselExhPM	2.68E-07	25YrCancerDerived_InhSoilDerm	*	2.68E-07
1991	ALL		562675	4226891	0.000774	9901	DieselExhPM	2.01E-07	25YrCancerDerived_InhSoilDerm	*	2.01E-07
1992	ALL		562675	4226989	0.000555	9901	DieselExhPM	1.44E-07	25YrCancerDerived_InhSoilDerm	*	1.44E-07
1993	ALL		562675	4227088	0.000455	9901	DieselExhPM	1.18E-07	25YrCancerDerived_InhSoilDerm	*	1.18E-07
1994	ALL		562675	4227186	0.000336	9901	DieselExhPM	8.72E-08	25YrCancerDerived_InhSoilDerm	*	8.72E-08
1995	ALL		562675	4227285	0.000215	9901	DieselExhPM	5.58E-08	25YrCancerDerived_InhSoilDerm	*	5.58E-08
1996	ALL		562675	4227383	0.000145	9901	DieselExhPM	3.78E-08	25YrCancerDerived_InhSoilDerm	*	3.78E-08
1997	ALL		562675	4227481	0.000117	9901	DieselExhPM	3.04E-08	25YrCancerDerived_InhSoilDerm	*	3.04E-08
1998	ALL		562675	4227580	0.000102	9901	DieselExhPM	2.66E-08	25YrCancerDerived_InhSoilDerm	*	2.66E-08
1999	ALL		562675	4227678	9.03E-05	9901	DieselExhPM	2.35E-08	25YrCancerDerived_InhSoilDerm	*	2.35E-08
2000	ALL		562675	4227777	8.21E-05	9901	DieselExhPM	2.13E-08	25YrCancerDerived_InhSoilDerm	*	2.13E-08
2001	ALL		562675	4227875	7.99E-05	9901	DieselExhPM	2.08E-08	25YrCancerDerived_InhSoilDerm	*	2.08E-08
2002	ALL		562583.3	4226300	0.000157	9901	DieselExhPM	4.07E-08	25YrCancerDerived_InhSoilDerm	*	4.07E-08
2003	ALL		562583.3	4226399	0.000219	9901	DieselExhPM	5.69E-08	25YrCancerDerived_InhSoilDerm	*	5.69E-08
2004	ALL		562583.3	4226497	0.000385	9901	DieselExhPM	1.00E-07	25YrCancerDerived_InhSoilDerm	*	1.00E-07
2005	ALL		562583.3	4226596	0.000648	9901	DieselExhPM	1.69E-07	25YrCancerDerived_InhSoilDerm	*	1.69E-07
2006	ALL		562583.3	4226694	0.00086	9901	DieselExhPM	2.23E-07	25YrCancerDerived_InhSoilDerm	*	2.23E-07
2007	ALL		562583.3	4226792	0.000882	9901	DieselExhPM	2.29E-07	25YrCancerDerived_InhSoilDerm	*	2.29E-07
2008	ALL		562583.3	4226891	0.000691	9901	DieselExhPM	1.80E-07	25YrCancerDerived_InhSoilDerm	*	1.80E-07
2009	ALL		562583.3	4226989	0.000495	9901	DieselExhPM	1.29E-07	25YrCancerDerived_InhSoilDerm	*	1.29E-07
2010	ALL		562583.3	4227088	0.000414	9901	DieselExhPM	1.08E-07	25YrCancerDerived_InhSoilDerm	*	1.08E-07

*HARP - HRACalc v22118 11/21/2023 4:17:32 AM - Cancer Risk - Input File: F:\Jobs\56390001\HARP\RESIDENT\hra\Commerce220WorkerHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
2011	ALL		562583.3	4227186	0.000343	9901	DieselExhPM	8.90E-08	25YrCancerDerived_InhSoilDerm	*	8.90E-08
2012	ALL		562583.3	4227285	0.000236	9901	DieselExhPM	6.14E-08	25YrCancerDerived_InhSoilDerm	*	6.14E-08
2013	ALL		562583.3	4227383	0.000153	9901	DieselExhPM	3.97E-08	25YrCancerDerived_InhSoilDerm	*	3.97E-08
2014	ALL		562583.3	4227481	0.000113	9901	DieselExhPM	2.93E-08	25YrCancerDerived_InhSoilDerm	*	2.93E-08
2015	ALL		562583.3	4227580	9.62E-05	9901	DieselExhPM	2.50E-08	25YrCancerDerived_InhSoilDerm	*	2.50E-08
2016	ALL		562583.3	4227678	8.58E-05	9901	DieselExhPM	2.23E-08	25YrCancerDerived_InhSoilDerm	*	2.23E-08
2017	ALL		562583.3	4227777	7.73E-05	9901	DieselExhPM	2.01E-08	25YrCancerDerived_InhSoilDerm	*	2.01E-08
2018	ALL		562583.3	4227875	7.17E-05	9901	DieselExhPM	1.86E-08	25YrCancerDerived_InhSoilDerm	*	1.86E-08
2019	ALL		562491.7	4226300	0.000143	9901	DieselExhPM	3.73E-08	25YrCancerDerived_InhSoilDerm	*	3.73E-08
2020	ALL		562491.7	4226399	0.000205	9901	DieselExhPM	5.32E-08	25YrCancerDerived_InhSoilDerm	*	5.32E-08
2021	ALL		562491.7	4226497	0.000351	9901	DieselExhPM	9.12E-08	25YrCancerDerived_InhSoilDerm	*	9.12E-08
2022	ALL		562491.7	4226596	0.000562	9901	DieselExhPM	1.46E-07	25YrCancerDerived_InhSoilDerm	*	1.46E-07
2023	ALL		562491.7	4226694	0.000728	9901	DieselExhPM	1.89E-07	25YrCancerDerived_InhSoilDerm	*	1.89E-07
2024	ALL		562491.7	4226792	0.000762	9901	DieselExhPM	1.98E-07	25YrCancerDerived_InhSoilDerm	*	1.98E-07
2025	ALL		562491.7	4226891	0.000624	9901	DieselExhPM	1.62E-07	25YrCancerDerived_InhSoilDerm	*	1.62E-07
2026	ALL		562491.7	4226989	0.000448	9901	DieselExhPM	1.16E-07	25YrCancerDerived_InhSoilDerm	*	1.16E-07
2027	ALL		562491.7	4227088	0.000368	9901	DieselExhPM	9.58E-08	25YrCancerDerived_InhSoilDerm	*	9.58E-08
2028	ALL		562491.7	4227186	0.000329	9901	DieselExhPM	8.55E-08	25YrCancerDerived_InhSoilDerm	*	8.55E-08
2029	ALL		562491.7	4227285	0.000253	9901	DieselExhPM	6.57E-08	25YrCancerDerived_InhSoilDerm	*	6.57E-08
2030	ALL		562491.7	4227383	0.000169	9901	DieselExhPM	4.40E-08	25YrCancerDerived_InhSoilDerm	*	4.40E-08
2031	ALL		562491.7	4227481	0.000116	9901	DieselExhPM	3.01E-08	25YrCancerDerived_InhSoilDerm	*	3.01E-08
2032	ALL		562491.7	4227580	9.17E-05	9901	DieselExhPM	2.38E-08	25YrCancerDerived_InhSoilDerm	*	2.38E-08
2033	ALL		562491.7	4227678	8.14E-05	9901	DieselExhPM	2.12E-08	25YrCancerDerived_InhSoilDerm	*	2.12E-08
2034	ALL		562491.7	4227777	7.38E-05	9901	DieselExhPM	1.92E-08	25YrCancerDerived_InhSoilDerm	*	1.92E-08
2035	ALL		562491.7	4227875	6.68E-05	9901	DieselExhPM	1.74E-08	25YrCancerDerived_InhSoilDerm	*	1.74E-08
2036	ALL		562400	4226300	0.000133	9901	DieselExhPM	3.46E-08	25YrCancerDerived_InhSoilDerm	*	3.46E-08
2037	ALL		562400	4226399	0.000193	9901	DieselExhPM	5.01E-08	25YrCancerDerived_InhSoilDerm	*	5.01E-08
2038	ALL		562400	4226497	0.000321	9901	DieselExhPM	8.35E-08	25YrCancerDerived_InhSoilDerm	*	8.35E-08
2039	ALL		562400	4226596	0.000493	9901	DieselExhPM	1.28E-07	25YrCancerDerived_InhSoilDerm	*	1.28E-07
2040	ALL		562400	4226694	0.000626	9901	DieselExhPM	1.63E-07	25YrCancerDerived_InhSoilDerm	*	1.63E-07
2041	ALL		562400	4226792	0.000664	9901	DieselExhPM	1.73E-07	25YrCancerDerived_InhSoilDerm	*	1.73E-07
2042	ALL		562400	4226891	0.000567	9901	DieselExhPM	1.47E-07	25YrCancerDerived_InhSoilDerm	*	1.47E-07
2043	ALL		562400	4226989	0.000412	9901	DieselExhPM	1.07E-07	25YrCancerDerived_InhSoilDerm	*	1.07E-07
2044	ALL		562400	4227088	0.000329	9901	DieselExhPM	8.54E-08	25YrCancerDerived_InhSoilDerm	*	8.54E-08
2045	ALL		562400	4227186	0.000303	9901	DieselExhPM	7.89E-08	25YrCancerDerived_InhSoilDerm	*	7.89E-08
2046	ALL		562400	4227285	0.00026	9901	DieselExhPM	6.77E-08	25YrCancerDerived_InhSoilDerm	*	6.77E-08
2047	ALL		562400	4227383	0.000188	9901	DieselExhPM	4.88E-08	25YrCancerDerived_InhSoilDerm	*	4.88E-08
2048	ALL		562400	4227481	0.000126	9901	DieselExhPM	3.28E-08	25YrCancerDerived_InhSoilDerm	*	3.28E-08
2049	ALL		562400	4227580	9.18E-05	9901	DieselExhPM	2.39E-08	25YrCancerDerived_InhSoilDerm	*	2.39E-08
2050	ALL		562400	4227678	7.72E-05	9901	DieselExhPM	2.01E-08	25YrCancerDerived_InhSoilDerm	*	2.01E-08
2051	ALL		562400	4227777	7.05E-05	9901	DieselExhPM	1.83E-08	25YrCancerDerived_InhSoilDerm	*	1.83E-08
2052	ALL		562400	4227875	6.45E-05	9901	DieselExhPM	1.68E-08	25YrCancerDerived_InhSoilDerm	*	1.68E-08

BAAQMD Stationary Source Screening Risk Output

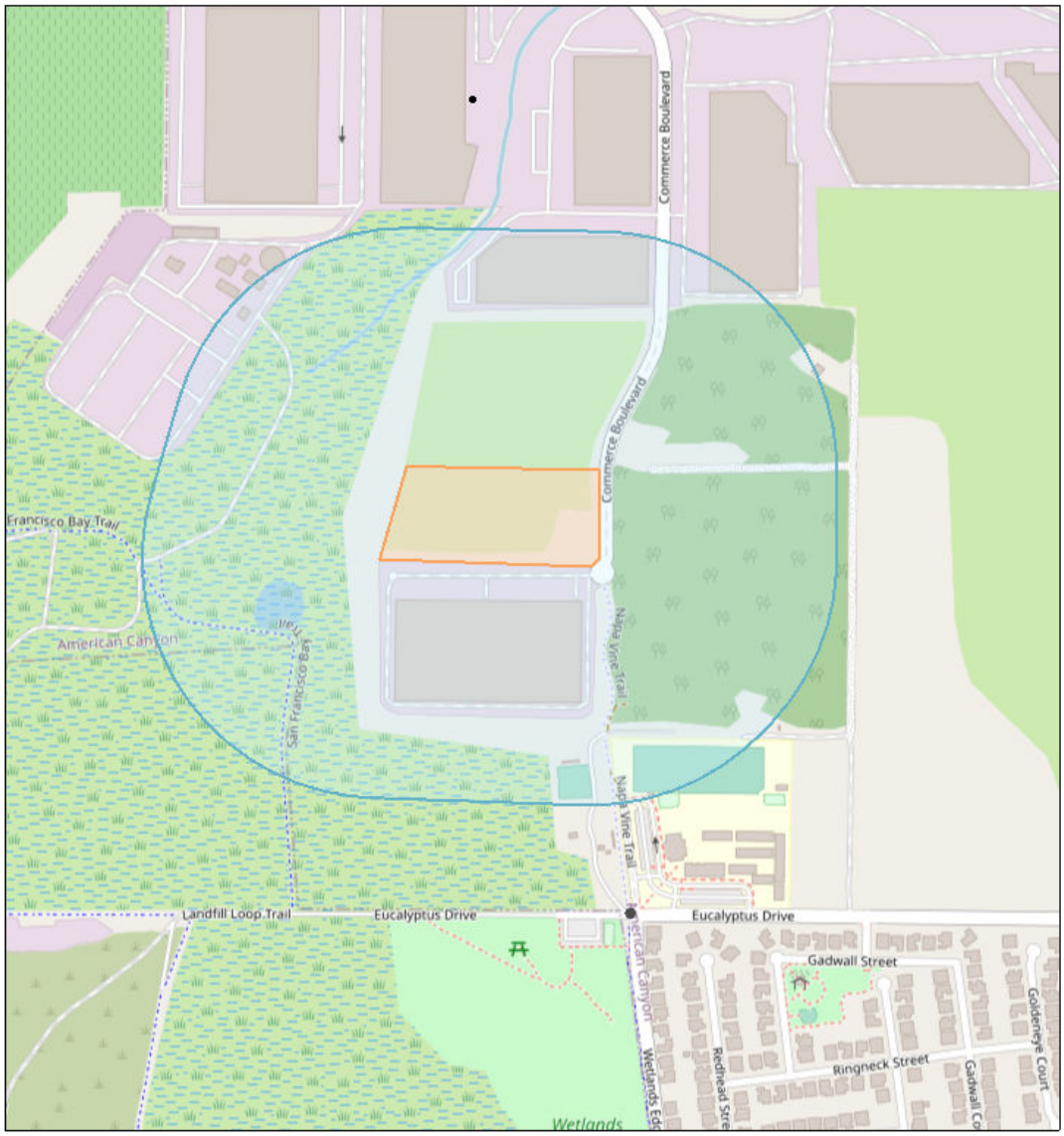
UTMX	UTMY	Road Cancer Risk	Road Chronic HI	Road PM2.5	Rail Cancer Risk	Rail Chronic HI	Rail PM2.5
563979	4226674	1.1926866	0.003058275	0.025068535	-3.40E+38	-3.40E+38	-3.40E+38

Screening Report

Area of Interest (AOI) Information

Area : 6,010,163.38 ft²

Nov 21 2023 2:35:31 Pacific Standard Time



Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Stationary Sources	0	N/A	N/A

NOTE: A larger buffer than 1000 feet may be warranted depending on proximity to significant sources.

Commerce 220 Warehouse Distribution Project

Summary of Energy Use During Construction

Construction equipment fuel	32,838	gallons (diesel)
Construction vehicle fuel	29,325	gallons (gasoline, diesel)
Total construction fuel	**62,162**	**gallons (gasoline, diesel)**

Summary of Energy Use During Construction - Electricity

Year	kWh per Year
2025	0

Summary of Annual Energy Use During Operations (2025)

Operation vehicle fuel	42,129	gallons	Gasoline
	249,798	gallons	Diesel
	13,980	gallons	Natural Gas
	35,233	kw-hours	Electricity

Operational Building Energy

Operation natural gas	0	MMBtu
Operation electricity	659,500	kw-hours

SDG Commerce 220 Warehouse Distribution Project

Phase Name	Equipment Type	Fuel Type	Number per Day	Hours Per Day	Horsepower	Load Factor	PhaseDays	Fuel Consumption
Site Preparation	Rubber Tired Dozers	Diesel	3	8	367	0.4	10	1903
Site Preparation	Tractors/Loaders/Backhoes	Diesel	4	8	84	0.37	10	537
Grading	Excavators	Diesel	2	8	158	0.38	20	1037
Grading	Graders	Diesel	1	8	148	0.41	20	524
Grading	Rubber Tired Dozers	Diesel	1	8	367	0.4	20	1268
Grading	Scrapers	Diesel	2	8	423	0.48	20	3509
Grading	Tractors/Loaders/Backhoes	Diesel	2	8	84	0.37	20	537
Building Construction	Cranes	Diesel	1	7	367	0.29	200	8046
Building Construction	Forklifts	Diesel	3	8	82	0.2	200	4251
Building Construction	Generator Sets	Diesel	1	8	14	0.74	200	895
Building Construction	Tractors/Loaders/Backhoes	Diesel	3	7	84	0.37	200	7049
Building Construction	Welders	Diesel	1	8	46	0.45	200	1788
Paving	Pavers	Diesel	2	8	81	0.42	20	588
Paving	Paving Equipment	Diesel	2	8	89	0.36	20	554
Paving	Rollers	Diesel	2	8	36	0.38	20	236
Architectural Coating	Air Compressors	Diesel	1	6	37	0.48	20	115
								32,837.8

ARB 2021, Low Emission Diesel (LED) Study: Biodiesel and Renewable Diesel Emissions in Legacy and New Technology Diesel Engines, November 2021
Average Value for CARB Reference Fuel - Nonroad Transient Cycle - BSFC = 0.054 gal/bhp-hr

SDG Commerce 220 Warehouse Distribution Project
Energy Calculations - Construction Vehicle Fuel

Vehicle Type	Total VMT (mi)	mi/gal	gal	Vehicle Cat
Worker	347,011	26.30	13,194	LDA,LDT1,LDT2
Vendor	92,504	6.76	13,685	HHDT,MHDT
Hauling	14,100	5.76	2,446	HHDT
Onsite truck	0	5.76	0	HHDT
	453,615		**29,325**	**gallons**
	Combined VMT			

Note: Fuel Economy Factors are from EMFAC2021 for: 2024 Napa

SDG Commerce 220 Warehouse Distribution Project
Energy Calculations - Building Electricity Consumption

Operational Year	**2025**
County	**Napa**

Building Energy Fuel	**Electricity (kWh/yr)**	**Natural Gas (MMBTU/yr)**
Refrigerated Warehouse-No Rail	659500	0
Total Building Energy	659,500	0

SDG Commerce 220 Warehouse Distribution Project
Energy Calculations
Onroad Mobile Sources

Operational Year	**2025**	
County	**Napa**	
Gasoline	**42,129**	**gallons**
Diesel	**249,798**	**gallons**
Natural Gas	**13,980**	**gallons**
Electricity	**35,233**	**kw-hr**

SDG Commerce 220 Warehouse Distribution Project
Energy Calculations - Operations Fuel Use from Mobile Sources

Total Operational FUEL Consumption for ALL LAND USES (gallons for fuels, Kw-hr for electricity)

Fuel	All Vehicles	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	42,129	291	13762	1994	8965				7811		9307			
Diesel	249,798	226317	27	0	28				121		23303			
Natural Gas	13,980	13609									371			
Electricity	35,233	16771	14646	78	809				801		2129			

Trucks

Refrigerated Warehouse-N Total Consumption by Vehicle Category

Fuel	Units	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	gal	291									9307			
Diesel	gal	226317									23303			
Natural Gas	gal	13609									371			
Plug-in Hybrid	gal													
Electricity	kwhr	16771									2129			
Plug-in Hybrid	kwhr													

Passenger Vehicles

User Defined Industrial Total Consumption by Vehicle Category

Fuel	Units	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	gal		13511	1993	8939				7794					
Diesel	gal		27	0	28				121					
Natural Gas	gal													
Plug-in Hybrid	gal		252	1	26				16					
Electricity	kwhr		12743	64	525				602					
Plug-in Hybrid	kwhr		1903	13	284				198					

Land Use Type	Season	Annual VMT	HHDT%	LDA%	LDT1%	LDT2%	LHD1%	LHD2%	MCY%	MDV%	MH%	MHDT%	OBUS%	SBUS%	UBUS%
Refrigerated Warehous	Annual	1,656,783	85.1%									14.9%			
User Defined Industrial	Annual	911,332		51.6%	5.6%	24.9%				17.9%					

Region	Year	County-Specific Fuel Economy (gal/mi)													
Napa	2025	Fuel	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Napa	2025	Gasoline	0.2882	0.0320	0.0393	0.0401	0.1065	0.1206	0.0242	0.0495	0.2263	0.2111	0.2083	0.0992	0.1490
Napa	2025	Diesel	0.1703	0.0231	0.0401	0.0307	0.0636	0.0771		0.0403	0.1065	0.1176	0.1376	0.1231	0.1167
Napa	2025	Natural Gas	0.1928									0.1384	0.1302	0.1833	0.1286
Napa	2025	Plug-in Hybrid		0.0334	0.0336	0.0338				0.0342					

Region	Year	County-Specific Electric Car Economy (kw-hr/mi)													
Napa	2025	Fuel	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Napa	2025	Electricity	1.8515	0.3861	0.3861	0.3861				0.3861		1.0947	1.1078	1.0535	
Napa	2025	Plug-in Hybrid		0.3020	0.3020	0.3020				0.3020					

Fossil Fuel Consumption - weighted by EMFAC Vehicle Type and Fuel

Region	Year	Fuel	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Napa	**2025**	**CVMT Fraction**	**0.9936**	**0.9164**	**0.9959**	**0.9899**	**0.9947**	**0.9949**	**1.0000**	**0.9864**	**1.0000**	**0.9921**	**0.9983**	**0.9952**	**1.0000**
Napa	2025	Gasoline	0.0007	0.9798	0.9991	0.9924	0.6488	0.3416	1.0000	0.9783	0.8110	0.1800	0.6095	0.1692	0.3846
Napa	2025	Diesel	0.9489	0.0027	0.0002	0.0041	0.3512	0.6584		0.0187	0.1890	0.8090	0.3884	0.7705	0.5159
Napa	2025	Natural Gas	0.0504									0.0109	0.0020	0.0603	0.0995
Napa	2025	Plug-in Hybrid		0.0175	0.0007	0.0034				0.0030					

Electricity Factors (mi/kw-hr) - Weighted by EMFAC Vehicle Type and Fuel Type

Region	Year	Fuel	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Napa	2025	**EVMT Fraction**	**0.0064**	**0.0836**	**0.0041**	**0.0101**	**0.0053**	**0.0051**	0.0000	**0.0136**	0.0000	**0.0079**	**0.0017**	**0.0048**	0.0000
Napa	2025	Electricity	1.0000	0.8397	0.7930	0.5913	1.0000	1.0000		0.7038		1.0000	1.0000	1.0000	
Napa	2025	Plug-in Hybrid		0.1603	0.2070	0.4087				0.2962					

Commerce 220 Warehouse Distribution Project
On-Site PV Solar GHG Calculations

	Electricity MWh/yr	GHG Emissions Intensity[3] lb CO2e/MWhr	COe Emissions kg/yr	CO2e Emissions MT/yr
Consumption[1]	659.5	98	29378	29.4
Avoided Emissions from Onsite Production[2]	235.204	98	10477	-10.5
Net Facility Consumption				18.9

Notes:

1) Energy Consumption estimated from SDG Commerce 217 Warehouse energy consumption value of 3.0 (kw-hr/ft2).

2) Energy production on-site based on applicant provided information. DC System Size: 144.72 kW , CEC AC System Size: 134.13 kW with estimated Annual System Production 235,204 kWh

3) PG&E GHG Emissions Intensity Factor for 2021.

Commerce 220 Warehouse Distribution Project
Operational Mobile Sources
Future Project Energy Projections (2030 and 2040)

	2030 - MSS			
	LDV	HHDT	MHDT	
Total VMT/year	911,332	1,409,923	246,861	
% ZEV	28%	10%	5%	**VMT and Fuel**
CVMT - NG Annual		634,465	-	2,568,115
CVMT - Diesel		634,465	234,518	
CVMT - Gasoline	656,159			
EVMT - Annual	255,173	140,992	12,343	
Gasoline (gal)	23,727	-	-	**23,727**
Diesel (gal)	-	100,091	26,935	**127,026**
Natural Gas (gal)	-	119,709	-	**119,709**
Electricity kw-hr	98,518	261,254	13,399	**373,170**

Assumes that LDV follow Statewide MSS Projections from Vision Model.
Assumes that MHDT follow MSS Strategy Projections for (State, SC or SJV)
Assumes that HHDT follow MSS Strategy Projections for (State, SC or SJV)

	Fuel Consumption Factors		
	LDV	HHDT	MHDT
Gasoline (gal/mi)	0.0362		
Diesel (gal/mi)		0.1578	0.1149
Natural Gas (gal/mi)		0.1887	
kw-hr /mi	0.3861	1.8530	1.0855

	2030 - ACF			
	LDV	HHDT	MHDT	
Total VMT/year	911,332	1,409,923	246,861	
% ZEV	28%	25%	42%	**VMT and Fuel**
CVMT - NG Annual		528,721	-	2,568,115
CVMT - Diesel		528,721	143,994	
CVMT - Gasoline	656,159			
EVMT - Annual	255,173	352,481	102,867	
Gasoline (gal)	23,727	-	-	**23,727**
Diesel (gal)	-	83,409	16,538	**99,947**
Natural Gas (gal)	-	99,758	-	**99,758**
Electricity kw-hr	98,518	653,134	111,666	**863,318**

Assumes that LDV follow Statewide MSS Projections from Vision Model.
Assumes that MHDT are box trucks and are Milestone Group 1.
Assumes that HHDT are day cab trucks complying with Milestone Group 2 Timeline.

	Fuel Consumption Factors		
	LDT1	HHDT	MHDT
Gasoline (gal/mi)	0.0362		
Diesel (gal/mi)		0.1578	0.1149
Natural Gas (gal/mi)		0.1887	
kw-hr /mi	0.3861	1.8530	1.0855

	2045 - MSS			
	LDV	HHDT	MHDT	
Total VMT/year	911,332	1,409,923	246,861	
% ZEV	85%	65%	65%	**VMT and Fuel**
CVMT - NG Annual		246,736	-	2,568,115
CVMT - Diesel		246,736	86,401	
CVMT - Gasoline	136,700			
EVMT - Annual	774,632	916,450	160,459	
Gasoline (gal)	4,943	-	-	**4,943**
Diesel (gal)	-	-	-	**-**
Natural Gas (gal)	-	46,554	-	**46,554**
Electriity kw-hr	299,072	1,698,150	174,184	**2,171,406**

Assumes that LDV follow Statewide MSS Projections from Vision Model.
Assumes that MHDT follow MSS Strategy Projections for (State, SC or SJV)
Assumes that HHDT follow MSS Strategy Projections for (State, SC or SJV)

	Fuel Consumption Factors		
	LDT1	HHDT	MHDT
Gasoline (gal/mi)	0.0362		
Diesel (gal/mi)		0.1578	0.1149
Natural Gas (gal/mi)		0.1887	0.1372
kw-hr /mi	0.3861	1.8530	1.0855

	2045 - ACF			
	LDT1	HHDT	MHDT	
Total VMT/year	911,332	1,409,923	246,861	
% ZEV	85%	100%	100%	
CVMT - NG Annual		-	-	2,568,115
CVMT - Diesel		-	-	
CVMT - Gasoline	136,700			
EVMT - Annual	774,632	1,409,923	246,861	
Gasoline (gal)	4,943	-	-	**4,943**
Diesel (gal)	-	-	-	**-**
Natural Gas (gal)	-	-	-	**-**
Electriity kw-hr	299,072	2,612,538	267,976	**3,179,586**

Assumes that LDV follow Statewide MSS Projections from Vision Model.
Assumes that MHDT are box trucks and are Milestone Group 1.
Assumes that HHDT are day cab trucks complying with Milestone Group 2 Timeline.

	Fuel Consumption Factors		
	LDT1	HHDT	MHDT
Gasoline (gal/mi)	0.0362		
Diesel (gal/mi)		0.1578	0.1149
Natural Gas (gal/mi)		0.1887	0.1372
kw-hr /mi	0.3861	1.8530	1.0855

Commerce 220 Warehouse Distribution Project
Operational Mobile Sources
GHG Projections (2030 and 2040)

2030 Projections

Fuel Consumption[1]	MSS[2]	ACF[3]	CO_2 Emission Factor	
Gasoline	23,727	23,727	8.78	kg/gal
Diesel	127,026	99,947	10.18	kg/gal
Natural Gas	119,709	99,758	6.89	kg/gal
Electricity	373,170	863,318	98.00	lb/MWHr
CO2e Emissions (Metric Tons)	2343.4	1952.0		

1 Fuel consumption is in gallons for gasoline and diesel, gallon equivalents for natural gas and kWh for electricity.

2 Based on fuel consumption estimates from project VMT and ZEV projections from the 2020 Mobile Source Strategy META and Vision Models.

3 Based on Fleet Projections assuming all trucks are subject to Advanced Clean Fleet Rule, following milestone compliance options.

2045 Projections

Fuel Consumption[1]	MSS[2]	ACF[3]	CO_2 Emission Factor	
Diesel	4,943	4,943	8.78	kg/gal
Natural Gas	-	-	10.18	kg/gal
Electricity	46,554	-	6.89	kg/gal
	2,171,406	3,179,586	0.00	lb/MWHr
CO2e Emissions (Metric Tons)	364.4	43.4		

1 Fuel consumption is in gallons for gasoline and diesel, gallon equivalents for natural gas and kWh for electricity.

2 Based on fuel consumption estimates from project VMT and ZEV projections from the 2020 Mobile Source Strategy META and Vision Models.

3 Based on Fleet Projections assuming all trucks are subject to Advanced Clean Fleet Rule, following milestone compliance options.

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Appendix C:
Biological Resources Supporting Information

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C.1 - Biological Resources Assessment

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Biological Resources Assessment
SDG Commerce 220 Distribution Center Project
City of American Canyon, Napa County, California

Project Applicant:
SDG Commerce 220, LLC
413 West Yosemite Avenue, Suite 105
Madera, CA 93637

Prepared by:
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director

Date: September 20, 2023

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SECTION 1: INTRODUCTION

This Biological Resources Assessment (BRA) has been prepared by FirstCarbon Solutions (FCS) for the proposed SDG Commerce Court 220 Distribution Center Project (proposed project). The purpose of the BRA is to (1) document existing and potentially occurring biological resources on the project site and adjacent areas; (2) analyze potential project-related impacts on regulated biological resources; (3) summarize relevant local, State, and federal regulations; and (4) recommend appropriate measures to mitigate potential impacts on biological resources to less than significant levels.

1.1 - Project Location

The approximately 10.17-acre project site is located in the City of American Canyon, in Napa County, California (Exhibit 1 and Exhibit 2). The project site is located on the *Cuttings Wharf, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map. The project site is generally trapezoidal in shape, bordered by the Commerce Court extension and eucalyptus trees to the east, eucalyptus trees and North Slough to the west, the future SDG Commerce 217 project site to the north, and the constructed and operational SDG Commerce 330 Distribution Center to the south.

1.2 - Project Description

The project applicant, SDG Commerce 220, LLC, proposes to develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site (Exhibit 3). The warehouse would provide 23 truck doors and up to provisions for 4,400 square feet of office space. The warehouse would have perimeter concrete tilt-up wall panels with varying parapet heights and accent spandrel glass/metal canopy features around offices and corners of the building. The average roof height would be approximately 35 feet high and portions of the building exterior walls would have various heights to provide architectural relief. The building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized.

1.3 - Project History

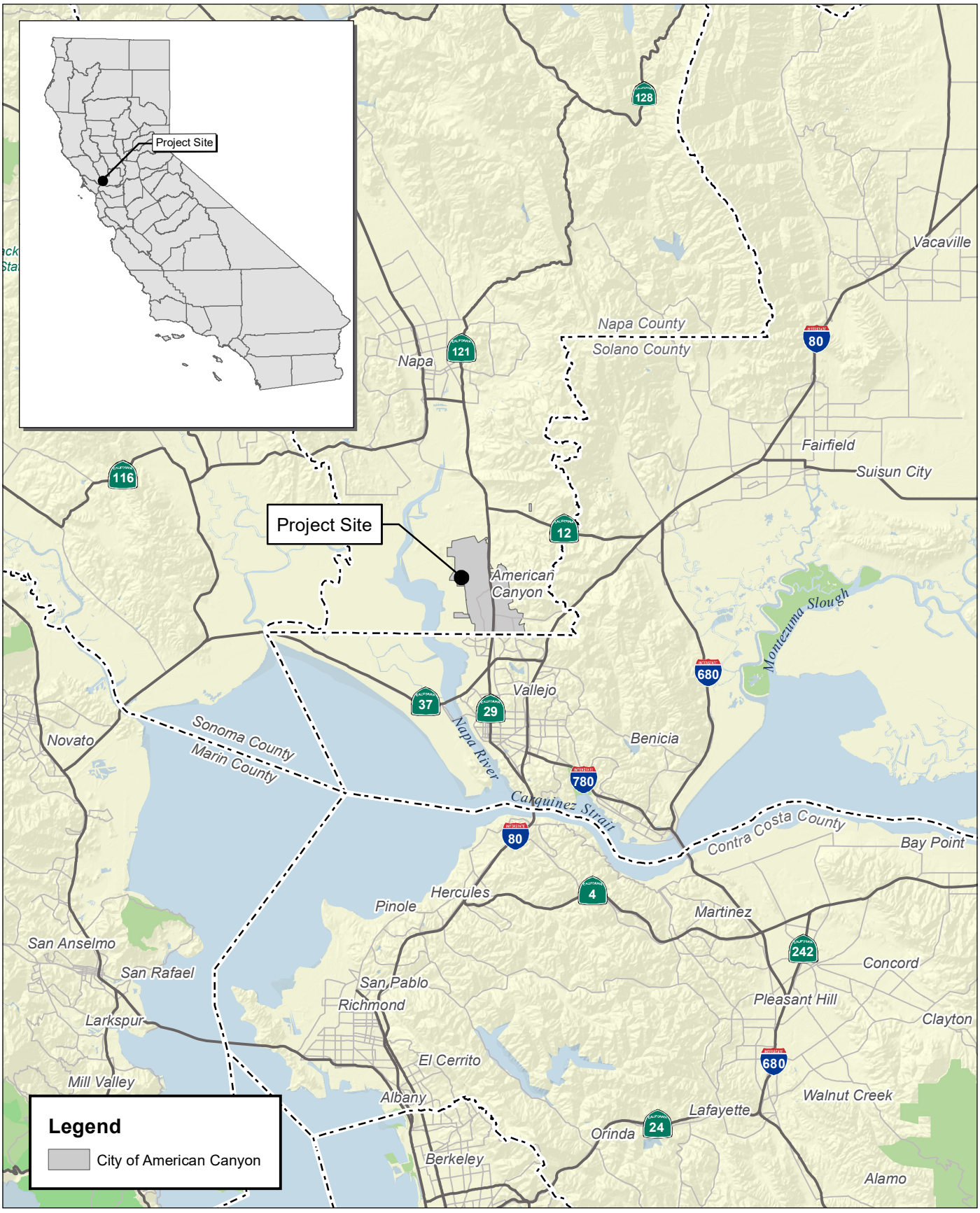
The project site is part of what was previously a larger 35.85-acre site. The site was subdivided into three lots (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330) via a tentative parcel map in February 2019. The southern parcel (SDG Commerce 330) was developed in 2021. The northern parcel (SDG Commerce 217) was entitled in 2021 and at the time of this writing is currently being developed. The central parcel (SDG Commerce 220) is the project site evaluated in this BRA. Exhibit 3 shows the relationship of the three parcels to each other. The following narrative provides background on the entire 35.85-acre project site.

Aerial photography dating back to 1937 indicates that the entire project site was occupied by planted ornamental trees; between then and the late 1950s, a eucalyptus grove was planted. From

the 1950s until 2001 the site remained relatively unchanged. From 2001 until circa 2012, the northwest corner of the site was used as a paintball field (Sherwood Forest Paintball Area) with the eucalyptus trees remaining in place.

In 2004, a warehouse was built directly to the north of the greater 35.8-acre site (as shown in Exhibit 2), and its development also included construction of Commerce Court cul-de-sac road improvements that terminated at on the northeast corner of the site. Also in 2004, the City of American Canyon installed underground utilities and a rock-paved access road through the middle of the eucalyptus grove adjacent to the east side of the project site. This work also included installation of a sanitary sewer force main that crosses the northern portion of the site (i.e., the 217 SDG Commerce parcel). In 2012 the entire 35.85-acre site was cleared and grubbed of eucalyptus trees and shrubs.

It should be noted that as part of the SDG Commerce 217 development, much of the SDG Commerce 220 project site was graded between May 29 and July 2, 2023, to procure existing, stockpiled soil for use as clean fill material for the SDG Commerce 217 site (See Appendix A for photographs). A Monk & Associates (M&A) authored *Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site* in September 2020 analyzed grading impacts (Appendix D.1). Additionally, an approved grading plan was issued by the City of American Canyon in March 2023 (Appendix D.1).



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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Source: Bing Aerial Imagery.

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1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map

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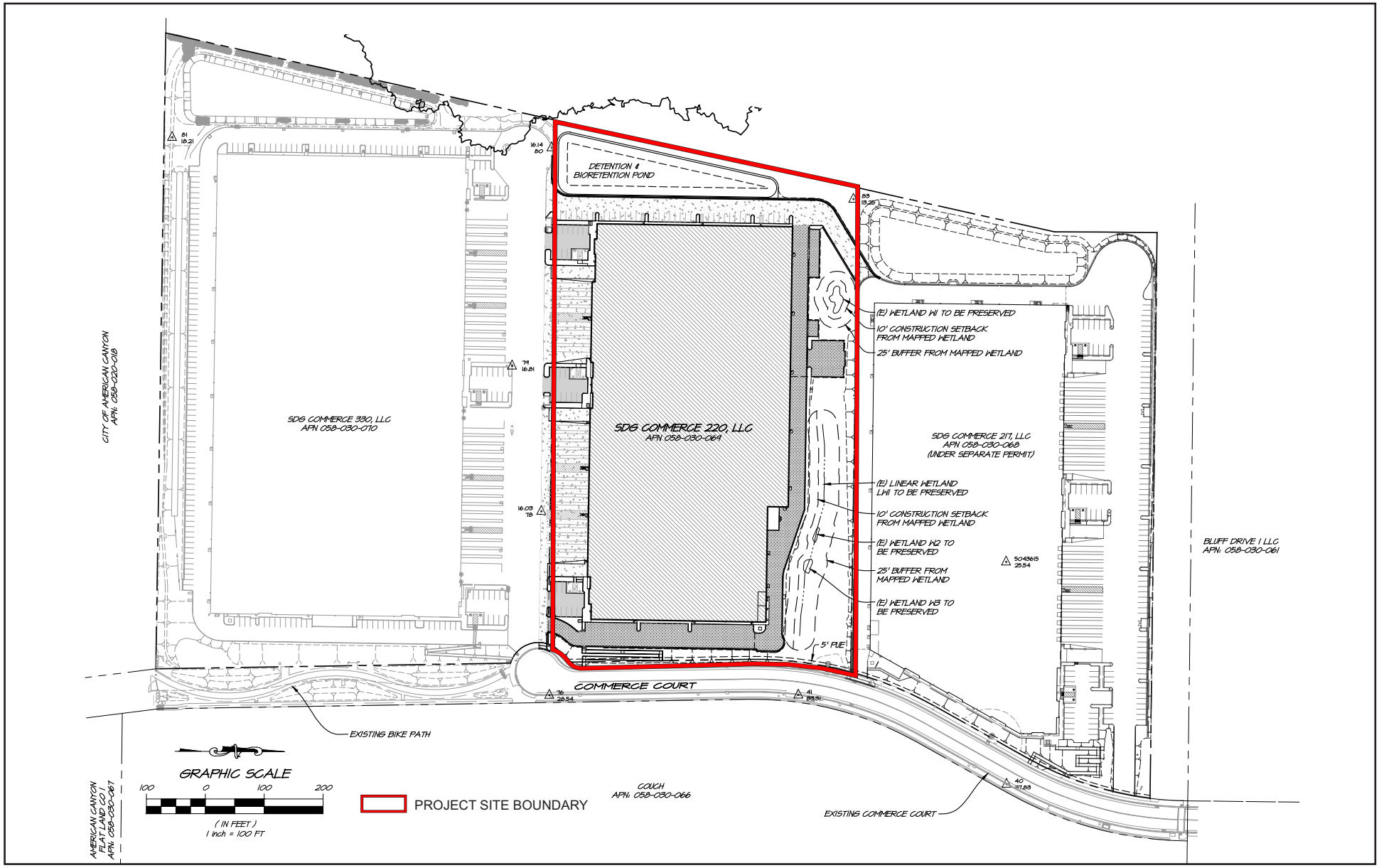

Source: RSA+ Consulting Civil Engineers + Surveyors. 07/21/2023.

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Exhibit 3
Site Plan

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SECTION 2: REGULATORY SETTING

2.1 - Federal

2.1.1 - Endangered Species Act of 1973

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the federal Endangered Species Act of 1973. Section 9 of Endangered Species Act protects listed species from "take," which is broadly defined as actions taken to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." The Endangered Species Act protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process.

2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, *et seq*.).

2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq*.) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

2.1.4 - Clean Water Act

Section 404

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States.

As of the preparation of this report on August 28, 2023, the final "Revised Definition of Waters of the United States" rule was published in the Federal Register on January 18, 2023, and took effect on March 20, 2023. However, the final rule is not currently operative in certain states and for certain parties due to litigation. Moreover, the United States Environmental Protection Agency (EPA) and USACE (hereafter known as the agencies) are in receipt of the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. In light of this decision, the agencies will interpret the phrase "waters of the United States" consistent with the Supreme Court's decision in *Sackett*.[1] As a result of ongoing litigation, the agencies are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice.

[1] United States Environmental Protection Agency (EPA). 2023. Website: https://www.epa.gov/wotus/current-implementation-waters-united-states. Accessed July 12, 2023.

Therefore, since the agencies are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice, our analysis follows 40 Code of Federal Regulations 230.3(s) in effect under the pre-2015 regulatory regime, which defines "waters of the United States" as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
2. All interstate waters including interstate wetlands.
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
   a) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
   b) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
   c) Which are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under this definition.
5. Tributaries of waters identified in paragraphs(s) (1) through (4) of this section.
6. The territorial sea.
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs(s) (1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 Code of Federal Regulations 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the EPA and/or USACE.

"Wetland" refers to areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and seasonal wetlands. Wetlands are considered jurisdictional if they fall under one of the categories of waters of the United States defined above. The USACE jurisdiction typically extends up to the ordinary high water mark (OHWM).

In general, a USACE permit must be obtained before placing fill in wetlands or other waters of the United States. The type of permit depends on the impacted acreage, the purpose of the proposed fill, and other factors.

Section 401

As stated in Section 401 of the CWA, "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

2.2 - State

2.2.1 - CEQA Guidelines

The California Environmental Quality Act (CEQA) requires public agencies to evaluate potential impacts to special-status species and their habitat. The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a Candidate, Sensitive, or Special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally and State-protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

Oak Woodlands Conservation Act

California State Senate Bill (SB) 1334, the Oak Woodlands Conservation Act, became law on January 1, 2005, and was added to the CEQA statutes as 21083.4. This statute requires that a county must determine whether or not a project will result in a significant impact on oak woodlands and, if it is

determined that a project may result in a significant impact on oak woodlands then the County shall require one or more of the following mitigation measures:

- Conserve oak woodlands through the use of conservation easements.
- Plant an appropriate number of trees, including maintenance of plantings and replacement of failed plantings.
- Contribute funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements.
- Other mitigation measures developed by the county.

2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California's rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA. Fish and Game Code Section 2081 established an incidental take permit program for State-listed species. The CDFW maintains a list of "Candidate" species that it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq*.) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right-of-way." Project impacts to these species

are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a Species of Special Concern. The CDFW maintains lists of Species of Special Concern that serve as species "watch lists." Species with this status may have limited distributions or limited populations, and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a Candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water. CDFW jurisdiction typically extends to the edge or "drip line" of the riparian habitat or top of bank.

2.2.1 - California Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the State" (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the State" (Water Code § 13050(e)). In 2019, the California State Water Resources Control Board (State Water Board) published the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures) to guide wetland/waters of the State determinations and the permitting process.[2]

2.2.2 - California Native Plant Society

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants rare, threatened, or endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

Potential impacts to populations of CNPS ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations. Nevertheless, some level of CEQA review is justified for California Rare Plant Rank (CRPR) 4 taxa, and under some circumstances, a full impact analysis is warranted. Taxa that can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be shown to be regionally rare or unique as defined in CEQA Section 15125(c) must be fully analyzed in a CEQA document. Some

[2] California State Water Resources Control Board (State Water Board). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. April 2, 2019.

circumstances, such as local rarity, having occurrences peripheral to the taxon's distribution, or having occurrences on unusual substrates or rare and declining habitats, provide justification for treating some CRPR 4 taxa occurrences as regionally rare or unique. One limitation to fully analyzing impacts on CRPR 4 taxa is the difficulty in obtaining current data on the number and condition of the occurrences.[3]

2.3 - Regional and Local

2.3.1 - City of American Canyon General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site. Only those applicable to the proposed project are discussed herein:

Goal 8 Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.

Objective 8.1 Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.

Policy 8.1.1 Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.

Policy 8.1.4 Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

Objective 8.2 Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.

Policy 8.2.1 Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site. In instances where the potential

[3] California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. January 21, 2020.

for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

Policy 8.3.1 b Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).

Objective 8.3 Protect natural drainages and riparian corridors within the American Canyon Planning Area.

Policy 8.3.1 Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:

- The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.

Policy 8.3.1 e Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment.

Policy 8.3.1 f Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.

Policy 8.3.1 g Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.

Policy 8.3.5 Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.

Policy 8.3.6 Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

2.4 - City of American Canyon Ordinances

Municipal Code Chapter 18.40.110 sets forth the City’s Tree Ordinance. The ordinance states that existing trees shall be preserved on the site unless otherwise approved by the City Council as a part of the site development plans. Additionally, unless specifically approved by the City Council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a 24-inch box of the same species unless specifically approved by the City Council.

SECTION 3: METHODS

3.1 - Literature Review

Literature review was conducted to analyze existing documentation regarding biological resources and habitat conditions within the project site and is summarized below.

3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist compiled and analyzed existing environmental documentation for the project site and relevant areas in its vicinity. This documentation included literature pertaining to the habitat requirements of special-status species with the potential to occur in the project vicinity and federal register listings, protocols, and species data provided by the USFWS, CDFW, and CNPS. Additionally, FCS reviewed and evaluated all available supporting documentation provided by the applicant, including a pending USACE jurisdictional determination, and species-specific studies and habitat assessments. These documents are attached to this BRA (Appendix D), and include the following:

SDG Commerce 217 Documents

- Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. City of American Canyon, California. March 2020.
- Monk & Associates (M&A). 2020. Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site SDG Commerce 217 Distribution Center. September 2020.
- FirstCarbon Solutions (FCS). 2023. Pre-Construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 per the Mitigation Monitoring and Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California. April 2023.
- RSA+. 2023. Commerce 217 Distribution Center Borrow Site Grading Plan. March 2023.

SDG Commerce 220 Documents

- Pinecrest Research Corp., Inc. 2023. Special-Status Animal Survey Report. August 2023.
- Pinecrest Research Corp., Inc. 2023. Special-Status Plant Survey Report. July 2023.
- Monk & Associates (M&A). 2023. Request for Reverification of Jurisdictional Determination and a PJD SDG Commerce 220 Project Site; USACE File Number: 2011-00322N American Canyon, California. May 2023.

3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s)and aerial photographs as a preliminary analysis of the existing conditions within the project site and

immediate vicinity.[4] Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS).[5] Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

3.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.[6] These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to inform whether the soil conditions on-site are potentially suitable for any special-status plant species. However, Natural Resources Conservation Service (NRCS) soil maps utilize an approximately 1.4-acre minimum mapping unit, and line placement may not be accurate on a large (i.e., parcel-level) scale.

3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity based on a search of the USFWS Information for Planning and Consultation (IPaC) database,[7] the CNDDB, and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California for the *Cuttings Wharf, California* USGS 7.5-minute Topographic Quadrangle Map, and the eight surrounding quadrangles.[8,9] The CNDDB Biogeographic Information and Observation System (BIOS 6) was used to determine the distance between the known occurrences of special-status species and the project site.[10]

3.2 - Field Surveys and Focused Surveys

FCS Biologists familiar with the biological resources of the region conducted field surveys on December 2, 2022, and March 17, 2023. The objective of the field surveys was to ascertain general site conditions, wildlife use, and identify whether existing vegetation communities provide suitable

[4] United States Geological Survey (USGS). 2022. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed August 21, 2023.

[5] United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed August 21, 2023.

[6] Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed August 21, 2023.

[7] United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed August 21, 2023.

[8] California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDB) RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed August 21, 2023.

[9] California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed August 21, 2023.

[10] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed August 21, 2023.

habitat for special-status plant or wildlife species. Potentially sensitive areas identified during the literature review were ground-truthed during the field survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

Wildlife species detected during the reconnaissance-level surveys by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the project site.[11] Appropriate field guides were used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.[12,13,14] Online resources such as eBird and California Herps were also consulted, as necessary.[15,16]

M&A performed 10 field surveys on the greater 35-acre project site before the site was subdivided into three lots (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330). Consequently, the SDG Commerce 220 project site was included in these surveys which were conducted on March 1 and April 27, 2006; June 14, 2011; February 14, March 21, and June 12, 2012; May 18, 2017; March 30, 2018; December 19 and December 27, 2019. Additional details concerning these surveys can be found in Appendix D.1 of this document.

3.2.1 - Pre-construction Surveys for SDG Commerce 217

Seven pre-construction surveys were conducted by FCS between January 18 and April 7, 2023, for a total of approximately 30 survey hours. Surveys were conducted for the entirety of the Commerce 217 project site and relevant adjacent areas (which included the adjacent SDG Commerce 220 site). Surveys were conducted pursuant to the January 2021 Mitigation, Monitoring, and Reporting Program (MMRP) for the Commerce 217 Warehouse Project. Surveys included nesting birds (including Swainson's hawk) and burrowing owl detection. Surveys for western pond turtle adults and nests were also performed simultaneously while walking the site. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) and the Staff Report on Burrowing Owl Mitigation*.[17,18] Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Additional details concerning these surveys can be found in Appendix D.1 of this document.

[11] California Department of Fish and Wildlife (CDFW). 2022. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed August 21, 2023.
[12] Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[13] Reid, F. 2006. A Field Guide to Mammals of North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[14] Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.
[15] eBird. 2022. Online bird occurrence database. Website: http://ebird.org/content/ebird/. Accessed August 21, 2023.
[16] California Herps. 2022. A Guide to the Amphibians and Reptiles of California. Website: http://www.californiaherps.com/Accessed August 21, 2023.
[17] Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.
[18] California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

3.2.2 - Special-status Animal Surveys for SDG Commerce 220

Eleven special-status animal surveys were conducted between January 18 and July 2, 2023, by Pinecrest Research Corp (Pinecrest) for the entirety of the Commerce 220 project site. Surveys were conducted by Dr. Christopher DiVittorio to determine the pre-construction presence or absence of several special-status species, including burrowing owl, Swainson's hawk, nesting raptors, nesting passerine birds, and western pond turtle. Survey methods followed established procedures and applicable protocols, including the R*ecommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, and the *Staff Report on Burrowing Owl Mitigation.*[19,20] Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Additional details concerning these surveys can be found in Appendix D.2 of this document.

3.2.3 - Protocol-level Rare Plant Surveys for SDG Commerce 220

Protocol-level rare plant surveys were conducted by Pinecrest during the growing season of 2023. An early-season site visit was performed on March 20. Mid-season site visits were performed on April 6, April 7, and May 29. A late-season site visit was also performed on July 2. Between the mid-season and late-season site visits the majority of the site was graded thus the late-season site visit focused on remaining vegetation surrounding the areas of disturbance. Rare plants recorded and mapped in the field, if present, include all plants that are federal or State-listed as Rare, Threatened, or Endangered, all federal and State candidates for listing, all plants included in Lists 1 through 4 of the CNPS Inventory, and plants that qualify under the definition of "rare" in CEQA Guidelines Section 15380.

Botanical surveys were performed by Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by Dr. Zoya Akulova. During the site visit, Dr. DiVittorio surveyed the entirety of the project area using methods as specified in the CDFW publication titled *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities*.[21] Surveys were conducted by walking the entire project area on foot in parallel lines approximately 15 feet apart, identifying every species that was flowering, and making note of any species that were past flowering or that had not yet flowered. Voucher specimens were taken of any species that required identification in the laboratory. All terminology follows currently accepted nomenclature as described in The Jepson Manual. Additional details concerning these surveys can be found in Appendix D.2 of this document.

3.3 - Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation,

[19] Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.
[20] California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.
[21] California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities. March 20, 2018.

development, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated "islands" of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey and review of aerial photographs, and CDFW's BIOS6 information on Bay Area Linkages. The focus of this study was to determine whether a change in land use at the project site could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, aerial photographs, USGS topographic maps and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.

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SECTION 4: RESULTS

This section summarizes the results of the literature research, database analyses, and field surveys listed in Section 3 above. Sensitive biological resources including special-status species and the impact analysis are addressed separately in Section 5 and 6 of this document.

4.1 - Environmental Setting

The project site is generally located on the northern boundary of the City of American Canyon, where commercial use is dominant. The project site is bordered by the Commerce Court extension and eucalyptus trees to the east, eucalyptus trees and North Slough to the west (beyond which is the Napa River), future SDG Commerce 217 project site to the north, and the active SDG Commerce 330 Distribution Center to the south.

4.1.1 - Topography and Hydrology

The project site is relatively flat with elevations ranging from 8 to 20 feet above sea level. The ground is undulating due to past land use disturbances including eucalyptus tree removal in 2012. The site slopes gently to the west toward the North Slough and the Napa River.

There are four wetland features (three seasonal wetlands and one linear wetland) along the northern boundary of the project site. In 2023, M&A mapped 0.023-acre of seasonal wetlands and 0.042-acre of linear wetlands within the delineation survey area. These wetlands have surface hydrologic connectivity to North Slough, which flows to the Napa River to the west. The Napa River is a traditional navigable water.

4.1.2 - Soils

The NRCS Web Soil Survey (WSS) depicts one soil type within the project site; Haire clay loam (148). This soil type and its primary characteristics are summarized in Table 1 and depicted in Exhibit 4.

Table 1: Soil Types Present within Project Site

Soil Name	Symbol	Slope	Description	Acreage
Haire Clay Loam	148	2-9%	Alluvium derived from sedimentary rock, moderately well drained, non-saline to very slightly saline.	10.17

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Source: Bing Aerial Imagery. USDA Soils Data Mart, County of American Canyon.

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Exhibit 4
Soils Map

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4.2 - Vegetation Communities and Land Cover Types

The following section describes the vegetation communities and land cover types present on the project site. The location and extent of each vegetation community is shown on Exhibit 5. These results are generally consistent with the results presented in the M&A BRA.

4.2.1 - Non-native Annual Grassland–*Avena spp.–Bromus spp. Herbaceous Semi-Natural Alliance*

This vegetation type is typically described by being dominated by non-native annual grasses and annual or perennial forbs from dense to sparse cover with less than 10 percent tree or shrub cover. With a few exceptions, the plants are dead through the summer and fall dry season, persisting as seeds. This community usually occurs below 3,000 feet and is the most common herbaceous vegetation type of the region. This vegetation type is classified by the Manual of California Vegetation (MCV) as *Avena spp.–Bromus spp.* Herbaceous Semi-Natural Alliance, which has broad membership rules, but is dominated by a non-native annual grass species. The herb layer in this alliance is generally less than 1.2 meter and cover ranges from open to continuous. Trees and shrubs may be present at low cover. This community is found on various substrates including foothills, waste spaces, rangelands, and openings in woods.

The vast majority of the project site is generally considered non-native annual grassland, with a species composition that trends strongly toward ruderal. Individual scattered shrubs (including coyote brush [*Baccharis pilularis*]) and eucalyptus saplings and resprouts are not considered their own vegetation type due to small patch size, but rather a component of the grassland matrix (see membership rules, above).

The most predominant grass species within the project site included wild oats (*Avena sp*), canary-grass (*Phalaris aquatica)*, medusahead (*Taeniatherum caput-medusae*), wall barley (*Hordeum murinum*), but equally dominant are ruderal species including mustard (*Hirschfeldia incana)*, stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*).

Large areas of this vegetation type were graded between May 29 and July 2, 2023 (see Appendix A and D.1). The grading did not encroach into the wetlands features or associated wetland buffer areas. The grading effectively eliminated the non-native grassland throughout much of the site.

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Source: Bing Aerial Imagery. Monk & Associates Environmental Consultants, 08/2023.

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Exhibit 5
Vegetation Communities and Land Cover Types

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4.2.2 - Seasonal Wetlands

Seasonal wetland habitat is present on the project site, as shown in Exhibit 5. In 2011, the USACE confirmed 0.049-acre of wetlands and 0.004-acre of "other waters" adjacent to the former gravel road on the eastern edge of the project site. On December 6, 2011, the USACE confirmed the extent of its jurisdiction on the project site (USACE File Number 2011-00322N). This determination expired on January 31, 2017, as a result, M&A conducted a reverification wetland delineation of the project site on November 16, 2016. The map was field confirmed by the USACE on May 18, 2017, and an approved jurisdictional determination (AJD) was issued on May 16, 2018. It should be noted that the 2018 AJD included one isolated wetland that is no longer part of the project site. In 2023, M&A mapped 0.023-acre of seasonal wetlands (W1-W3) and 0.042-acre of linear wetlands (LW1) within the project site. On August 30, 2023, the USACE issued a Preliminary Jurisdictional Determination (PJD) which can be found in Appendix D.2.

Vegetation observed within the seasonal wetlands included non-native and native species. Non-native species included spiny-fruit buttercup (*Ranunculus muricatus;* facultative wetland [FACW]) and Italian ryegrass (*Festuca perennis;* facultative [FAC]). Native species included creeping spikerush (*Eleocharis macrostachya;* obligate wetland species [OBL]), brown-headed rush (*Juncus phaeocephalus;* FACW) and spreading rush (*Juncus patens;* FACW). Mapped wetlands on the project site remain inundated and/or saturated seasonally for sufficient duration to satisfy wetland hydrology criteria. Hydrological indicators in the mapped wetlands include the presence of oxidized rhizosphere (a "primary" hydrological indicator) as well as biotic crust. Soil matrix colors in the wetland area identified in the field were noted as 10YR 3/2 with redoximorphic features. Soil matrix colors in areas mapped as non-hydric soils were noted as 10YR 3/3 and 10YR 3/2, with insufficient redoximorphic features. These wetland features were not impacted during the grading that occurred within upland portions of the project site between May 29 and July 2, 2023.

4.2.3 - Developed

While not a natural habitat type, urban/developed areas typically consist of buildings, hardscape such as asphalt or concrete and other man-made structures. Such areas typically provide little habitat value to most wildlife species. On-site, this landcover type can be found within the southeastern corner in the form of a construction trailer, a staging area, and a paved road that allows access into the site via Commerce Boulevard. The paved road runs half the length of the southern border of the project site.

4.3 - Wildlife

The vegetation community and land cover types discussed above provide habitat for numerous wildlife species. Wildlife activity during the 2023 field surveys consisted primarily of avian species, including Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), lesser goldfinch (*Spinus psaltria*), yellow-rumped warbler (*Setophaga coronate*), turkey vulture (*Cathartes aura*), red-shouldered hawk (*Buteo lineatus*), and California towhee (*Melozone crissalis*). Additionally, Botta's pocket gopher (*Thomomys bottae*) burrows, black-tailed jackrabbit (Lepus californicus), and Columbian black-tailed deer (*Odocoileus hemionus ssp. columbianus*) were observed. Noteworthy, no signs of current or past

presence of California ground squirrel (*Otospermophilus beecheyi*) burrows were observed on-site during the 2023 surveys.

In general, FCS field surveys found that the conditions related to wildlife habitat are consistent with the results presented in the March 2020 M&A BRA which lists the following common wildlife species as observed on or near the project site: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe, American crow, mourning dove (*Zenaida macroura*), black-tailed jackrabbit, California meadow vole (*Microtus californicus*), Botta's pocket gopher, and Mule deer (*Odocoileus hemionus*), among others, all of which have been observed on the project site. Red-shouldered hawk, tree swallows (*Tachycineta bicolor*), Nuttall's woodpecker (*Picoides nuttallii*), and northern flicker (*Colaptes auratus*), among others, likely nest in the eucalyptus trees that surround the project site to the west, north and south. Chestnut-backed chickadee (*Poecile rufescens*), brown creeper (*Certhia americana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), spotted towhee (Pipilo maculatus), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), Bullock's oriole (*Icterus bullockii*) and western gray squirrel (*Sciurus griseus*) were also observed in the immediate project vicinity.

Wildlife use is expected to have decreased since M&A's surveys because these surveys were conducted prior the construction of the warehouse to the south (SDG Commerce 330) and before the current construction began on the warehouse to the north (SDG Commerce 217). A comprehensive list of wildlife and plant species observed by FCS and Pinecrest can be found in Appendix E.

4.4 - Wildlife Movement Corridors and Nursey Sites

A wildlife corridor is an area of habitat connecting wildlife populations that can be separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, development, or human disturbance. Wildlife corridors allow an exchange of individuals between populations, which may help prevent the negative effects of inbreeding and reduced genetic diversity (via genetic drift) that often occur within isolated populations.

The project site has been subject to decades of varying degrees of anthropogenic disturbances. More recently, adjacent developments include the construction of SDG Commerce 330 to the south and the current construction of SDG Commerce 217 to the north. Dense industrial developments are located north of the project site while a school and single-family residences are found to the south. Therefore, non-volant wildlife movement through the site is limited, and the site does not connect habitats suitable for sustainable wildlife populations. Wildlife may utilize the off-site eucalyptus grove and aquatic habitats (e.g., North Slough and Napa River) to the west for dispersal; however, the proposed project would be set back from the eucalyptus grove and aquatic habitats. No direct impacts to the eucalyptus grove and marsh habitat would occur from project construction.

There are no native wildlife nursery sites present within the project site.

4.5 - Protected Trees

No tree removal is proposed, the project site does not contain any trees.

4.6 - Habitat Conservation Plans

No habitat conservation plans exist for the project site.

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SECTION 5: SENSITIVE BIOLOGICAL RESOURCES

The following section discusses the extent to which sensitive biological resources are present or expected on-site. Sensitive biological resources are protected by laws and regulations, including CEQA (see Section 2 for details).

5.1 - Sensitive Natural Communities

The CDFW maintains a list of natural communities that classifies vegetation types found within the State of California and ranks them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.[22] Wetlands and riparian habitats are also typically considered sensitive natural communities and are addressed in the environmental review process.

5.1.1 - Seasonal Wetland Communities

The vegetation communities of the four wetland features are dominated by both non-native, and native hydrophytic species as described in detail in Section 4.2.2. Naturally occurring seasonal wetland plant communities can be considered sensitive natural communities.

5.2 - Special-status Plant Species

The CNDDB and CNPS list 45 special-status or sensitive plant species that have been recorded within the *Cuttings Wharf, California,* USGS Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix B).[23,24,25] The CNDDB occurrences within the vicinity of the project site are shown on Exhibit 6. A list of all plant species recorded on-site during the protocol-level floristic surveys is included in Appendix E. No rare or special-status plant species were observed during the appropriately timed protocol-level floristic surveys (see Section 3.2.3) and are therefore determined to be absent from the site. This result is also supported by M&A's March 2020 BRA, which additionally states that in the recent past, blue gum eucalyptus trees covered most of the project site dating back for several decades; these trees emit allelopathic (growth inhibiting) chemicals from their leaves, acorns and bark that prevent other plants from growing under them.[26]

[22] California Department of Fish and Wildlife (CDFW). 2023. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed August 21, 2023.

[23] United States Geological Survey (USGS). 2023. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed August 21, 2023.

[24] California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed August 21, 2023.

[25] California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed August 21, 2023.

[26] Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.

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CNDDB version 08/2023. Please Note:
The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area.

Legend

- Project Site

CNDDB

Symbology

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)
- Aquatic Comm. (specific)
- Aquatic Comm. (non-specific)
- Aquatic Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's (Commercial only)

Source: Bing Street Imagery. California Natural Diversity Database (CNDDB), August 2023.

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Exhibit 6
CNDDB Special-Status Species Occurrences

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5.3 - Special-status Wildlife Species

The CNDDB identifies 43 federal and State-listed threatened and/or endangered wildlife species and State Species of Special Concern that have been recorded within the *Cuttings Wharf, California,* USGS Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix B).[27,28] The CNDDB occurrences within the vicinity of the project site are shown on Exhibit 6. Thirty-five of these species are unlikely to occur on-site, as discussed in the Special-status Wildlife Species Habitat Value Evaluation Table (Appendix B, Table 2).

The remaining eight species (and functional groups like nesting birds and roosting bats that include special-status species) could have at least theoretical potential to occur on-site, perhaps as vagrant, dispersing, or foraging individuals, and are therefore discussed in more detail below.

5.3.1 - Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is a State-listed threatened species protected pursuant to CESA and Title 14 of the California Code of Regulations. It is protected from direct take under the Federal MBTA of 1918 (16 USC 703-711). Swainson's hawks, their active nests, eggs, and young are also protected under California Fish and Game Code (FGC §§ 3503, 3503.5, 3513, and 3800).

Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands. It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall.

Foraging habitats include grasslands, alfalfa fields, fallow fields, beet, tomato, and other low growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded. Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole. Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. During the nesting season Swainson's hawk usually forage within 2 miles of the nest.

Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially, therefore it can occupy habitats with few or no perches except the nest tree. Swainson's hawks are regular summer visitors and breeders throughout the western states. In the fall months, most Swainson's hawks migrate to Argentina before returning to the United States to breed in the late spring (typically April). For decades, Argentina farmers were spraying insecticides over habitats that included gregarious night roosts of the Swainson's hawk, killing many thousands of these hawks. This practice was halted in the last 10 years and the Swainson's hawk population appears to be dramatically responding in California. While in the 1970s through 1990s there were only two relatively small populations of Swainson's hawks that remained resident in California year-round in the Davis area and in the Sacramento River Delta, resident and migrant populations of the

[27] California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed August 22, 2023.

[28] California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed August 22, 2023.

Swainson's hawks are now dramatically expanding their nesting distribution in California since insecticide use over Argentinian wintering grounds was halted. For example, Swainson's hawks were never recorded nesting in the Napa County area until relatively recently.[29]

The closest known record for nesting Swainson's hawk is 1.5 miles north of the project site (CNDDB Occurrence No. 2839). No individual Swainson's hawk or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. However, the eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, there is the possibility that Swainson's hawks could nest near this project site in future years.

5.3.2 - Western Burrowing Owl

The western burrowing owl (*Athene cunicularia*) is a California Species of Special Concern. Its nest, eggs, and young are also protected under California Fish and Game Code (FGC §§ 3503, 3503.5, and 3800). The burrowing owl is also protected from direct take under the MBTA (50 CFR 10.13).

Burrowing owl occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low growing vegetation. This species utilizes, modifies, and nests in burrows created by other species, most notably the California ground squirrel. They may also on occasion dig their own burrows or use man-made objects such as concrete culverts or rip-rap piles for cover.

The closest CNDDB record within the last 10 years was documented 2.7 miles north of the project site (CNDDB Occurrence No. 935). No evidence of burrowing owl activity was observed during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Furthermore, no California ground squirrel burrows were observed, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl.

However, it cannot be ruled out entirely that a vagrant burrowing owl may visit the site under unlikely circumstances before start of construction and could potentially be impacted by the proposed project.

5.3.3 - Northern Harrier

The northern harrier (*Circus hudsonius*) is a California Species of Special Concern. This raptor is protected under California Fish and Game Code Section 3503.5 that protects nesting raptors and their eggs/young and is also protected from direct take under the MBTA (50 CFR 10.13). Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators such as coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), and various snake species.[30]

[29] Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.
[30] Ibid.

The closest CNDDB record was documented 2.8 miles west of the project site (CNDDB Occurrence No. 29). No individual northern harriers or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. However, northern harriers have the potential to nest in the open ruderal habitats on-site that provide marginal nesting habitat for this species. Therefore, there is the possibility that northern harriers could nest on or near this project site in the future.

5.3.4 - Golden Eagle

The golden eagle is a migratory California resident that resides in rolling foothills, mountain areas, sage-juniper flats, and deserts from sea level to 11,500 feet (3,833 meters). It feeds mostly on lagomorphs and rodents, and occasionally other mammals, birds, reptiles, and some carrion. The golden eagle hunts in open terrain including grasslands, deserts, savannas, and early successional stages of forest and shrub habitats. It is known to hunt in pairs and pirate food from other predators. This species nests in large trees in open areas on cliffs. The breeding season for the golden eagle ranges from January through August, with a peak in March through July.

The closest CNDDB record was documented 4.5 miles southeast of the project site (CNDDB Occurrence No. 40). No individual golden eagles or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Regardless, the eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, it cannot be ruled out that golden eagles could nest near this project site in the future.

5.3.5 - White-tailed Kite

The white-tailed kite (*Elanus leucurus*) is a whitish falcon-shaped raptor. This sensitive bird is designated by CDFW as a fully protected species (FGC § 3511). Fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Nesting white-tailed kite habitat consists mainly of oak and sycamore woodlands, but the birds also use mature willows. White-tailed kite nests have been documented in a variety of tree species, including oak (*Quercus sp*.), cottonwood (*Populus sp*.), willow (*Salix sp*.), California sycamore (*Platanus racemosa*), and elder (*Acer sp.).*[31] Nests are placed near the top of dense oak, willow, or other tree stand approximately 20-100 feet above ground.[32] Nest trees have a dense canopy or are within a dense group of trees, such as riparian forest or oak woodland. Adjacent to their nesting woodland must be open foraging grasslands, where the birds can find their small mammal prey.[33]

[31] Science Applications International Corporation (SAIC). 2007. Draft Ecological Baseline Report for the Butte Regional Habitat Conservation Plan/Natural Community Conservation Plan. Prepared for the Butte County Association of Governments. May 2007.
[32] California Department of Fish and Wildlife (CDFW). 1988. California's Wildlife, Volume II: Birds. State of California Resources Agency. Sacramento, California.
[33] Gallagher, Sylvia. 1997. Atlas of Breeding Birds, Orange County, California. Sea and Sage Audubon Press, Irvine, CA.

White-tail kites forage in undisturbed, open grasslands, meadows, emergent wetlands, farmlands, crops, pastures, and other cultivated habitats. The white-tailed kite preys mostly on voles, but also takes other small, diurnal mammals, and occasionally birds, insects, reptiles, and amphibians.

The closest CNDDB record was documented 5.3 miles north of the project site (CNDDB Occurrence No. 181). Several white-tailed kite individuals were observed foraging over the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site and seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. This species was observed on the following dates during 2023 surveys: March 20, April 4, April 5, April 6, April 7, April 24, April 28, and July 2. These individuals were observed to be continually harassed by several crows who were observed loitering around the eucalyptus grove. After continued interactions with the crows, white-tailed kite individuals flew off to the southwest out of sight and the location of their nest could not be determined.

The eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, it cannot be ruled out that white-tailed kite could nest within relevant disturbance distance.

5.3.6 - Protected Nesting Birds (Including All Special-status Bird Species)

In addition to the specific special-status bird species discussed in more detail above, the active nests of most resident and migratory (game and non-game) birds (including the nests of additional special-status bird on-site) are protected by the MBTA and/or Fish and Game Code; and are therefore categorized as “special-status” wildlife functional group during this time. While a juvenile, red-shouldered hawk was observed perched off-site within a large eucalyptus tree to the north of the SDG Commerce 217 site during the 2023 surveys, no active nests were observed.

The project site is adjacent to eucalyptus groves which provide nesting opportunities for different taxa of birds, and the site itself contains the potential for ground nesters. Although the site has been significantly disturbed in the past, the grassland on-site may provide marginal foraging opportunities to support nesting and rearing habitat. Therefore, it cannot be ruled out that protected bird nests are present on or within the disturbance distance of the project site during the nesting season (typically considered to last from February 1 to August 31 for most species).

5.3.7 - Bats (Including Special-status Bats)

The project site is adjacent to eucalyptus groves which offer potentially viable roosting habitat for bat species. A CNDDB recorded presence of bat species 5.2 miles northwest of the project site (CNDDB Occurrence No. 44). Bats could potentially use cavities in trees to roost and forage over the grassland and shrubland. Of the special-status bat species that has potential to occur in the region, the pallid bat (*Antrozous pallidus*) would be more likely to roost in natural features, such as the eucalyptus grove rather than artificial structures.

Roosts are used during the daytime to seek refuge; at night between foraging excursions to rest, digest prey, seek refuge from predators or poor weather conditions, or for social purposes; and in winter for hibernation. Adult females and their young use some particularly secure roosts as

maternity roosts. The number of bats occupying a given roost can vary from a solitary individual to a large colony, depending on the species. Roosting sites are very sensitive to human disturbance, especially when bats are hibernating or rearing young.

At dusk, bats leave their roosts to forage for insects in nearby ponds or riparian habitats. Bats generally prey on insect species that are locally abundant near water bodies. Ecotone areas (areas of transition between habitats) are also used as foraging areas. The grassland habitat of the project site and eucalyptus grove adjacent has foraging and roosting potential for bat species. Therefore, it cannot be ruled out that bat roosts are within disturbance distance of the project site.

5.3.8 - Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) is a California Species of Special Concern. This species feeds on aquatic plant material, including pond lilies, beetles, fishes, frogs, and a variety of invertebrate species. Pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Turtles slip from basking sites to underwater retreats at the approach of humans or potential predators. In colder areas, this species hibernates underwater in bottom mud.

The closest CNDDB record was documented 0.4 mile northeast of the project site (CNDDB Occurrence No. 552). No western pond turtle individuals or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. While there are seasonal wetland features present on-site there are no ponds or streams on-site that would be suitable for foraging or breeding. It cannot be ruled out entirely that a vagrant western pond turtle may be present on-site under unlikely circumstances before start of construction and could potentially be impacted by the project.

5.3.9 - Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is listed as Candidate under the Endangered Species Act, and wintering roosts are protected under the Fish and Game Code.

Preferred monarch habitat is filled with diverse nectar sources which support monarchs and native bees. Native milkweeds (*Asclepias* spp.) and other nectar sources provide monarchs with breeding habitat, resting, and refueling stops during migration, and food at overwintering sites.

Overwintering habitats consist of tree groves that typically occur within 1.5 miles of the Pacific coastline, or within the San Francisco Bay Area, where the proximity to large water bodies moderate temperature fluctuations. Overwintering begins in September or October. Suitable grove conditions include temperatures above freezing, high humidity, dappled sunlight, access to water and nectar, and protection from high winds and storms. Monarchs will select the native Monterey pine, Monterey cypress, western sycamore, and other native tree species when they are available, but will also utilize non-native eucalyptus species if other optimal habitat conditions are met. During breeding season in the late spring and summer, female monarch butterflies will lay their eggs on the underside of young leaves or flower buds of milkweeds, caterpillars then hatch within 3-5 days and begin to feed on milkweed leaves that provide energy and protective toxic compounds that protect

the caterpillars from predation. Within a month, the caterpillars will grow, produce a chrysalis, and emerge as fully formed adult butterflies.

While no milkweed has been recorded on-site as confirmed through protocol-level rare plant surveys, the project site is bounded by dense stands of eucalyptus trees, potentially suitable for overwintering monarchs. Overwintering colonies have been documented on Mare Island, approximately 7 miles to the south. For these reasons, the presence of overwintering monarchs within disturbance distance cannot be ruled out.

5.4 - State or Federally Protected Waters and Wetlands

There are four wetlands features present within the project site as shown on Exhibit 5 and in Appendix D.2.[34] The USACE issued a PJD on August 30, 2023 which includes 0.023-acre of seasonal wetlands and 0.042-acre of linear wetlands mapped within the project site. These wetlands have surface hydrologic connectivity to North Slough, which flows to the Napa River. The Napa River is a traditional navigable water. Consequently, the seasonal wetlands identified within the project site would likely be subject to USACE and RWQCB jurisdiction.

5.5 - Wildlife Movement Corridors and Nursery Sites

Field surveys and a query of CDFW's BIOS6 information on wildlife linkages in the Bay Area confirm the that the proposed project will not interfere with the movement of native wildlife. The project site and adjacent areas are not identified by CDFW (The Critical Linkages: Bay Area and Beyond project; BIOS 6)[35] as lands essential to maintain or restore functional connectivity among wildlands for all species or ecological processes of interest in the California Bay Area and as a vital adaptation strategy to conserve biodiversity during climate change.

The project site has a history of disturbance associated with eucalyptus tree removal in 2012, and continued disturbance associated with the paintball facility located immediately to the southeast. Additionally, construction of the SDG Commerce 330 Distribution Center to the south recently occurred and construction of the SDG Commerce 217 site to the north is currently underway.

Wildlife may utilize the off-site eucalyptus grove and aquatic habitats (e.g., North Slough and Napa River) to the west for dispersal; however, the proposed project would not encroach into the off-site eucalyptus grove or aquatic habitats.

Wildlife nursery sites include nesting birds and maternity bat roosts, aquatic breeding habitat, and special-status and non-special-status wildlife breeding or nesting colonies. No significant breeding/nesting colonies were observed during the wildlife surveys. However, individual nesting birds and roosting bats have the potential of being present on-site and within disturbance distance seasonally.

[34] Monk & Associates (M&A). 2023. Request for Reverification of Jurisdictional Determination and a PJD SDG Commerce 220 Project Site; USACE File Number: 2011-00322N American Canyon, California. May 31, 2023.

[35] California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 6): The Critical Linkages: Bay Area & Beyond project. Website: https://map.dfg.ca.gov/bios/. Accessed August 21, 2023.

SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on sensitive biological resources, including special-status species, and recommends mitigation measures to avoid and/or mitigate impacts to a less than significant level under CEQA Guidelines.

6.1 - Impact Analysis for Sensitive Natural Communities

Seasonal wetland communities are typically considered sensitive under CEQA. The wetland features on-site would be avoided by the proposed project through the implementation of 25-foot buffers (Exhibit 7). No other sensitive communities occur on-site. Therefore, no impacts on sensitive natural communities would occur.

6.2 - Impact Analysis for Special-status Species

The following section analyzes potential project-related impacts on special-status species potentially occurring on or within disturbance distance of the proposed project.

6.2.1 - Impact Analysis for Special-status Wildlife Species

Swainson's Hawk

Potentially suitable Swainson's hawk nesting trees are located adjacent to the project site. If a Swainson's hawk nest is active near the project site during construction, the proposed project could cause indirect harm to the species through the noise, light and other man-made disturbances resulting from project construction, which may result in this species abandoning its nests.

No Swainson hawks or nests were observed during the 18 field surveys conducted by FCS and Pinecrest in 2023. Out of an abundance of caution, FCS proposes that the project applicant implement the following mitigation measures (MM BIO-1a through MM BIO-1b) to avoid indirect impacts on Swainson's hawk nesting habitat and to establish adequate nest protection zones to conform with CDFW Guidelines:[36]

MM BIO-1a Pre-construction Surveys for Swainson's Hawk

Prior to ground disturbance that occurs during the nesting season for Swainson's hawk (generally March 20 to July 20), a qualified Biologist shall conduct Swainson's hawk nesting surveys within a 0.5-mile radius of the project site to determine whether nests are occupied. Occupancy shall be determined through observation of all accessible areas, including from public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) on and near the project site.

[36] California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee. Sacramento, California. May 31, 2000.

The qualified Biologist shall follow the survey protocol outlined in CDFW's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, which recommends surveys according to the following survey periods:

I. **January–March 20:** Conduct one survey total.
II. **March 20–April 5:** Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset.
III. **April 5–April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset.
IV. **April 21–June 10:** Initiating surveys are not recommended. Monitoring of known nest sites only.
V. **June 10–July 30:** (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset.

Pre-construction surveys shall be completed for at least the two survey periods immediately prior to a project's initiation.[37]

MM BIO-1b Swainson's Hawk Avoidance and Minimization and Construction Monitoring

If nests are located and determined to be occupied, minimization measures must be implemented, and construction monitoring conducted as follows:

1. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson's hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment.
2. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern.
3. No tree containing an active Swainson's hawk nest shall be removed.

Western Burrowing owl

No western burrowing owls have been observed on the project site during the 18 field surveys conducted by FCS and Pinecrest in 2023. Additionally, no suitable burrows or ground squirrels were observed on-site during the surveys. Therefore, the likelihood of presence on the project site is considered to be low. Since the western burrowing owl is a mobile species that could move onto the project site prior to development, pre-construction surveys are recommended out of an abundance of caution. If burrowing owl are present on-site before grading, the proposed project may result in impacts to the western burrowing owl, considered a potentially significant impact pursuant to CEQA.

[37] California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee. Sacramento, California. May 31, 2000.

However, MM BIO-2 is designed to detect, avoid, and passively relocate owls, and therefore, any potential significant impacts on this species would be reduced to less than significant.

MM BIO-2 Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found)

A qualified Biologist shall conduct a habitat assessment for wintering burrowing owl, and surveys if habitat is present. The qualified Biologist shall follow the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation habitat assessment and survey methodology prior to project activities occurring during the burrowing owl wintering season from September 1 to January 31. The habitat assessment and surveys shall encompass a sufficient buffer zone to detect owls nearby that may be impacted, which shall be a minimum of 1,640 feet unless otherwise approved in writing by the CDFW. Surveys shall include four nonbreeding season surveys spread evenly throughout the nonbreeding season pursuant to the CDFW 2012 Staff Report. Time lapses between surveys or project activities shall trigger subsequent surveys, as determined by a qualified Biologist, including but not limited to a final survey within 24 hours prior to ground disturbance and before construction equipment mobilizes to the project area. The qualified Biologist shall have a minimum of 2 years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections.

Detected burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan shall be subject to CDFW review. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a "take" avoidance, minimization, or mitigation measure; therefore, off-site habitat compensation shall be included in the eviction plan. Habitat compensation acreages shall be approved by CDFW, as the amount depends on-site-specific conditions, and must be completed before project construction unless otherwise approved in writing by CDFW. Habitat compensation shall also include placement of a conservation easement and preparation and implementation of a long-term management plan prior to project construction.

Other Protected Nesting Birds (including northern harrier, golden eagle, white-tailed kite and others)

The adjacent areas of the project site provide suitable nesting habitat for a variety of species of nesting birds, including potentially for special-status bird species including northern harrier, golden eagle, white-tailed kite, and others. Disturbed grassland and barren areas provide potential nesting opportunities for ground nesting birds. Construction activities that occur during the avian nesting season (generally February 1 to August 31) could disturb protected nesting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting season could result in direct harm to nesting birds, while noise, light, and other

construction-related disturbances may cause nesting birds adjacent to the vegetation removal areas to abandon their nests.

No active raptor nests were observed within the project site during the 2023 field surveys conducted by FCS and Pinecrest; however white-tail kite individuals were observed foraging over project site. Additionally, a juvenile, red-shouldered hawk was observed perched off-site within a large eucalyptus tree to the north of the SDG Commerce 217 site. Although no active nests have been observed on-site, it cannot be ruled out that avian species may nest within disturbance distance of the project site. With implementation of MM BIO-3, requiring pre-construction nesting bird surveys and avoidance of direct and indirect impacts on nests, potential project-related impacts on protected bird nests can be reduced to a less than significant level under CEQA.

MM BIO-3 Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

1. If the proposed project requires vegetation to be removed during the nesting season (February 1 to August 31), pre-construction surveys shall be conducted no more than 7 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present.
2. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).
3. The qualified Biologist shall monitor the active nest during construction activities and modify the protection zone accordingly to prevent project-related nest disturbance, until the young have fledged.

Roosting Bats (including Pallid Bat)

The project site is adjacent to trees that could provide suitable bat roosting habitat, including for special-status bats such as pallid bat. Potential indirect impacts could occur to roosting bats due to the proximity to disturbance distance during project construction. These activities could potentially subject bats to risk of injury or disturbance, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual bats by displacing them into adjacent territories belonging to other individuals.

With implementation of MM BIO-4, requiring pre-construction roosting bat surveys and avoidance of indirect impacts on active bat roosts, potential project-related impacts on protected roosting bats can be reduced to a less than significant level under CEQA.

MM BIO-4 Roosting Bat Pre-construction Survey and Avoidance

A qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) within 250 feet of project construction activities (where accessible).

If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Grading shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

Western Pond Turtle

No western pond turtles or nests were observed during the 2023 surveys conducted by FCS and Pinecrest. While the site appears to be unlikely to support western pond turtle, it cannot be ruled out entirely that a vagrant western pond turtle may be present on-site under unlikely circumstances before start of construction and could potentially be impacted by the project. Impacts to western pond turtle from the proposed project are considered potentially significant. MM BIO-5 would reduce this impact to a less than significant level through avoidance and minimization measures outlined below.

MM BIO-5 Protection of Western Pond Turtles

A qualified Biologist (i.e., a Biologist with at least 2 years of experience conducting surveys for western pond turtle detections) shall submit a wildlife exclusion fencing plan to the California Department of Fish and Wildlife (CDFW) for review and approval prior to starting construction. Exclusion fencing shall be installed along the western perimeter of the project site to prevent the species from traveling from North Slough onto the project site during construction. A qualified Biologist shall survey the project site and adjacent habitat within 72 hours of the start of project activities to determine whether western pond turtle or their nests are present and guide the installation of the exclusion fence. If western pond turtles are discovered,

a qualified Biologist with experience handling and relocating the species shall move the species to the nearest suitable habitat outside of the project area and exclusion fencing. If western pond turtle nests are found, CDFW shall be notified prior to starting project activities, and the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fence until eggs hatch and young turtles disperse to the adjacent North Slough. In addition, if nest(s) are located during surveys, moth balls (naphthalene) shall be sprinkled around the vicinity of the nest (no closer than 5 feet) to mask human scent and discourage predators. Grading within the nest site's 50-foot buffer area shall be delayed until the young leave the nest as determined by a qualified Biologist. If the CDFW allows translocation of any nestling pond turtles this shall be completed by a qualified Biologist under the direction of the CDFW.

Monarch Butterfly

There is a potential for monarch overwintering in the eucalyptus woodland adjacent to the site. Construction activities, including dust, noise, and vibration adjacent to overwintering colonies could result in loss of overwintering monarch butterflies. Therefore, MM BIO-6 which includes a pre-construction survey and, if found, avoidance in coordination with USFWS and CDFW are recommended to reduce any potential impacts on monarch butterfly to less than significant.

MM BIO-6 Protection of Overwintering Monarch Butterfly

Activities such as vegetation removal, grading, or initial ground-disturbing activities shall be conducted between November 1 and July 31 (outside of the overwintering season) to the extent feasible. If such activities must be initiated during the overwintering season (August 1 through October 31), a pre-construction overwintering survey shall be conducted by a qualified Biologist no more than 7 days prior to vegetation removal, grading, or initial ground disturbance. The survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any colonies that could potentially be affected either directly or indirectly by project activities. If no colonies are present, then project activities can commence as scheduled. If a colony is present, project construction shall cease immediately to avoid all direct and indirect impacts and report the presence of the colony to the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and follow all recommendations provided by USFWS and CDFW.

6.3 - Impact Analysis for Wildlife Nursery Sites and Wildlife Movement Corridors

The site does not function as a critical wildlife movement corridor, as discussed in Sections 4.4 and 5.5 above. This result is consistent with M&A's March 2020 BRA (Appendix D.1). Certain common wildlife may move within or cross the site; however, it does not function to connect valuable habitats together, but rather it currently funnels wildlife east into a pocket of land generally surrounded with dense developments, including State Route (SR) 29 to the east, commercial and industrial areas to

the north, and dense residential subdivision to the south, potentially constituting a population sink. Therefore, potential project-related impacts on wildlife movement are less than significant.

No substantial wildlife nursery sites, including breeding or nesting colonies, breeding ponds, or dens are present on-site. However, individual nesting birds and roosting bats have the potential of being present within disturbance distances seasonally. Potential impacts to individual nesting birds and roosting bats are addressed through the implementation of MM BIO-1 through MM BIO-4. As such, impacts to nursery sites would be less than significant.

6.4 - Impact Analysis for State and Federally Protected Waters and Wetlands

The proposed project would avoid all impacts on potential jurisdictional wetland features through the implementation of a wetland buffer avoidance area (Exhibit 7). Additionally, the proposed project would be required to comply with applicable laws and regulations related to jurisdictional waters and wetlands (see Regulatory Background section). These generally applicable laws and regulations are designed to avoid any net loss of area and function, reducing any potential indirect or residual impacts to less than significant under CEQA.

6.5- Protected Trees

The proposed project would not remove any trees as there are no trees located within the project site. Therefore, the proposed project would not remove any City protected trees and no conflicts would occur.

6.6- Conflict with Habitat Conservation Plans

No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan is applicable to the project site. Therefore, the proposed project would not conflict with the provisions of such a document.

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Source: Bing Aerial Imagery. Monk & Associates Environmental Consultants, 08/2023.

FIRSTCARBON SOLUTIONS™

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Exhibit 7
Biological Impacts

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Appendix A:
Site Photographs

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Photograph 1: 4.3.1–Non-native annual grassland facing west



Photograph 2: Eucalyptus saplings next to seasonal wetlands facing north



Photograph 3: Eucalyptus grove on the western periphery of the project site facing north.



Photograph 4: Grading within the project site and sectioned off seasonal wetland facing west.



Photograph 5: Grading throughout the south of the project site facing west.

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Appendix B:
Special-status Species Tables

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Table 1: Special-status Plant Species Habitat Value Evaluation

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Agrostis hendersonii Henderson's bent grass	—	—	3.2	Valley and foothill grassland, vernal pools. Moist places in grassland or vernal pool habitat. Elevation: 65-1030 m. Blooming Period: April-June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Allium peninsulare var. franciscanum Franciscan onion	—	—	1B.2	Cismontane woodland, valley, and foothill grassland. Clay soils; often on serpentine; sometimes on volcanics. Dry hillsides. Elevation: 5-320 m. Blooming Period: May-June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Amorpha californica var. napensis Napa false indigo	—	—	1B.2	Dicot, perennial shrub found in broadleaf upland forest or chaparral openings Elevation: 30–590 m. Blooming period: April–July.	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Astragalus tener var. tener alkali milk-vetch	—	—	1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. Elevation: 0-170 m Blooming Period: May-July	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Balsamorhiza macrolepis big-scale balsamroot	—	—	1B.2	Chaparral, cismontane woodland and valley and foothill grassland. Sometimes occurs in serpentinite soils. Elevation: 45-1555 m. Blooming period: March-June.	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Blennosperma bakeri Sonoma sunshine	FE	SE	1B.1	Vernal pools, wet grasslands and swales. Elevation: 10-290 m. Blooming Period: March-May	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Blepharizonia plumosa big tarplant	—	—	1B.1	Valley and foothill grassland. Dry hills & plains in annual grassland. Clay to clay-loam soils; usually on slopes and often in burned areas. Elevation: 60-505 m. Blooming Period: July-October	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Brodiaea leptandra narrow-anthered brodiaea	—	—	1B.2	Monocot perennial herb found in open mixed-evergreen forest, chaparral, and gravelly soils. Elevation: 70–610 m. Blooming period: May–July.	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Calochortus pulchellus Mt. Diablo fairy-lantern	—	—	1B.2	Chaparral, cismontane woodland, riparian woodland, valley, and foothill grassland. Elevation: 30–840 m. Blooming period: April–June.	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Carex lyngbyei Lyngbye's sedge	—	—	2B.2	Marshes and swamps (brackish or freshwater). Elevation: 0–200 m. Blooming period: April–August	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Castilleja affinis var. neglecta Tiburon paintbrush	FE	ST	1B.2	Valley and foothill grassland. Rocky serpentine sites. Elevation: 120–400 m. Blooming period: April–June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Ceanothus confusus Rincon Ridge ceanothus	—	—	1B.1	Volcanic slopes, chaparral, pine/oak woodland. Elevation: 75–1100 m. Blooming period: February–April	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Ceanothus purpureus holly-leaved ceanothus	—	—	1B.2	Chaparral, cismontane woodland on volcanic substrates or slopes. Elevation: 140–720 m. Blooming period: February–April	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Ceanothus sonomensis Sonoma ceanothus	—	—	1B.2	Chaparral, serpentine or volcanic substrates. Elevation: 140–795 m. Blooming period: March–April	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Centromadia parryi ssp. congdonii Congdon's tarplant	—	—	1B.1	Valley and foothill grassland. Alkaline soils sometimes described as heavy white clay. Elevation: 0–230 m. Blooming Period: March–October	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Centromadia parryi ssp. parryi pappose tarplant	—	—	1B.2	Chaparral, coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland. Vernally mesic, often alkaline sites. Elevation: 1-500 m. Blooming period: March–November	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Chloropyron molle ssp. molle soft salty bird's-beak	FE	CR	1B.2	Coastal salt marsh. In coastal salt marsh with Distichlis, Salicornia, Frankenia, etc. Elevation: 0-5 m. Blooming Period: July-November	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Cicuta maculata var. bolanderi Bolander's water-hemlock	—	—	2B.1	Marshes and swamps. In fresh or brackish water. Elevation: 0-20 m. Blooming Period: July-September	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Dirca occidentalis western leatherwood	—	—	1B.2	Broadleafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, north coast coniferous forest, riparian forest, riparian woodland. On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. Elevation: 20–640 m. Blooming Period: November–March	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Downingia pusilla dwarf downingia	—	—	2B.2	Valley and foothill grassland (mesic sites), vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. Elevation: 1-490 m. Blooming period: March-May	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Erigeron greenei Greene's narrow-leaved daisy	—	—	1B.2	Perennial herb found in chaparral (serpentinite or volcanic) Elevation: 80 –1005 m Blooming period: May–September	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Eryngium jepsonii Jepson's coyote-thistle	—	—	1B.2	Vernal pools, valley and foothill grassland. In clay substrate. Elevation: 3–305 m. Blooming Period: May–June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Extriplex joaquinana San Joaquin spearscale	—	—	1B.2	Chenopod scrub, meadows and seeps, Playas, Valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with Distichlis spicata, Frankenia, etc. Elevation: 0–800 m. Blooming Period: April–September	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Fritillaria liliacea fragrant fritillary	—	—	1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, and cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. Elevation: 3–385 m. Blooming Period: February–April	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Helianthella castanea Diablo helianthella	—	—	1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Usually in chaparral/oak woodland interface in rocky, azonal soils. Often in partial shade. Elevation: 45-1070 m. Blooming Period: April–September	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	—	—	1B.2	Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. Elevation: 5-520 m. Bloom period: April-November	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Hesperolinon breweri Brewer's western flax	—	—	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Often in rocky serpentine soil in serpentine chaparral and serpentine grassland. Elevation: 195-910 m. Blooming Period: May-July	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Holocarpha macradenia Santa Cruz tarplant	FT	CE	1B.1	Coastal prairie, coastal scrub, valley and foothill grassland. Light, sandy soil or sandy clay; often with nonnatives. Elevation: 10-275 m. Blooming Period: June–October	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Horkelia tenuiloba thin-lobed horkelia	—	—	1B.2	Broad-leafed upland forest, chaparral, valley and foothill grassland with sandy soils. Often found in mesic habitats. Elevation: 45-640 m. Blooming period: May–July (August)	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Isocoma arguta Carquinez goldenbush	—	—	1B.1	Valley and foothill grassland. Alkaline soils, flats, lower hills. On low benches near drainages and on tops and sides of mounds in swale habitat. Elevation: 1-50 m Blooming Period: April–December	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Lasthenia conjugens Contra Costa goldfields	FE	—	1B.1	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland, swales, low depressions, in open grassy areas. Elevation: 1–450 m. Blooming Period: March–June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Lathyrus jepsonii var. jepsonii Delta tule pea	—	—	1B.2	Marshes and swamps. In freshwater and brackish marshes. Often found with Typha, Aster lentus, Rosa californica, Juncus spp., Scirpus, etc. Usually on marsh and slough edges. Elevation: 0–5 m. Blooming Period: May–July	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Legenere limosa legenere	—	—	1B.1	Vernal pools and in beds of vernal pools. Elevation: 1–1005 m. Blooming Period: April–June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Leptosiphon jepsonii Jepson's leptosiphon	—	—	1B.2	Dicot annual herb found in open to partially shaded grassy slopes. On volcanic soils or the periphery of serpentine substrates. Elevation: 100–570 m. Blooming period: March–May.	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Lilaeopsis masonii Mason's lilaeopsi	—	CR	1B.1	Marshes and swamps, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. In brackish or freshwater. Elevation: 0-10 m Blooming Period: April-November	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Lupinus sericatus Cobb Mountain lupine	—	—	1B.2	Perennial herb found in broadleafed upland forest, chaparral. cismontane woodland, lower montane coniferous forest. Elevation: 275–1525 m Blooming period: March–June.	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Polygonum marinense Marin knotweed	—	—	3.1	Marshes and swamps. Elevation: 0-10 m. Blooming period: May–August	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Rhynchospora californica California beaked-rush	—	—	1B.1	Bogs and fens, open marshes and swamps, lower montane coniferous forest, meadows and freshwater seeps. Elevation: 45-270 m. Blooming period: May–July	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Senecio aphanactis chaparral ragwort	—	—	1B.2	Dicot annual herb found in chaparral, cismontane woodland, and coastal scrub habitat. Prefers drying alkaline flats. Elevation: 15-800m. Blooming period: January–April.	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Sidalcea hickmanii ssp. napensis Napa checkerbloom	—	—	1B.1	Chamise chaparral, rocky volcanic soil. Elevation: 400-600 m. Blooming period: April-June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Spergularia macrotheca var. longistyla long-styled sand-spurrey	—	—	1B.2	Marshes and swamps, meadows and seeps. Alkaline. Elevation: 0-220 m. Blooming Period: February–May	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Symphyotrichum lentum Suisun Marsh aster	—	—	1B.2	Marshes and swamps (brackish and freshwater). Most often seen along sloughs with Phragmites, Scirpus, blackberry, Typha, etc. Elevation: 0-15 m. Blooming Period: May–November	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Trichostema ruygtii Napa bluecurls	—	—	1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools. Often in sunny, open areas Elevation: 30-600m. Blooming period: June–October	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Trifolium amoenum two-fork clover	FE	—	1B.1	Coastal bluff scrub, valley and foothill grassland (sometimes serpentinite). Elevation: 5-415 m. Blooming period: April–June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Trifolium hydrophilum saline clover	—	—	1B.2	Marshes and swamps, valley and foothill grassland in mesic or alkaline soils, and vernal pools. Elevation: 0-300 m. Blooming period: April–June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
Viburnum ellipticum oval-leaved viburnum	—	—	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation: 215-1400 m. Blooming Period: May–June	**Absent:** The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description[4]	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		

Code Designations

[1] Federal Status: 2023 Endangered Species Act (ESA) Listing	[2] State Status: 2023 California Endangered Species Act (CESA) Listing	[3] California Rare Plant Rank (CRPR): 2023 CRPR Listing
ESU = Evolutionary Significant Unit is a distinctive population. **FE** = Listed as endangered under the Endangered Species Act. **FT** = Listed as threatened under the Endangered Species Act. **FC** = Candidate for listing (threatened or endangered) under the Endangered Species Act. **FD** = Delisted in accordance with the Endangered Species Act. **FPD** = Federally Proposed to be Delisted. **MBTA** = Protected by the Migratory Bird Treaty Act **—** = Not federally listed	**SE** = Listed as endangered under the California Endangered Species Act. **ST** = Listed as threatened under the CESA. **SSC** = Species of Special Concern as identified by the CDFW. **FP** = Listed as fully protected under FGC. **CFG** = FGC =protected by FGC 3503.5 **CR** = Rare in California. **—** = Not state listed	**Rank 1A** = Plants species that presumed extinct in California. **Rank 1B** = Plant species that are rare, threatened, or endangered in California and elsewhere. **Rank 2** = Plant species that are rare, threatened, or endangered in California, but more common elsewhere. **Rank 3** = Plants about which we need more information—A Review List **Rank 4** = Plants of limited distribution—A Watch List **Blooming period:** Months in parentheses are uncommon.

Notes:

[4] **Habitat Description**: Habitat description adapted from CNDDB and CNPS online inventory or other specified source.

[5] **Potential to Occur and Rationale**: Location of recorded species occurrences determined by geospatial information from BIOS 6 or other specified source.

Sources:

California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 18, 2023.
California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed July 18, 2023.
California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed July 18, 2023.

Table 2: Special-status Wildlife Species Habitat Value Evaluation

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale[4]
	ESA[1]	CESA/FGC[2]		
Amphibians				
Dicamptodon ensatus California giant salamander	—	SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	**Absent: T**he project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Rana boylii pop. 1 foothill yellow-legged frog-north coast DPS	—	SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Rana draytonii California red-legged frog	FT	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development	**Absent**. The project site is adjacent to mapped critical habitat for this species, but the project site is significantly developed, and the site and surrounding area does not provide suitable habitat. Absence confirmed through surveys in 2023.
Taricha rivularis red-bellied newt	—	SSC	Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Birds				
Agelaius tricolor Tricolored blackbird	—	ST SSC	Breeds near fresh water in dense emergent vegetation.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale[4]
	ESA[1]	CESA/FGC[2]		
Aquila chrysaetos Golden eagle	—	FP	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert	**Low:** The species has been recorded 4.5 miles southeast of the project site and the site is adjacent to marginal nesting habitat for the species. This species was not observed during the 2023 surveys.
Athene cunicularia Burrowing owl	—	SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Low**. The species has been recorded 2.7 miles north of the project site and the site provides marginal habitat for the species. This species was not observed during the 2023 surveys.
Buteo swainsoni Swainson's hawk	—	ST	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	**Low**. Land adjacent to the project site provides suitable nesting habitat. The closest known record of the species is 1.5 miles north of the project site. This species was not observed during the 2023 surveys.
Charadrius nivosus nivosus western snowy plover	FT	SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Circus hudsonius northern harrier	—	SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	**Low**. The species has been recorded 1.8 miles west of the project site and the site provides marginal nesting habitat for the species. This species was not observed during the 2023 surveys.
Coturnicops noveboracensis yellow rail	—	SSC	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass, and rice fields.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Cypseloides niger black swift	—	SSC	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale[4]
	ESA[1]	CESA/FGC[2]		
Elanus leucurus white-tailed kite	—	FP	Grasslands and open coastal scrub in coastal and valley lowlands; rarely found away from agricultural areas. Inhabits herbaceous, open stages of most habitats mostly in cismontane California.	**Low:** The species has been recorded 5.3 miles north of the project site and the site provides marginal nesting habitat for the species. Individuals were observed foraging over the project site in 2023.
Falco peregrinus anatum American peregrine falcon	FD	FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Geothlypis trichas sinuosa saltmarsh common yellowthroat	—	SSC	Resident of the San Francisco Bay region, in fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Laterallus jamaicensis coturniculus California black rail	—	FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	**Absent: T**he project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Melospiza melodia maxillaris Suisun song sparrow	—	SSC	Resident of brackish-water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and Salicornia; also known to frequent tangles bordering sloughs.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Melospiza melodia samuelis San Pablo song sparrow	—	SSC	Resident of salt marshes along the north side of San Francisco and San Pablo bays. Inhabits tidal sloughs in the Salicornia marshes; nests in Grindelia bordering slough channels.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Rallus obsoletus obsoletus California Ridgway's rail	FE	FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale[4]
	ESA[1]	CESA/FGC[2]		
Riparia riparia bank swallow	—	ST	Nests in riparian scrub and riparian woodland. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Xanthocephalus xanthocephalus yellow-headed blackbird	—	SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Fish				
Acipenser medirostris pop. 1 green sturgeon-southern DPS	FT	—	Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.	**Absent:** The project site does not contain habitat suitable for this species.
Hypomesus transpacificus Delta smelt	FT	—	Aquatic and estuary habitats. Populations in the Sacramento-San Joaquin Delta.	**Absent:** The project site does not contain habitat suitable for this species.
Oncorhynchus mykiss irideus pop. 11 steelhead-Central Valley DPS	FT	—	Populations in the Sacramento and San Joaquin rivers and their tributaries.	**Absent: T**he project site does not contain habitat suitable for this species.
Pogonichthys macrolepidotus Sacramento splittail	—	SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	**Absent:** The project site does not contain habitat suitable for this species.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale[4]
	ESA[1]	CESA/FGC[2]		
Spirinchus thaleichthys longfin smelt	FC	—	Longfin smelt spend their adult life in bays, estuaries, and nearshore coastal areas, and migrate into freshwater rivers to spawn. Spawning occurs primarily from January through March, after which most adults die.	**Absent:** The project site does not contain habitat suitable for this species.
Thaleichthys pacificus eulachon	FT	—	Found in Klamath River, Mad River, Redwood Creek, and in small numbers in Smith River and Humboldt Bay tributaries. Spawn in lower reaches of coastal rivers with moderate water velocities and bottom of pea-sized gravel, sand, and woody debris.	**Absent:** The project site does not contain habitat suitable for this species.
Invertebrates				
Branchinecta lynchi vernal pool fairy shrimp	FT	—	Small vernal pools with cool water (10ºC), moderate alkalinity and conductivity, and less than 1 m deep.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Bombus crotchii *Crotch bumble bee*	—	SC	This species occurs primarily in California, including coastal habitats, western Mojave Desert, San Joaquin Valley, and adjacent foothills through most of southwestern California. It inhabits arid grasslands and shrublands, and its food sources including milkweeds, pincushions, lupines, clovers, phacelias, sages, clarkias, poppies, and buckwheats.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Bombus occidentalis western bumble bee	—	SC	Formerly found in large parts of California but has been reduced in abundance and is now mostly restricted to high meadows or coastal environments. Species requires floral resources, and undisturbed nest and overwintering sites	**Absent:** Historic records from 1962 of this species were found 7 miles away from the project site, but no recent recorded occurrence exists. The site is site is heavily disturbed from years of anthropogenic disturbances. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale[4]
	ESA[1]	CESA/FGC[2]		
Danaus plexippus Monarch Butterfly	—	—	Occurs in temperate climates, such as eastern and western North America and undergoes long-distance migration. Lays eggs on obligate milkweed host plant (primarily Asclepias spp.). Inhabits a variety of open habitats including fields, meadows, weedy areas, marshes, and roadsides. Adults feed on variety of flowers including dogbane, lilac, red clover, lantana, thistles, goldenrods, blazing stars, ironweed, and tickseed sunflower.	**Low:** The species has been recorded 7 miles south of the project site. The site is adjacent to eucalyptus groves which provides marginal overwintering habitat for the species. This species was not observed during the 2023 surveys.
Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT	—	Occurs only in the Central Valley of California, in association with blue elderberry (Sambucus mexicana). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries. Common in riparian scrub.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Speyeria callippe callippe callippe silverspot butterfly	FE	—	Restricted to the northern coastal scrub of the San Francisco peninsula. Hostplant is *Viola pedunculata*. Most adults found on east facing slopes; males congregate on hilltops in search of females.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Syncaris pacifica California freshwater shrimp	FE	—	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main streamflow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Mammals				
Antrozous pallidus Pallid bat	—	SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures and include trees and buildings. Species is very sensitive to disturbance of roosting sites.	**Low:** The project site is adjacent to a eucalyptus grove that has potential roosting habitat for this species. Record of this species was found 5.2 miles northwest of the project site. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale[4]
	ESA[1]	CESA/FGC[2]		
Microtus californicus sanpabloensis San Pablo vole	—	SSC	Saltmarshes of San Pablo Creek, on the south shore of San Pablo Bay. Constructs burrow in soft soil. Feeds on grasses, sedges and herbs. Forms a network of runways leading from the burrow.	**Absent: T**he project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Nyctinomops macrotis big free-tailed bat	—	SSC	Migrant bats using elevations from 0-2600 meters. Roosts in rock crevices cliffs as well as in buildings, caves, and tree cavities	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Reithrodontomys raviventris salt-marsh harvest mouse	—	FP	Only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat but may occur in other marsh vegetation types and in adjacent upland areas. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Sorex ornatus sinuosus Suisun shrew	—	SSC	Tidal marshes of the northern shores of San Pablo and Suisun bays. Require dense low-lying cover and driftweed and other litter above the mean hightide line for nesting and foraging.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Sorex vagrans halicoetes salt-marsh wandering shrew	—	SSC	Salt marshes of the southern portion of the San Francisco Bay. Marsh, wetland, or swamps with Salicornia and abundant driftwood	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Taxidea taxus American badger	—	SSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils, specifically grassland environments. Natal dens occur on slopes.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Reptiles				
Emys marmorata western pond turtle	—	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	**Low:** The species has been recorded 0.4 miles northeast of the project site. Adjacent aquatic habitat west of the site provides marginal habitat for this species. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale[4]
	ESA[1]	CESA/FGC[2]		
Masticophis lateralis euryxanthus Alameda whipsnake	FT	—	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna and woodland habitats. Specifically, mostly south-facing slopes and ravines, with rock outcrops, deep crevices or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses.	**Absent:** The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.

Code Designations

[1] Federal Status: 2023 Endangered Species Act (ESA) Listing		[2] State Status: 2023 California Endangered Species Act (CESA) Listing	
ESU	= Evolutionary Significant Unit is a distinctive population.	**SE**	= Listed as endangered under CESA.
FE	= Listed as endangered under the Endangered Species Act.	**ST**	= Listed as threatened under CESA.
FT	= Listed as threatened under the Endangered Species Act.	**SSC**	= Species of Special Concern as identified by the CDFW.
FC	= Candidate for listing (threatened or endangered) under the Endangered Species Act.	**FP**	= Listed as fully protected under the Fish and Game Code.
FD	= Delisted in accordance with the Endangered Species Act.	**CFG**	= FGC = protected by Fish and Game Code 3503.5
FPD	= Federally Proposed to be Delisted.	**CR**	= Rare in California.
MBTA	= protected by the Migratory Bird Treaty Act	**—**	= Not State-listed
—	= Not federally listed		

Notes:
[3] **Habitat Description**: Habitat description adapted from CNDDB or other specified source.
[4] **Potential to Occur and Rationale**: Location of recorded species occurrences determined by geospatial information from BIOS 6 or other specified source.
Sources:
California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed July 18, 2023.
California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed July 18, 2023

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Appendix C: Database Searches

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Cuttings Wharf (3812223) OR Napa (3812233) OR Mt. George (3812232) OR Sonoma (3812234) OR Sears Point (3812224) OR Cordelia (3812222) OR Petaluma Point (3812214) OR Mare Island (3812213) OR Benicia (3812212))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Acipenser medirostris pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	
Adela oplerella Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Agrostis hendersonii Henderson's bent grass	PMPOA040K0	None	None	G2Q	S2	3.2
Allium peninsulare var. franciscanum Franciscan onion	PMLIL021R1	None	None	G4G5T2	S2	1B.2
Amorpha californica var. napensis Napa false indigo	PDFAB08012	None	None	G4T2	S2	1B.2
Andrena blennospermatis Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S1	
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Balsamorhiza macrolepis big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
Blennosperma bakeri Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
Blepharizonia plumosa big tarplant	PDAST1C011	None	None	G1G2	S1S2	1B.1
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Brodiaea leptandra narrow-anthered brodiaea	PMLIL0C022	None	None	G3?	S3?	1B.2
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Calasellus californicus An isopod	ICMAL34010	None	None	G2	S3	
Calochortus pulchellus Mt. Diablo fairy-lantern	PMLIL0D160	None	None	G2	S2	1B.2
Carex lyngbyei Lyngbye's sedge	PMCYP037Y0	None	None	G5	S3	2B.2
Castilleja affinis var. neglecta Tiburon paintbrush	PDSCR0D013	Endangered	Threatened	G4G5T1T2	S1S2	1B.2
Ceanothus confusus Rincon Ridge ceanothus	PDRHA04220	None	None	G1	S1	1B.1
Ceanothus purpureus holly-leaved ceanothus	PDRHA04160	None	None	G2	S2	1B.2
Ceanothus sonomensis Sonoma ceanothus	PDRHA04420	None	None	G2	S2	1B.2
Centromadia parryi ssp. congdonii Congdon's tarplant	PDAST4R0P1	None	None	G3T2	S2	1B.1
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
Chloropyron molle ssp. molle soft salty bird's-beak	PDSCR0J0D2	Endangered	Rare	G2T1	S1	1B.2
Cicuta maculata var. bolanderi Bolander's water-hemlock	PDAPI0M051	None	None	G5T4T5	S2?	2B.1
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC
Coastal Brackish Marsh Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Cypseloides niger black swift	ABNUA01010	None	None	G4	S3	SSC
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Dicamptodon ensatus California giant salamander	AAAAH01020	None	None	G2G3	S2S3	SSC
Dirca occidentalis western leatherwood	PDTHY03010	None	None	G2	S2	1B.2
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erigeron greenei Greene's narrow-leaved daisy	PDAST3M5G0	None	None	G3	S3	1B.2
Eryngium jepsonii Jepson's coyote-thistle	PDAPI0Z130	None	None	G2	S2	1B.2
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Geothlypis trichas sinuosa saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Helianthella castanea Diablo helianthella	PDAST4M020	None	None	G2	S2	1B.2
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	PDAST4R0W1	None	None	G5T2	S2	1B.2
Hesperolinon breweri Brewer's western flax	PDLIN01030	None	None	G2	S2	1B.2
Horkelia tenuiloba thin-lobed horkelia	PDROS0W0E0	None	None	G2	S2	1B.2
Hydroprogne caspia Caspian tern	ABNNM08020	None	None	G5	S4	
Hypomesus transpacificus Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
Isocoma arguta Carquinez goldenbush	PDAST57050	None	None	G1	S1	1B.1
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Lathyrus jepsonii var. jepsonii Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Leptosiphon jepsonii Jepson's leptosiphon	PDPLM09140	None	None	G2G3	S2S3	1B.2
Lilaeopsis masonii Mason's lilaeopsis	PDAPI19030	None	Rare	G2	S2	1B.1
Lupinus sericatus Cobb Mountain lupine	PDFAB2B3J0	None	None	G2?	S2?	1B.2
Masticophis lateralis euryxanthus Alameda whipsnake	ARADB21031	Threatened	Threatened	G4T2	S2	
Melospiza melodia maxillaris Suisun song sparrow	ABPBXA301K	None	None	G5T3	S2	SSC
Melospiza melodia samuelis San Pablo song sparrow	ABPBXA301W	None	None	G5T2	S2	SSC
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Northern Vernal Pool Northern Vernal Pool	CTT44100CA	None	None	G2	S2.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T3Q	S3	
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	G3	S3	SSC
Polygonum marinense Marin knotweed	PDPGN0L1C0	None	None	G2Q	S2	3.1
Rallus obsoletus obsoletus California Ridgway's rail	ABNME05011	Endangered	Endangered	G3T1	S2	FP
Rana boylii pop. 1 foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	G3T4	S4	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Reithrodontomys raviventris salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S3	FP

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Rhynchospora californica California beaked-rush	PMCYP0N060	None	None	G1	S1	1B.1
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Serpentine Bunchgrass Serpentine Bunchgrass	CTT42130CA	None	None	G2	S2.2	
Sidalcea hickmanii ssp. napensis Napa checkerbloom	PDMAL110A6	None	None	G3T1	S1	1B.1
Sorex ornatus sinuosus Suisun shrew	AMABA01103	None	None	G5T1T2Q	S1S2	SSC
Spergularia macrotheca var. longistyla long-styled sand-spurrey	PDCAR0W062	None	None	G5T2	S2	1B.2
Speyeria callippe callippe callippe silverspot butterfly	IILEPJ6091	Endangered	None	G5T1	S1	
Speyeria zerene sonomensis Sonoma zerene fritillary	IILEPJ6083	None	None	G5T1	S1	
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Syncaris pacifica California freshwater shrimp	ICMAL27010	Endangered	Endangered	G2	S2	
Taricha rivularis red-bellied newt	AAAAF02020	None	None	G2	S2	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Trichostema ruygtii Napa bluecurls	PDLAM220H0	None	None	G1G2	S1S2	1B.2
Trifolium amoenum two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Viburnum ellipticum oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
Xanthocephalus xanthocephalus yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 101

Search Results

6 matches found. Click on scientific name for details

Search Criteria: Fed List is one of [**FE:FT:FC:FD**] **or** State List is one of [**CE:CT:CR:CC:CD**] , 9-Quad include [**3812232:3812222:3812234:3812233:3812212:3812213:3812214:3812223:3812224**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Castilleja affinis var. *neglecta*	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	FE	CT	G4G5T1T2	S1S2	1B.2	Yes	1974-01-01	No Photo Available
Chloropyron molle ssp. *molle*	soft salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Nov	FE	CR	G2T1	S1	1B.2	Yes	1974-01-01	No Photo Available
Lasthenia conjugens	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	 © 2013 Neal Kramer
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	No Photo Available

Showing 1 to 6 of 6 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 3 August 2023].

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Napa County, California



Local offices

San Francisco Bay-Delta Fish And Wildlife

(916) 930-5603
(916) 930-5654

650 Capitol Mall

Suite 8-300
Sacramento, CA 95814

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

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2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Salt Marsh Harvest Mouse Reithrodontomys raviventris Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/613	Endangered

Birds

NAME	STATUS
California Clapper Rail Rallus longirostris obsoletus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4240	Endangered
California Least Tern Sterna antillarum browni Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Northern Spotted Owl Strix occidentalis caurina Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/1123	Threatened
Western Snowy Plover Charadrius nivosus nivosus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened

Reptiles

NAME	STATUS

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NAME	STATUS
Green Sea Turtle Chelonia mydas	Threatened

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6199

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii	Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS
Tidewater Goby Eucyclogobius newberryi	Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/57

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus	Candidate

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Crustaceans

NAME	STATUS
California Freshwater Shrimp Syncaris pacifica	Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7903

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Conservancy Fairy Shrimp Branchinecta conservatio — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8246

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/498

Flowering Plants

NAME	STATUS

Contra Costa Goldfields Lasthenia conjugens — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/7058

Showy Indian Clover Trifolium amoenum — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6459

Soft Bird's-beak Cordylanthus mollis ssp. mollis — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8541

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Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list,click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

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Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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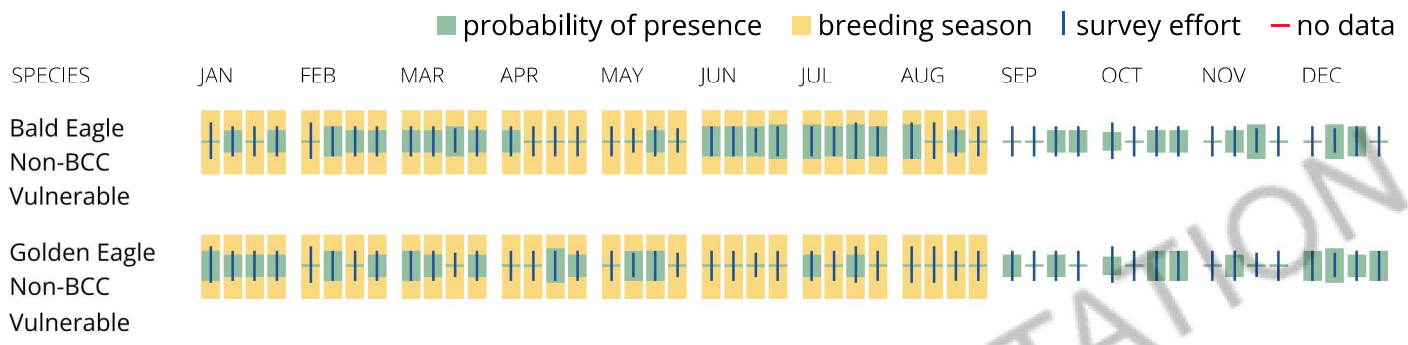
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

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If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Turnstone *Arenaria melanocephala* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31

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Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit Limosa fedoa — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

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Western Grebe aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the

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probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

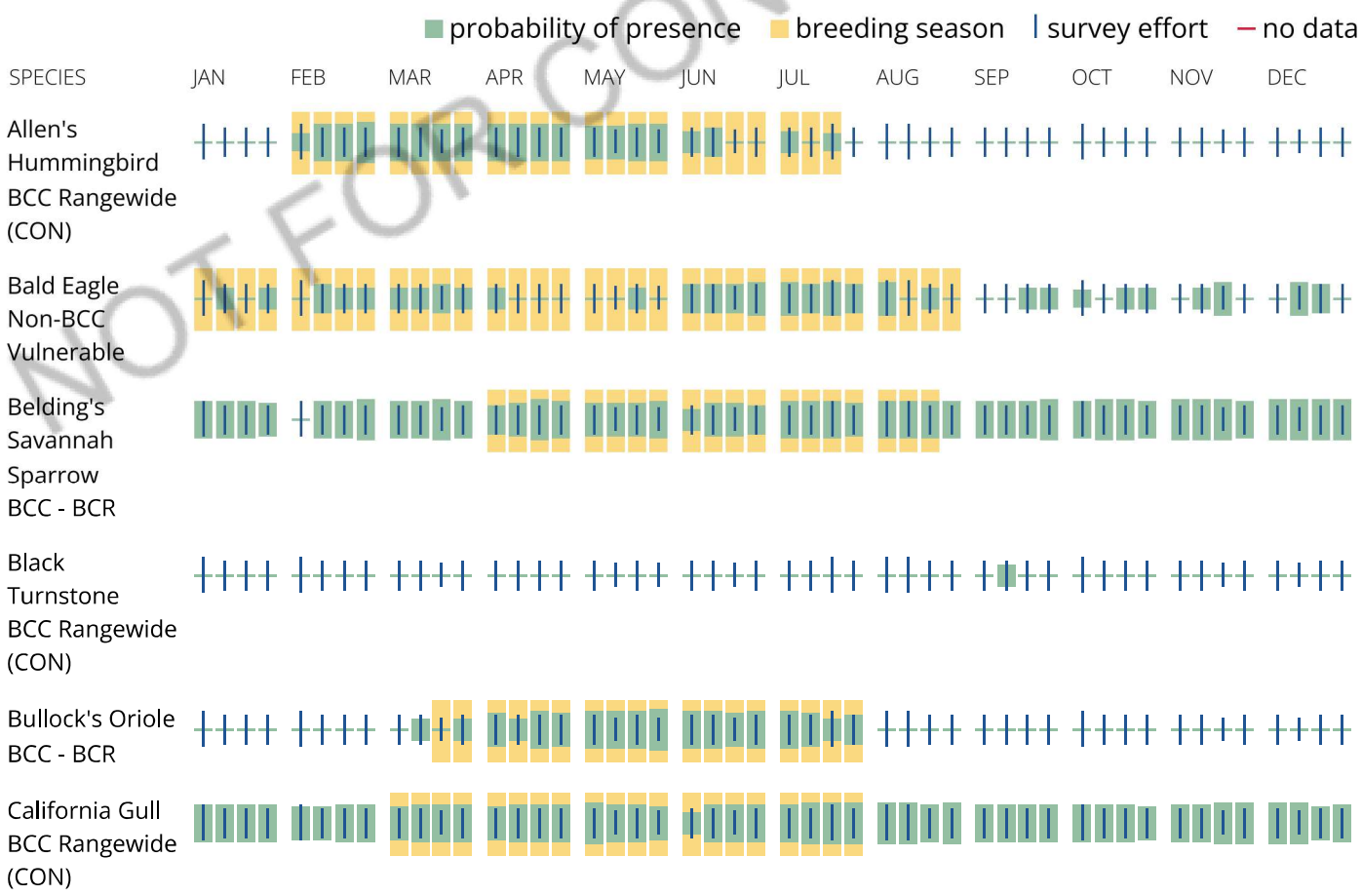
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



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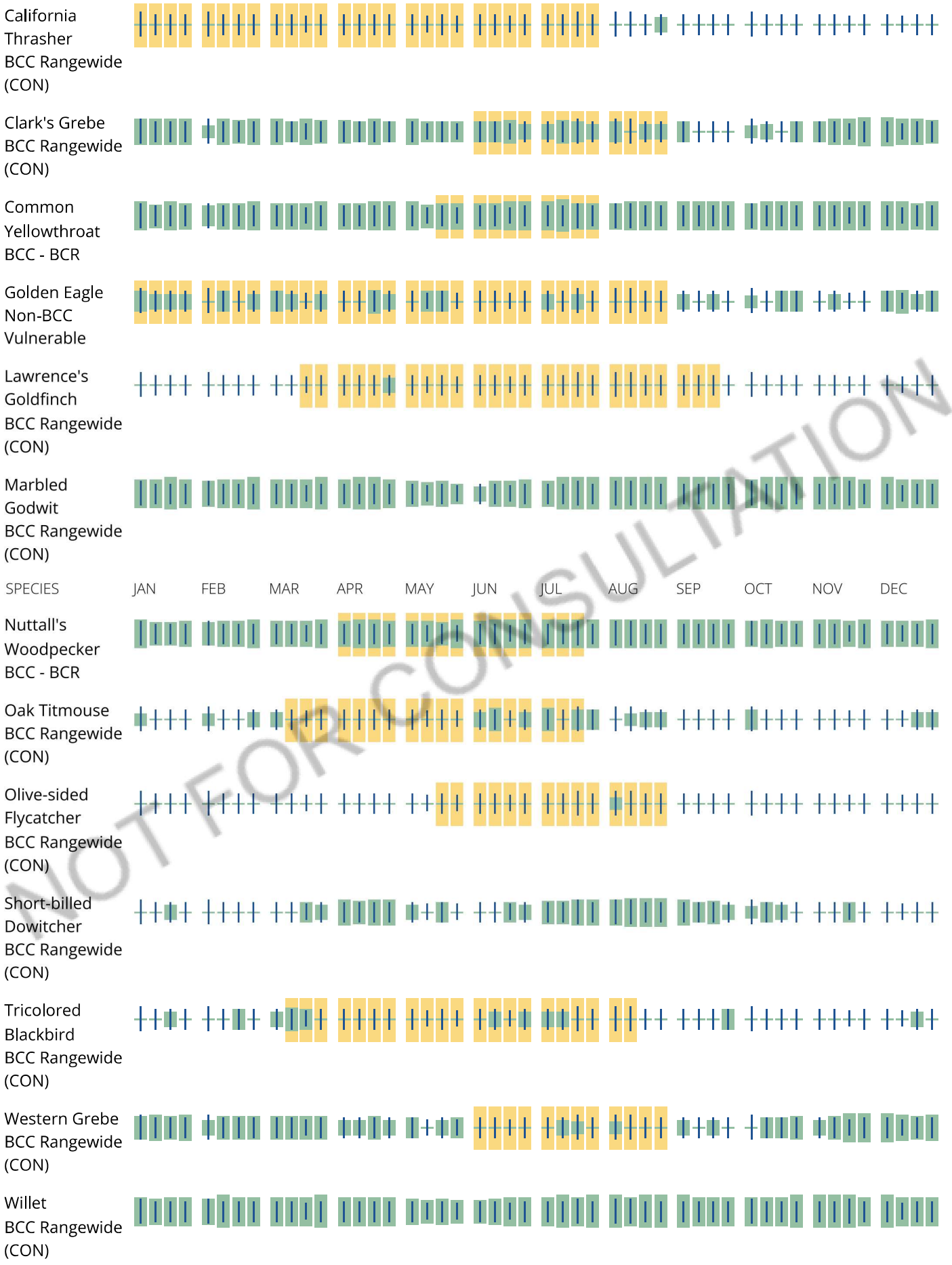

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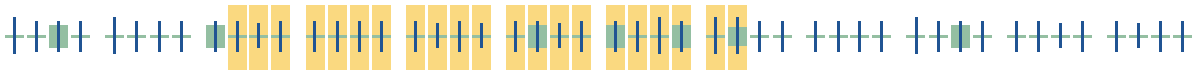
Wrentit
BCC Rangewide
(CON)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird

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on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key

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component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

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Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Appendix D:
Supporting Documents

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D.1 - SDG Commerce Site 217 Documents

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April 20, 2023

John Wojtas
Industrial and Commercial Contractors, LP
413 W. Yosemite Avenue, Suite 105
Madera, CA 93637

Subject: **Pre-construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 per the Mitigation Monitoring and Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California**

Dear John:

This letter summarizes results of pre-construction burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), nesting raptor, nesting passerine bird, and western pond turtle (*Actinemys marmorata*) surveys conducted to-date by FirstCarbon Solutions (FCS) consulting Biologists Dr. Christopher DiVittorio and Bernhard Warzecha as they relate to compliance with CEQA Mitigation Measures (MM) BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, and MM BIO-5 from the January 2021 Mitigation, Monitoring, and Reporting Program (MMRP) for the Commerce 217 Warehouse Project located in American Canyon, California.

The project site comprises a single parcel measuring 10.8 acres in size and consists of non-native annual and perennial grassland with several small, mapped wetland features. The site is bounded by Commerce Court to the east, a developed warehouse to the north, an open field to the south beyond which is another developed warehouse, and a eucalyptus grove to the west.

Methods

Between January 18 and April 7, 2023, FCS conducted seven nesting bird and burrowing owl detection surveys (including for Swainson's hawk) on the project site and relevant adjacent areas (where accessible), for a total of approximately 30 survey hours. Surveys for western pond turtle adults and nests were also performed simultaneously while walking the site.

Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Protocol) and the *Staff Report on Burrowing Owl Mitigation*.[1,2] Survey equipment included high-quality binoculars and a high-quality spotting scope.

[1] Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.
[2] California Department of Fish and Wildlife 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

UNITED STATES

T +1 888 826 5814
T +1 714 508 4100
F +1 714 508 4110
E info@fcs-intl.com

Irvine
250 Commerce
Suite 210
Irvine, CA 92602

Bay Area
2999 Oak Road
Suite 250
Walnut Creek, CA 94597

Central Valley
7726 N. First Street
#413
Fresno, CA 93720

Inland Empire
967 Kendall Drive
#A-537
San Bernardino, CA 92407

Sacramento Valley
2351 Sunset Boulevard
Suite 170-301
Rocklin, CA 95765

Utah
2901 Bluegrass Boulevard
Suite 200-62
Lehi, UT 84043

Connecticut
2 Corporate Drive
Suite 450
Shelton, CT 06484

New York
10 Monument Street
Deposit, NY 13754
56 Broome Corporate Parkway
Conklin, NY 13748

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KENYA

AUSTRALIA

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CHINA

MALAYSIA

SINGAPORE

Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Surveys were conducted on foot. Survey dates conducted by FCS are shown below in Table 1.

Table 1: Survey Dates

Date	Swainson's Hawk	Burrowing Owl	Nesting Birds including Raptors
1/18/2023	First survey in Period I	Burrowing owl breeding season survey	Nesting bird surveys–All Species
3/20/2023	First survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
3/31/2023	Second survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/4/2023	Third survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/5/2023	First survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/6/2023	Second survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/7/2023	Third survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/24/2023 (planned)	Swainson's hawk presence/absence survey	Burrowing owl breeding season survey	Nesting bird surveys–All Species

Surveys were conducted by FCS consulting Biologists Dr. Christopher DiVittorio and Bernhard Warzecha, both of whom are experienced in conducting surveys for all of the aforementioned special-status species and have been previously approved by the California Department of Fish and Wildlife (CDFW). Additionally Mr. Warzecha and Dr. DiVittorio have previous experience and training in the monitoring of Swainson's hawk nesting, including Swainson's hawk identification and behavioral patterns.

Results

A list of all species of birds observed at the different time points is provided below. No nesting birds were observed on the project site itself, and no nests of any protected species were observed off-site in the areas that could be accessed. White-tailed kites (*Elanus leucurus*) were observed foraging in the field, but they did not appear to be nesting nearby, as described below. No Swainson's hawk or burrowing owl were observed during any of the avian surveys to-date. No adults or nests of western pond turtle were observed. All observed animal species are listed in Attachment A: Animal Species Observed.

Swainson's Hawk

No individuals of Swainson's hawk were observed during any of the surveys, and no raptor nests that could belong to Swainson's hawk were observed. The presence of other birds-of-prey utilizing territories on-site also indicates that Swainson's hawk are not utilizing this habitat currently. The negative survey results for Swainson's hawk despite approximately 30 survey hours satisfies the requirements of the survey protocol for this species, therefore it is reasonable to conclude Swainson's hawk are absent from the project site.

Nesting Birds (Including Raptors)

FCS Biologists observed no active nests within the vicinity of the project site. Several American crow were loitering around the eucalyptus grove to the east of the parcel and harassing white-tail kites that approached the grove; however, their nest could not be located. Several white-tail kites were observed each day foraging over the grassland habitat; however, each time they flew off to the southwest out of sight and the location of their nest could not be determined. One juvenile red-tailed hawk was observed within the large eucalyptus tree along the north property line; however, this individual flew off-site after approximately 20 minutes. No other active nests were observed as of April 7.

Burrowing Owl

No evidence of burrowing owl activity was observed during any of the field surveys. No California ground squirrel burrows were observed on-site, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl. Therefore, it is reasonable to conclude burrowing owl is absent from the project site.

Western Pond Turtle

No evidence of western pond turtle activity was observed during any of the field surveys. There are some wetland features on-site, however no ponds or streams suitable for western pond turtle exist on-site and no signs of adults or nests were observed. Therefore, it is reasonable to conclude western pond turtle is absent from the project site.

Compliance

With implementation of the pre-construction surveys, and implementation of the recommendations for Swainson's hawk, burrowing owl, nesting birds, and western pond turtle, the project is in compliance with MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4 and MM BIO-5.

FCS appreciates the opportunity to assist you on this project. If you have any questions concerning this letter report, please contact me at jwaligorski@fcs-intl.com.

Sincerely,



Janna Waligorski
Senior Project Manager
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
530.519.9736

Attachment A: Animal Species Observed List

Attachment A:
Animal Species Observed

Commerce 217/220 Species List

Site Visit: 1/18/23

Birds: juvenile red-shouldered hawk (*Buteo lineatus*) sitting in eucalyptus tree on N fenceline, Western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American pelican (*Pelecanus erythrorhynchos*), black phoebe (*Sayornis nigricans*), white-crowned sparrow (*Zonotrichia leucophrys*), Northern flicker (*Colaptes auratus*), crow (*Corvus brachyrhynchos*)

Site Visit: 3/20/23

Start Time: 6:35 AM
Weather: no wind, 49 degF, 46% RH
Note: start at sunrise; park in SE corner

Bird Species: wild turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), Canada goose (*Branta canadensis*), crow (*Corvus brachyrhynchos*), raven (*Corvus corax*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Western bluebird (*Sialia mexicana*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), red-shouldered hawk (*Buteo lineatus*) two individuals soaring over the eucalyptus grove to the E of the site, house wren (*Troglodytes aedon*), American robin (*Turdus migratorius*), golden-crowned sparrow (*Zonotrichia atricapilla*), Nuttal's woodpecker (*Picoides nuttallii*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), purple finch (*Haemorhous purpureus*), tree swallow (*Tachycineta bicolor*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), California gull (*Larus californicus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), chestnut-backed chickadee (*Poecile rufescens*), White-tailed kite (*Elanus leucurus*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*)

Flowering Plants: California poppy (*Eschscholzia californica*), coastal heron's bill (*Erodium cicutarium*), common groundsel (*Senecio vulgaris*), field marigold (*Calendula arvensis*)

Site Visit: 3/31/23

Start time: 6:30 AM
Weather: clear, wind 0 mph, 44.5 degF, 76.5% RH
Notes: parked NE corner

Bird species: American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), Canada goose (*Branta canadensis*), American goldfinch (*Spinus tristis*), house sparrow (*Passer domesticus*),

Allen's hummingbird (*Selasphorus sasin*), kildeer (*Charadrius vociferus*), raven (*Corvus corax*), unknown gull likely Western or California, American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*)

Other Animals: Mule deer (*Odocoileus hemionus*), domestic cat (*Felis catus*)

Site Visit: 4/4/23

Start time: 6:35 AM
Weather: clear, 49 degF, no wind, 81% RH, 6:15 AM first light, 7:15 first direct sunlight
Notes: parked SW corner

Bird Species: red-shouldered hawk (*Buteo lineatus*) perched on eucalyptus tree on N fenceline , wild turkey (*Meleagris gallopavo*) calling and all over parking area, White-tailed kite (*Elanus leucurus*) foraging and calling, house wren (*Troglodytes aedon*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), purple finch (*Haemorhous purpureus*), song sparrow (*Melospiza melodia*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), rock wren (*Salpinctes obsoletus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), fox sparrow (*Passerella iliaca*), Northern mockingbird (*Mimus polyglottos*), tree swallow (*Tachycineta bicolor*), Canada goose (*Branta canadensis*), kildeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), Western bluebird (*Sialia mexicana*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*)

Site Visit: 4/5/23

Start time: 6:08 AM
Weather: 39 degF, 80% RH, no wind
Notes: met Jerry with Stravinsky on-site; parked SW corner

Bird Species: red-shouldered hawk (*Buteo lineatus*) called from southwest corner of eucalyptus grove once, wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), raven (*Corvus corax*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), White-tailed kite (*Elanus leucurus*) 3 hovering various times over the field, Nuttal's woodpecker (*Picoides nuttallii*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*)

Site Visit: 4/6/23

Start time: 6:17 AM
Weather: clear, 44 degF, 80% RH, no wind
Notes: fewer wildlife than yesterday; met Jerry with Stravinsky on-site; parked SW corner

Bird Species: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), brown creeper (*Certhia americana*), raven (*Corvus corax*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), red-shouldered hawk (*Buteo lineatus*) called from southwest corner of eucalyptus grove once similar to other mornings, White-tailed kite (*Elanus leucurus*) two individuals over east eucalyptus grove being chased by crows, song sparrow (*Melospiza melodia*), great blue heron (*Ardea herodias*) soaring overhead, unknown gulls soaring, lesser goldfinch (*Spinus psaltria*), Anna's hummingbird (*Calypte anna*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*)

Other Animals: runways of black-tailed jackrabbit (*Lepus californicus*) and California vole (*Microtus californicus*)

Site Visit: 4/7/23

Start time: 6:30 AM
Weather: cloudy, 54.5 degF, 79% RH, wind 1-2 mph
Notes: fewer birds today, met Jerry on-site

Bird Species: Bewick's wren (*Thryomanes bewickii*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), hermit thrush (*Catharus guttatus*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), Nuttal's woodpecker (*Picoides nuttallii*), White-tailed kites (*Elanus leucurus*) being chased by crows then two foraging in field, cliff swallow (*Petrochelidon pyrrhonota*), cedar waxwing (*Bombycilla cedrorum*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*)

September 3, 2020

Industrial and Commercial Contractors, LP
403 W. Yosemite Avenue, Suite 105
Madera, California 93637

Attention: Mr. Brian Doswald

RE: Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site SDG Commerce 217 Distribution Center, Napa, California APN: 058-030-065-000

Dear Mr. Doswald:

1. INTRODUCTION

Monk & Associates, Inc., (M&A) has prepared this Addendum to our March 2, 2020, *Revised Biological Resource Analysis* (biology report) for the SDG Commerce 217 Distribution Center located in the City of American Canyon, California (the "project site"). Since the time M&A prepared our biology report for the project site, it has been determined that it will be necessary to acquire soil from the adjacent parcel to the south (the "borrow area parcel") and transport this soil for use as clean fill on the project site. M&A has prepared this Addendum to our biology report to address the transportation of soil from the offsite borrow area parcel onto the project site and to analyze any affects this activity could have on mapped jurisdictional waters of the United States/State that lie inbetween the project site and the adjacent borrow area parcel. Mapped waters of the United States are shown on the attached exhibits.

2. DESCRIPTION OF THE PROJECT SITE AND ADJACENT BORROW AREA PARCEL

The project site and the adjacent borrow area parcel were once part of a contiguous approximately 35-acre project site that M&A conducted surveys on over multiple years dating between 2006 and 2018. Both the project site and adjacent borrow area parcel are dominated by ruderal (weedy) vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). These non-native, weedy species provide little habitat value to wildlife and they do not constitute a native plant community. Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, is also common on the 35 acres. Ruderal vegetation is the only vegetation community found on the project site. The adjacent borrow area parcel, however, in addition to supporting a ruderal herbaceous community also supports waters of the United States, as described below.

On May 16, 2018, the U.S. Army Corps of Engineers issued a jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the approximately 35-acre

parcel that comprises the project site, the adjacent borrow area parcel, and another property now known as 330 Commerce Center (see attached exhibits). The entire 0.043-acre of waters of the U.S. confirmed by the Corps is found on the adjacent borrow area parcel as shown on the attached exhibit "Borrow Site Rough Grading," Sheet 1 prepared by RSA on August 21, 2020. There are no waters of the United States or State on the project site.

3. DISCUSSION OF PROPOSED ACTIVITIES AND AVOIDANCE OF IMPACTS TO MAPPED WATERS OF THE UNITED STATES

The project applicant intends to rough grade the borrow area parcel and transport soil from that parcel onto the project site for use in development of the project site. In order to protect the waters of the United States/State that occur in between the project site and the borrow area parcel, a 25-foot buffer area around the outside edge of the wetlands will be staked and protected with fiber roll, silt fencing and high visibility orange construction fencing to prevent equipment from driving into the wetlands during hauling activities. See the attached exhibit.

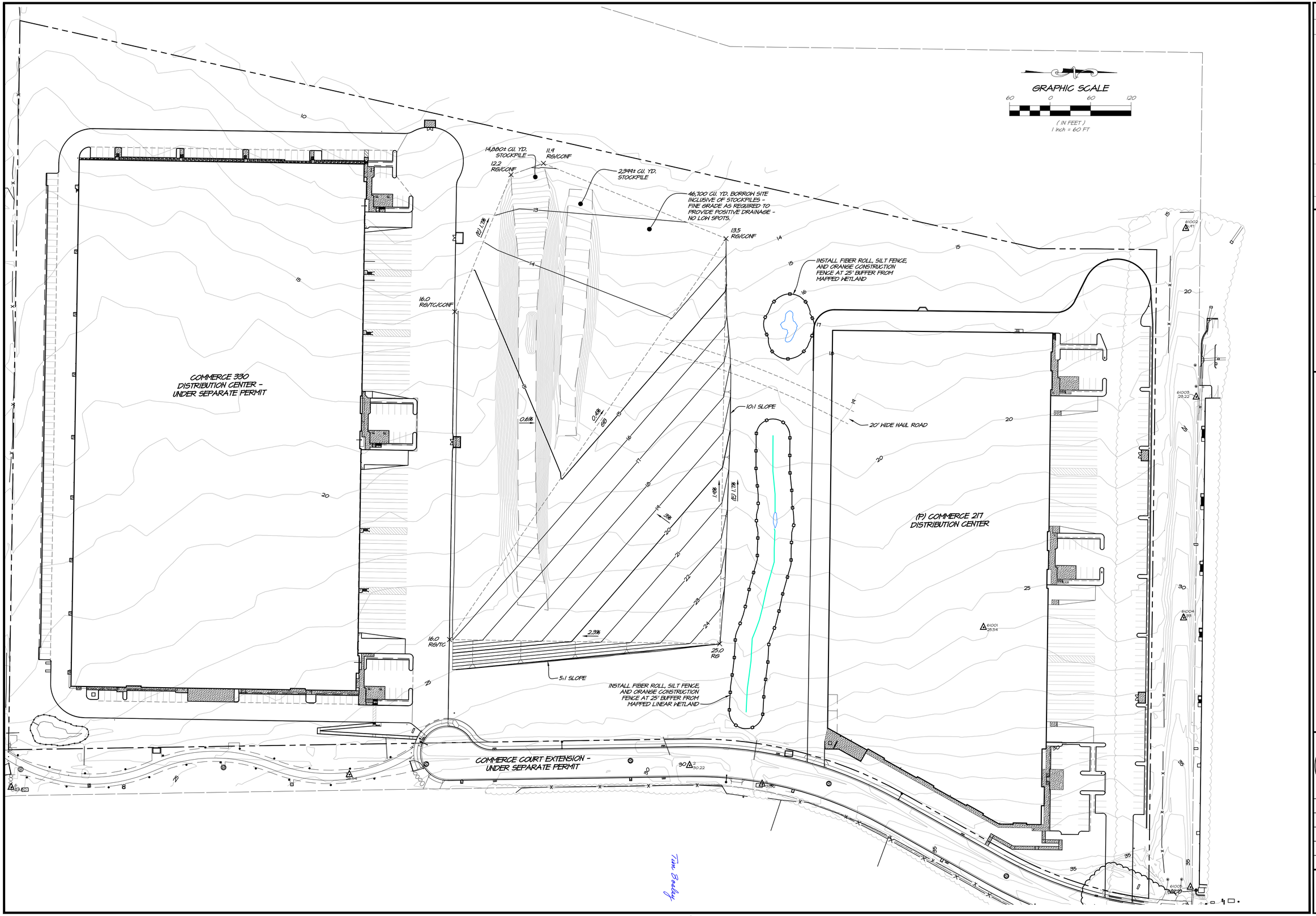
With these protection measures in place, as shown on the attached Borrow Site Rough Grading exhibit, Sheet 1, attached, *there are no expected impacts to waters of the U.S./State from the transport of soil/materials from the borrow area parcel to the project site*.

This concludes our addendum to our biology report. If you have any questions or require additional information, please do not hesitate to contact me at (925) 323-4850 or Sarah@monkassociates.com. Thank you.

Sincerely,

Sarah Lynch
Senior Associate Biologist

Attachments: U.S. Army Corps of Engineers Confirmed Aquatic Resources Delineation Map;
Sheet 1, Borrow Site Rough Grading prepared by RSA, August 21, 2020



NO.	DATE	REVISIONS	BY	APPD

RSA+
1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE [707] 252.3301
+ www.RSAcivil.com +
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SDG COMMERCE 217 DISTRIBUTION CENTER
BORROW SITE ROUGH GRADING
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNOCK
No. 82758
Exp. 9-30-20
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	AUG. 21, 2020
DRAWN	DRL
DESIGNED	DRL
CHECKED	PSW
JOB NO.	4119037.0
SHEET NO.	1
	1 OF 1 SHEETS

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PRELIMINARY - NOT FOR CONSTRUCTION

- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army Corps of Engineers
San Francisco District
Regulatory Division

American Canyon Flat Lands
American Canyon, Napa County, California
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID. **2011-00322** Date: **March 6, 2018** Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees

W 1
LW 1
W2
LW2
IW 1
3'
3'

Feet
0 50 100 200 300 400 500
Scale: 1 inch = 100 feet

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map
American Canyon Flat Lands, Lot 3
City of American Canyon, Napa County, California

Corps Verification Date: May 18, 2017
Confirmed by Bryan Matsumoto
Delineation Conduced by: Hope Kingma & Devin Jokerst
Aerial Photograph Source: ESRI
Map Revision Date: May 22, 2017

Revised
BIOLOGICAL RESOURCE ANALYSIS
SDG COMMERCE 217 DISTRIBUTION CENTER
CITY OF AMERICAN CANYON, CALIFORNIA

March 2, 2020

Prepared for

SDG Commerce 217, LLC
413 W. Yosemite Ave. Suite 105
Madera, California 93637

Prepared by

Monk & Associates, Inc.
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595

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Figure 1. SDG Commerce 217 Distribution Center Project Site Regional Map.

Figure 2. SDG Commerce 217 Distribution Center Project Site Location Map.

Figure 3. SDG Commerce 217 Distribution Center Project Site Aerial Photograph.

Figure 4. Known Special-Status CNDDB Records Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

Figure 5. USFWS Critical Habitat in the Vicinity of the SDG 217 Commerce Distribution Center Project Site.

TABLES
(At Back of Report)

Table 1. Plant Species Observed on the SDG Commerce 217 Distribution Center Project Site.

Table 2. Wildlife Species Observed on the SDG Commerce 217 Distribution Center Project Site.

Table 3. Special-Status Plant Species Known to Occur Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

Table 4. Special-Status Wildlife Species Known to Occur Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

ATTACHMENTS
(At Back of Report)

Sheet A1. Preliminary Site Plan for the SDG Commerce 217 Distribution Center, prepared by WAI (Ward Architects, Inc.) dated January 15, 2020.

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map, dated May 22, 2017.

Sheet UP4. Utility Plan for the SDG Commerce 217 Distribution Center, prepared by RSA, dated January 2020.

Storm Drain Level Spreader Detail, prepared by RSA, dated January 7, 2020.

1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this biological resource analysis for the proposed SDG Commerce 217 Distribution Center project site (herein referred to as the project site) located in the City of American Canyon, California (Figures 1 and 2). The purpose of our analysis is to provide a description of existing biological resources on the project site and to identify potentially significant impacts that could occur to sensitive biological resources from the construction of a distribution center and associated parking on the project site.

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations, including the California Native Plant Society (CNPS). Biological resources also include waters of the United States and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW. Our analysis includes a formal delineation of "waters of the U.S." that was confirmed in 2012 and reverified by the Corps in 2017.

This biological resources analysis also provides mitigation measures for "potentially significant" impacts that could occur to biological resources. Whenever possible, upon implementation, the prescribed mitigation measures would reduce impacts to levels considered less than significant pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs §§ 15000 et seq). Accordingly, this report is suitable for review and inclusion in any review being conducted by the City of American Canyon for the proposed project pursuant to the CEQA.

2. PROPERTY LOCATION AND SETTING

The approximately 10-acre project site is located at 1075 Commerce Court, American Canyon, Napa County, California (Figures 1 and 2). The project site is bordered to the southeast by Jungle Paintball, a 40-acre paintball park. To the east is located a large eucalyptus grove with scattered mobile homes. Further to the east is Oat Hill, a geographically prominent hill west of Highway 29. A mix of open space, large warehouses and distribution centers occurs north of the project site. The American Canyon Wastewater Treatment Plant and treatment ponds is located west of the project site. The Napa River and associated marshes occur greater than 300 feet west of the project site. A large distribution center, known as the SDG Commerce 330 Distribution Center, is currently under construction occurs immediately to the south of the project site. Clark Ranch, Wetlands Edge Park, and salt marsh and mudflat habitats associated with the Napa River, occur further to the south of the project site. The Napa Valley Unified School District is constructing the Napa Junction Elementary School to the southeast, along Eucalyptus Drive. Figure 3 provides an aerial photograph that shows the project site features and the surrounding land use.

The 10.39-acre project site is part of a larger 35.85-acre parcel (formerly known as Lot 3) that is comprised of a highly disturbed, ruderal (weedy) plant community, that was recently graded and leveled. This site formerly was occupied by a grove of blue gum eucalyptus (*Eucalyptus globulus*) trees that were removed in 2012.

3. PROPOSED PROJECT

The applicant proposes to construct a 217,294-square foot distribution center with associated parking areas and a detention/bioretention pond on the 10.39-acre project site. Access to the distribution center will be provided by the Commerce Court extension, as illustrated on the Preliminary Site Plan (see attached Sheet A1).

4. ANALYSIS METHODS

Prior to preparing this biological resources analysis report, M&A researched the most recent version of CDFW's Natural Diversity Database, RareFind 5 application (CNDDB 2018) for historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare) known to occur in the region of the project site. All special-status species records were compiled in tables. M&A examined all known record locations for special-status species to determine if special-status species could occur on the project site or within an area of affect.

M&A biologists have a long history of field surveys associated with the approximately 35-acre parcel. M&A biologists conducted site surveys on the parcel on March 1 and April 27, 2006, June 14, 2011, February 14, March 21, and June 12, 2012, May 18, 2017, and on March 30, 2018, December 19 and December 27, 2019. In 2006, and again in 2011, M&A conducted a wetland delineation on the entire parcel. This delineation of "waters of the U.S." was confirmed by the Corps in 2012 and reverified by this agency in 2017. The Corps Confirmed Reverification of Aquatic Resources Delineation Map is provided as Sheet 2.

During the site surveys and wetland delineations, M&A biologists recorded biological resources and assessed the likelihood of resource regulated areas on the project site. In addition to the wetland delineations, the survey involved searching all habitats on the site and recording all plant and wildlife species observed. M&A cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species. The results of our literature research and field reconnaissance are provided in the sections below.

5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES

5.1 Topography

The project site is relatively flat with elevations ranging from 8 to 20 feet above sea level. The ground is undulating due to past land use disturbances including eucalyptus tree removal in 2012. The site slopes gently to the west towards North Slough and the Napa River.

5.2 Hydrology

There are no drainages on the project site. There are no indicators of hydrology on the 10-acre project site (Sheet 2).

5.3 Plant Communities and Associated Wildlife Habitats

A complete list of plant species observed on the project site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual* Second Edition (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (http://ucjeps.berkeley.edu/interchange/index.html). Table 2 is a list of wildlife species observed on the project site during multiple years of surveys at the project site. Nomenclature for wildlife follows CDFW's *Complete list of amphibian, reptile, bird, and mammal species in California* (CDFW 2016) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list.

5.3.1 RUDERAL HERBACEOUS VEGETATION

A complete list of plant species observed within the project site is presented in Table 1. The project site is dominated by ruderal vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, such as is found on the project site, is also common on this parcel.

Typically, ruderal communities provide habitat for those animal species adapted to humans. Examples of animals associated with these communities include wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), California ground squirrel (*Otospermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), California meadow vole (*Microtus californicus*), and Botta's pocket gopher (*Thomomys bottae*), among others, all of which have been observed on the project site. Red-shouldered hawk (*Buteo lineatus*), tree swallows (*Tachycineta bicolor*), Nuttall's woodpecker (*Picoides nuttallii*), and northern flicker (*Colaptes auratus*), among others, likely nest in the eucalyptus trees that surround the project site to the west, north and south. Chestnut-backed chickadee (*Poecile rufescens*), brown creeper (*Certhia americana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), Bullock's oriole (*Icterus bullockii*) and western gray squirrel (*Sciurus griseus*) were also observed in the immediate project vicinity.

5.4 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible

to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

The proposed project will not interfere with the movement of native wildlife. The project site has a history of disturbance associated with eucalyptus tree removal in 2012, and continued disturbance associated with the paintball facility located immediately to the southeast and construction of the SDG Commerce 330 Distribution Center distribution center to the south. The eucalyptus grove and the marshes associated with the Napa River to the west of the project site provide a more valuable wildlife corridor for terrestrial wildlife.

6. SPECIAL-STATUS SPECIES DEFINITION

6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq*.; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);

- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);

- plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;

- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2017). The California Department of Fish and Wildlife (CDFW) recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in EIRs. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001) (CNPS 2017). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);

- migratory nongame birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);

- animals that are designated as "species of special concern" by CDFW (2018);

- Animal species that are “fully protected” in California (Fish and Game Codes 3511, 4700, 5050, and 5515).

- Bat Species that are designated on the Western Bat Working Group’s (WBWG) Regional Bat Species Priority Matrix as: “RED OR HIGH.” This priority is justified by the WBWG as follows: “Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.”

In the paragraphs below we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as Endangered or Threatened under the FESA is protected from unauthorized “take” (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a Federal listed Endangered or Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as Threatened under the state Endangered Species Act (§2050 of California Fish and Game Code) is protected from unauthorized “take” (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to “take” a state listed Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the “take.”

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered “rare.” Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a “significant effect on the environment” (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an “Inventory” of special status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federal listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the Fish and Game Code, and are eligible for state listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by CDFW and maintained on "watch lists."

Additionally, in 2006 CNPS updated their lists to include "threat code extensions" for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered "seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)";
- .2 is "fairly endangered in California (20-80% of occurrences threatened)";
- .3 is "not very endangered in California (less than 20% of occurrences threatened or no current threats known)."

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the white-tailed kite and golden eagle, are protected under California Fish and Game Code (§3511). Fully protected birds may not be "taken" or possessed (i.e., kept in captivity) at any time.

6.2 Potential Special-Status Plants on the Project Site

Figure 4 provides a graphical illustration of the known records for special-status species within 3 miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status plants have been mapped on or adjacent to the project site. However, according to the CDFW's CNDDB, a total of eight special-status plant species are known to occur in the region of the project site (Table 3). Most of these plants occur in specialized habitats such as marshes, foothill grasslands, and vernal pools, none of which occur onsite. In the recent past, blue gum eucalyptus trees covered the majority of the project site dating back for several decades; these trees emit allelopathic (growth inhibiting) chemicals from their leaves, acorns and bark that prevent other plants from growing under them. Once bark and leaf debris accumulate on the ground beneath the trees, nearly nothing will grow there. Based on the negative findings during the multiple surveys conducted on this site in 2006, 2011, 2012, 2017, 2018 and 2019, special-status plants are not likely to be found onsite and mitigation for special-status plants should not be warranted.

6.3 Potential Special-Status Animals in the Project Site

Figure 4 provides a graphical illustration of the known records for special-status species within three miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status animal records have ever been mapped on or adjacent to the project site. However, a total of 18 special-status animal species are known to occur in the region of the project site (Table 4). Due to the disturbed nature of the project site and its history as a eucalyptus grove, there is a very low likelihood of special-status species occurring onsite. Regardless, due to the sensitivity of four of the special-status wildlife species known to occur in the area, we further discuss these species below.

6.3.1 California red-legged frog

The California red-legged frog (*Rana draytonii*) was federally-listed as threatened on May 23, 1996 (Federal Register 61: 25813-25833) and as such is protected pursuant to the Federal Endangered Species Act. On March 16, 2010 the USFWS issued the final designation for California red-legged frog Critical Habitat (USFWS 2010). *The project site does not fall within mapped critical habitat, although it is adjacent* (see Figure 5).

The California red-legged frog is also a state "species of special concern." While the state designation "species of special concern" does not provide any legally mandated protection, species of special concern must be considered in any project undergoing a CEQA review.

The California red-legged frog is typically found in ponds, slow-flowing portions of perennial and intermittent streams that maintain water in the summer months. This frog is also found in hillside seeps that maintain pool environments or saturated soils throughout the summer months. Populations probably cannot be maintained if all surface water disappears (i.e., no available surface water for egg laying and larval development habitat). Larval California red-legged frogs require 11-20 weeks of permanent water to reach metamorphosis (i.e., to change from a tadpole into a frog), in water depths of 10 to 20 inches (USFWS 2002). Riparian vegetation such as willows and emergent vegetation such as cattails are preferred red-legged frog habitats, though not necessary for this species to be present. Populations of California red-legged frog will be reduced in size or eliminated from ponds supporting non-native species such as bullfrog, Centrarchid fish species (such as sunfish, bluegill, or large-mouth bass), and signal and red swamp crayfish (*Pacifastacus leniusculus* and *Procambarus clarkii*, respectively), all of which are known California red-legged frog predators. However, the presence of these non-native species does not preclude the presence of the California red-legged frog.

California red-legged frogs also use upland habitats for migration and dispersal. The USFWS *Recovery Plan for the California Red-Legged Frog* states that frog overland excursions via uplands can vary between 0.25-mile up to 3 miles during the wet season, and that frogs "have been observed to make long-distance movements that are straight-line, point to point migrations rather than using corridors for moving in between habitats" (USFWS 2002). The information presented in the USFWS' Recovery Plan was taken from a publication by Bulger et al. (2003) that recounts a study in coastal redwoods in Santa Cruz area. M&A believes that such overland straight-line migrations are primarily limited to periods of heavy rainfall or during periods when ambient conditions exhibit high moisture levels such as in fog belts along the coast. Working in

Point Reyes National Seashore on the coast of California, Fellers and Kleeman (2007) found approximately 31 percent of California red-legged frogs moved more than 30 meters from their breeding sites and about 69 percent moved less than 30 meters from their breeding site during seasonal movement periods. Similarly, Bulger et al. (2003) found that 60 percent of their radio tagged frogs stayed within 30 meters of their breeding sites.

In locations that are characterized by hot and seasonally dry climates, the California red-legged frog is inclined to stay closer to its aquatic environments or will not migrate. Tatarian (2005) who studied an inland population of California red-legged frogs in eastern Contra Costa County where the climate is far drier than the coastal environment, found that all movements started after the first 0.5 cm of rain in the fall, with more terrestrial movements being made in the fall pre-breeding season (57%) than in the winter breeding season (32%) or spring post-breeding season (11%). Tatarian (op. cit.) also found that California red-legged frogs moved greater average distances aquatically (84.6 m) than terrestrially (27.7 m). Greater terrestrial distances were moved in the pre-breeding season (35.2 m) than in the breeding season (15.5 m) or post-breeding season (16.3 m) with the majority of movements occurring for only one of the 3-4 day survey periods. The majority of frogs (57%) were position faithful within a pool, indicating they did not migrate at all. These data suggest that long forays across the landscape found in coastal populations are less likely in dry inland locations.

The USFWS *Recovery Plan for the California Red-Legged Frog* states that populations are "most likely to persist where multiple breeding areas are embedded within a matrix of habitats used for dispersal." "The primary constituent elements for California red-legged frogs are aquatic and upland areas where suitable breeding and non-breeding habitat is interspersed throughout the landscape and is interconnected by unfragmented dispersal habitat" (USFWS 2002).

In the American Canyon/Napa area, there are no records for the California red-legged frog west of State Route 29 where the project site is located. The closest known California red-legged frog occurrence is 1.4 miles east of the project site (CNDDB Occurrence No. 896). The California red-legged frog at this location was found in a dry cement tank adjacent to a large quarry pond that supported bullfrogs (*Lithobates catesbeiana*). State Route 29 is located between this closest California red-legged frog record and the project site and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the project site. There is no hydrologic connectivity over any undeveloped migration route between the known records for this species and the project site. Finally, the project site does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that the project site does not provide suitable habitat for the California red-legged frog. Similarly, the surrounding parcels with dense eucalyptus groves do not provide suitable habitat. Owing to the excessively disturbed conditions on the project site due to prior grading and tree removal activities, this species is not expected to occur on the project site. *Therefore, the proposed project will not impact the California red-legged frog and mitigation should not be warranted.*

6.3.2 SWAINSON'S HAWK

The Swainson's hawk (*Buteo swainsoni*) is a state-listed threatened species, protected pursuant to the California Endangered Species Act (CESA), and Title 14 of the California Code of Regulations. While it has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their active nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800).

Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands (Kochert 1986). It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall (Schmutz et. al. 1984). Nests are constructed in isolated trees that are dead or alive along drainages and in wetlands, or in windbreaks in fields and around farmsteads (Palmer 1988). Swainson's hawks occasionally nest in shrubs, on telephone poles, and on the ground. In the Central Valley of California, the majority of Swainson's hawk nests and territories are associated with riparian systems and nests are commonly found in cottonwoods and oaks (Schlorff et. al. 1984). They have also been documented nesting in eucalyptus (*Eucalyptus* spp.), black walnut (*Juglans hindsii*), black locust (*Robinia pseudoacacia*), almond (*Prunus dulcis*), Osage orange (*Maclura pomifera*), Arizona cypress (*Cupressus arizonica*), and pine (*Pinus* spp.).

Foraging habitats include grasslands, alfalfa fields, fallow fields, beet, tomato, and other low-growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded (CDFG 1994). The Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole (*Microtus californicus*). Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. In addition, agricultural practices (planting, maintenance, harvesting, disking) allow for access to prey, and very likely increase foraging success of Swainson's hawks by flushing prey (personal observations of G. Monk). During the nesting season Swainson's hawks usually forage within two miles of the nest. Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially, therefore it can occupy habitats with few or no perches except the nest tree (James 1992).

Swainson's hawks are regular summer visitors and breeders throughout the western states. In the fall months, most Swainson's hawks migrate to Argentina before returning to the United States to breed in the late-spring (typically April). For decades, Argentina farmers were spraying insecticides over habitats that included gregarious night roosts of the Swainson's hawk, killing many thousands of these hawks. This practice was halted in the last 10 years and the Swainson's hawk population appears to be dramatically responding in California. While in the 1970s through 1990s there were only two relatively small populations of Swainson's hawks that remained resident in California year-round in the Davis area and in the Sacramento River Delta, resident and migrant populations of the Swainson's hawks are now dramatically expanding their nesting distribution in California since insecticide use over Argentinian wintering grounds was halted (G. Monk, personal observations). For example, Swainson's hawks were never recorded nesting in the Napa County area until relatively recently.

The closest known record for nesting Swainson's hawk is 2.6 miles northeast of the project site (CNDDB Occurrence No. 2744). No Swainson's hawk nests have been observed on the site or offsite in the vicinity of the project site during M&A's project site surveys. However, the nesting population appears to be increasing throughout its nesting range in northern California (recent CNDDB records and G. Monk general observations) and the eucalyptus trees growing adjacent to the project site provide suitable nesting habitat. Therefore, there is the possibility that Swainson's hawks could nest near this project site in future years. *Hence, prior to earth-disturbance or construction, nesting surveys must be conducted that confirm or negate this species' presence as a nesting bird on or adjacent to the project site. Accordingly, impacts to Swainson's hawk are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

6.3.3 WESTERN BURROWING OWL

The western burrowing owl (*Athene cunicularia hypugaea*) is a California "species of special concern." Its nest, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, and §3800). The burrowing owl is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Finally, based upon this species' rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment" pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. Thus, this owl species must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency. When these owls occur on project sites, typically, mitigation requirements are mandated in the conditions of project approval from the CEQA lead agency.

Burrowing owl habitat is usually found in annual and perennial grasslands, characterized by low-growing vegetation. Often, the burrowing owl utilizes rodent burrows, typically California ground squirrel (*Otospermophilus beecheyi*) burrows, for nesting and cover. They may also on occasion dig their own burrows or use man-made objects such as concrete culverts or rip-rap piles for cover. They exhibit high site fidelity, reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of these owls during the spring and summer months or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement (white wash) at or near a burrow. Burrowing owls typically are not observed in grasslands with tall vegetation or wooded areas because the vegetation obscures their ability to detect avian and terrestrial predators. Since burrowing owls spend the majority of their time sitting at the entrances of their burrows, grazed grasslands seem to be their preferred habitat because it allows them to view the world at 360 degrees without obstructions.

The closest CNDDB record was documented 2.6 miles southeast of the project site in an area that has since been developed (CNDDB Occurrence No. 109). The project site was severely disturbed during the eucalyptus removal in 2012; thus, ground squirrel burrows are few and of recent origin. The mobility of the western burrowing owl enables the species to colonize the recent burrows. M&A did not observe western burrowing owls or any indirect evidence that burrowing owls are using or residing on the project site during any of the site surveys.

Regardless, the project site provides marginal nesting habitat for the western burrowing owl. *In order to confirm or negate the presence of western burrowing owls on site, surveys must be conducted prior to the commencement of earth-moving or construction*. *Accordingly, impacts to western burrowing owl are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

6.3.4 NORTHERN HARRIER

The northern harrier (*Circus cyaneus*) is a California species of special concern. This raptor is protected under California Fish and Game Code §3503.5 that protects nesting raptors and their eggs/young and is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators such as coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), and various snake species. Ground nesting birds in general are also subject to disturbance by agricultural practices. Northern harriers may forage over the project site and may nest in the open ruderal habitats onsite that provide suitable nesting habitat for this species. Hence, the proposed project could result in impacts to nesting northern harriers.

The closest CNDDB record was documented 2.8 miles west of the project site (CNDDB Occurrence No. 29). The project site was severely disturbed during the eucalyptus removal in 2012. Regardless, the project site provides marginal nesting habitat for the northern harrier. *In order to confirm or negate the presence of northern harriers on site, surveys must be conducted prior to the commencement of earth-moving or construction*. *Accordingly, impacts to northern harrier are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS

This section provides a discussion of those laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law we discuss their pertinence to the proposed development.

7.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, they are as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. According to this ruling, the USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is actually present.

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain a incidental take permit either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency), or requires preparation of a Habitat Conservation Plan (HCP) pursuant to Section 10 of FESA (for state and local agencies, or individuals, and projects without a federal "nexus").

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the

geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the "federal nexus agency," for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the "action agency" – that is, the federal agency that is carrying out, funding, or approving a project - that the project "may affect" a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in "jeopardy" to a listed species or if it could adversely modify designated critical habitat. If the USFWS/NMFS prepares a Biological Opinion, it will contain either a "jeopardy" or "non-jeopardy" decision. If the USFWS/NMFS concludes that a proposed project would result in adverse modification of critical habitat or would jeopardize the continued existence of a federal listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be most unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a "non-jeopardy" Biological Opinion, the nexus federal agency may authorize the discretionary permit making all conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an "incidental take" permit that allows applicants to "take" federally-listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, counties that are considering a discretionary permit, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, for the applicant to obtain an "incidental take permit," the applicant is required to submit a "conservation plan" to the USFWS or NMFS that specifies the impacts that are likely to result to federally-listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

7.1.1 Responsible Agency

FESA gives regulatory authority to the USFWS for federally-listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally-listed marine mammals and anadromous fish.

7.1.2 Applicability to the Proposed Project

The closest known California red-legged frog occurrence is 1.4 miles east of the project site (CNDDB Occurrence No. 896). The California red-legged frog was found in a dry cement tank

adjacent to a large quarry pond that supported bullfrogs. State Route 29 is located between the closest California red-legged frog record and the project site and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the project site. There is no hydrologic connectivity along any undeveloped migration route between the known records for this species and the project site. Finally, the project site does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that the project site does not provide suitable habitat for the California red-legged frog. Owing to the excessively disturbed conditions on the project site due to prior grading and tree removal activities, this species is not expected to occur on the project site. Therefore, the proposed project will not impact the California red-legged frog.

No other federally listed species are expected to occur on the project site. The project site does not provide fisheries habitat as it consists entirely of upland communities. *Therefore, it can be stated with confidence that the proposed project would not impact federally listed plant, animal, or fish species.*

7.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to "take" (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

7.2.1 Applicability to The Proposed Project

Western burrowing owl, northern harrier, Swainson's hawk, red-shouldered hawk, and red-tailed hawk (*Buteo jamaicensis*), among other raptors (birds of prey) could nest in the eucalyptus grove in the immediate vicinity of the project site. These raptors would be protected by the Migratory Bird Treaty Act. Also, the common songbirds that could forage on the site would be protected pursuant to this Act. As long as there is no direct mortality of species protected pursuant to this Act caused by development of the site, there should be no constraints to development of the site. To comply with the Migratory Bird Treaty Act, all active nest sites would have to be avoided while such birds were nesting. Upon completion of nesting, the project could commence as otherwise planned. Please review specific requirements for avoidance of nest sites for potentially occurring species in the Impacts and Mitigations section below.

7.3 California Endangered Species Act

7.3.1 Section 2081 of the California Endangered Species Act

In 1984, the state legislated the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above),

CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If CDFW determines that a proposed project could impact a state-listed threatened or endangered species, CDFW will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from CDFW and/or USFWS (if it is a Federal listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a state-listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for Federal listed species). CDFW will issue an incidental take permit only if:

1) The authorized take is incidental to an otherwise lawful activity;
2) the impacts of the authorized take are minimized and fully mitigated;
3) measures required to minimize and fully mitigate the impacts of the authorized take:
    a) are roughly proportional in extent to the impact of the taking on the species;
    b) maintain the project applicant's objectives to the greatest extent possible; and,
    c) capable of successful implementation; and,
4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing a habitat conservation plan (HCP) as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve CDFW staff in development of the HCP. If a final Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the federal Endangered Species Act, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of "take." These species are listed in several statutes that identify "fully protected" species and "specified birds." *See* Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a "fully protected" species or a "specified bird" occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a "non-jeopardy*"* federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal incidental take permit) pursuant to the FESA, to submit the federal opinion or permit to CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days CDFW determines that the federal incidental take permit is consistent

with state law, and that all state-listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are state-listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a state CESA permit under Section 2081(b). Section 2081(b) is of no use if an affected species is state-listed, but not federally-listed.

State and federal incidental take permits are issued on a discretionary basis, and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

7.3.2 Applicability to The Proposed Project

No state-listed plant species would likely occur on the project site due to an absence of habitat. The project site does not support any trees and does not provide nesting habitat for the Swainson's hawk. Suitable nesting habitat for this hawk exists in the eucalyptus trees on the adjacent properties; thus, preconstruction nesting surveys will be necessary to ensure that earth-work or construction does not occur while this raptor is nesting nearby or that if it does, it does not disturb the nesting birds. If the proposed project follows the proposed mitigation measures as detailed in the Impacts and Mitigation section below, *an Incidental Take Permit (ITP) from the CDFW should not be necessary for this project.*

7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503, 3503.5, 3511, and 3513 prohibit the "take, possession, or destruction of birds, their nests or eggs." Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "take." Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

7.4.1 Applicability to the Proposed Project

Raptors that could be affected by the project include western burrowing owl, northern harrier, Swainson's hawk, red-shouldered hawk and red-tailed hawk. Preconstruction surveys would have to be conducted for these species to ensure that there is no direct take of these birds including their eggs, or young. Any active nests that were found during preconstruction surveys

would have to be avoided by the project. Suitable non-disturbance buffers would have to be established around nest sites until the nesting cycle is complete. More specifics on the size of buffers are provided below in the Impacts and Mitigations section.

7.5 City of American Canyon General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site. Only those applicable to the proposed project are discussed herein:

7.5.1 Goal 8, Objective 8.1 and Policies 8.1.1 and 8.1.4

- **Goal 8:** Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.
- **Objective 8.1:** Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.
- **Policy 8.1.1:** Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.
- **Policy 8.1.4:** Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

7.5.2 Applicability to the Proposed Project

Consistent with General Plan Policies 8.1.1 and 8.1.4, this report provides a detailed assessment of the biological resources present on the project site.

7.5.3 Objective 8.2 and Policy 8.2.1

- **Objective 8.2:** Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savannah, and wetland and riparian habitats, with new development in the City.
- **Policy 8.2.1:** Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified biologist to determine if sensitive habitats exist on-site. In instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

7.5.4 Applicability to the Proposed Project

Consistent with General Plan Policy 8.2.1, the project site has been evaluated for the presence of sensitive biological resources. This report represents a Biological Assessment Report documenting findings from background research, and presents the current habitats and species present on the project site.

7.5.5 Objective 8.3 and Policy 8.3.1

- **Objective 8.3:** Protect natural drainages and riparian corridors within the American Canyon Planning Area.
- **Policy 8.3.1:** Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:
    a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.

7.5.6 Applicability to the Proposed Project

No wetland, natural drainages or riparian habitats are proposed to be impacted, as there are none present on the 10-acre project site.

7.5.7 Policy 8.3.1 b

- **Policy 8.3.1 b:** Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).

7.5.8 Applicability to the Proposed Project

Proposed development on the project site does not impact watercourses, riparian habitat, vernal pools or wetlands.

7.5.9 Policy 8.3.1 e

- **Policy 8.3.1 e:** Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment.

7.5.10 Applicability to the Proposed Project

Previous disturbance on the project site prohibits presence of land linkages, corridors, or habitat areas. Similarly, because creation of a mitigation site is not necessary for this site, there will be no habitat area or otherwise natural space in need of buffering.

7.5.11 Policy 8.3.1 f

- **Policy 8.3.1 f:** Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.

7.5.12 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with Policy 8.3.1.f, and Policy 8.3.1.g roads and utilities have been designed to avoid conflicts with biological resources on the project site.

7.5.13 POLICY 8.3.1 G

- **Policy 8.3.1 g:** Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.

7.5.14 POLICIES 8.3.5 AND 8.3.6

- **Policy 8.3.5:** Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.
- **Policy 8.3.6:** Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

7.5.15 APPLICABILITY TO THE PROPOSED PROJECT

There are no drainages on the project site or significant biological habitats onsite; hence, these policies do not apply to the proposed project.

8. CITY OF AMERICAN CANYON –ORDINANCES

8.1 Trees (Ord. 18.40.110)

A. Existing trees shall be preserved on the site unless otherwise approved by the city council as a part of the site development plans.

B. Unless specifically approved by the city council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a twenty-four-inch box of the same species unless specifically approved by the city council. (Ord. 98-10 § 1 (part), 1998).

8.1.1 APPLICABILITY TO THE PROPOSED PROJECT

The project site does not support any trees.

9. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE

This section presents an overview of the criteria used by the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board, the State Water Resources Control Board, and CDFW to determine those areas within a project area that would be subject to their regulation.

9.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting

9.1.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill materials into any water of the United States.

In the Federal Register "waters of the United States" are defined as, "...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce..." (33 CFR Section 328.3).

Limits of Corps' jurisdiction:

(a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:

(1) Extends to the mean high tide line, or
(2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.

(c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:

(1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
(2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
(3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the ordinary high water mark (OHWM) or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is:

- the "line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

Wetlands are defined as: "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

9.1.1.1 Significant Nexus of Tributaries

On December 2, 2008, the Corps and the Environmental Protection Agency (EPA) issued joint guidance on implementing the U.S. Supreme Court decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (herein referred to simply as "Rapanos") which address the jurisdiction over waters of the United States under the Clean Water Act. In this joint guidance these agencies provide guidance on where they will assert jurisdiction over waters of the U.S.

The EPA and Corps will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (for example, typically three months).
- Wetlands that directly abut such tributaries.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and

- Significant nexus includes consideration of hydrologic and ecologic factors.

9.1.1.2 Isolated Areas Excluded from Section 404 Jurisdiction

In addition to areas that may be exempt from Section 404 jurisdiction, some isolated wetlands and waters may also be considered outside of Corps jurisdiction as a result of the Supreme Court's decision in Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers (531 U.S. 159 [2001]). Isolated wetlands and waters are those areas

that do not have a surface or groundwater connection to, and are not adjacent to a navigable "Waters of the U.S.," and do not otherwise exhibit an interstate commerce connection.

9.1.1.3 Permitting Corps Jurisdictional Areas

To remain in compliance with Section 404 of the Clean Water Act, project proponents and property owners (applicants) are required to be permitted by the Corps prior to discharging or otherwise impacting waters of the United States. In many cases, the Corps must visit a proposed project area (to conduct a "jurisdictional determination") to confirm the extent of area falling under their jurisdiction prior to authorizing any permit for that project area. Typically, at the time the jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to "waters of the United States."

Pursuant to Section 404 of the Clean Water Act, the Corps normally provides two alternatives for permitting impacts to the type of "waters of the United States" found in the project area. The first alternative would be to use Nationwide Permit(s) (NWP). The second alternative is to apply to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes public interest review procedures (i.e., public notice and receipt of public comments) and must contain an "alternatives analysis" that is prepared pursuant to Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). The alternatives analysis is also typically reviewed by the federal EPA and thus brings another resource agency into the permitting framework. Both the Corps and EPA take the initial viewpoint that there are practical alternatives to the proposed project if there would be impacts to waters of the U.S., and the proposed permitted action is not a water dependent project (e.g. a pier or a dredging project). Alternative analyses therefore must provide convincing reasons that the proposed permitted impacts are unavoidable. Individual Permits may be available for use in the event that discharges into regulated waters fail to meet conditions of NWP(s).

NWPs are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under NWP, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). In order to use NWP(s), a project must meet 27 general nationwide permit conditions, and all specific conditions pertaining to the NWP being used (as presented at 33 CFR Section 330, Appendices A and C). It is also important to note that pursuant to 33 CFR Section 330.4(e), there may be special regional conditions or modifications to NWPs that could have relevance to individual proposed projects. Finally, pursuant to 33 CFR Section 330.6(a), Nationwide permittees may, and in some cases must, request from the Corps confirmation that an activity complies with the terms and conditions of the NWP intended for use (*i.e.,* must receive "verification" from the Corps).

Prior to finalizing design plans, the applicant needs to be aware that the Corps maintains a policy of "no net loss" of wetlands (waters of the United States) from project area development. Therefore, it is incumbent upon applicants that propose to impact Corps regulated areas to submit a mitigation plan that demonstrates that impacted regulated areas would be recreated (*i.e.,* impacts would be mitigated). Typically, the Corps requires mitigation to be "in-kind" (i.e., if a

stream channel would be filled, mitigation would include replacing it with a new stream channel), and at a minimum of a 1:1 replacement ratio (i.e., one acre or fraction there of recreated for each acre or fraction thereof lost). Often a 2:1 replacement ratio is required. Usually the 2:1 ratio is met by recreation or enhancement of an equivalent amount of wetland as is impacted, in addition to a requirement to preserve an equivalent amount of wetland as is impacted by the project. In some cases, the Corps allows "out-of-kind" mitigation if the compensation site has greater value than the impacted site. For example, if project designs call for filling an intermittent drainage, mitigation should include recreating the same approximate jurisdictional area (same drainage widths) at an offsite location or on a set-aside portion of the project area. Finally, there are many Corps approved wetland mitigation banks where wetland mitigation credits can be purchased by applicants to meet mitigation compensation requirements. Mitigation banks have defined service areas and the Corps may only allow their use when a project would have minimal impacts to wetlands.

9.1.2 APPLICABILITY TO THE PROPOSED PROJECT

M&A originally prepared a preliminary wetland delineation map of the 35 acre parcel in 2006; however, this map was never submitted to the Corps. In 2011, a formal wetland delineation was conducted on July 14th and July 20th by M&A biologists Ms. Hope Kingma and Mr. Tim O'Donnell. The wetland delineation report and map were submitted to the Corps on August 22, 2011, requesting confirmation of the extent of Corps jurisdiction at the American Canyon Flat Lands site. In a letter dated January 31, 2012 the extent of Corps jurisdiction was confirmed, based on a field investigation on September 21, 2011. That jurisdictional determination expired five (5) years from the date of that letter.

M&A biologists Ms. Hope Kingma and Mr. Devin Jokerst conducted another wetland delineation of the entire 35.85-acre parcel (known as Lot 3), which includes this project site, on November 16, 2016 to re-verify the extent of jurisdictional areas on the site. M&A used the Corps' 1987 *Wetlands Delineation Manual* in conjunction with the *Regional Supplement for the Arid West Region*. The jurisdictional determination request and the Draft Aquatic Resources Delineation Map (Sheet 2) were submitted to the Corps in December 2016. Mr. Bryan Matsumoto of the Corps conducted a site verification visit on May 18, 2017. On May 16, 2018 the Corps issued the jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the 35.43-acre parcel. The confirmed Jurisdictional Delineation Map (Sheet 2) and letter are attached. None of the jurisdictional features on that map occur on the 10-acre project site that is the subject of this report. *As such there will be no impacts to the waters of the U.S. for this project.*

9.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)

9.2.1 SECTION 401 OF THE CLEAN WATER ACT

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the United States, including wetlands and other waters, any Corps permit authorized for a proposed project would be inoperative unless it is an NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific

certification of water quality. Certification of NWPs requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the permit (the term is typically for five years). Certification must be consistent with the requirements of the federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification of water quality.

9.2.2 Applicability to the Proposed Project

The Corps' Confirmed Reverification Aquatic Resources Delineation Map dated May 22, 2017 is provided as Sheet 2. The proposed project will not impact any waters of the State. *Therefore Section 401 of the Clean Water Act is not necessary for this project.*

9.3 California Department of Fish and Wildlife Protections

9.3.1 Section 1602 of California Fish and Game Code

Pursuant to Section 1602 of the California Fish and Game Code: "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

(1) CDFW receives written notification regarding the activity in the manner prescribed by CDFW. The notification shall include, but is not limited to, all of the following:
   (A) A detailed description of the project's location and a map.
   (B) The name, if any, of the river, stream, or lake affected.
   (C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
   (D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
   (E) A copy of any other applicable local, state, or federal permit or agreement already issued.
   (F) Any other information required by CDFW" (Fish & Game Code 2014).

Please see Section 1602 of the current California Fish and Game Code for further details.

Please also note that while not stated in the regulations above, CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, would require entering into a Streambed Alteration Agreement (SBAA) with CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, CDFW typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

9.3.2 APPLICABILITY TO THE PROPOSED PROJECT

There are no streams or drainages on the project site that would be regulated by CDFW. *Hence, an SBAA with CDFW would not be necessary for this project*.

10. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT

10.1 Construction General Permit

While federal Clean Water Act NPDES regulations allow two permitting options for construction related stormwater discharges (individual permits and General Permits), the State Water Resources Control Board (SWRCB) has elected to adopt only one statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (CalTrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than one acre of land or those sites less than one acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters.

2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively-defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.

3. Perform inspections of all BMPs.

This Construction General Permit is implemented and enforced by the nine California Regional Water Quality Control Boards (RWQCBs). It is also enforceable through citizens' suits and represents a dramatic shift in the State Water Board's approach to regulating new and redevelopment sites, imposing new affirmative duties and fixed standards on builders and developers.

<u>Types of Construction Activity Covered by the Construction General Permit</u>

- clearing,
- grading,
- disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre or more of total land area.

Construction activity that results in soil disturbances to a smaller area would still be subject to this General Permit if the construction activity is part of a larger common plan of development that encompasses greater than one acre of soil disturbance, or if there is significant water quality impairment resulting from the activity.

Construction activity does not include:

- routine maintenance to maintain original line and grade,
- hydraulic capacity, or original purpose of the facility,
- nor does it include emergency construction activities required to protect public health and safety.

The Construction General Permit includes several "post-construction" requirements. These requirements entail that site designs provide no net increase in overall site runoff and match pre-project hydrology by maintaining runoff volume and drainage concentrations. To achieve the required results where impervious surfaces such as roofs and paved surfaces are being increased, developers must implement non-structural off-setting BMPs, such as landform grading, site design BMPs, and distributed structural BMPs (bioretention cells, rain gardens, and rain cisterns). This "runoff reduction" approach is essentially a State Water Board-imposed regulatory requirement to implement Low Impact Development ("LID") design features. Volume that cannot be addressed using non-structural BMPs must be captured in structural BMPs that are approved by the RWQCB.

Improving the quality of site runoff is necessary to improve water quality in impaired and threatened streams, rivers, and lakes (that is, water bodies on the EPA's 303(d) list). The RWQCB prioritizes the water bodies on the 303(d) list according to potential impacts to beneficial uses. Beneficial uses can include a wide range of uses, such as nautical navigation; wildlife habitat; fish spawning and migration; commercial fishing, including shellfish harvesting; recreation, including swimming, surfing, fishing, boating, beachcombing, and more; water supply for domestic consumption or industrial processes; and groundwater recharge, among other uses. The State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these impaired water bodies. The TMDL is the quantity of a pollutant that can be safely assimilated by a water body without violating the applicable water quality standards.

Pursuant to the CWA, the RWQCB regulates construction discharges under the National Pollutant Discharge Elimination System (NPDES). The project sponsor of construction or other activities that disturb more than 1 acre of land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB[1].

[1] CGP Order 2009-0009-DWQ remains in effect, but has been amended by CGP Order 2009-0014-DWQ, effective February 14, 2011, and CGP Order 2009-0016-DWQ, effective July 17, 2012. The first amendment merely provided additional clarification to Order 2009-0009-DWQ, while Order 2009-0016-DWQ eliminated numeric effluent limits on pH and turbidity (except in the case of active treatment systems), in response to a legal challenge to the original order.

10.1.1 APPLICABILITY TO THE PROPOSED PROJECT

To obtain coverage under the SWRCB administered Construction General Permit, the applicant (typically through its civil engineer) must electronically file a number of permit-related compliance documents (Permit Registration Documents (PRDs), including a Notice of Intent (NOI), a risk assessment, site map, signed certification, Stormwater Pollution Prevention Plan (SWPPP), Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). (QSDs are typically civil engineers, professional hydrologists, engineering geologists, or landscape architects.) Once filed, these documents become immediately available to the public for review and comment. At a minimum, the SWPPP shall identify Best Management Practices (BMPs) for implementation during project construction that are in accordance with the applicable guidance and procedures contained in the California Stormwater Quality Association's *California Stormwater Best Management Practices Handbook* (2015).

10.2 RWQCB Municipal Storm Water Permitting Programs

The federal Clean Water Act (CWA) was amended in 1987 to address urban stormwater runoff pollution of the nation's waters. In 1990, the U.S. Environmental Protection Agency (USEPA) promulgated rules establishing Phase 1 of the National Pollutant Discharge Elimination System (NPDES) stormwater program. The Phase 1 program for Municipal Separate Storm Sewer System (MS4s) requires operators that serve populations of 100,000 or greater to implement a stormwater management program to control polluted discharges from these MS4s. While Phase 1 of the municipal stormwater program has focused on large urban areas, Phase 2 of the municipal stormwater program was promulgated by the USEPA for smaller urban areas including non-traditional Small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes.

MS4 permits require the discharger (or dischargers that are permitted by the MS4 permittees) to develop and implement a Storm Water Management Plan/Program (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. The management programs specify what best management practices (BMPs) will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations. In general, medium and large municipalities are required to conduct chemical monitoring, though small municipalities are not.

10.2.1 NPDES C.3 REQUIREMENTS

The NPDES C.3 requirements went into effect for any project (public or private) that is "deemed complete" by the City or County (Lead Agency) on or after February 15, 2005, and which will result in the creation or replacement (other than normal maintenance) of at least 10,000 square feet of impervious surface area (roofs, streets, patios, parking lots, etc. Provision C.3 requires the onsite treatment of stormwater prior to its discharge into downstream receiving waters. Note that these requirements are in addition to the existing NPDES requirements for erosion and

sedimentation controls during project construction that are typically addressed through acquisition of coverage under the SWRCB administered Construction General Permit. The C.3 requirements are typically required to be implemented by MS4 permittees (and their constituencies).

Projects subject to Provision C3 must include the capture and onsite treatment of all stormwater from the site prior to its discharge, including rainwater falling on building rooftops. Project applicants are required to implement appropriate source control and site design measures and to design and implement stormwater treatment measures in order to reduce the discharge of stormwater pollutants to the *maximum extent practicable.* While the Clean Water Act does not define "maximum extent practicable," the Stormwater Quality Management Plans required as a condition of the municipal NPDES permits identify control measures (known as Best Management Plans, or BMPs) and, where applicable, performance standards, to establish the level of effort required to satisfy the maximum extent practicable criterion. It is ultimately up to the professional judgment of the reviewing municipal staff in the individual jurisdictions to determine whether a project's proposed stormwater controls will satisfy the maximum extent practicable criterion. However, there are numeric criteria used to ensure that treatment BMPs have been adequately sized to accommodate and treat a site's stormwater. The C3 requirements are quite extensive, and their complete explanation is not provided here. However, the following are minimums that should be understood and adhered to:

- The applicant must provide a detailed and realistic site design *and impervious surface area calculations*. This site design *and calculations* will be used by the Lead Agency (County or City) to determine/*verify* the amount of impervious surface area that is being created or replaced. It should include all proposed buildings, roads, walkways, parking lots, landscape areas, etc., that are being created or redeveloped. If large (greater than 10,000 square feet) lots are being created an effort will need to be made to determine the total impervious surface area that could be created on that parcel. For example, if only a portion of the lot is shown as a "building envelope" then the lead agency will need to consider that a driveway will have to be constructed to access the envelope and that the envelope will then be developed as shown. If the C.3 thresholds are met (creation/redevelopment of 10,000 square feet of impervious surface area), a Stormwater Control Plan (SWCP) (if required by the Lead Agency, or whatever steps for compliance with Provision C3 are required locally) must accompany the application.

- If a SWCP is required by the Lead Agency for the project it must be stamped by a Licensed Civil Engineer, Architect, or Landscape Architect.

10.2.2 Applicability to the Proposed Project

The Water Board issued county-wide municipal stormwater permits in the early 1990s to operators of MS4s. On November 19, 2015, the Water Board re-issued these county-wide municipal stormwater permits as one Municipal Regional Stormwater NPDES Permit to regulate stormwater discharges from municipalities and local agencies. Permittees in the San Francisco Bay area are included in a Municipal Regional Permit (MRP), issued to 76 cities, counties and

flood control districts in 2009 and revised in 2015. Each of the Permittee's must file an Annual Report that is comprised of three parts: regional, countywide, and individual. Some requirements of the MRP are being implemented by the Bay Area Stormwater Management Agencies Association (BASMAA) on behalf of all the MRP Permittees. Other elements are being implemented collaboratively by the Permittees through their respective countywide programs. As such, BASMAA and the countywide programs have submitted Annual Report elements on the regional and countywide collaborative tasks, respectively, on behalf of the MRP Permittees and the individual MRP Permittees have also submitted Annual Report elements on the Permit Provisions they have implemented individually.

It is the applicant's responsibility to ensure that the project civil engineer prepares all required Storm Water Planning documents for submittal to the City of American Canyon to comply with its MS4 permit requirements. In addition, if the project includes a requirement to obtain a Clean Water Act Section 401 permit from the RWQCB, the Storm Water Management Plan (or equivalent plan) must be submitted to the RWQCB with the application package submitted for acquisition of a Section 401 permit (aka "water quality certification").

The applicant is proposing to treat all stormwater falling on impervious surfaces in the detention/bioretention basin located on the western edge of the project site (see Sheet UP4). Once treated, stormwater would be conveyed to "level spreader outfalls" that will be installed along the western project site boundary. The level spreader outfalls consist of perforated pipe set on contour that will discharge flows uniformly across a gradual slope covered by riprap, which will mimic sheet flow conditions similar to current project site runoff (see Storm Drain Level Spreader Detail). Accordingly, the project will not violate any water quality standards.

11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g. an occupancy permit must be issued), the lead agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an "Initial Study." If there could be significant environmental impacts, the lead agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are "Categorical Exemptions" that apply to the proposed activity; thus, the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. If the project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a "Negative Declaration." If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a "Mitigated Negative Declaration" is typically prepared by the lead agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can't be mitigated to a level considered less than significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact

Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines "endangered" species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. "Rare" species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will "substantially affect a rare or endangered species of animal or plant or the habitat of the species." The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

This report has been prepared as a Biology section that is suitable for incorporation into a Mitigated Negative Declaration. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA and can be incorporated by the CEQA lead agency (in this case City of American Canyon) into an initial study or higher levels of CEQA review including incorporation into the biology section of an Environmental Impact Report.

12. IMPACTS ANALYSIS

Below the criteria used in assessing impacts to Biological Resources is presented.

12.1 Significance Criteria

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other Federal, State, and local agencies' considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as "significant," "potentially significant," or "less than significant." Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated "waters of the United States" and/or stream channels.

12.1.1 THRESHOLDS OF SIGNIFICANCE

12.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on federally protected "wetlands" as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

12.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged or fill material into waters of the United States, which includes wetlands, as discussed in the bulleted item above, and also includes "other waters" (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the state. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

12.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which CDFW typically considers including riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

13. IMPACT ASSESSMENT AND PROPOSED MITIGATION

In this section we discuss potential impacts to sensitive biological resources, including special-status wildlife species. We follow each impact with a mitigation prescription that when

implemented would reduce impacts to the greatest extent possible. This impact analysis is based on the Preliminary Site Plan (Sheet A-1).

13.1 Impact BIO-1. Development of the Project Could Have a Potentially Significant Impact on Nesting Swainson's hawks (Potentially Significant)

The Swainson's hawk is a state listed threatened species. While the Swainson's hawk has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800).

No Swainson's hawk nests have been observed on the site or offsite in the vicinity of the project site during M&A's multiple project site surveys; however, the nesting population appears to be increasing throughout its nesting range in northern California and thus, it could conceivably nest in trees near the project site in the future.

If Swainson's hawks are found to be nesting adjacent to the project site, implementation of the proposed project could be viewed by CDFW as a project that could impact nesting Swainson's hawks. Nest site disturbance which results in: (1) nest abandonment; (2) loss of young; (3) reduced health and vigor of eggs and/or nestlings (resulting in reduced survival rates), may ultimately result in the take (killing) of nestling or fledgling Swainson's hawks incidental to otherwise lawful activities. The taking of Swainson's hawks in this manner can be viewed by CDFW as a violation of the Section 2080 of the Fish and Game Code. This interpretation of take has been judicially affirmed by the landmark appellate court decision pertaining to CESA (CDFG v. ACID, 8 CA App. 4, 41554) (CDFG 1994).

Typically, CDFW requires that any impact to a Swainson's hawk nest be permitted through a Fish and Game Section 2081 management authorization. If an active nest is found adjacent to the project site within an area of influence (which is generally considered to be within 1,000 feet of the project site) "to avoid potential violation of Fish and Game Code 2080 (i.e., killing of listed species), project-related disturbance at active Swainson's hawk nesting sites should be reduced or eliminated during critical phases of the nesting cycle (March 1- September 15 annually)" (CDFG 1994). If disturbance would occur, a Fish and Game Section 2081 management authorization would be required. As such, in the absence of survey results, it must be concluded that impacts to Swainson's hawk from the proposed project would be *potentially significant pursuant to CEQA.* This impact could be mitigated to a level considered less than significant pursuant to CEQA.

The closest known record for nesting Swainson's hawk is 2.6 miles north of the project site (CNDDB Occurrence No. 2744). There are extensive foraging opportunities both around the closest nesting location and between this nesting location and the project site. Considering that the entire project site consisted of a eucalyptus grove until 2012, it did not historically provide potential foraging habitat. Also, as the project site is essentially surrounded by eucalyptus forest, it is not a foraging destination which would likely attract foraging Swainson's hawks. Furthermore, M&A has confirmed that the project site has a low rodent population, therefore development of the project site will not have a significant impact on Swainson's hawk foraging habitat. Therefore, no mitigation for the loss of foraging habitat is warranted for this project.

13.2 Mitigation Measure BIO-1. Mitigation for Potential Impacts to Nesting Swainson's Hawk

Preconstruction surveys shall be conducted for a quarter-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to the project's initiation. The survey period timing and methodology shall be conducted in accordance with CDFW's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (CDFG 1994), which identifies different survey windows throughout the pre-nesting and nesting season (ranging from January 1 through July 30/post-fledging) that have different survey methodologies and requirements.

If Swainson's hawks are found to be nesting on the project site or within a ¼-mile of the project site, consultation with CDFW will be required. The size of the nest protection buffer will be determined during consultation with CDFW but at a minimum there will be a 300-foot non-disturbance buffer around the nest site.

Implementation of this mitigation measure would reduce potential impacts to nesting Swainson's hawk to a level considered less than significant pursuant to CEQA.

13.3 Impact BIO-2. Development of the Project Could Have a Potentially Significant Impact on Western Burrowing Owl (Potentially Significant)

The western burrowing owl is a California Species of Special Concern. This raptor (that is, bird of prey) is also protected under the Migratory Bird Treaty Act (50 CFR 10.13) and its nest, eggs, and young are protected under California Fish and Game Code Sections 3503, 3503.5. While western burrowing owls have not been observed on the project site and their likelihood of presence on the project site is considered to be low, limited suitable nesting habitat occurs on the project site. Since the western burrowing owl is a mobile species that could move onto the project site prior to development, preconstruction surveys would be necessary to determine its presence. Thus, the project may result in impacts to the western burrowing owl; this would be a *potentially significant impact pursuant to CEQA***.** This impact could be mitigated to a level considered less than significant pursuant to CEQA.

13.4 Mitigation Measure BIO-2. Mitigation for Potential Impacts to Western Burrowing Owl

Based on the presence of this species in the project vicinity and the potential habitat found on the project site, a preconstruction survey for burrowing owls should be conducted 14 days prior or less to initiating ground disturbance. As burrowing owls may recolonize a site after only a few days, time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance to ensure absence. If no owls are found during these surveys, no further regard for the burrowing owl would be necessary.

a. Burrowing owl surveys should be conducted by walking the entire project site. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be 7 meters to 20 meters and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility.

Poor weather may affect the surveyor's ability to detect burrowing owls thus, avoid conducting surveys when wind speed is greater than 20 kilometers per hour and there is precipitation or dense fog. To avoid impacts to owls from surveyors, owls and/or occupied burrows should be avoided by a minimum of 50 meters (approximately 160 ft.) wherever practical to avoid flushing occupied burrows. Disturbance to occupied burrows should be avoided during all seasons.

b. If burrowing owls are detected on the site, the following restricted activity dates and setback distances are recommended per CDFW's Staff Report (2012).

- From April 1 through October 15, low disturbance and medium disturbance activities should have a 200 meter buffer while high disturbance activities should have a 500 meter buffer from occupied nests.
- From October 16 through March 31, low disturbance activities should have a 50 meter buffer, medium disturbance activities should have a 100 meter buffer, and high disturbance activities should have a 500 meter buffer from occupied nests.
- No earth-moving activities or other disturbance should occur within the afore-mentioned buffer zones of occupied burrows. These buffer zones should be fenced as well. If burrowing owls were found in the project area, a qualified biologist would also need to delineate the extent of burrowing owl habitat on the site.

Implementation of these mitigation measures would reduce potential impacts to burrowing owls to a level considered less than significant pursuant to CEQA.

13.5 Impact BIO-3: Development of the Project Would Have a Potentially Significant Impact on Tree or Ground Nesting Raptors (Potentially Significant)

Tree or ground nesting raptors that could be affected by the project include northern harrier, white-tailed kites, red-shouldered hawk and red-tailed hawk. Nesting raptors are protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711 and 50 CFR 10.13). All nesting raptors, their eggs and young are protected pursuant to California Fish and Game Code §3503.5. Specific surveys for nesting raptors have not been conducted. In the absence of survey results indicating otherwise, it is conservatively assumed that implementation of the proposed project may impact nesting raptors which could result in nest abandonment and death of eggs or young. Therefore, impacts to nesting raptors are regarded as *potentially significant pursuant to CEQA***.** This impact could be mitigated to a level considered less than significant pursuant to CEQA.

13.6 Mitigation Measure BIO-3: Mitigation for Potential Impacts to Tree or Ground Nesting Raptors

To ensure that impacts to tree or ground nesting raptors are avoided or offset, the following mitigation measures will be implemented:

a. In order to avoid impacts to nesting raptors, a preconstruction nesting survey will be conducted by a qualified raptor biologist prior to commencing with earth-moving or construction work if this work would commence between February 1st and August 31st. The survey should be

conducted within the 30 day period prior to site disturbance. The raptor nesting surveys will include examination of all trees and ruderal habitat within 200 feet of the project site.

b. If nesting raptors are identified during the surveys, the dripline of the nest tree or ground-nesting site must be fenced with orange construction fencing (provided the nest site is on the project site), and a 200-foot radius around the nest tree or nest site must be staked with orange construction fencing. If the tree or nest site is located off the project site, then the buffer should be demarcated per above where the buffer occurs on the project site. The size of the buffer may be altered if a qualified raptor biologist conducts behavioral observations and determines the nesting raptors are well acclimated to disturbance. If this occurs, the raptor biologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors. No construction or earth-moving activity should occur within the established buffer until it is determined by a qualified raptor biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by August 1st. This date may be earlier or later, and would have to be determined by a qualified raptor biologist. If a qualified biologist is not hired to watch the nesting raptors then the buffers should be maintained in place through the month of August and work within the buffer can commence on September 1st.

c. If the preconstruction nesting survey identifies a large stick or other type of raptor nest that appears inactive at the time of the survey, but there are territorial raptors evident in the nest site vicinity, a protection buffer (as described above) should be established around the potential nesting tree until the qualified raptor biologist determines that the nest is not being used. In the absence of conclusive observations indicating the nest site is not being used, the buffer should remain in place until a second follow-up nesting survey can be conducted to determine the status of the nest and eliminate the possibility that the nest is utilized by a late-spring nesting raptor (for example, red-tailed hawk). This second survey should be conducted even if construction has commenced. If during the follow-up late season nesting survey a nesting raptor is identified utilizing the nest, the protection buffer should remain until it is determined by a qualified raptor biologist that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If the nest remains inactive, the protection buffer can be removed and construction and earth-moving activities can proceed unrestrained.

Implementation of these mitigation measures would reduce potential impacts to nesting raptors to a level considered less than significant pursuant to CEQA.

13.7 Impact BIO-4: Development of the Project Would Have a Potentially Significant Impact on Nesting Passerine Birds. (Potentially Significant)

Nesting passerine birds (i.e., perching birds) are protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711 and 50 CFR 10.13) and by California Fish and Game Code §3503 and §3503.5 which protects nesting birds, their eggs and young. These birds frequently change nesting locations from year to year and thus, past nesting histories are not necessarily indicative of future nesting activities. Accordingly, impacts to nesting passerine birds, their eggs, and/or young resulting from the proposed project are considered potentially significant. *This impact could be mitigated to a level considered less than significant pursuant to CEQA.*

13.8 Mitigation Measure BIO-4: Mitigation for Potential Impacts to Nesting Passerine Birds.

To ensure that impacts to nesting passerine birds are avoided or offset, a nesting survey shall be conducted 15 days prior to commencing construction/ grading or tree removal activities if this work would commence between March 1 and September 1. If common passerine birds or special-status passerine birds are identified nesting on the project site, a non-disturbance buffer of 75 feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with orange construction fencing. Disturbance within the buffer shall be postponed until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.

Typically, most passerine birds in the region of the project site are expected to complete nesting by August 1st. However, many species can complete nesting by the end of June or in early to mid-July. Regardless, nesting buffers shall be maintained until August 1st unless a qualified ornithologist determines that young have fledged and are independent of their nests at an earlier date. If buffers are removed prior to August 1st, the qualified biologist conducting the nesting surveys should prepare a report that provides details about the nesting outcome and the removal of buffers. This report shall be submitted to the City of American Canyon Planning Department prior to the time that nest protection buffers are removed if the date is before August 1st.

Implementation of this mitigation measure would reduce potential impacts nesting passerine birds to a level considered less than significant pursuant to CEQA.

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Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 1. SDG 217 Commerce Distribution Center
Project Site Regional Map
City of American Canyon, California

County: Napa
Map Preparation Date: December



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 2. SDG 217 Commerce Distribution Center
Project Site Location Map
City of American Canyon, California

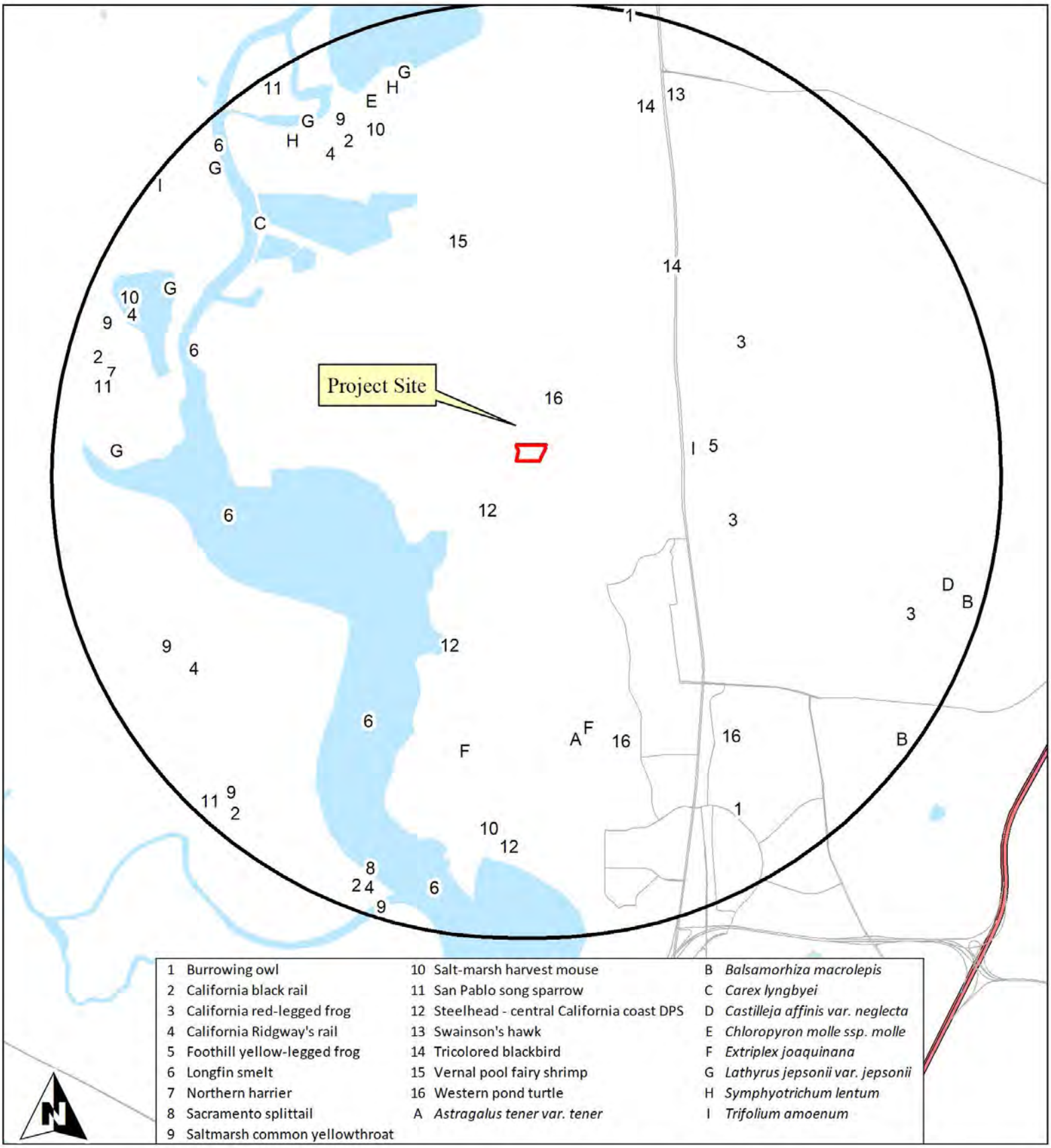
38.185626, -122.274079
Section: 23, T4N R4W
7.5-Minute Cuttings Wharf quadrangle
HUC08 Watershed CA: San Pablo Bay
Aerial Photograph Source: ESRI
Map Preparation Date: December



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 3. SDG 217 Commerce Project Site
Aerial Photograph
City of American Canyon, California

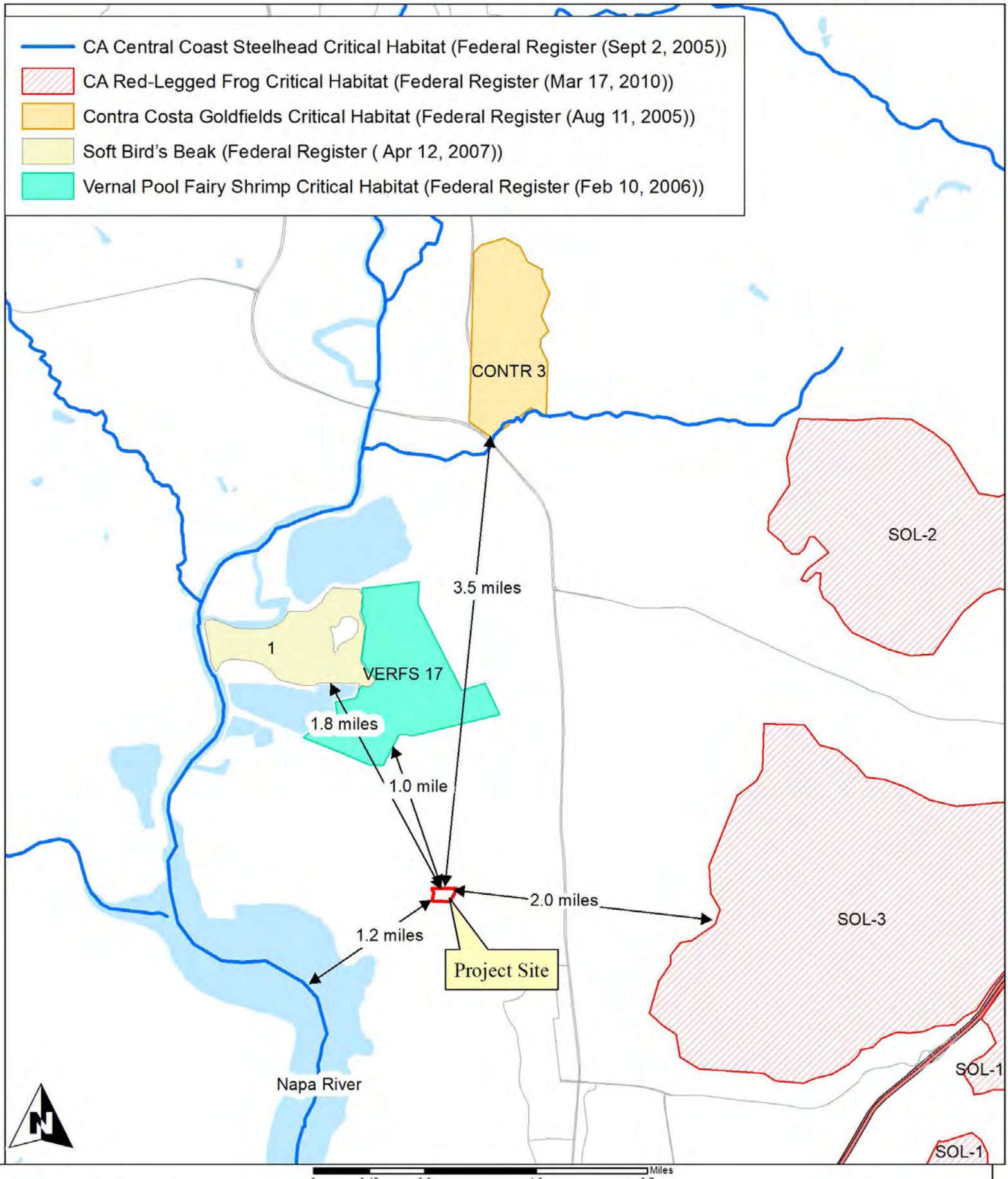
Aerial Photograph Source: ESRI
Map Preparation Date: December 2



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 4. Known CNDDB Records for Special-Status Species Within 3 Miles of the SDG 217 Commerce Project Site

Map Preparation Date:
December 3, 2019
3-Mile Radius
Source: CDFW, California Natural Diversity Data Bas



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 5. USFWS Critical Habitat
in the Vicinity of the
SDG 217 Commerce Distribution Center

Source: USFWS
Map Preparation Date: December 2(

Table 1

Plant Species Observed on the SDG 217 Commerce Distribution Center Project Site

Angiosperms - Dicots

Apiaceae

Torilis sp.	sock destroyer

Asteraceae

Baccharis pilularis subsp. pilularis	Baccharis
**Carduus pycnocephalus subsp. pycnocephalus*	Italian thistle
**Cirsium vulgare*	Bull thistle
**Dittrichia graveolens*	Stinkwort
**Hypochaeris radicata*	Rough cat's-ear
**Sonchus asper subsp. asper*	Prickly sow-thistle

Brassicaceae

**Hirschfeldia incana*	Short-podded mustard
**Sinapis alba*	White mustard

Caryophyllaceae

**Stellaria media*	Common chickweed

Convolvulaceae

**Convolvulus arvensis*	Bindweed

Fabaceae

**Medicago polymorpha*	California burclover
**Trifolium repens*	White clover
**Vicia sativa*	Common vetch

Geraniaceae

**Erodium cicutarium*	Red-stem filaree
**Geranium dissectum*	Cut-leaf geranium

Montiaceae

Claytonia perfoliata	Miner's lettuce

Myrsinaceae

**Lysimachia arvensis*	Scarlet pimpernel

Orobanchaceae

**Parentucellia viscosa*	Yellow glandweed

Papaveraceae

**Fumaria parviflora*	Fumaria

Plantaginaceae

**Plantago lanceolata*	English plantain

Polygonaceae

**Rumex crispus*	Curly dock

Ranunculaceae

**Ranunculus muricatus*	Spiny-fruit buttercup

Rubiaceae

Galium aparine	Goose grass

* Indicates a non-native species

Table 1

Plant Species Observed on the SDG 217 Commerce Distribution Center Project Site

Angiosperms -Monocots

Iridaceae

Sisyrinchium californicum	Golden-eyed-grass

Juncaceae

Juncus occidentalis	Slender rush

Poaceae

**Avena barbata*	Slender wild oat
**Bromus diandrus*	Ripgut grass
**Bromus hordeaceus*	Soft chess
Elymus triticoides	Creeping wildrye
**Festuca perennis*	perennial ryegrass
**Hordeum murinum*	Wall barley
Phalaris angusta	Canary timothy grass

* Indicates a non-native species

Table 2
Wildlife Observed on the ICC SDG 217 Commerce Distribution Center Project Site

Amphibians	
Sierran treefrog	*Pseudacris sierra*
Reptiles	
Western fence lizard	*Sceloporus occidentalis*
Birds	
Northern flicker	*Colaptes auratus*
Great blue heron	*Ardea herodias*
Turkey vulture	*Cathartes aura*
Canada goose	*Branta canadensis*
Osprey	*Pandion haliaetus*
White-tailed kite	*Elanus leucurus*
Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
Ring-necked pheasant	*Phasianus colchicus*
Wild turkey	*Meleagris gallopavo*
California quail	*Callipepla californica*
Virginia rail	*Rallus limicola*
Eurasian collared-dove	*Streptopelia decaocto*
Mourning dove	*Zenaida macroura*
Barn owl	*Tyto alba*
Anna's hummingbird	*Calypte anna*
Belted kingfisher	*Megaceryle alcyon*
Nuttall's woodpecker	*Picoides nuttallii*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
California scrub jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
Tree swallow	*Tachycineta bicolor*
Cliff swallow	*Petrochelidon pyrrhonota*
Barn swallow	*Hirundo rustica*
Chestnut-backed chickadee	*Poecile rufescens*
Bushtit	*Psaltriparus minimus*
Brown creeper	*Certhia americana*
Bewick's wren	*Thryomanes bewickii*
Marsh wren	*Cistothorus palustris*
Ruby-crowned kinglet	*Regulus calendula*
Western bluebird	*Sialia mexicana*
American robin	*Turdus migratorius*
Wrentit	*Chamaea fasciata*
Northern mockingbird	*Mimus polyglottos*
European starling	*Sturnus vulgaris*
Yellow-rumped warbler	*Setophaga coronata*
Spotted towhee	*Pipilo maculatus*

Table 2
Wildlife Observed on the ICC SDG 217 Commerce Distribution Center Project Site

California towhee	*Pipilo crissalis*
Savannah sparrow	*Passerculus sandwichensis*
Song sparrow	*Melospiza melodia*
White-crowned sparrow	*Zonotrichia leucophrys*
Dark-eyed junco	*Junco hyemalis*
Red-winged blackbird	*Agelaius phoeniceus*
Brewer's blackbird	*Euphagus cyanocephalus*
Brown-headed cowbird	*Molothrus ater*
Bullock's oriole	*Icterus bullockii*
House finch	*Haemorhous mexicanus*
Lesser goldfinch	*Spinus psaltria*
House sparrow	*Passer domesticus*
Mammals	
Western gray squirrel	*Sciurus griseus*
Black-tailed jackrabbit	*Lepus californicus*
California ground squirrel	*Otospermophilus beecheyi*
Columbian black-tailed deer	*Odocoileus hemionus ssp. columbianus*
Coyote	*Canis latrans*
Raccoon	*Procyon lotor*
Feral cat	*Felis catus*

Table 3

Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Asteraceae					
Balsamorhiza macrolepis Big-scale balsam-root	Fed: - State: - CNPS: Rank 1B.2	March-June	Cismontane woodland; chaparral; valley and foothill grassland; [sometimes serpentinite]. 90 - 1555 meters	Closest record is from 2011 and is 3.0 miles east of the project site (Occurrence No. 7).	None. The project site is highly disturbed. No suitable habitat on the project site.
Symphyotrichum lentum Suisun Marsh aster	Fed: - State: - CNPS: Rank 1B.2	August-November	Marshes and swamps (brackish and fresh water)	Closest record is from 1993 and is 2.5 miles northwest of the project site (Occurrence No. 128).	None. The project site is highly disturbed. No suitable habitat on the project site.
Chenopodiaceae					
Extriplex joaquinana San Joaquin spearscale	Fed: - State: - CNPS: Rank 1B.2	April-October	Chenopod scrub; meadows; valley and foothill grassland; [alkaline].	Closest record is from and is 1.8 miles south of the project site (Occurrence No. 58).	None. The project site is highly disturbed. No suitable habitat on the project site.
Cyperaceae					
Carex lyngbyei Lyngbye's sedge	Fed: - State: - CNPS: Rank 2	May-August	Marshes or swamps (brackish or freshwater)	Closest record is from 2008 and is 2.3 miles northwest of the project site (Occurrence No. 28).	None. The project site is highly disturbed. No suitable habitat on the project site.
Fabaceae					
Astragalus tener tener Alkali milkvetch	Fed: - State: - CNPS: Rank 1B.2	March-June	Playas; mesic grasslands (adobe clay), vernal pools (alkaline).	Closest record is from 1993 and is 1.8 miles south of the project site (Occurrence No. 50).	None. The project site is highly disturbed. No suitable habitat on the project site.

Table 3

Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Lathyrus jepsonii jepsonii Delta tule pea	Fed: - State: - CNPS: Rank 1B.2	May-September	Marshes and swamps (freshwater and brackish).	Closest record is from 1978 and is 2.6 miles northwest of the project site (Occurrence No. 13).	None. The project site is highly disturbed. No suitable habitat on the project site.
Trifolium amoenum Showy Indian clover	Fed: FE State: - CNPS: Rank 1B.1	April-June	Valley and foothill grassland (sometimes serpentinite)	Closest record is from 1952 and is 1.2 miles east of the project site (Occurrence No. 23).	None. The project site is highly disturbed. No suitable habitat on the project site.
Orobanchaceae					
Castilleja affinis neglecta Tiburon paintbrush	Fed: FE State: CT CNPS: Rank 1B.2	April-June	Valley and foothill grassland [serpentinite]	Closest record is from 2013 and is 3.0 miles east of the project site (Occurrence No. 5).	None. The project site is highly disturbed. No suitable habitat on the project site.
Chloropyron molle molle Soft bird's-beak	Fed: FE State: CR CNPS: Rank 1B.2	July-September	Marshes and swamps (coastal salt).	Closest record is from 2010 and is 2.3 miles north of the project site (Occurrence No. 3).	None. The project site is highly disturbed. No suitable habitat on the project site.

Table 3

Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site

***Status**

Federal:
FE - Federal Endangered
FT - Federal Threatened
FPE - Federal Proposed Endangered
FPT - Federal Proposed Threatened
FC - Federal Candidate

State:
CE - California Endangered
CT - California Threatened
CR - California Rare
CC - California Candidate
CSC - California Species of Special Concern

CNPS:
Rank 1A - Presumed extinct in California
Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/ high degree and immediacy of threat)
Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)
Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

CNPS Continued:
Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 2A - Extirpated in California, common elsewhere
Rank 2B.1 - Seriously endangered in California, but more common elsewhere
Rank 2B.2 - Fairly endangered in California, but more common elsewhere
Rank 2B.3 - Not very endangered in California, but more common elsewhere
Rank 3 - Plants about which we need more information (Review List)
Rank 3.1 - Plants about which we need more information (Review List) Seriously endangered in California
Rank 3.2 - Plants about which we need more information (Review List) Fairly endangered in California
Rank 4 - Plants of limited distribution - a watch list

Table 4

Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Invertebrates				
Vernal pool fairy shrimp *Branchinecta lynchi*	Fed: FT State: - Other:	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains. Inhabit static rain-filled/vernal pools, small, clear water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression	Closest record is from 2003 and is 1.5 miles north of the project site (Occurrence No. 232).	None. No suitable habitat on the project site.
Fish				
Steelhead - Central California Coast DPS *Oncorhynchus mykiss irideus*	Fed: FT State: - Other:	From Russian River south to Soquel Creek, and to Pajaro River. Also found in San Francisco & San Pablo Bay Basins. Spawn in clear, cool, well oxygenated streams greater than 18 cm deep.	Closest record is from 2000 and is 0.39 miles southwest of the project site (Occurrence No. 4).	None. No suitable habitat on the project site.
Longfin smelt *Spirinichus thaleichthys*	Fed: -- State: CT Other:	Endemic to the Sacramento-San Joaquin River system. Inhabits open waters in the Delta and Suisun Bay. After spawning, larvae are carried downstream to brackish nursery areas.	Closest record is from 2012 and is1.2 miles west of the project site (Occurrence No. 26).	None. No suitable habitat on the project site.
Sacramento splittail *Pogonichthys macrolepidotus*	Fed: State: CSC Other:	Endemic to the lakes and rivers of the Central Valley; now confined to the delta, Suisun Bay, and associated marshes. Inhabits slow moving river sections and dead-end sloughs. Needs flooded vegetation for spawning.	Closest record is from 2001 and is 2.9 miles southwest of the project site (Occurrence No. 12).	None. No suitable habitat on the project site.
Amphibians				
California red-legged frog *Rana draytonii*	Fed: FT State: CSC Other:	Occurs in lowlands and foothills in deeper pools and streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.	Closest record is from 2006 and is 1.4 miles east of the project site (Occurrence No. 896).	None. No suitable habitat on the project site.

Table 4

Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Foothill yellow-legged frog *Rana boylii*	Fed: -- State: CC Other:	Found in partially shaded, shallow streams with rocky substrates. Requires perenial pools or flowing water. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.	Closest record is from 193X and is 1.2 miles east of the project site (Occurrence No. 2341).	None. No suitable habitat on the project site.
Reptiles				
Western pond turtle ** *Emys marmorata*	Fed: - State: CSC Other:	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County.	Closest record is from 2002 and is 0.45 miles northeast of the project site (Occurrence No. 552).	None. No suitable habitat on or adjacent to the project site.
Birds				
Northern harrier *Circus cyaneus*	Fed: - State: CSC Other:	Nests on the ground or in shrubby vegetation typically in grasslands, fallow farm lands, near freshwater and salt water marshes.	Closest record is from 2004 and is 2.8 miles west of the project site (Occurrence No. 29).	Unlikely to nest onsite. Preconstruction surveys will be conducted.
Swainson's hawk *Buteo swainsoni*	Fed: - State: CT Other:	Migratory and resident raptor that breeds in open areas with scattered trees. Prefers riparian and sparse oak woodland habitats for nesting. Requires nearby grasslands, grain fields, or alfalfa for foraging.	Closest record is from 2013 and is 2.6 miles northeast of the project site (Occurrence No. 2744).	Unlikely to nest adjacent to project site. Preconstruction surveys will be conducted.
Ferruginous hawk *Buteo regalis*	Fed: -- State: WL Other:	Winter migrant to California where they prefer grasslands, cultivated fields and arid areas with an abundance of prey species, such as pocket gophers, black-tailed hares, and cottontails.	Closest record is from 1988 and is 3.0 miles north of the project site (Occurrence No. 28).	None. Does not nest in California.

Table 4

Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Peregrine falcon *Falco peregrinus*	Fed: - State: - Other:	Nests on high cliffs near wetlands, lakes, rivers, or other water; also nests on human-made structures. Nest consists of a scrape on a depression or ledge in an open site. Was formerly state and federally listed but delisted due to species recovery.	Closest record is from 2015 and is 3.0 miles east of the project site (Occurrence No. 42).	None. No suitable nesting habitat on or near the project site.
California black rail *Laterallus jamaicensis coturniculus*	Fed: -- State: CT Other:	Inhabits salt marshes bordering larger bays. Prefers tidal salt marshes of pickleweed.	Closest record is from 2011 and is 2.5 miles northwest of the project site (Occurrence No. 31).	None. No suitable habitat on the project site.
California Ridgway's rail *Rallus obsoletus obsoletus*	Fed: FE State: CE Other:	Inhabits salt water and brackish marshes with tidal sloughs in San Francisco Bay. Prefers dense pickleweed for cover, but forages for invertebrates along mud-bottomed sloughs.	Closest record is from 1989 and is 2.4 miles northwest of the project site (Occurrence No. 16).	None. No suitable habitat on the project site.
Western burrowing owl *Athene cunicularia hypugaea*	Fed: -- State: CSC Other:	Found in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Closest record is from 1989 and is 2.6 miles southeast of the project site (Occurrence No. 109).	Unlikely to nest on the project site. Preconstruction surveys will be conducted.
Salt marsh common yellowthroat *Geothlypis trichas sinuosa*	Fed: - State: CSC Other:	Resident of freshwater and salt water marshes in the San Francisco Bay region. Requires thick, continuous cover for foraging and tall grasses, tules, or willows for nesting.	Closest record is from 2004 and is 2.5 miles northwest of the project site (Occurrence No. 37).	None. No suitable habitat on the project site.
San Pablo song sparrow *Melospiza melodia samuelis*	Fed: -- State: CSC Other:	More properly known as Samuels Song Sparrow. Resident of salt marshes along the north side of San Francisco and San Pablo Bays. Inhabits tidal sloughs in the California marshes; nests in grindelia bordering slough channels.	Closest record is from 2004 and is 2.8 miles west of the project site (Occurrence No. 17).	None. No suitable habitat on the project site.

Table 4

Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Tricolored blackbird *Agelaius tricolor*	Fed: - State: CC Other: CSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	Closest record is from 2014 and is 1.6 miles northeast of the project site (Occurrence No. 243).	None. No suitable nesting habitat on the project site.
Mammals				
Salt marsh harvest mouse *Reithrodontomys raviventris*	Fed: FE State: CE Other:	Inhabits saline marshes in the San Francisco Estuary. Prefers pickleweed marshes. Requires higher areas for escaping high water.	Closest record is from 1989 and is 2.4 miles south of the project site (Occurrence No. 150).	None. No suitable habitat on the project site.

***Status**

Federal:	State:
FE - Federal Endangered	CE - California Endangered
FT - Federal Threatened	CT - California Threatened
FPE - Federal Proposed Endangered	CR - California Rare
FPT - Federal Proposed Threatened	CC - California Candidate
FC - Federal Candidate	CSC - California Species of Special Concern
FPD - Federally Proposed for delisting	FP - Fully Protected
	WL - Watch List. Not protected pursuant to CEQA

**The USFWS hopes to finish a 12-month finding for western pond turtle in 2021 but until formally listed, it is not afforded the protections of FESA.

- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army Corps of Engineers
San Francisco District
Regulatory Division

American Canyon Flat Lands
American Canyon, Napa County, California
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID. **2011-00322** Date: **March 6, 2018** Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees

W 1
LW 1
W2
LW2
IW 1
3'
3'

0 50 100 200 300 400 500 Feet Scale: 1 inch = 100 feet

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map
American Canyon Flat Lands, Lot 3
City of American Canyon, Napa County, California

Corps Verification Date: May 18, 2017
Confirmed by Bryan Matsumoto
Delineation Conduced by: Hope Kingma & Devin Jokerst
Aerial Photograph Source: ESRI
Map Revision Date: May 22, 2017

September 3, 2020

Industrial and Commercial Contractors, LP
403 W. Yosemite Avenue, Suite 105
Madera, California 93637

Attention: Mr. Brian Doswald

RE: Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site
SDG Commerce 217 Distribution Center, Napa, California
APN: 058-030-065-000

Dear Mr. Doswald:

1. INTRODUCTION

Monk & Associates, Inc., (M&A) has prepared this Addendum to our March 2, 2020, *Revised Biological Resource Analysis* (biology report) for the SDG Commerce 217 Distribution Center located in the City of American Canyon, California (the "project site"). Since the time M&A prepared our biology report for the project site, it has been determined that it will be necessary to acquire soil from the adjacent parcel to the south (the "borrow area parcel") and transport this soil for use as clean fill on the project site. M&A has prepared this Addendum to our biology report to address the transportation of soil from the offsite borrow area parcel onto the project site and to analyze any affects this activity could have on mapped jurisdictional waters of the United States/State that lie inbetween the project site and the adjacent borrow area parcel. Mapped waters of the United States are shown on the attached exhibits.

2. DESCRIPTION OF THE PROJECT SITE AND ADJACENT BORROW AREA PARCEL

The project site and the adjacent borrow area parcel were once part of a contiguous approximately 35-acre project site that M&A conducted surveys on over multiple years dating between 2006 and 2018. Both the project site and adjacent borrow area parcel are dominated by ruderal (weedy) vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). These non-native, weedy species provide little habitat value to wildlife and they do not constitute a native plant community. Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, is also common on the 35 acres. Ruderal vegetation is the only vegetation community found on the project site. The adjacent borrow area parcel, however, in addition to supporting a ruderal herbaceous community also supports waters of the United States, as described below.

On May 16, 2018, the U.S. Army Corps of Engineers issued a jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the approximately 35-acre

parcel that comprises the project site, the adjacent borrow area parcel, and another property now known as 330 Commerce Center (see attached exhibits). The entire 0.043-acre of waters of the U.S. confirmed by the Corps is found on the adjacent borrow area parcel as shown on the attached exhibit "Borrow Site Rough Grading," Sheet 1 prepared by RSA on August 21, 2020. There are no waters of the United States or State on the project site.

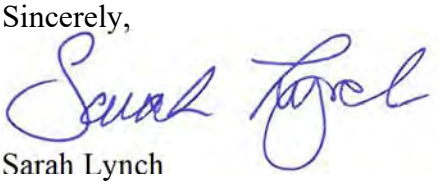
3. DISCUSSION OF PROPOSED ACTIVITIES AND AVOIDANCE OF IMPACTS TO MAPPED WATERS OF THE UNITED STATES

The project applicant intends to rough grade the borrow area parcel and transport soil from that parcel onto the project site for use in development of the project site. In order to protect the waters of the United States/State that occur in between the project site and the borrow area parcel, a 25-foot buffer area around the outside edge of the wetlands will be staked and protected with fiber roll, silt fencing and high visibility orange construction fencing to prevent equipment from driving into the wetlands during hauling activities. See the attached exhibit.

With these protection measures in place, as shown on the attached Borrow Site Rough Grading exhibit, Sheet 1, attached, *there are no expected impacts to waters of the U.S./State from the transport of soil/materials from the borrow area parcel to the project site*.

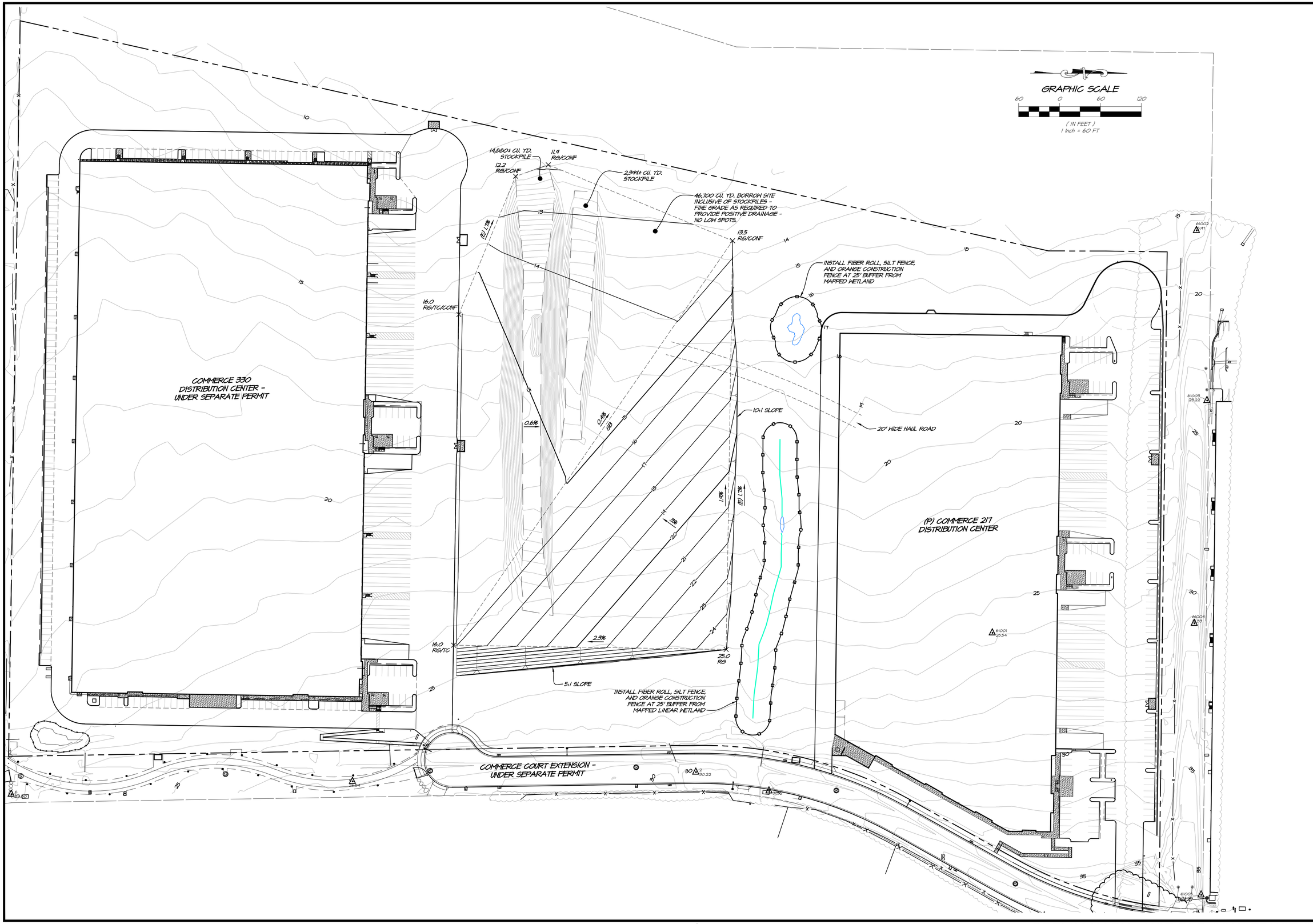
This concludes our addendum to our biology report. If you have any questions or require additional information, please do not hesitate to contact me at (925) 323-4850 or Sarah@monkassociates.com. Thank you.

Sincerely,



Sarah Lynch
Senior Associate Biologist

Attachments: U.S. Army Corps of Engineers Confirmed Aquatic Resources Delineation Map;
Sheet 1, Borrow Site Rough Grading prepared by RSA, August 21, 2020



NO.	DATE	REVISIONS	BY	APPD

RSA+
1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE [707] 252.3301
+ www.RSAcivil.com +
RSA+ | CONSULTING CIVIL ENGINEERS + SURVEYORS + | 1980

SDG COMMERCE 217 DISTRIBUTION CENTER
BORROW SITE ROUGH GRADING
AMERICAN CANYON
CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNOCK
No. 82758
Exp. 9-30-20
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	AUG. 21, 2020
DRAWN	DRL
DESIGNED	DRL
CHECKED	PSW
JOB NO.	4119037.0
SHEET NO.	1
	1 OF 1 SHEETS

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PRELIMINARY - NOT FOR CONSTRUCTION

1903

- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
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- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

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Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army Corps of Engineers
San Francisco District
Regulatory Division

American Canyon Flat Lands
American Canyon, Napa County, California
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID. **2011-00322** Date: **March 6, 2018** Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees

W 1
LW 1
W2
LW2
IW 1
3'
3'

0 50 100 200 300 400 500 Feet Scale: 1 inch = 100 feet

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map
American Canyon Flat Lands, Lot 3
City of American Canyon, Napa County, California

Corps Verification Date: May 18, 2017
Confirmed by Bryan Matsumoto
Delineation Conduced by: Hope Kingma & Devin Jokerst
Aerial Photograph Source: ESRI
Map Revision Date: May 22, 2017

NOTE: SEE SHEET C3.0 FOR ADDITIONAL GRADING.

(P) COMMERCE 217
DISTRIBUTION CENTER

(E) COMM

INSTALL FIBER ROLL, SILT FENCE, AND ORANGE CONSTRUCTION FENCE AT 25' BUFFER FROM MAPPED WETLAND (SEE NOTE 1)

FIBER ROLL, TYP. PER (1/C5.1)

13.4ft RG/CONF

10:1 SLOPE

(E) 1.7%

1.9%

(E) GRAVEL ROAD

25.00 RG

INSTALL FIBER ROLL, SILT FENCE, AND ORANGE CONSTRUCTION FENCE AT 25' BUFFER FROM MAPPED LINEAR WETLAND. (SEE NOTE 1)

24,576 CU. YD. BORROW SITE INCLUSIVE OF STOCKPILES - FINE GRADE AS REQUIRED TO PROVIDE POSITIVE DRAINAGE - NO LOW SPOTS.

2,399± CU. YD. STOCKPILE

12.13 RG/CONF

14,880± CU. YD. STOCKPILE

12.16 RG/CONF

(E) 1.7%

15.82 RG/CONF

1.1%

21.00 RG

5:1 SLOPE

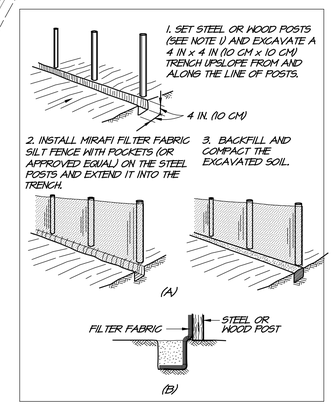
(E) AREA GRADED TO DRAIN

PRESERVE EXISTING VEGETATION OUTSIDE OF THE PROJECT FOOTPRINT TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION.

COMMERCE COURT

(E) COMMERCE 330
DISTRIBUTION CENTER -
UNDER SEPARATE PERMIT

GRAPHIC SCALE
40 0 40 80
(IN FEET)
1 inch = 40 FT



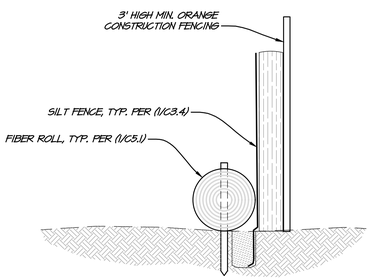
CONSTRUCTION OF A SILT FENCE:
(A) INSTALLATION SEQUENCE
(B) EXTENSION OF FABRIC INTO THE TRENCH

INSTALLATION OF SILT FENCE SEDIMENT BARRIER

1. LAY OUT A SUITABLE FENCE LINE AND SET POSTS ALONG IT. ON SLOPES, ALIGN THE FENCE ALONG THE CONTOUR AS CLOSELY AS POSSIBLE. IN SMALL SWALES, CURVE THE FENCE LINE UPSTREAM AT THE SIDES TO DIRECT THE FLOW TOWARD THE MIDDLE OF THE FENCE. THE SIDES SHOULD BE HIGHER THAN THE CENTER AS ILLUSTRATED AT RIGHT. SPACE POSTS ON 6' CENTERS AND DRIVE THEM A MINIMUM OF 12 IN (30 CM) INTO THE GROUND. POSTS FOR SILT FENCES CAN BE EITHER 1 1/2" (3.8 CM) MIN DIA. HARD WOOD OR 1.33 LB/FT (1.97 KG/M) STEEL WITH A MINIMUM LENGTH OF 5 FT (1.5 M). STEEL POSTS MUST HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
2. FASTEN THE FILTER FABRIC TO THE UPHILL SIDE OF THE FENCE POSTS, AND EXTEND TO 6 TO 8 IN (15 TO 20 CM) INTO THE TRENCH. THE HEIGHT OF THE FENCE SHOULD NOT EXCEED 36 IN (0.9 M). DO NOT STAPLE FABRIC ONTO TREES. CUT THE FILTER FABRIC FROM A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, SPLICE THE FILTER CLOTH AT A SUPPORT POST, WITH A MINIMUM 6 IN (15 CM) OVERLAP, AND SECURELY FASTEN BOTH ENDS TO THE POST.
3. BACKFILL THE TRENCH OVER THE TOE OF THE FABRIC AND COMPACT THE SOIL.
4. PREFABRICATED SILT FENCE WITH POSTS MAY BE USED AS AN ALTERNATE TO SETTING STEEL OR WOOD POSTS.

1 SILT FENCE SEDIMENT BARRIER
RSA EC0000-13 NOT TO SCALE

NOTE
1. PRIOR TO START OF ANY GRADING WORK, CONTRACTOR SHALL INSTALL WETLAND PROTECTION MEASURES (FIBER ROLL, SILT FENCE, AND DRAINAGE CONSTRUCTION FENCE.)



2 WETLANDS PROTECTION DETAIL
NOT TO SCALE

City of American Canyon
Public Works
Job Site Copy
03/28/2023

NO.	DATE	REVISIONS	BY	APPD

RSA+
1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE (707) 252-2330
+ WWW.RSACIVIL.COM +
RSA+ | CONSULTING CIVIL ENGINEERS + SURVEYORS + | (1980)

SDG COMMERCE 217 DISTRIBUTION CENTER
BORROW SITE GRADING PLAN
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER NICHOLAS AARON WEBER C85746 Exp. 9-30-24 CIVIL STATE OF CALIFORNIA

DATE	MAR. 16, 2023
DRAWN	LMM
DESIGNED	NAW
CHECKED	PSW
JOB NO.	4119037.0

SHEET NO.
C3.5
14 OF 20 SHEETS

R:\2019\4119037.0_SDG_Commerce_210_Distribution_Center\Civil\CAD\C3.5-GRAD-BORROW SITE.dwg 03/16/2023 3:01:32PM lmlgrom COPYRIGHT RSA+

D.2 - SDG Commerce Site 220 Documents

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Pinecrest Environmental Consulting

PINECREST ENVIRONMENTAL CONSULTING
6425 TELEGRAPH AVE. #8
OAKLAND, CA 94609

510.881.3039 TEL
INFO@PINECRESTENVIRONMENTAL.ORG
WWW.PINECRESTENVIRONMENTAL.ORG

SPECIAL-STATUS ANIMAL SURVEY REPORT

Date: August 8, 2023

To: Robert Carroll, FCS International.

From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc.

Subject: Results of special-status animal surveys at 220 Commerce Court, Napa County, CA (FCS Project 5639.0001)

Robert Carroll,

This special-status animal survey report (Report) details the findings of eleven (11) wildlife surveys conducted between January 18 and July 2 in 2023 at the above-referenced property located in the County of Napa. The site consists of one parcel measuring 10.2 acres and assigned APN 058-030-069. Surveys were conducted in order to determine the pre-construction presence or absence of the following special-status animals: burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), nesting raptors, nesting passerine birds, and Western pond turtle. Surveys were conducted by consulting biologist Dr. Christopher DiVittorio.

Site Description

The entirety of the site is disked and mowed ruderal grassland, with the exception of a row of Eucalyptus trees along the northern property line. The ruderal grassland exhibits low cover of plants and low species diversity with very few native species (Figure 1). The habitat type of this area as determined by Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV) is *Bromus* (*diandrus, hordeaceous*)-*Brachypodium distachyon* Semi-Natural Herbaceous Stand. On the north side of the parcels is a row of bluegum Eucalyptus. The MCV classification of this habitat is *Eucalyptus* (*globulus, camaldulensis*) Semi-Natural Woodland Stands.

Methods

Between January 18 and July 2, 2023, eleven (11) surveys were conducted for nesting passerine birds, raptors (including Swainson's hawk), burrowing owl, and Western pond turtle. During each survey, the entirety of the "Commerce 220" site as well as the adjacent "Commerce 217" site were examined. These surveys included the entirety of both legal parcels, as well all of the vegetated areas up to the concrete paved area on the developed parcel to the south. Relevant adjacent areas were also examined with binoculars where possible. A total of approximately 45 survey hours were completed across all survey dates. All of the aforementioned animal types were surveyed for at each of the eleven site visits. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting fSurveys in California's Central Valley*, and the *Staff Report on*

Burrowing Owl Mitigation.[1,2] Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10 a.m.). Surveys were conducted on foot. Survey dates with the corresponding Swainson's hawk survey periods are shown below.

Date	Swainson's Hawk Survey Period
1/18/2023	1st survey in Period I
3/20/2023	1st survey in Period II
3/31/2023	2nd survey in Period II
4/4/2023	3rd survey in Period II
4/5/2023	1st survey in Period III
4/6/2023	2nd survey in Period III
4/7/2023	3rd survey in Period III
4/24/2023	1st survey in Period IV
4/28/2023	2nd survey in Period IV
5/29/2023	3rd survey in Period IV
7/2/2023	1st survey in Period V

Results & Recommendations

A total of 56 unique species of birds were observed across the eleven site visits. A total of 4 other species of animals were observed across the eleven site visits. Transcribed field notes from each of the eleven site visits are provided in Appendix A, below. A master list of all species of birds and other animals encountered across the eleven site visits is provided in Appendix B, below.

Due to the lack of suitable nesting habitat on the project site itself, no nesting birds were observed in the project area, although nesting birds were observed in the *Eucalyptus* stands offsite. Of the nesting birds in the offsite *Eucalyptus* stands, none of these were special-status including raptors. White tailed kites (*Elanus leucurus*) were observed foraging in the field, but they did not appear to be nesting nearby, as described below. No Swainson's hawk or burrowing owl were observed during any of the avian surveys. No adults or nests of Western pond turtle were observed (Appendix A & B).

[1] Swainson's Hawk Technical Advisory Committee. 2000. *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*. California Department of Fish and Wildlife, May 31, 2000.

[2] California Department of Fish and Wildlife 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

Swainson's hawk

No individuals of Swainson's hawk were observed during any of the surveys, and no raptor nests that could belong to Swainson's hawk were observed. The presence of other birds-of-prey utilizing territories onsite also indicates that Swainson's hawk are not utilizing this habitat currently since these species are antagonistic and do not typically share ranges. The negative survey results for Swainson's hawk despite approximately 45 survey hours satisfies the requirements of the survey protocol for this species, therefore it is reasonable to conclude Swainson's hawk are absent from the project site.

Nesting Birds (Including Raptors)

No active raptor nests were observed within the vicinity of the project site. Several American crow were loitering around the *Eucalyptus* grove to the east of the parcel and harassing White-tail kites that approached the grove, however their nest could not be located. Several White-tail kites were observed each day foraging over the grassland habitat, however each time they flew off to the southwest out of sight and the location of their nest could not be determined. One juvenile red-shouldered hawk was observed within a large *Eucalyptus* tree along the north property line however this individual flew offsite after approximately 20 minutes. No other active nests were observed during any of the eleven site visits.

Burrowing Owl

No evidence of burrowing owl activity was observed during any of the eleven field surveys. No California ground squirrel burrows were observed on-site, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl. Therefore, it is reasonable to conclude burrowing owl is absent from the project site.

Western Pond Turtle

No evidence of Western pond turtle activity was observed during any of the eleven field surveys. There are some wetland features onsite, however there are no ponds or streams onsite that would be suitable for Western pond turtle foraging or breeding. No signs of adults or nests were observed onsite or in the accessible vicinity of the site. Therefore, it is reasonable to conclude Western pond turtle is absent from the project site.

Based on the results of these eleven surveys, we conclude that there are no special-status animal species currently occupying the project site, and no compensatory mitigation for impacts to special-status animal species is recommended at this time. These results do not however, preclude the future existence of the above-referenced species onsite as they may recolonize the site if sufficient time has passed between these surveys and site development.

Please let me know if you have any questions about this or any other studies we've performed for this project.

Sincerely,



Christopher DiVittorio, PhD
President, PEC
(510) 881-3039
chris@pinecrestenvironmental.org

Figure 1: Ruderal Grassland



SOURCES: PEC Inc.

APN 058-030-069-000
220 Commerce Court, American Canyon, CA 94503

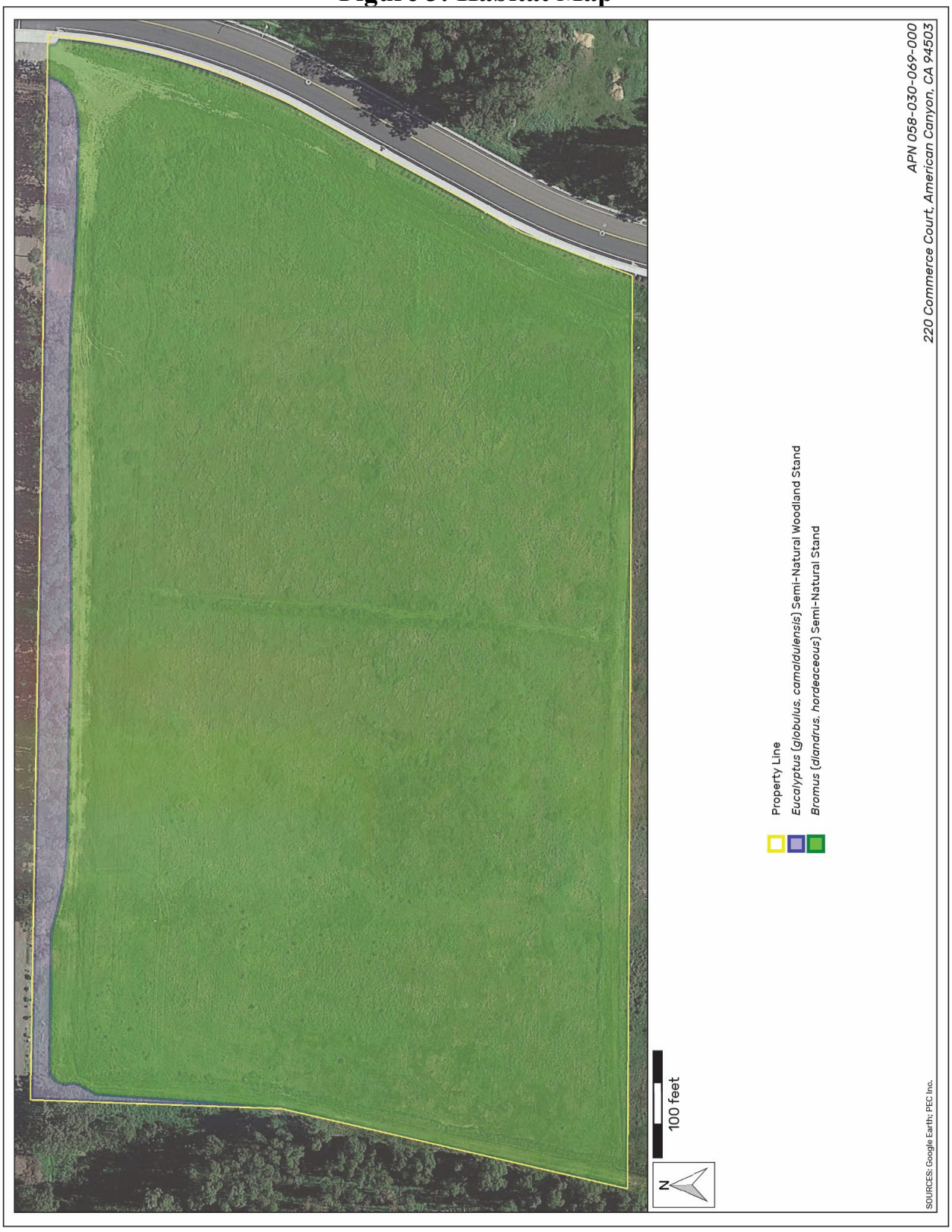
Figure 2: Eucalyptus Stands



SOURCES: PEC Inc.

APN 058-030-069-000
220 Commerce Court, American Canyon, CA 94503

Figure 3: Habitat Map



Appendix A: Animal Survey Field Notes

The following is a transcription of field notes for each of the eleven (11) protocol-level surveys conducted at the project site. Special-status species, if any, are denoted with an asterisk (*).

Site Visit: 1/18/23

Time: 12:00 PM (approx.)
Weather: clear, no wind, 56degF
Notes: started mid-day
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Birds: juvenile red-shouldered hawk (*Buteo lineatus*) sitting in Eucalyptus tree on N fenceline, Western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American pelican (*Pelecanus erythrorhynchos*), black phoebe (*Sayornis nigricans*), white-crowned sparrow (*Zonotrichia leucophrys*), Northern flicker (*Colaptes auratus*), crow (*Corvus brachyrhynchos*)

Other Animals: None

Site Visit: 3/20/23

Time: 6:35 AM
Weather: no wind, 49 degF, 46% RH
Notes: start at sunrise; park in SE corner
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; early season plant survey
Personnel: Dr. Christopher DiVittorio

Bird Species: wild turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), Canada goose (*Branta canadensis*), crow (*Corvus brachyrhynchos*), raven (*Corvus corax*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Western bluebird (*Sialia mexicana*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), red-shouldered hawk (*Buteo lineatus*) two individuals soaring over the Eucalyptus grove to the E of the site, house wren (*Troglodytes aedon*), American robin (*Turdus migratorius*), golden-crowned sparrow (*Zonotrichia atricapilla*), Nuttal's woodpecker (*Picoides nuttallii*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), purple finch (*Haemorhous purpureus*), tree swallow (*Tachycineta bicolor*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), California gull (*Larus californicus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), chestnut-backed chickadee (*Poecile rufescens*), White-tailed kite (*Elanus leucurus*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 3/31/23

Time: 6:30 AM
Weather: clear, wind 0 mph, 44.5 degF, 76.5% RH
Notes: parked NE corner
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Bird species: American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), Canada goose (*Branta canadensis*), American goldfinch (*Spinus tristis*), house sparrow (*Passer domesticus*), Allen's hummingbird (*Selasphorus sasin*), kildeer (*Charadrius vociferus*), raven (*Corvus corax*), unknown gull likely Western or California, American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*),

Other Animals: Mule deer (*Odocoileus hemionus*), domestic cat (*Felis catus*),

Site Visit: 4/4/23

Start time: 6:35 AM
Weather: clear, 49 degF, no wind, 81% RH
Notes: parked SW corner; 6:15 AM first light, 7:15 first direct sunlight
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; mid-season plant survey
Personnel: Dr. Christopher DiVittorio

Bird Species: red-shouldered hawk (*Buteo lineatus*) perched on Eucalyptus tree on N fenceline , wild turkey (*Meleagris gallopavo*) calling and all over parking area, White-tailed kite (*Elanus leucurus*) foraging and calling, house wren (*Troglodytes aedon*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), purple finch (*Haemorhous purpureus*), song sparrow (*Melospiza melodia*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), rock wren (*Salpinctes obsoletus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), fox sparrow (*Passerella iliaca*), Northern mockingbird (*Mimus polyglottos*), tree swallow (*Tachycineta bicolor*), Canada goose (*Branta canadensis*), kildeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), Western bluebird (*Sialia mexicana*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 4/5/23

Start time: 6:08 AM
Weather: 39 degF, 80% RH, no wind
Notes: met Jerry with Stravinsky onsite; parked SW corner
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Bird Species: red-shouldered hawk (*Buteo lineatus*) called from southwest corner of Eucalyptus grove once, wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), raven (*Corvus corax*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), White-tailed kite (*Elanus leucurus*) 3 hovering various times over the field, Nuttal's woodpecker (*Picoides nuttallii*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*),

Other Animals: None

Site Visit: 4/6/23

Start time: 6:17 AM
Weather: clear, 44 degF, 80% RH, no wind
Notes: fewer wildlife than yesterday; met Jerry with Stravinsky onsite; parked SW corner
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Bird Species: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), brown creeper (*Certhia americana*), raven (*Corvus corax*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), red-shouldered hawk (*Buteo lineatus*) called from southwest corner of Eucalyptus grove once similar to other mornings, White-tailed kite (*Elanus leucurus*) two individuals over east Eucalyptus grove being chased by crows, song sparrow (*Melospiza melodia*), great blue heron (*Ardea herodias*) soaring overhead, unknown gulls soaring, lesser goldfinch (*Spinus psaltria*), Anna's hummingbird (*Calypte anna*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*) runways, California vole (*Microtus californicus*) runways

Site Visit: 4/7/23

Start time: 6:30 AM
Weather: cloudy, 54.5 degF, 79% RH, wind 1-2 mph, fewer birds today
Notes: met Jerry with Stravinsky onsite
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Bird Species: Bewick's wren (*Thryomanes bewickii*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), hermit thrush (*Catharus guttatus*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), Nuttal's woodpecker (*Picoides nuttallii*), White-tailed kites (*Elanus leucurus*) being chased by crows then two foraging in field, cliff swallow (*Petrochelidon pyrrhonota*), cedar waxwing (*Bombycilla cedrorum*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 4/24/23

Start time: 6:30 AM
Weather: cloudy, then sunny; 61 degF, 64% RH, 1-3 mph wind
Notes: met Jerry with Stravinsky onsite for survey at 6:30, began preconstruction meeting 8:00 AM
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; preconstruction meeting with geotechnical engineer, Stravinsky, civil engineer, SWPP monitor, etc.
Personnel: Dr. Christopher DiVittorio

Birds: violet-green swallow (*Tachycineta thalassina*), Brewer's blackbird (*Euphagus cyanocephalus*), California towhee (*Melozone crissalis*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), Nuttal's woodpecker (*Picoides nuttallii*), American goldfinch (*Spinus tristis*), Western bluebird (*Sialia mexicana*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), White-tailed kite (*Elanus leucurus*) soaring and hovering over field, juvenile red-tailed hawk (*Buteo jamaicensis*) offsite to E flushed immediately out of site to the SE, peregrine falcon (*Falco peregrinus*) fly-through overhead, unidentified species of sparrow,

Other Animals: none

Other Notes: Red-tailed hawk nest on south side of existing warehouse to the south of project site is not active this year.

Site Visit: 4/28/23

Start time: 5:45 AM
Weather: cloudy, cold
Notes: met Jerry with Stravinsky onsite, Commerce 217 will be graded tomorrow; silt fencing installed and grass has been mowed since last visit; no burrows or other animal sign onsite; this counts towards the 24-hour BUOW preconstruction survey requirement
Purpose: preconstruction Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Birds: White-tailed kite (*Elanus leucurus*) hovering over field, turkey vulture (*Cathartes aura*), wild turkey (*Meleagris gallopavo*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 5/29/23

Start time: 8:30 AM
Weather: sunny
Notes: Commerce 220 site has been graded in addition to Commerce 217
Purpose: Swainson's hawk, other raptor, nesting passerine bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Birds: no sign of BUOW or Swainson's hawk; presence/absence survey only; no comprehensive bird list completed

Other Animals: none

Site Visit: 7/2/23

Start time: 1:00 PM
Weather: clear, sunny, 85 degF, 51% RH, 3-8 mph wind
Note: many species appear to have migrated offsite for the summer
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Bird Species:

house finch (*Haemorhous mexicanus*), Osprey (*Pandion haliaetus*), turkey vulture (*Cathartes aura*), lesser goldfinch (*Spinus psaltria*), red-tailed hawk (*Buteo jamaicensis*), Nuttal's woodpecker (*Picoides nuttallii*), kildeer (*Charadrius vociferus*), White-tailed kite (*Elanus leucurus*)

Other Animals: none

Appendix B: Master Species List

The following is a list of animal species observed across the eleven (11) site visits at the project site. Special-status species, if any, are denoted with an asterisk (*).

MASTER BIRD LIST

Allen's hummingbird (*Selasphorus sasin*)
American coot (*Fulica americana*)
American goldfinch (*Spinus tristis*)
American pelican (*Pelecanus erythrorhynchos*)
American pipit (*Anthus rubescens*)
American robin (*Turdus migratorius*)
Anna's hummingbird (*Calypte anna*)
Bewick's wren (*Thryomanes bewickii*)
black phoebe (*Sayornis nigricans*)
Brewer's blackbird (*Euphagus cyanocephalus*)
brown creeper (*Certhia americana*)
brown-headed cowbird (*Molothrus ater*)
California gull (*Larus californicus*)
California towhee (*Melozone crissalis*)
Canada goose (*Branta canadensis*)
cedar waxwing (*Bombycilla cedrorum*)
chestnut-backed chickadee (*Poecile rufescens*)
cliff swallow (*Petrochelidon pyrrhonota*)
crow (*Corvus brachyrhynchos*)
dark-eyed junco (*Junco hyemalis*)
European starling (*Sturnus vulgaris*)
fox sparrow (*Passerella iliaca*)
golden-crowned sparrow (*Zonotrichia atricapilla*)
great blue heron (*Ardea herodias*)
hermit thrush (*Catharus guttatus*)
house finch (*Haemorhous mexicanus*)
house sparrow (*Passer domesticus*)
house wren (*Troglodytes aedon*)
kildeer (*Charadrius vociferus*)
lesser goldfinch (*Spinus psaltria*)
mallard ducks (*Anas platyrhynchos*)
mourning dove (*Zenaida macroura*)
Northern flicker (*Colaptes auratus*)
Northern mockingbird (*Mimus polyglottos*)
Nuttal's woodpecker (*Picoides nuttallii*)
Osprey (*Pandion haliaetus*)
peregrine falcon (*Falco peregrinus*)
purple finch (*Haemorhous purpureus*)
raven (*Corvus corax*)
red-shouldered blackbird (*Agelaius phoeniceus*)
red-shouldered hawk (*Buteo lineatus*)
red-tailed hawk (*Buteo jamaicensis*)

rock wren (*Salpinctes obsoletus*)
ruby-crowned kinglet (*Regulus calendula*)
song sparrow (*Melospiza melodia*)
tree swallow (*Tachycineta bicolor*)
turkey vulture (*Cathartes aura*)
violet-green swallow (*Tachycineta thalassina*)
Western bluebird (*Sialia mexicana*)
Western scrub jay (*Aphelocoma californica*)
white-crowned sparrow (*Zonotrichia leucophrys*)
White-tailed kite (*Elanus leucurus*)
wild turkey (*Meleagris gallopavo*)
yellow-rumped warbler (*Setophaga coronata*)
unidentified gull likely Western or California
unidentified species of sparrow

MASTER OTHER ANIMALS LIST

black-tailed deer (*Odocoileus hemionus*)
black-tailed jackrabbit (*Lepus californicus*)
California vole (*Microtus californicus*) runways
domestic cat (*Felis catus*)

Pinecrest Environmental Consulting

PINECREST ENVIRONMENTAL CONSULTING
6425 TELEGRAPH AVE. #8
OAKLAND, CA 94609

510.881.3039 TEL
INFO@PINECRESTENVIRONMENTAL.ORG
WWW.PINECRESTENVIRONMENTAL.ORG

SPECIAL-STATUS PLANT SURVEY REPORT

Date: July 21, 2023

To: Jason Brandman, FCS International.

From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc.

Subject: Results of special-status plant surveys at 220 Commerce Court, Napa County, CA (FCS Project 5639.0001)

To Whom It May Concern,

This rare plant survey report (Report) details the findings of three protocol-level special-status plant surveys conducted in 2023 at the above-referenced property located in the County of Napa. The site consists of one parcel measuring 10.2 acres and assigned APN 058-030-069.

Site Description

The entirety of the site is disked and mowed ruderal grassland, with the exception of some emergent wetland along the north property line. A stand of non-native *Eucalyptus* spp. exists to the west but this is offsite and located on the adjacent parcel. The ruderal grassland exhibits low cover of plants and low species diversity with very few native species (Figure 1). The habitat type of this area as determined by Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV) is *Bromus* (*diandrus, hordeaceous*)-*Brachypodium distachyon* Semi-Natural Herbaceous Stand. There is also some disturbed/previously developed habitat in the southeast corner (Figure 3). The project will affect only the ruderal grassland portion of the site.

Methods

Special-status plants are defined here to include: (1) all plants that are federal- or state-listed as rare, threatened or endangered, (2) all federal and state candidates for listing, (3) all plants included in Lists 1 through 4 of the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380. Background information searches were conducted prior to all site visits to identify potential rare plant species or sensitive plant communities recognized by the California Department of Fish and Wildlife (CDFW) that may occur in the Study Area vicinity.

A table of these species, and their protection status, habitat requirements, and likelihood to occur in the Study Area is provided below in Appendix A. Sources for this table include the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CDFW 2023), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023), and the knowledge of PEC staff. CNDDB searches were performed within a "9-quad" area encompassing the surrounding region.

Site visits were performed during the growing season of 2023. An early-season site visit was performed on March 20. Mid-season site visits were performed on April 6, April 7, and May 29. A late-season site visit was also performed on July 2. Between the mid-season and late-season site visits the site was graded thus the late-season site visit focused on remaining vegetation surrounding the areas of disturbance. Site visits were performed by PEC botanist Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by PEC botanist Dr. Zoya Akulova. During each site visit, Dr. DiVittorio surveyed the entirety of the project area using methods as specified in the California Department of Fish & Wildlife (CDFW) publication titled *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*, dated March 20, 2018.

During each survey, the entirety of the "Commerce 220" site as well as the adjacent "Commerce 217" site were examined. These surveys included the entirety of both legal parcels, as well all of the vegetated areas up to the concrete paved area on the developed parcel to the south. Field surveys were conducted by walking the entire project area on foot in parallel lines approximately 15 feet apart, identifying every species that was flowering, and making note of any species that were past flowering or that had not yet flowered. Voucher specimens were taken of any species that required identification in the laboratory. All terminology follows currently accepted nomenclature as described in *The Jepson Manual* (2012).

Results & Recommendations

The project area is comprised of routinely disked ruderal *Bromus* (*diandrus, hordeaceous*) Semi-Natural Stands with some isolated individuals of *Baccharis pilularis* mostly near the edges of the site. A map of habitat types is shown in Figure 3. No special-status plant species or sensitive habitats were positively identified in the project area. A full list of the species encountered during the surveys is provided below in Appendix B. In total, 15 native species were observed onsite and 57 non-native species were observed. No special-status species were found thus we have no recommendations for mitigation or avoidance for this project.

Please let me know if you have any questions about this or any other studies we've performed for this project.

Sincerely,



Christopher DiVittorio, PhD
President, PEC
(510) 881-3039
chris@pinecrestenvironmental.org

Figure 1: Ruderal Grassland



SOURCES: PEC Inc.

APN 058-030-069-000
220 Commerce Court, American Canyon, CA 94503

Figure 2: Eucalyptus Stands



SOURCES: PEC Inc.

APN 058-030-069-000
220 Commerce Court, American Canyon, CA 94503

Figure 3: Habitat Map



Appendix A: Special-Status Species Considered

The following is a list of sensitive and/or rare plants and habitats generated based on knowledge of the species and habitats of Napa County by PEC staff, from various State and Federal databases, and from the California Natural Diversity Database (CNDDB). Known occurrences within a "9-quad" region around the project site are shown in bold.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
PLANTS			
Alkali milk-vetch (*Astragalus tener* var. *tener*)	**—/—/1B.2**	**Alkali grassland**	**Very Low: No alkali habitat exists in the project area.**
Anthony peak lupine (*Lupinus antoninus*)	—/—/1B.2	Coniferous forest	None: No coniferous forest habitat exists in the project area.
Baker's goldfields (*Lasthenia californica* ssp. *bakeri*)	—/—/1B.2	Coastal grasslands	Very Low: Some grassland habitat exists in the project area.
Baker's larkspur (*Delphinium bakeri*)	FE/SE/1B.1	Coastal scrub	Very Low: No coastal scrub habitat exists in the project area.
Baker's manzanita (*Arctostaphylos bakeri* ssp. *bakeri*)	—/—/1B.1	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)	**—/—/1B.1**	**Vernal pool**	**None: No vernal pool habitat exists in the project area.**
Beaked tracyina (*Tracyina rostrata*)	—/—/1B.2	Grassland, foothill woodland	Low: Some grassland habitat exists in the project area.
Bent flowered fiddleneck (*Amsinckia lunaris*)	—/—/1B.2	Grassland, foothill woodland	Low: Some grassland habitat exists in the project area.
Big-scale balsamroot (*Balsamorhiza macrolepis*)	**—/—/1B.2**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Big tarplant (*Blepharizonia plumosa*)	**—/—/1B.1**	**Chaparral, grassland**	**Low: Some grassland habitat exists in the project area.**
Blasdale's bent grass (*Agrostis blasdalei*)	—/—/1B.2	Coastal grassland	Very Low: Some grassland habitat exists in the project area.
Blue coast gilia (*Gilia capitata* ssp. *chamissonis*)	—/—/1B.1	Coastal sand dunes	None: No sand dune habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Bluff wallflower (*Erysimum concinnum*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Bogg's Lake hedge-hyssop (*Gratiola heterosepala*)	—/—/1B.2	Vernal pool, pond	None: No vernal pool habitat exists in the project area.
Bolander's horkelia (*Horkelia bolanderi*)	—/—/1B.2	Coniferous forest, grassland	Low: Some grassland exists in the project area.
Bolander's water hemlock (*Cicuta maculata var. bolanderi*)	**—/—/2B.1**	**Salt marsh**	**None: No salt marsh habitat exists in the project area.**
Brandegee's eriastrum (*Eriastrum brandegeeae*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Brewer's calandrinia (*Calandrinia breweri*)	**—/—/4.2**	**Coastal scrub**	**None: No coastal scrub habitat exists in the project area.**
Brewer's western flax (*Hesperolinon breweri*)	**—/—/1B.2**	**Chaparral, grassland**	**Low: Some grassland habitat exists in the project area.**
Bristly leptosiphon (*Leptosiphon aureus*)	**—/—/4.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Bristly sedge (*Carex comosa*)	—/—/2B.1	Wetland, riparian	None: No potential wetland habitat exists in the project area.
Brownish beaked-rush (*Rhynchospora capitellata*)	—/—/2B.2	Wetland, riparian	None: No potential wetland habitat exists in the project area.
Burke's goldfields (*Lasthenia burkei*)	FE/SE/1B.1	Vernal pools, grassland	Low: Some grassland habitat exists in the project area.
California alkali grass (*Puccinellia simplex*)	—/—/1B.2	Alkali grassland	Very Low: No alkali grassland habitat exists in the project area.
California beaked-rush (*Rhynchospora californica*)	**—/—/1B.1**	**Freshwater wetlands**	**None: No potential wetland habitat exists in the project area.**
California satintail (*Imperata brevifolia*)	—/—/2B.1	Chaparral, coastal scrub	None: No chaparral habitat exists in the project area.
California sedge (*Carex californica*)	—/—/2B.3	Wetlands	None: No wetland habitat exists in the project area.
Calistoga ceanothus (*Ceanothus divergens*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Calistoga popcornflower (*Plagiobothrys strictus*)	FE/ST/1B.1	Wetland, riparian	None: No wetland habitat exists in the project area.
Carquinez goldenbrush (*Isocoma arguta*)	**—/—/1B.1**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Chaparral ragwort (*Senecio aphanactis*)	**—/—/1B.1**	**Coastal scrub, woodland**	**None: No coastal scrub habitat exists in the project area.**
Clara Hunt's milk vetch (*Astragalus claranus*)	—/—/1B.1	Chaparral, grassland	Low: Some grassland habitat exists in the project area.
Coast iris (*Iris longipetala*)	**—/—/4.2**	**Coastal grassland, wetland**	**Low: Some grassland habitat exists in the project area.**
Coast lily (*Lilium maritimum*)	—/—/1B.1	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*)	—/—/1B.2	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Cobb Mountain lupine (*Lupinus sericatus*)	**—/—/1B.2**	**Chaparral, coniferous forest**	**None: No chaparral habitat exists in the project area.**
Colusa layia (*Layia septentrionalis*)	—/—/1B.2	Chaparral, valley grassland	Low: Some grassland habitat exists in the project area.
Congdon's tarplant (*Centromadia parryi ssp. congdonii*)	**—/—/1B.1**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)	—/—/1B.2	Grassland, coastal scrub	Low: Some grassland habitat exists in the project area.
Contra Costa goldfields (*Lasthenia conjugens*)	**FE/—/1B.1**	**Vernal pool**	**None: No vernal pool habitat exists in the project area.**
Crystal Springs lessingia (*Lessingia arachnoidea*)	—/—/1B.2	Serpentine grassland	None: No serpentine grassland habitat exists in the project area.
Cunningham Marsh cinquefoil (*Potentilla uliginosa*)	—/—/1A	Wetland	None: No wetland habitat exists in the project area.
Dark-eyed gilia (*Gilia millefoliata*)	—/—/1B.2	Coastal sand dunes	None: No coastal sand dune habitat exists in the project area.
Dark-mouthed triteleia (*Triteleia lugens*)	**—/—/4.3**	**Grassland, chaparral**	**Low: Some grassland habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Deceiving sedge (*Carex saliniformis*)	—/—/1B.2	Grassland	Low: Some grassland habitat exists in the project area.
Deep-scarred cryptantha (*Cryptantha excavata*)	—/—/1B.2	Woodland	None: No woodland habitat exists in the project area.
Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*)	**—/—/1B.2**	**Freshwater and brackish marsh**	**None: No marsh habitat exists in the project area.**
Diablo helianthella (*Helianthella castanea*)	**—/—/1B.2**	**Chaparral, grassland**	**Low: Some grassland habitat exists in the project area.**
Dimorphic snapdragon (*Antirrhinum subcordatum*)	—/—/4.3	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Dwarf downingia (*Downingia pusilla*)	**—/—/2B.2**	**Vernal pool, wetland**	**None: No vernal pool habitat exists in the project area.**
Dwarf soaproot (*Chlorogalum pomeridianum* var. *minus*)	—/—/1B.2	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Eel-grass pondweed (*Potamogeton zosteriformis*)	—/—/2B.2	Wetland, pond	None: No wetland habitat exists in the project area.
Fragrant fritillary (*Fritillaria liliacea*)	**—/—/1B.2**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Few-flowered navarretia (*Navarretia leucocephala* ssp. *pauciflora*)	FE/SE/1B.1	Vernal pool, wetland	None: No vernal pool habitat exists in the project area.
Franciscan onion (*Allium peninsulare* var. *franciscanum*)	**—/—/1B.2**	**Coastal grassland**	**Very Low: No coastal grassland habitat exists in the project area.**
Geysers panicum (*Panicum acuminatum* var. *thermale*)	—/—/1B.2	Chaparral, wetland	None: No chaparral habitat exists in the project area.
Glandular western flax (*Hesperolinon adenophyllum*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Golden larkspur (*Delphinium luteum*)	FE/SR/1B.1	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Grassleaf water plantain (*Alisma gramineum*)	—/—/2B.2	Wetland, pond	None: No wetland habitat exists in the project area.
Green monardella (*Monardella viridis*)	**—/—/4.3**	**Chaparral**	**None: No chaparral habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Greene's narrow-leaved daisy (*Erigeron greenei*)	**—/—/1B.2**	**Serpentine chaparral**	**None: No serpentine chaparral habitat exists in the project area.**
Hall's harmonia (*Harmonia hallii*)	—/—/1B.2	Serpentine chaparral	None: No chaparral habitat exists in the project area.
Henderson's bent grass (*Agrostis hendersonii*)	**—/—/3.2**	**Vernal pool**	**None: No vernal pool habitat exists in the project area.**
Hoffman's bristly jewelflower (*Streptanthus glandulosus* spp. *hoffmanii*)	—/—/1B.3	Chaparral, woodland	None: No chaparral habitat exists in the project area.
Holly-leaved ceanothus (*Ceanothus purpureus*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*)	—/—/1B.2	Woodland	None: No woodland habitat exists in the project area.
Humboldt County milk vetch (*Astragalus agnicidus*)	—/—/1B.1	Coniferous forest	None: No coniferous forest habitat exists in the project area.
Jepson's coyote thistle (*Eryngium jepsonii*)	**—/—/4.2**	**Wetland, vernal pool**	**None: No wetland habitat exists in the project area.**
Jepson's leptosiphon (*Leptosiphon jepsonii*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Jepson's milk-vetch (*Astragalus rattanii* var. *jepsonianus*)	—/—/1B.2	Chaparral, grassland	Very Low: Some grassland habitat exists in the project area.
Johnny-nip (*Castilleja ambigua var. ambigua*)	—/—/4.2	**Wetland, riparian**	**None: No wetland habitat exists in the project area.**
Kenwood Marsh checkerbloom (*Sidalcea oregana* ssp. *valida*)	FE/SE/1B.1	Wetland	None: No wetland habitat exists in the project area.
Konocti manzanita (*Arctostaphylos manzanita* ssp. *elegans*)	—/—/1B.3	Chaparral, woodland	None: No chaparral habitat exists in the project area.
Lake County stonecrop (*Sedella leiocarpa*)	—/—/1B.1	Wetland	None: No wetland habitat exists in the project area.
Legenere (*Legenere limosa*)	**—/—/1B.1**	**Wetland, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Loch Lomond button-celery (*Eryngium constancei*)	FE/SE/1B.1	Vernal pool	None: No vernal pool habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Lobb's aquatic buttercup (*Ranunculus lobbii*)	**—/—/4.2**	**Vernal pool**	**None: No vernal pool habitat exists in the project area.**
Long-styled sand-spurrey (*Spergularia macrotheca* var. *longistyla*)	**—/—/1B.2**	**Wetland, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Lyngbye's sedge (*Carex lyngbyei*)	**—/—/2B.2**	**Salt marsh**	**None: No salt marsh habitat exists in the project area.**
Many-flowered navarretia (*Navarretia leucocephala* spp. *plieantha*)	FE/SE/1B.2	Vernal pool	None: No wetland habitat exists in the project area.
Maple-leaved checkerbloom (*Sidalcea malachroides*)	—/—/4.2	Coastal grassland, coniferous forest	Very Low: No coastal grassland habitat exists in the project area.
Marin checker lily (*Fritillaria lanceolata* var. *tristulis*)	—/—/1B.1	Grassland	Low: Some grassland habitat exists in the project area.
Marin checkerbloom (*Sidalcea hickmanii* spp. *viridis*)	—/—/1B.2	Grassland	Low: Some grassland habitat exists in the project area.
Marin County navarretia (*Navarretia rosulata*)	—/—/1B.2	Serpentine forest	None: No serpentine habitat exists in the project area.
Marin knotweed (*Polygonum marinense*)	**—/—/3.1**	**Coastal salt marsh**	**None: No coastal salt marsh habitat exists in the project area.**
Marin manzanita (*Arctostaphylos virgata*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Marin western flax (*Hesperolinon congestum*)	FT/ST/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Marsh checkerbloom (*Sidalcea oregana* ssp. *hydrophila*)	—/—/1B.2	Wetland, riparian	None: No wetland habitat exists in the project area.
Marsh microseris (*Microseris paludosa*)	—/—/1B.2	Wetland, grassland	Very Low: Some grassland habitat exists in the project area.
Marsh pea (*Lathyrus palustris*)	—/—/2B.1	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Mason's ceanothus (*Ceanothus masonii*)	—/SR/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Mason's lilaeopsis (*Lilaeopsis masonii*)	**—/SR/1B.1**	**Freshwater and brackish marsh**	**None: No marsh habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Milo Baker's lupine (*Lupinus milo-bakeri*)	—/—/1B.1	Woodland, grassland	None: No woodland habitat exists in the project area.
Modest rockcress (*Arabis modesta*)	**—/—/4.3**	**Chaparral, forest**	**None: No chaparral habitat exists in the project area.**
Morrison's jewelflower (*Streptanthus morrisonii* ssp. *morrisonii*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Mt. Diablo fairy-lantern (*Calochortus pulchellus*)	**—/—/1B.2**	**Chaparral, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Mt. St. Helena morning glory (*Calystegia collina* ssp. *oxyphylla*)	—/—/4.2	Serpentine chaparral	None: No serpentine habitat exists in the project area.
Mt. Tamalpais bristly jewelflower (*Streptanthus glandulosus* spp. *pulchellus*)	—/—/1B.2	Chaparral, grassland	Very Low: Some grassland habitat exists in the project area.
Mt. Tamalpais manzanita (*Arctostaphylos montana* spp. *montana*)	—/—/1B.3	Chaparral	None: No chaparral habitat exists in the project area.
Mt. Tamalpais thistle (*Cirsium hydrophilum* var. *vaseyi*)	—/—/1B.2	Grassland	Low: Some grassland habitat exists in the project area.
Napa bluecurls (*Trichostema ruygtii*)	**—/—/1B.2**	**Grassland**	**Medium: Some grassland habitat exists in the project area.**
Napa blue grass (*Poa napensis*)	FE/SE/1B.1	Wetland, grassland	Very Low: Some grassland habitat exists in the project area.
Napa checkerbloom (*Sidalcea hickmanii* ssp. *napensis*)	**—/—/1B.1**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Napa false indigo (*Amorpha californica* var. *napensis*)	**—/—/1B.2**	**Forest, woodland**	**None: No woodland habitat exists in the project area.**
Napa lomatium (*Lomatium repostum*)	**—/—/1B.2**	**Woodland, chaparral**	**None: No woodland habitat exists in the project area.**
Narrow-anthered brodiaea (*Brodiaea leptandra*)	**—/—/1B.2**	**Woodland, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Nodding harmonia (*Harmonia nutans*)	**—/—/4.3**	**Woodland, chaparral**	**None: No chaparral habitat exists in the project area.**
North Coast semaphore grass (*Pleuropogon hooverianus*)	—/—/1B.1	Wetland, vernal pool	None: No wetland habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*)	—/—/2B.2	Pond	None: No pond habitat exists in the project area.
Oval-leaved viburnum (*Viburnum ellipticum*)	**—/—/2B.3**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Pacific gilia (*Gilia capitata* ssp. *pacifica*)	—/—/1B.2	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Pacific Grove clover (*Trifolium polyodon*)	—/—/1B.1	Grassland, wetland	Very Low: Some grassland habitat exists in the project area.
Pappose tarplant (*Centromadia parryi* ssp. *parryi*)	**—/—/1B.2**	**Grassland, wetland**	**Low: Some grassland habitat exists in the project area.**
Parry's rough tarplant (*Centromadia parryi ssp. rudisi*)	**—/—/4.2**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Pennell's bird's beak (*Cordylanthus tenuis* ssp. *capillaris*)	FE/SR/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Perennial goldfields (*Lasthenia californica* ssp. *macrantha*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*)	—/—/1B.2	Parasitic plant, grassland, chaparral	Low: Some grassland habitat exists in the project area.
Petaluma popcornflower (*Plagiobothrys mollis* var. *vestitus*)	—/—/1A	Coastal salt marsh	None: No coastal salt marsh habitat exists in the project area.
Pink sand verbena (*Abronia umbellata* var. *breviflora*)	—/—/1B.1	Coastal sand dune	None: No sand dune habitat exists in the project area.
Pitkin Marsh lily (*Lilium pardalinum* ssp. *pitkinense*)	FE/SE/1B.1	Wetland	None: No wetland habitat exists in the project area.
Pitkin Marsh paintbrush (*Castilleja uliginosa*)	FE/SE/1A	Wetland	None: No wetland habitat exists in the project area.
Point Reyes checkerbloom (*Sidalcea calycosa* ssp. *rhizomata*)	—/—/1B.2	Coastal salt marsh	None: No salt marsh habiat exists in the project area.
Point Reyes salty bird's beak (*Chloropyron maritimum* ssp. *palustre*)	—/—/1B.2	Coastal salt marsh	None: No salt marsh habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Purple-stemmed checkerbloom (*Sidalcea malviflora* spp. *purpurea*)	—/—/1B.2	Wetland	None: No wetland habitat exists in the project area.
Pygmy cypress (*Hesperocyparis pygmaea*)	—/—/1B.2	Hardpan soil	None: No hardpan forest habitat exists in the project area.
Raiche's manzanita (*Arctostaphylos stanfordiana* ssp. *raichei*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Raiche's red ribbons (*Clarkia concinna* spp. *raichei*)	—/—/1B.1	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Redwood lily (*Lilium rubescens*)	**—/—/4.2**	**Chaparral, forest**	**None: No chaparral habitat exists in the project area.**
Rincon Ridge ceanothus (*Ceanothus confusus*)	**—/—/1B.1**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Rincon Ridge manzanita (*Arctostaphylos stanfordiana* ssp. *decumbens*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Rose leptosiphon (*Leptosiphon rosaceus*)	—/—/1B.1	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Round-headed beaked rush (*Rhynchospora globularis*)	—/—/2B.1	Wetland, riparian	None: No wetland habitat exists in the project area.
Round-headed Chinese houses (*Collinsia corymbosa*)	—/—/1B.2	Coastal grassland	None: No coastal grassland habitat exists in the project area.
Round-leaved filaree (*California macrophylla*)	—/—/1B.2	Foothill grassland	Low: Some grassland habitat exists in the project area.
Saline clover (*Trifolium hydrophilum*)	**—/—/1B.2**	**Wetland, riparian**	**None: No potential wetland habitat exists in the project area.**
San Antonio Hills monardella (*Monardella antonina ssp. antonina*)	**—/—/3.0**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
San Francisco spineflower (*Chorizanthe cuspidata* var. *cuspidata*)	—/—/1B.2	Coastal sand dunes	None: No coastal sand dune habitat exists in the project area.
San Joaquin spearscale (*Extriplex joaquinana*)	**—/—/1B.2**	**Alkali scrub, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Santa Cruz clover (*Trifolium buckwestiorum*)	—/—/1B.1	Wetland, grassland	Very Low: Some grassland habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Santa Cruz microseris (*Stebbinsoseris decipiens*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Santa Cruz tarplant (*Holocarpha macradenia*)	FT/SE/1B.1	Coastal grassland	None: No coastal grassland habitat exists in the project area.
Santa Rosa horkelia (*Horkelia tenuiloba*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Seaside bittercress (*Cardamine angulata*)	—/—/2B.2	Forest, riparian	None: No forest habitat exists in the project area.
Sebastopol meadowfoam (*Limnanthes vinculans*)	FE/SE/1B.1	Wetland, vernal pool	None: No wetland habitat exists in the project area.
Serpentine cryptantha (*Cryptantha dissita*)	—/—/1B.2	Serpentine chaparral	None: No chaparral habitat exists in the project area.
Serpentine daisy (*Erigeron serpentinus*)	—/—/1B.3	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Short-leaved evax (*Hesperevax sparsiflora var. brevifolia*)	—/—/1B.2	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Slender Orcutt grass (*Orcuttia tenuis*)	FT/SE/1B.1	Vernal pool	None: No vernal pool habitat exists in the project area.
Small-flowered calycadenia (*Calycadenia micrantha*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Small groundcone (*Kopsiopsis hookeri*)	—/—/2B.3	Redwood forest	None: No redwood forest habitat exists in the project area.
Small spikerush (*Eleocharis parvula*)	**—/—/3.0**	**Woodland, chaparral**	**None: No chaparral habitat exists in the project area.**
Soft salty bird's beak (*Chloropyron molle* ssp. *molle*)	**FE/ST/1B.2**	**Coastal salt marsh**	**None: No salt marsh habitat exists in the project area.**
Sonoma alopecurus (*Alopecurus aequalis* var. *sonomensis*)	FE/—/1B.1	Wetland, vernal pool	None: No wetland habitat exists in the project area.
Sonoma beardtongue (*Penstemon newberryi* var. *sonomensis*)	—/—/1B.3	Chaparral	None: No chaparral habitat exists in the project area.
Sonoma ceanothus (*Ceanothus sonomensis*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Sonoma spineflower (*Chorizanthe valida*)	FE/SE/1B.1	Coastal grassland	Very Low: Some grassland habitat exists in the project area.
Sonoma sunshine (*Blennosperma bakeri*)	**FE/SE/1B.1**	**Grassland, wetland**	**Very Low: Some grassland habitat exists in the project area.**
St. Helena fawn lily (*Erythronium helenae*)	**—/—/4.2**	**Grassland, chaparral**	**Very Low: Some grassland habitat exists in the project area.**
Streamside daisy (*Erigeron biolettii*)	**—/—/4.2**	**Grassland, chaparral**	**Very Low: Some grassland habitat exists in the project area.**
Suisun marsh aster (*Symphyotrichum lentum*)	**—/—/1B.2**	**Freshwater and brackish marsh**	**None: No marsh habitat exists in the project area.**
Supple daisy (*Erigeron supplex*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Swamp harebell (*Campanula californica*)	—/—/1B.2	Coastal grassland, wetland	Very Low: Some grassland habitat exists in the project area.
Tamalpais jewelflower (*Streptanthus batrachopus*)	—/—/1B.3	Serpentine	None: No serpentine habitat exists in the project area.
Tamalpais lessingia (*Lessingia micradenia* var. *micradenia*)	—/—/1B.2	Grassland	Low: Some grassland habitat exists in the project area.
Tamalpais oak (*Quercus parvula* var. *tamalpaisensis*)	—/—/1B.3	Woodland	None: No woodland habitat exists in the project area.
The Cedars fairy lantern (*Calochortus raichei*)	—/—/1B.2	Hardpan chaparral	None: No chaparral habitat exists in the project area.
The Cedars manzanita (*Arctostaphylos bakeri* ssp. *sublaevis*)	—/—/1B.2	Hardpan chaparral	None: No chaparral habitat exists in the project area.
Thin-lobed horkelia (*Horkelia tenuiloba*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Thurber's reed grass (*Calamagrostis crassiglumis*)	—/—/2B.1	Coastal scrub, wetland	None: No wetland habitat exists in the project area.
Tiburon buckwheat (*Eriogonum luteolum* var. *caninum*)	—/—/1B.2	Serpentine grassland	Very Low: No serpentine grassland exists in the project area.
Tiburon paintbrush (*Castilleja affinis* var. *neglecta*)	**FE/ST/1B.2**	**Serpentine grassland**	**Very Low: No serpentine grassland exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Tracy's clarkia (*Clarkia gracilis ssp. tracyi*)	**—/—/4.2**	**Serpentine chaparral**	**None: No serpentine grassland exists in the project area.**
Two-carpellate western flax (*Hesperolinon bicarpellatum*)	—/—/1B.2	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Twig-like snapdragon (*Antirrhinum virga*)	**—/—/1B.1**	**Serpentine chaparral**	**None: No serpentine habitat exists in the project area.**
Two-carpellate western flax (*Hesperolinon bicarpellatum*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Two-fork clover (*Trifolium amoenum*)	**FE/—/1B.1**	**Grassland, wetland**	**Very Low: Some grassland habitat exists in the project area.**
Vine Hill ceanothus (*Ceanothus foliosus* var. *vineatus*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Vine Hill clarkia (*Clarkia imbricata*)	FE/SE/1B.1	Chaparral, grassland	Very Low: Some grassland habitat exists in the project area.
Vine Hill manzanita (*Arctostaphylos densiflora*)	—/SE/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Watershield (*Brasenia schreberi*)	—/—/2B.3	Pond	None: No pond habitat exists in the project area.
Western leatherwood (*Dirca occidentalis*)	**—/—/1B.2**	**Woodland, chaparral**	**None: No woodland habitat exists in the project area.**
White-beaked rush (*Rhynchospora alba*)	—/—/2B.2	Wetland, riparian	None: No wetland habitat exists in the project area.
White-flowered rein orchid (*Piperia candida*)	—/—/1B.2	Coniferous forest	None: No coniferous forest habitat exists in the project area.
White-rayed pentachaeta (*Pentachaeta bellidiflora*)	FE/SE/1B.1	Grassland	Low: Some grassland habitat exists in the project area.
Wolly-headed gilia (*Gilia capitata* ssp. *tomentosa*)	—/—/1B.1	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Wolly-headed lessingia (*Lessingia hololeuca*)	**—/—/3.0**	**Forest, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Wolly meadowfoam (*Limnanthes floccosa* ssp. *floccosa*)	—/—/4.2	Vernal pool	None: No wetland habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Wolly spineflower (*Chorizanthe cuspidata* var. *villosa*)	—/—/1B.2	Coastal sand dunes	None: No sand dune habitat exists in the project area.
MOSSES, LICHENS & LIVERWORTS			
Angel's hair lichen (*Ramalina thrausta*)	—/—/2B.1	Forest, woodland	None: No forest habitat exists in the project area.
Coastal triquetrella (*Triquetrella californica*)	—/—/1B.2	Forest, woodland	None: No forest habitat exists in the project area.
Elongate copper moss (*Mielichhoferia elongata*)	—/—/4.3	Rock outcrops	None: No rock outcrop habitat exists in the project area.
Koch's cord moss (*Entosthodon kochii*)	—/—/1B.3	Forest, woodland	None: No forest habitat exists in the project area.
Methuselah's beard lichen (*Dolichousnea longissima*)	—/—/4.2	Forest, woodland	None: No forest habitat exists in the project area.
Slender silver moss (*Anomobryum julaceum*)	—/—/4.2	Rocky substrates in forests	None: No forest habitat exists in the project area.
Torren's grimmia (*Grimmia torenii*)	—/—/1B.3	Forest, woodland	None: No forest habitat exists in the project area.
HABITATS			
Coastal & Valley Freshwater Marsh (CVFM)	—	—	None: No marsh habitat exists in the project area.
Coastal Brackish Marsh (CVFM)	**—**	**—**	**None: No brackish marshes exist in the project area.**
Northern Coastal Salt Marsh (NCSM)	**—**	**—**	**None: No salt marsh habitat exists in the project area.**
Northern Hardpan Vernal Pool (NHVP)	—	—	None: No hardpan vernal pool habitat exists in the project area.
Northern Vernal Pool (NVP)	**—**	**—**	**None: No vernal pool habitat exists in the project area.**
Serpentine Bunchgrass (SBG)	**—**	**—**	**None: No serpentine bunchgrass habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Sycamore Alluvial Woodland (SAW)	—	—	None: No woodland habitat exists in the project area.
Valley Needlegrass Grassland (VNG)	—	—	Low: Some grassland habitat exists in the project area.
Valley Oak Woodland (VOW)	—	—	None: No valley oaks exist in the project area.
Valley Sink Scrub (VSS)	—	—	None: No sink scrub habitat exists in the project area.

[1] Status:
Federal
FE = Federally Endangered Species
FT = Federally Threatened Species

State
SE = State Endangered Species
ST = State Threatened Species
SSC = California Species of Special Concern
CFP = California Fully Protected Species

CNPS (applies to plants only)
List 1B = plants considered rare, threatened, or endangered in California and elsewhere
List 2B = plants rare, threatened or endangered in California, but more common elsewhere
List 3 = plant is likely rare but more information is required
List 4 = plants of limited distribution

Appendix B: Plant Species Observed Onsite

The following is a list of plant species generated based on knowledge of the species and habitats of Napa County by PEC staff, and from various State and Federal databases, as described in the *Methods* section, above. Special-status species, if any, are denoted with an asterisk (*).

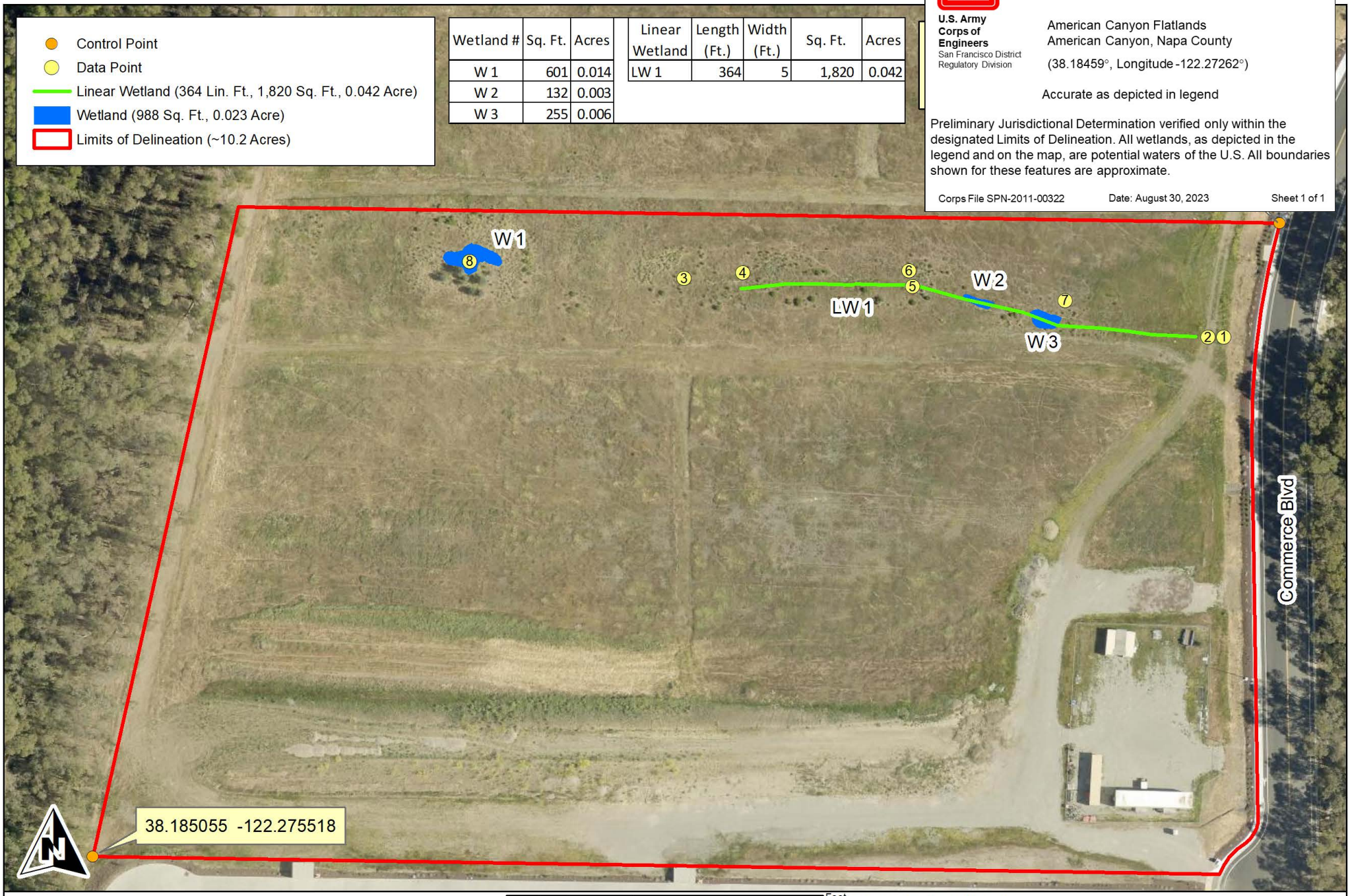
Non-Native Plant Species:

bird's foot trefoil (*Lotus corniculatus*)
bishop's weed (*Ammi majus*)
black mustard (*Brassica nigra*)
bluegum (*Eucalyptus globulus*)
bristly ox-tongue (*Helminthotheca echioides*)
bull thistle (*Cirsium vulgare*)
bur clover (*Medicago polymorpha*)
cheeseweed (*Malva parviflora*)
chicory (*Cichorium intybus*)
common dandelion (*Taraxacum officinale*)
common groundsel (*Senecio vulgaris*)
crane's bill filaree (*Erodium botrys*)
curly dock (*Rumex crispus*)
false brome (*Brachypodium distachyon*)
fennel (*Foeniculum vulgare*)
field bindweed (*Convolvulus arvensis*)
field marigold (*Calendula arvensis*)
foxtail barley (*Hordeum murinum*)
Fuller's teasel (*Dipsacus fullonum*)
hairgrass (*Aira caryophyllea*)
hairy vetch (*Vicia villosa*)
Harding grass (*Phalaris aquatica*)
hedge parsley (*Torilis arvensis*)
Himalayan blackberry (*Rubus armeniacus*)
Italian ryegrass (*Festuca perennis*)
Italian thistle (*Circium pycnocephalus*)
Jersey cudweed (*Pseudognaphalium luteoalbum*)
narrowleaf cottonrose (*Logfia gallica*)
New Zealand flax (*Phormium colensoi*)
pennyroyal (*Mentha pulegium*)
pineapple weed (*Matricaria discoidea*)
poison hemlock (*Conium maculatum*)
prickly lettuce (*Lactuca serriola*)
purple star thistle (*Centaurea calcitrapa*)
red brome (*Bromus madritensis*)
reed fescue (*Festuca arundinacea*)
ribwort (*Plantago lanceolata*)
ripgut brome (*Bromus diandrus*)
rose clover (*Trifolium hirtum*)
scarlet pimpernel (*Lysimachia arvensis*)
seaside barley (*Hordeum marinum*)

sheep sorrel (*Rumex acetocella*)
shortpod mustard (*Hirschfeldia incana*)
shrubby germander (*Teucrium fruticans*)
smooth cat's ear (*Hypochaeris glabra*)
soft chess (*Bromus hordeaceous*)
spring vetch (*Vicia sativa*)
sweet pea (*Lathyrus latifolius*)
tall flatsedge (*Cyperus eragrostis*)
weedy brome (*Bromus caroli-henrici*)
wild geranium (*Geranium dissectum*)
wild lettuce (*Lactuca saligna*)
wild oatgrass (*Avena barbata*)
wild radish (*Raphanus sativa*)
woolly grevillea (*Grevillea lanigera*)
yellow star thistle (*Centaurea solstitialis*)
Zorro fescue (*Festuca myuros*)

Native Plant Species:

blue-eyed grass (*Sisyrinchium bellum*)
bog rush (*Juncus patens*)
California poppy (*Eschscholzia californica*)
common madia (*Madia elegans*)
common yarrow (*Achillea millefolium*)
coyote brush (*Baccharis pilularis*)
hairy gumweed (*Grindelia hirsutula*)
ladies' tobacco (*Pseudognaphalium californicum*)
meadow barley (*Hordeum brachyantherum*)
mountain dandelion (*Agoseris heterophylla*)
narrow-leaved miner's lettuce (*Claytonia parviflora*)
poison oak (*Toxicodendron diversilobum*)
saltgrass (*Distichlis spicata*)
slender tarweed (*Madia gracilis*)
toyon (*Heteromeles arbutifolia*)



Wetland #	Sq. Ft.	Acres
W 1	601	0.014
W 2	132	0.003
W 3	255	0.006

Linear Wetland	Length (Ft.)	Width (Ft.)	Sq. Ft.	Acres
LW 1	364	5	1,820	0.042

U.S. Army Corps of Engineers
San Francisco District
Regulatory Division

Preliminary Jurisdictional Determination
pursuant to Section 404 Clean Water Act

American Canyon Flatlands
American Canyon, Napa County
(38.18459°, Longitude -122.27262°)

Accurate as depicted in legend

Preliminary Jurisdictional Determination verified only within the designated Limits of Delineation. All wetlands, as depicted in the legend and on the map, are potential waters of the U.S. All boundaries shown for these features are approximate.

Corps File SPN-2011-00322 Date: August 30, 2023 Sheet 1 of 1

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Sheet 1. Draft Aquatic Resources Delineation Map
SDG Commerce 220 Project Site
City of American Canyon, California

Delineation Conducted on: May 2, 2023
Delineation Conducted by: Sarah Lynch and Zarina Sheikh
Aerial Photograph Source: ESRI
Map Preparation Date: May 1(

Appendix E:
Plant and Wildlife List

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WILDLIFE AND PLANT SPECIES LIST

Table 1: Wildlife Species List

Wildlife Species	
Scientific Name	**Common Name**
Agelaius phoeniceus	red-shouldered blackbird
Anas platyrhynchos	mallard ducks
Anthus rubescens	American pipit
Aphelocoma californica	western scrub jay
Ardea herodias	great blue heron
Bombycilla cedrorum	cedar waxwing
Branta canadensis	Canada goose
Buteo lineatus	red-shouldered hawk
Calypte anna	Anna's hummingbird
Cathartes aura	turkey vulture
Catharus guttatus	hermit thrush
Colaptes auratus	northern flicker
Corvus brachyrhynchos	crow
Corvus corax	raven
Elanus leucurus	white-tailed kite
Felis catus	domestic cat
Fulica americana	American coot
Haemorhous mexicanus	house finch
Haemorhous purpureus	purple finch
Junco hyemalis	dark-eyed junco
Larus californicus	California gull
Lepus californicus	black-tailed jackrabbit
Meleagris gallopavo	wild turkey
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Microtus californicus	California vole
Molothrus ater	brown-headed cowbird
Odocoileus hemionus	mule deer
Passerella iliaca	fox sparrow
Pelecanus erythrorhynchos	American pelican

Wildlife Species	
Scientific Name	**Common Name**
Petrochelidon pyrrhonota	cliff swallow
Picoides nuttallii	Nuttal's woodpecker
Poecile rufescens	chestnut-backed chickadee
Regulus calendula	ruby-crowned kinglet
Salpinctes obsoletus	rock wren
Sayornis nigricans	black phoebe
Setophaga coronata	yellow-rumped warbler
Sialia mexicana	western bluebird
Spinus psaltria	lesser goldfinch
Spinus tristis	American goldfinch
Sturnus vulgaris	European starling
Tachycineta bicolor	tree swallow
Thryomanes bewickii	Bewick's wren
Troglodytes aedon	house wren
Turdus migratorius	American robin
Zenaida macroura	mourning dove
Zonotrichia atricapilla	golden-crowned sparrow
Zonotrichia leucophrys	white-crowned sparrow

Table 2: Plant Species List

Plant Species	
Scientific Name	**Common Name**
Achillea millefolium	common yarrow
Agoseris heterophylla	mountain dandelion
Aira caryophyllea	hairgrass
Ammi majus	bishop's weed
Avena barbata	wild oatgrass
Baccharis pilularis	coyote brush
Brachypodium distachyon	false brome
Brassica nigra	black mustard
Bromus caroli-henrici	weedy brome
Bromus diandrus	ripgut brome
Bromus hordeaceous	soft chess

Plant Species	
Scientific Name	**Common Name**
Bromus madritensis	red brome
Calendula arvensis	field marigold
Centaurea calcitrapa	purple star thistle
Centaurea solstitialis	yellow star thistle
Cichorium intybus	chicory
Circium pycnocephalus	Italian thistle
Cirsium sp.	upland thistle
Cirsium vulgare	bull thistle
Claytonia parviflora	narrow-leaved miner's lettuce
Conium maculatum	poison hemlock
Convolvulus arvensis	field bindweed
Cyperus eragrostis	tall flatsedge
Diatoms sp.	algal mats
Dipsacus fullonum	Fuller's teasel
Distichlis spicata	saltgrass
Erodium botrys	crane's bill filaree
Erodium cicutarium	coastal heron’s bill
Eschscholzia californica	California poppy
Eucalyptus globulus)	bluegum
Festuca arundinacea	reed fescue
Festuca myuros	Zorro fescue
Festuca perennis	Italian ryegrass
Foeniculum vulgare	fennel
Geranium dissectum	wild geranium
Grevillea lanigera	woolly grevillea
Grindelia hirsutula	hairy gumweed
Helminthotheca echioides	bristly ox-tongue
Heteromeles arbutifolia	toyon
Hirschfeldia incana	shortpod mustard
Hordeum brachyantherum	meadow barley
Hordeum marinum	seaside barley
Hordeum murinum	foxtail barley
Hypochaeris glabra	smooth cat’s ear
Juncus patens	bog rush

Plant Species	
Scientific Name	**Common Name**
Lactuca saligna	wild lettuce
Lactuca serriola	prickly lettuce
Lathyrus latifolius	sweet pea
Logfia gallica	narrowleaf cottonrose
Lotus corniculatus	bird's foot trefoil
Lysimachia arvensis	scarlet pimpernel
Madia elegans	common madia
Madia gracilis	slender tarweed
Malva parviflora	cheeseweed
Matricaria discoidea	pineapple weed
Medicago polymorpha	bur clover
Mentha pulegium	pennyroyal
Phalaris aquatica	harding grass
Phormium colensoi	New Zealand flax
Plantago lanceolata	ribwort
Pseudognaphalium californicum	ladies’ tobacco
Pseudognaphalium luteoalbum	Jersey cudweed
Raphanus sativa	wild radish
Rubus armeniacus	Himalayan blackberry
Rumex acetocella	sheep sorrel
Rumex crispus	curly dock
Rumex sp.	docks
Senecio vulgaris	common groundsel
Sisyrinchium bellum	blue-eyed grass
Taraxacum officinale	common dandelion
Teucrium fruticans	shrubby germander
Torilis arvensis	hedge parsley
Toxicodendron diversilobum	poison oak
Trifolium hirtum	rose clover
Vicia sativa	spring vetch
Vicia villosa	hairy vetch

C.2 - Commerce 217 Documents

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April 20, 2023

John Wojtas
Industrial and Commercial Contractors, LP
413 W. Yosemite Avenue, Suite 105
Madera, CA 93637

Subject: **Pre-construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 per the Mitigation Monitoring and Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California**

Dear John:

This letter summarizes results of pre-construction burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), nesting raptor, nesting passerine bird, and western pond turtle (*Actinemys marmorata*) surveys conducted to-date by FirstCarbon Solutions (FCS) consulting Biologists Dr. Christopher DiVittorio and Bernhard Warzecha as they relate to compliance with CEQA Mitigation Measures (MM) BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, and MM BIO-5 from the January 2021 Mitigation, Monitoring, and Reporting Program (MMRP) for the Commerce 217 Warehouse Project located in American Canyon, California.

The project site comprises a single parcel measuring 10.8 acres in size and consists of non-native annual and perennial grassland with several small, mapped wetland features. The site is bounded by Commerce Court to the east, a developed warehouse to the north, an open field to the south beyond which is another developed warehouse, and a eucalyptus grove to the west.

Methods

Between January 18 and April 7, 2023, FCS conducted seven nesting bird and burrowing owl detection surveys (including for Swainson's hawk) on the project site and relevant adjacent areas (where accessible), for a total of approximately 30 survey hours. Surveys for western pond turtle adults and nests were also performed simultaneously while walking the site.

Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Protocol) and the *Staff Report on Burrowing Owl Mitigation*.[1,2] Survey equipment included high-quality binoculars and a high-quality spotting scope.

[1] Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.
[2] California Department of Fish and Wildlife 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

UNITED STATES

T +1 888 826 5814
T +1 714 508 4100
F +1 714 508 4110
E info@fcs-intl.com

Irvine
250 Commerce
Suite 210
Irvine, CA 92602

Bay Area
2999 Oak Road
Suite 250
Walnut Creek, CA 94597

Central Valley
7726 N. First Street
#413
Fresno, CA 93720

Inland Empire
967 Kendall Drive
#A-537
San Bernardino, CA 92407

Sacramento Valley
2351 Sunset Boulevard
Suite 170-301
Rocklin, CA 95765

Utah
2901 Bluegrass Boulevard
Suite 200-62
Lehi, UT 84043

Connecticut
2 Corporate Drive
Suite 450
Shelton, CT 06484

New York
10 Monument Street
Deposit, NY 13754
56 Broome Corporate Parkway
Conklin, NY 13748

CANADA

UNITED KINGDOM

PORTUGAL

FRANCE

KENYA

AUSTRALIA

PHILIPPINES

CHINA

MALAYSIA

SINGAPORE

Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Surveys were conducted on foot. Survey dates conducted by FCS are shown below in Table 1.

Table 1: Survey Dates

Date	Swainson's Hawk	Burrowing Owl	Nesting Birds including Raptors
1/18/2023	First survey in Period I	Burrowing owl breeding season survey	Nesting bird surveys–All Species
3/20/2023	First survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
3/31/2023	Second survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/4/2023	Third survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/5/2023	First survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/6/2023	Second survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/7/2023	Third survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/24/2023 (planned)	Swainson's hawk presence/absence survey	Burrowing owl breeding season survey	Nesting bird surveys–All Species

Surveys were conducted by FCS consulting Biologists Dr. Christopher DiVittorio and Bernhard Warzecha, both of whom are experienced in conducting surveys for all of the aforementioned special-status species and have been previously approved by the California Department of Fish and Wildlife (CDFW). Additionally Mr. Warzecha and Dr. DiVittorio have previous experience and training in the monitoring of Swainson's hawk nesting, including Swainson's hawk identification and behavioral patterns.

Results

A list of all species of birds observed at the different time points is provided below. No nesting birds were observed on the project site itself, and no nests of any protected species were observed off-site in the areas that could be accessed. White-tailed kites (*Elanus leucurus*) were observed foraging in the field, but they did not appear to be nesting nearby, as described below. No Swainson's hawk or burrowing owl were observed during any of the avian surveys to-date. No adults or nests of western pond turtle were observed. All observed animal species are listed in Attachment A: Animal Species Observed.

Swainson's Hawk

No individuals of Swainson's hawk were observed during any of the surveys, and no raptor nests that could belong to Swainson's hawk were observed. The presence of other birds-of-prey utilizing territories on-site also indicates that Swainson's hawk are not utilizing this habitat currently. The negative survey results for Swainson's hawk despite approximately 30 survey hours satisfies the requirements of the survey protocol for this species, therefore it is reasonable to conclude Swainson's hawk are absent from the project site.

Nesting Birds (Including Raptors)

FCS Biologists observed no active nests within the vicinity of the project site. Several American crow were loitering around the eucalyptus grove to the east of the parcel and harassing white-tail kites that approached the grove; however, their nest could not be located. Several white-tail kites were observed each day foraging over the grassland habitat; however, each time they flew off to the southwest out of sight and the location of their nest could not be determined. One juvenile red-tailed hawk was observed within the large eucalyptus tree along the north property line; however, this individual flew off-site after approximately 20 minutes. No other active nests were observed as of April 7.

Burrowing Owl

No evidence of burrowing owl activity was observed during any of the field surveys. No California ground squirrel burrows were observed on-site, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl. Therefore, it is reasonable to conclude burrowing owl is absent from the project site.

Western Pond Turtle

No evidence of western pond turtle activity was observed during any of the field surveys. There are some wetland features on-site, however no ponds or streams suitable for western pond turtle exist on-site and no signs of adults or nests were observed. Therefore, it is reasonable to conclude western pond turtle is absent from the project site.

Compliance

With implementation of the pre-construction surveys, and implementation of the recommendations for Swainson's hawk, burrowing owl, nesting birds, and western pond turtle, the project is in compliance with MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4 and MM BIO-5.

FCS appreciates the opportunity to assist you on this project. If you have any questions concerning this letter report, please contact me at jwaligorski@fcs-intl.com.

Sincerely,



Janna Waligorski
Senior Project Manager
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
530.519.9736

Attachment A: Animal Species Observed List

Attachment A:
Animal Species Observed

Commerce 217/220 Species List

Site Visit: 1/18/23

Birds: juvenile red-shouldered hawk (*Buteo lineatus*) sitting in eucalyptus tree on N fenceline, Western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American pelican (*Pelecanus erythrorhynchos*), black phoebe (*Sayornis nigricans*), white-crowned sparrow (*Zonotrichia leucophrys*), Northern flicker (*Colaptes auratus*), crow (*Corvus brachyrhynchos*)

Site Visit: 3/20/23

Start Time: 6:35 AM
Weather: no wind, 49 degF, 46% RH
Note: start at sunrise; park in SE corner

Bird Species: wild turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), Canada goose (*Branta canadensis*), crow (*Corvus brachyrhynchos*), raven (*Corvus corax*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Western bluebird (*Sialia mexicana*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), red-shouldered hawk (*Buteo lineatus*) two individuals soaring over the eucalyptus grove to the E of the site, house wren (*Troglodytes aedon*), American robin (*Turdus migratorius*), golden-crowned sparrow (*Zonotrichia atricapilla*), Nuttal's woodpecker (*Picoides nuttallii*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), purple finch (*Haemorhous purpureus*), tree swallow (*Tachycineta bicolor*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), California gull (*Larus californicus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), chestnut-backed chickadee (*Poecile rufescens*), White-tailed kite (*Elanus leucurus*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*)

Flowering Plants: California poppy (*Eschscholzia californica*), coastal heron's bill (*Erodium cicutarium*), common groundsel (*Senecio vulgaris*), field marigold (*Calendula arvensis*)

Site Visit: 3/31/23

Start time: 6:30 AM
Weather: clear, wind 0 mph, 44.5 degF, 76.5% RH
Notes: parked NE corner

Bird species: American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), Canada goose (*Branta canadensis*), American goldfinch (*Spinus tristis*), house sparrow (*Passer domesticus*),

Allen's hummingbird (*Selasphorus sasin*), kildeer (*Charadrius vociferus*), raven (*Corvus corax*), unknown gull likely Western or California, American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*)

Other Animals: Mule deer (*Odocoileus hemionus*), domestic cat (*Felis catus*)

Site Visit: 4/4/23

Start time: 6:35 AM
Weather: clear, 49 degF, no wind, 81% RH, 6:15 AM first light, 7:15 first direct sunlight
Notes: parked SW corner

Bird Species: red-shouldered hawk (*Buteo lineatus*) perched on eucalyptus tree on N fenceline , wild turkey (*Meleagris gallopavo*) calling and all over parking area, White-tailed kite (*Elanus leucurus*) foraging and calling, house wren (*Troglodytes aedon*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), purple finch (*Haemorhous purpureus*), song sparrow (*Melospiza melodia*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), rock wren (*Salpinctes obsoletus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), fox sparrow (*Passerella iliaca*), Northern mockingbird (*Mimus polyglottos*), tree swallow (*Tachycineta bicolor*), Canada goose (*Branta canadensis*), kildeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), Western bluebird (*Sialia mexicana*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*)

Site Visit: 4/5/23

Start time: 6:08 AM
Weather: 39 degF, 80% RH, no wind
Notes: met Jerry with Stravinsky on-site; parked SW corner

Bird Species: red-shouldered hawk (*Buteo lineatus*) called from southwest corner of eucalyptus grove once, wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), raven (*Corvus corax*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), White-tailed kite (*Elanus leucurus*) 3 hovering various times over the field, Nuttal's woodpecker (*Picoides nuttallii*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*)

Site Visit: 4/6/23

Start time: 6:17 AM
Weather: clear, 44 degF, 80% RH, no wind
Notes: fewer wildlife than yesterday; met Jerry with Stravinsky on-site; parked SW corner

Bird Species: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), brown creeper (*Certhia americana*), raven (*Corvus corax*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), red-shouldered hawk (*Buteo lineatus*) called from southwest corner of eucalyptus grove once similar to other mornings, White-tailed kite (*Elanus leucurus*) two individuals over east eucalyptus grove being chased by crows, song sparrow (*Melospiza melodia*), great blue heron (*Ardea herodias*) soaring overhead, unknown gulls soaring, lesser goldfinch (*Spinus psaltria*), Anna's hummingbird (*Calypte anna*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*)

Other Animals: runways of black-tailed jackrabbit (*Lepus californicus*) and California vole (*Microtus californicus*)

Site Visit: 4/7/23

Start time: 6:30 AM
Weather: cloudy, 54.5 degF, 79% RH, wind 1-2 mph
Notes: fewer birds today, met Jerry on-site

Bird Species: Bewick's wren (*Thryomanes bewickii*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), hermit thrush (*Catharus guttatus*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), Nuttal's woodpecker (*Picoides nuttallii*), White-tailed kites (*Elanus leucurus*) being chased by crows then two foraging in field, cliff swallow (*Petrochelidon pyrrhonota*), cedar waxwing (*Bombycilla cedrorum*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*)

September 3, 2020

Industrial and Commercial Contractors, LP
403 W. Yosemite Avenue, Suite 105
Madera, California 93637

Attention: Mr. Brian Doswald

RE: Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site
SDG Commerce 217 Distribution Center, Napa, California
APN: 058-030-065-000

Dear Mr. Doswald:

1. INTRODUCTION

Monk & Associates, Inc., (M&A) has prepared this Addendum to our March 2, 2020, *Revised Biological Resource Analysis* (biology report) for the SDG Commerce 217 Distribution Center located in the City of American Canyon, California (the "project site"). Since the time M&A prepared our biology report for the project site, it has been determined that it will be necessary to acquire soil from the adjacent parcel to the south (the "borrow area parcel") and transport this soil for use as clean fill on the project site. M&A has prepared this Addendum to our biology report to address the transportation of soil from the offsite borrow area parcel onto the project site and to analyze any affects this activity could have on mapped jurisdictional waters of the United States/State that lie inbetween the project site and the adjacent borrow area parcel. Mapped waters of the United States are shown on the attached exhibits.

2. DESCRIPTION OF THE PROJECT SITE AND ADJACENT BORROW AREA PARCEL

The project site and the adjacent borrow area parcel were once part of a contiguous approximately 35-acre project site that M&A conducted surveys on over multiple years dating between 2006 and 2018. Both the project site and adjacent borrow area parcel are dominated by ruderal (weedy) vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). These non-native, weedy species provide little habitat value to wildlife and they do not constitute a native plant community. Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, is also common on the 35 acres. Ruderal vegetation is the only vegetation community found on the project site. The adjacent borrow area parcel, however, in addition to supporting a ruderal herbaceous community also supports waters of the United States, as described below.

On May 16, 2018, the U.S. Army Corps of Engineers issued a jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the approximately 35-acre

parcel that comprises the project site, the adjacent borrow area parcel, and another property now known as 330 Commerce Center (see attached exhibits). The entire 0.043-acre of waters of the U.S. confirmed by the Corps is found on the adjacent borrow area parcel as shown on the attached exhibit "Borrow Site Rough Grading," Sheet 1 prepared by RSA on August 21, 2020. There are no waters of the United States or State on the project site.

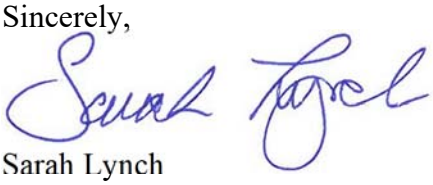
3. DISCUSSION OF PROPOSED ACTIVITIES AND AVOIDANCE OF IMPACTS TO MAPPED WATERS OF THE UNITED STATES

The project applicant intends to rough grade the borrow area parcel and transport soil from that parcel onto the project site for use in development of the project site. In order to protect the waters of the United States/State that occur in between the project site and the borrow area parcel, a 25-foot buffer area around the outside edge of the wetlands will be staked and protected with fiber roll, silt fencing and high visibility orange construction fencing to prevent equipment from driving into the wetlands during hauling activities. See the attached exhibit.

With these protection measures in place, as shown on the attached Borrow Site Rough Grading exhibit, Sheet 1, attached, *there are no expected impacts to waters of the U.S./State from the transport of soil/materials from the borrow area parcel to the project site*.

This concludes our addendum to our biology report. If you have any questions or require additional information, please do not hesitate to contact me at (925) 323-4850 or Sarah@monkassociates.com. Thank you.

Sincerely,



Sarah Lynch
Senior Associate Biologist

Attachments: U.S. Army Corps of Engineers Confirmed Aquatic Resources Delineation Map;
Sheet 1, Borrow Site Rough Grading prepared by RSA, August 21, 2020

GRAPHIC SCALE

60 0 60 120

(IN FEET)
1 inch = 60 FT

14,880± CU. YD. STOCKPILE
12.2 RG/CONF
11.9 RG/CONF
2,349± CU. YD. STOCKPILE
46,700 CU. YD. BORROW SITE INCLUSIVE OF STOCKPILES - FINE GRADE AS REQUIRED TO PROVIDE POSITIVE DRAINAGE - NO LOW SPOTS.
13.5 RG/CONF
16.0 RG/TC/CONF
(E) 1,178
0.6%
0.4%
(E) 1,178
1.9%
3%
2.3%
16.0 RG/TC
25.0 RG
5:1 SLOPE
10:1 SLOPE
20' WIDE HAUL ROAD
INSTALL FIBER ROLL, SILT FENCE, AND ORANGE CONSTRUCTION FENCE AT 25' BUFFER FROM MAPPED WETLAND
INSTALL FIBER ROLL, SILT FENCE, AND ORANGE CONSTRUCTION FENCE AT 25' BUFFER FROM MAPPED LINEAR WETLAND
COMMERCE 330 DISTRIBUTION CENTER - UNDER SEPARATE PERMIT
COMMERCE COURT EXTENSION - UNDER SEPARATE PERMIT
(P) COMMERCE 217 DISTRIBUTION CENTER
61002 25.71
61003 23.22
61001 25.54
61004 23.98
61005 DB23.9
61006 DB23.9
30 30.22

Tim Bradley

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RSA+ CONSULTING CIVIL ENGINEERS + SURVEYORS + (RSA)
1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE (707) 252-2301
+ WWW.RSACIVIL.COM +

SDG COMMERCE 217 DISTRIBUTION CENTER
BORROW SITE ROUGH GRADING
CALIFORNIA
AMERICAN CANYON

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNOCK
No. 82758
Exp. 9-30-20
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	AUG. 21, 2020
DRAWN	DRL
DESIGNED	DRL
CHECKED	PSW
JOB NO.	4119031.0
SHEET NO.	1
	1 OF 1 SHEETS

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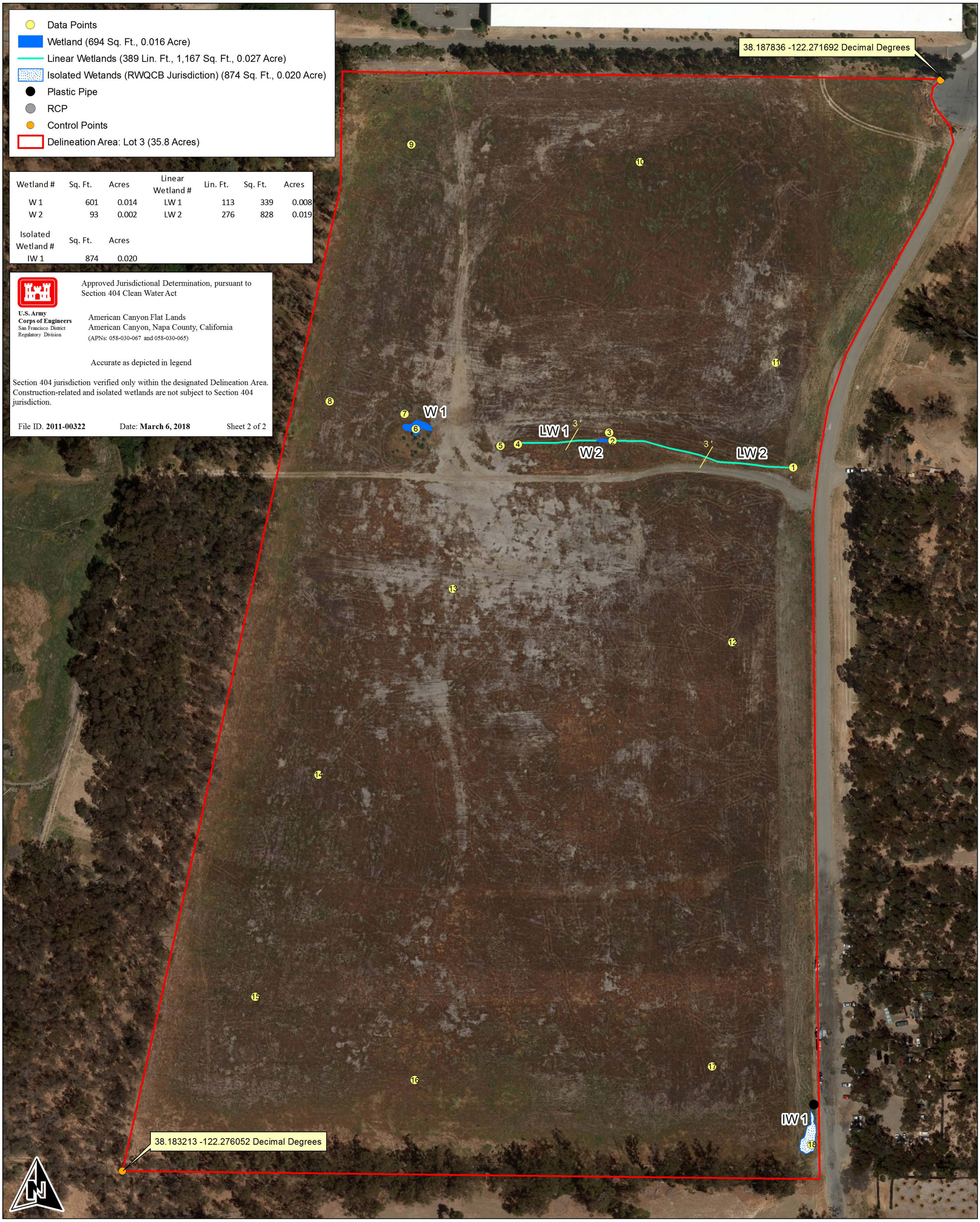

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

U.S. Army
Corps of Engineers
San Francisco District
Regulatory Division

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

American Canyon Flat Lands
American Canyon, Napa County, California
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID. **2011-00322** Date: **March 6, 2018** Sheet 2 of 2

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map
American Canyon Flat Lands, Lot 3
City of American Canyon, Napa County, California

Corps Verification Date: May 18, 2017
Confirmed by Bryan Matsumoto
Delineation Conduced by: Hope Kingma & Devin Jokerst
Aerial Photograph Source: ESRI
Map Revision Date: May 22, 2017

Revised
BIOLOGICAL RESOURCE ANALYSIS
SDG COMMERCE 217 DISTRIBUTION CENTER
CITY OF AMERICAN CANYON, CALIFORNIA

March 2, 2020

Prepared for

SDG Commerce 217, LLC
413 W. Yosemite Ave. Suite 105
Madera, California 93637

Prepared by

Monk & Associates, Inc.
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595

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Figure 1. SDG Commerce 217 Distribution Center Project Site Regional Map.

Figure 2. SDG Commerce 217 Distribution Center Project Site Location Map.

Figure 3. SDG Commerce 217 Distribution Center Project Site Aerial Photograph.

Figure 4. Known Special-Status CNDDB Records Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

Figure 5. USFWS Critical Habitat in the Vicinity of the SDG 217 Commerce Distribution Center Project Site.

TABLES
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Table 1. Plant Species Observed on the SDG Commerce 217 Distribution Center Project Site.

Table 2. Wildlife Species Observed on the SDG Commerce 217 Distribution Center Project Site.

Table 3. Special-Status Plant Species Known to Occur Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

Table 4. Special-Status Wildlife Species Known to Occur Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

ATTACHMENTS
(At Back of Report)

Sheet A1. Preliminary Site Plan for the SDG Commerce 217 Distribution Center, prepared by WAI (Ward Architects, Inc.) dated January 15, 2020.

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map, dated May 22, 2017.

Sheet UP4. Utility Plan for the SDG Commerce 217 Distribution Center, prepared by RSA, dated January 2020.

Storm Drain Level Spreader Detail, prepared by RSA, dated January 7, 2020.

1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this biological resource analysis for the proposed SDG Commerce 217 Distribution Center project site (herein referred to as the project site) located in the City of American Canyon, California (Figures 1 and 2). The purpose of our analysis is to provide a description of existing biological resources on the project site and to identify potentially significant impacts that could occur to sensitive biological resources from the construction of a distribution center and associated parking on the project site.

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations, including the California Native Plant Society (CNPS). Biological resources also include waters of the United States and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW. Our analysis includes a formal delineation of "waters of the U.S." that was confirmed in 2012 and reverified by the Corps in 2017.

This biological resources analysis also provides mitigation measures for "potentially significant" impacts that could occur to biological resources. Whenever possible, upon implementation, the prescribed mitigation measures would reduce impacts to levels considered less than significant pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs §§ 15000 et seq). Accordingly, this report is suitable for review and inclusion in any review being conducted by the City of American Canyon for the proposed project pursuant to the CEQA.

2. PROPERTY LOCATION AND SETTING

The approximately 10-acre project site is located at 1075 Commerce Court, American Canyon, Napa County, California (Figures 1 and 2). The project site is bordered to the southeast by Jungle Paintball, a 40-acre paintball park. To the east is located a large eucalyptus grove with scattered mobile homes. Further to the east is Oat Hill, a geographically prominent hill west of Highway 29. A mix of open space, large warehouses and distribution centers occurs north of the project site. The American Canyon Wastewater Treatment Plant and treatment ponds is located west of the project site. The Napa River and associated marshes occur greater than 300 feet west of the project site. A large distribution center, known as the SDG Commerce 330 Distribution Center, is currently under construction occurs immediately to the south of the project site. Clark Ranch, Wetlands Edge Park, and salt marsh and mudflat habitats associated with the Napa River, occur further to the south of the project site. The Napa Valley Unified School District is constructing the Napa Junction Elementary School to the southeast, along Eucalyptus Drive. Figure 3 provides an aerial photograph that shows the project site features and the surrounding land use.

The 10.39-acre project site is part of a larger 35.85-acre parcel (formerly known as Lot 3) that is comprised of a highly disturbed, ruderal (weedy) plant community, that was recently graded and leveled. This site formerly was occupied by a grove of blue gum eucalyptus (*Eucalyptus globulus*) trees that were removed in 2012.

3. PROPOSED PROJECT

The applicant proposes to construct a 217,294-square foot distribution center with associated parking areas and a detention/bioretention pond on the 10.39-acre project site. Access to the distribution center will be provided by the Commerce Court extension, as illustrated on the Preliminary Site Plan (see attached Sheet A1).

4. ANALYSIS METHODS

Prior to preparing this biological resources analysis report, M&A researched the most recent version of CDFW's Natural Diversity Database, RareFind 5 application (CNDDB 2018) for historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare) known to occur in the region of the project site. All special-status species records were compiled in tables. M&A examined all known record locations for special-status species to determine if special-status species could occur on the project site or within an area of affect.

M&A biologists have a long history of field surveys associated with the approximately 35-acre parcel. M&A biologists conducted site surveys on the parcel on March 1 and April 27, 2006, June 14, 2011, February 14, March 21, and June 12, 2012, May 18, 2017, and on March 30, 2018, December 19 and December 27, 2019. In 2006, and again in 2011, M&A conducted a wetland delineation on the entire parcel. This delineation of "waters of the U.S." was confirmed by the Corps in 2012 and reverified by this agency in 2017. The Corps Confirmed Reverification of Aquatic Resources Delineation Map is provided as Sheet 2.

During the site surveys and wetland delineations, M&A biologists recorded biological resources and assessed the likelihood of resource regulated areas on the project site. In addition to the wetland delineations, the survey involved searching all habitats on the site and recording all plant and wildlife species observed. M&A cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species. The results of our literature research and field reconnaissance are provided in the sections below.

5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES

5.1 Topography

The project site is relatively flat with elevations ranging from 8 to 20 feet above sea level. The ground is undulating due to past land use disturbances including eucalyptus tree removal in 2012. The site slopes gently to the west towards North Slough and the Napa River.

5.2 Hydrology

There are no drainages on the project site. There are no indicators of hydrology on the 10-acre project site (Sheet 2).

5.3 Plant Communities and Associated Wildlife Habitats

A complete list of plant species observed on the project site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual* Second Edition (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (http://ucjeps.berkeley.edu/interchange/index.html). Table 2 is a list of wildlife species observed on the project site during multiple years of surveys at the project site. Nomenclature for wildlife follows CDFW's *Complete list of amphibian, reptile, bird, and mammal species in California* (CDFW 2016) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list.

5.3.1 RUDERAL HERBACEOUS VEGETATION

A complete list of plant species observed within the project site is presented in Table 1. The project site is dominated by ruderal vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, such as is found on the project site, is also common on this parcel.

Typically, ruderal communities provide habitat for those animal species adapted to humans. Examples of animals associated with these communities include wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), California ground squirrel (*Otospermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), California meadow vole (*Microtus californicus*), and Botta's pocket gopher (*Thomomys bottae*), among others, all of which have been observed on the project site. Red-shouldered hawk (*Buteo lineatus*), tree swallows (*Tachycineta bicolor*), Nuttall's woodpecker (*Picoides nuttallii*), and northern flicker (*Colaptes auratus*), among others, likely nest in the eucalyptus trees that surround the project site to the west, north and south. Chestnut-backed chickadee (*Poecile rufescens*), brown creeper (*Certhia americana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), Bullock's oriole (*Icterus bullockii*) and western gray squirrel (*Sciurus griseus*) were also observed in the immediate project vicinity.

5.4 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible

to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

The proposed project will not interfere with the movement of native wildlife. The project site has a history of disturbance associated with eucalyptus tree removal in 2012, and continued disturbance associated with the paintball facility located immediately to the southeast and construction of the SDG Commerce 330 Distribution Center distribution center to the south. The eucalyptus grove and the marshes associated with the Napa River to the west of the project site provide a more valuable wildlife corridor for terrestrial wildlife.

6. SPECIAL-STATUS SPECIES DEFINITION

6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq*.; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);

- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);

- plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;

- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2017). The California Department of Fish and Wildlife (CDFW) recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in EIRs. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001) (CNPS 2017). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);

- migratory nongame birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);

- animals that are designated as "species of special concern" by CDFW (2018);

- Animal species that are “fully protected” in California (Fish and Game Codes 3511, 4700, 5050, and 5515).

- Bat Species that are designated on the Western Bat Working Group’s (WBWG) Regional Bat Species Priority Matrix as: “RED OR HIGH.” This priority is justified by the WBWG as follows: “Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.”

In the paragraphs below we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as Endangered or Threatened under the FESA is protected from unauthorized “take” (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a Federal listed Endangered or Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as Threatened under the state Endangered Species Act (§2050 of California Fish and Game Code) is protected from unauthorized “take” (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to “take” a state listed Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the “take.”

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered “rare.” Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a “significant effect on the environment” (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an “Inventory” of special status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federal listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the Fish and Game Code, and are eligible for state listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by CDFW and maintained on "watch lists."

Additionally, in 2006 CNPS updated their lists to include "threat code extensions" for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered "seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)";
- .2 is "fairly endangered in California (20-80% of occurrences threatened)";
- .3 is "not very endangered in California (less than 20% of occurrences threatened or no current threats known)."

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the white-tailed kite and golden eagle, are protected under California Fish and Game Code (§3511). Fully protected birds may not be "taken" or possessed (i.e., kept in captivity) at any time.

6.2 Potential Special-Status Plants on the Project Site

Figure 4 provides a graphical illustration of the known records for special-status species within 3 miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status plants have been mapped on or adjacent to the project site. However, according to the CDFW's CNDDB, a total of eight special-status plant species are known to occur in the region of the project site (Table 3). Most of these plants occur in specialized habitats such as marshes, foothill grasslands, and vernal pools, none of which occur onsite. In the recent past, blue gum eucalyptus trees covered the majority of the project site dating back for several decades; these trees emit allelopathic (growth inhibiting) chemicals from their leaves, acorns and bark that prevent other plants from growing under them. Once bark and leaf debris accumulate on the ground beneath the trees, nearly nothing will grow there. Based on the negative findings during the multiple surveys conducted on this site in 2006, 2011, 2012, 2017, 2018 and 2019, special-status plants are not likely to be found onsite and mitigation for special-status plants should not be warranted.

6.3 Potential Special-Status Animals in the Project Site

Figure 4 provides a graphical illustration of the known records for special-status species within three miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status animal records have ever been mapped on or adjacent to the project site. However, a total of 18 special-status animal species are known to occur in the region of the project site (Table 4). Due to the disturbed nature of the project site and its history as a eucalyptus grove, there is a very low likelihood of special-status species occurring onsite. Regardless, due to the sensitivity of four of the special-status wildlife species known to occur in the area, we further discuss these species below.

6.3.1 California red-legged frog

The California red-legged frog (*Rana draytonii*) was federally-listed as threatened on May 23, 1996 (Federal Register 61: 25813-25833) and as such is protected pursuant to the Federal Endangered Species Act. On March 16, 2010 the USFWS issued the final designation for California red-legged frog Critical Habitat (USFWS 2010). *The project site does not fall within mapped critical habitat, although it is adjacent* (see Figure 5).

The California red-legged frog is also a state "species of special concern." While the state designation "species of special concern" does not provide any legally mandated protection, species of special concern must be considered in any project undergoing a CEQA review.

The California red-legged frog is typically found in ponds, slow-flowing portions of perennial and intermittent streams that maintain water in the summer months. This frog is also found in hillside seeps that maintain pool environments or saturated soils throughout the summer months. Populations probably cannot be maintained if all surface water disappears (i.e., no available surface water for egg laying and larval development habitat). Larval California red-legged frogs require 11-20 weeks of permanent water to reach metamorphosis (i.e., to change from a tadpole into a frog), in water depths of 10 to 20 inches (USFWS 2002). Riparian vegetation such as willows and emergent vegetation such as cattails are preferred red-legged frog habitats, though not necessary for this species to be present. Populations of California red-legged frog will be reduced in size or eliminated from ponds supporting non-native species such as bullfrog, Centrarchid fish species (such as sunfish, bluegill, or large-mouth bass), and signal and red swamp crayfish (*Pacifastacus leniusculus* and *Procambarus clarkii*, respectively), all of which are known California red-legged frog predators. However, the presence of these non-native species does not preclude the presence of the California red-legged frog.

California red-legged frogs also use upland habitats for migration and dispersal. The USFWS *Recovery Plan for the California Red-Legged Frog* states that frog overland excursions via uplands can vary between 0.25-mile up to 3 miles during the wet season, and that frogs "have been observed to make long-distance movements that are straight-line, point to point migrations rather than using corridors for moving in between habitats" (USFWS 2002). The information presented in the USFWS' Recovery Plan was taken from a publication by Bulger et al. (2003) that recounts a study in coastal redwoods in Santa Cruz area. M&A believes that such overland straight-line migrations are primarily limited to periods of heavy rainfall or during periods when ambient conditions exhibit high moisture levels such as in fog belts along the coast. Working in

Point Reyes National Seashore on the coast of California, Fellers and Kleeman (2007) found approximately 31 percent of California red-legged frogs moved more than 30 meters from their breeding sites and about 69 percent moved less than 30 meters from their breeding site during seasonal movement periods. Similarly, Bulger et al. (2003) found that 60 percent of their radio tagged frogs stayed within 30 meters of their breeding sites.

In locations that are characterized by hot and seasonally dry climates, the California red-legged frog is inclined to stay closer to its aquatic environments or will not migrate. Tatarian (2005) who studied an inland population of California red-legged frogs in eastern Contra Costa County where the climate is far drier than the coastal environment, found that all movements started after the first 0.5 cm of rain in the fall, with more terrestrial movements being made in the fall pre-breeding season (57%) than in the winter breeding season (32%) or spring post-breeding season (11%). Tatarian (op. cit.) also found that California red-legged frogs moved greater average distances aquatically (84.6 m) than terrestrially (27.7 m). Greater terrestrial distances were moved in the pre-breeding season (35.2 m) than in the breeding season (15.5 m) or post-breeding season (16.3 m) with the majority of movements occurring for only one of the 3-4 day survey periods. The majority of frogs (57%) were position faithful within a pool, indicating they did not migrate at all. These data suggest that long forays across the landscape found in coastal populations are less likely in dry inland locations.

The USFWS *Recovery Plan for the California Red-Legged Frog* states that populations are "most likely to persist where multiple breeding areas are embedded within a matrix of habitats used for dispersal." "The primary constituent elements for California red-legged frogs are aquatic and upland areas where suitable breeding and non-breeding habitat is interspersed throughout the landscape and is interconnected by unfragmented dispersal habitat" (USFWS 2002).

In the American Canyon/Napa area, there are no records for the California red-legged frog west of State Route 29 where the project site is located. The closest known California red-legged frog occurrence is 1.4 miles east of the project site (CNDDB Occurrence No. 896). The California red-legged frog at this location was found in a dry cement tank adjacent to a large quarry pond that supported bullfrogs (*Lithobates catesbeiana*). State Route 29 is located between this closest California red-legged frog record and the project site and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the project site. There is no hydrologic connectivity over any undeveloped migration route between the known records for this species and the project site. Finally, the project site does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that the project site does not provide suitable habitat for the California red-legged frog. Similarly, the surrounding parcels with dense eucalyptus groves do not provide suitable habitat. Owing to the excessively disturbed conditions on the project site due to prior grading and tree removal activities, this species is not expected to occur on the project site. *Therefore, the proposed project will not impact the California red-legged frog and mitigation should not be warranted.*

6.3.2 SWAINSON'S HAWK

The Swainson's hawk (*Buteo swainsoni*) is a state-listed threatened species, protected pursuant to the California Endangered Species Act (CESA), and Title 14 of the California Code of Regulations. While it has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their active nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800).

Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands (Kochert 1986). It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall (Schmutz et. al. 1984). Nests are constructed in isolated trees that are dead or alive along drainages and in wetlands, or in windbreaks in fields and around farmsteads (Palmer 1988). Swainson's hawks occasionally nest in shrubs, on telephone poles, and on the ground. In the Central Valley of California, the majority of Swainson's hawk nests and territories are associated with riparian systems and nests are commonly found in cottonwoods and oaks (Schlorff et. al. 1984). They have also been documented nesting in eucalyptus (*Eucalyptus* spp.), black walnut (*Juglans hindsii*), black locust (*Robinia pseudoacacia*), almond (*Prunus dulcis*), Osage orange (*Maclura pomifera*), Arizona cypress (*Cupressus arizonica*), and pine (*Pinus* spp.).

Foraging habitats include grasslands, alfalfa fields, fallow fields, beet, tomato, and other low-growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded (CDFG 1994). The Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole (*Microtus californicus*). Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. In addition, agricultural practices (planting, maintenance, harvesting, disking) allow for access to prey, and very likely increase foraging success of Swainson's hawks by flushing prey (personal observations of G. Monk). During the nesting season Swainson's hawks usually forage within two miles of the nest. Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially, therefore it can occupy habitats with few or no perches except the nest tree (James 1992).

Swainson's hawks are regular summer visitors and breeders throughout the western states. In the fall months, most Swainson's hawks migrate to Argentina before returning to the United States to breed in the late-spring (typically April). For decades, Argentina farmers were spraying insecticides over habitats that included gregarious night roosts of the Swainson's hawk, killing many thousands of these hawks. This practice was halted in the last 10 years and the Swainson's hawk population appears to be dramatically responding in California. While in the 1970s through 1990s there were only two relatively small populations of Swainson's hawks that remained resident in California year-round in the Davis area and in the Sacramento River Delta, resident and migrant populations of the Swainson's hawks are now dramatically expanding their nesting distribution in California since insecticide use over Argentinian wintering grounds was halted (G. Monk, personal observations). For example, Swainson's hawks were never recorded nesting in the Napa County area until relatively recently.

The closest known record for nesting Swainson's hawk is 2.6 miles northeast of the project site (CNDDB Occurrence No. 2744). No Swainson's hawk nests have been observed on the site or offsite in the vicinity of the project site during M&A's project site surveys. However, the nesting population appears to be increasing throughout its nesting range in northern California (recent CNDDB records and G. Monk general observations) and the eucalyptus trees growing adjacent to the project site provide suitable nesting habitat. Therefore, there is the possibility that Swainson's hawks could nest near this project site in future years. *Hence, prior to earth-disturbance or construction, nesting surveys must be conducted that confirm or negate this species' presence as a nesting bird on or adjacent to the project site. Accordingly, impacts to Swainson's hawk are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

6.3.3 WESTERN BURROWING OWL

The western burrowing owl (*Athene cunicularia hypugaea*) is a California "species of special concern." Its nest, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, and §3800). The burrowing owl is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Finally, based upon this species' rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment" pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. Thus, this owl species must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency. When these owls occur on project sites, typically, mitigation requirements are mandated in the conditions of project approval from the CEQA lead agency.

Burrowing owl habitat is usually found in annual and perennial grasslands, characterized by low-growing vegetation. Often, the burrowing owl utilizes rodent burrows, typically California ground squirrel (*Otospermophilus beecheyi*) burrows, for nesting and cover. They may also on occasion dig their own burrows or use man-made objects such as concrete culverts or rip-rap piles for cover. They exhibit high site fidelity, reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of these owls during the spring and summer months or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement (white wash) at or near a burrow. Burrowing owls typically are not observed in grasslands with tall vegetation or wooded areas because the vegetation obscures their ability to detect avian and terrestrial predators. Since burrowing owls spend the majority of their time sitting at the entrances of their burrows, grazed grasslands seem to be their preferred habitat because it allows them to view the world at 360 degrees without obstructions.

The closest CNDDB record was documented 2.6 miles southeast of the project site in an area that has since been developed (CNDDB Occurrence No. 109). The project site was severely disturbed during the eucalyptus removal in 2012; thus, ground squirrel burrows are few and of recent origin. The mobility of the western burrowing owl enables the species to colonize the recent burrows. M&A did not observe western burrowing owls or any indirect evidence that burrowing owls are using or residing on the project site during any of the site surveys.

Regardless, the project site provides marginal nesting habitat for the western burrowing owl. *In order to confirm or negate the presence of western burrowing owls on site, surveys must be conducted prior to the commencement of earth-moving or construction*. *Accordingly, impacts to western burrowing owl are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

6.3.4 NORTHERN HARRIER

The northern harrier (*Circus cyaneus*) is a California species of special concern. This raptor is protected under California Fish and Game Code §3503.5 that protects nesting raptors and their eggs/young and is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators such as coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), and various snake species. Ground nesting birds in general are also subject to disturbance by agricultural practices. Northern harriers may forage over the project site and may nest in the open ruderal habitats onsite that provide suitable nesting habitat for this species. Hence, the proposed project could result in impacts to nesting northern harriers.

The closest CNDDB record was documented 2.8 miles west of the project site (CNDDB Occurrence No. 29). The project site was severely disturbed during the eucalyptus removal in 2012. Regardless, the project site provides marginal nesting habitat for the northern harrier. *In order to confirm or negate the presence of northern harriers on site, surveys must be conducted prior to the commencement of earth-moving or construction*. *Accordingly, impacts to northern harrier are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS

This section provides a discussion of those laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law we discuss their pertinence to the proposed development.

7.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, they are as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. According to this ruling, the USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is actually present.

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain a incidental take permit either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency), or requires preparation of a Habitat Conservation Plan (HCP) pursuant to Section 10 of FESA (for state and local agencies, or individuals, and projects without a federal "nexus").

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the

geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the "federal nexus agency," for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the "action agency" – that is, the federal agency that is carrying out, funding, or approving a project - that the project "may affect" a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in "jeopardy" to a listed species or if it could adversely modify designated critical habitat. If the USFWS/NMFS prepares a Biological Opinion, it will contain either a "jeopardy" or "non-jeopardy" decision. If the USFWS/NMFS concludes that a proposed project would result in adverse modification of critical habitat or would jeopardize the continued existence of a federal listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be most unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a "non-jeopardy" Biological Opinion, the nexus federal agency may authorize the discretionary permit making all conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an "incidental take" permit that allows applicants to "take" federally-listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, counties that are considering a discretionary permit, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, for the applicant to obtain an "incidental take permit," the applicant is required to submit a "conservation plan" to the USFWS or NMFS that specifies the impacts that are likely to result to federally-listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

7.1.1 Responsible Agency

FESA gives regulatory authority to the USFWS for federally-listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally-listed marine mammals and anadromous fish.

7.1.2 Applicability to the Proposed Project

The closest known California red-legged frog occurrence is 1.4 miles east of the project site (CNDDB Occurrence No. 896). The California red-legged frog was found in a dry cement tank

adjacent to a large quarry pond that supported bullfrogs. State Route 29 is located between the closest California red-legged frog record and the project site and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the project site. There is no hydrologic connectivity along any undeveloped migration route between the known records for this species and the project site. Finally, the project site does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that the project site does not provide suitable habitat for the California red-legged frog. Owing to the excessively disturbed conditions on the project site due to prior grading and tree removal activities, this species is not expected to occur on the project site. Therefore, the proposed project will not impact the California red-legged frog.

No other federally listed species are expected to occur on the project site. The project site does not provide fisheries habitat as it consists entirely of upland communities. *Therefore, it can be stated with confidence that the proposed project would not impact federally listed plant, animal, or fish species.*

7.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to "take" (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

7.2.1 Applicability to The Proposed Project

Western burrowing owl, northern harrier, Swainson's hawk, red-shouldered hawk, and red-tailed hawk (*Buteo jamaicensis*), among other raptors (birds of prey) could nest in the eucalyptus grove in the immediate vicinity of the project site. These raptors would be protected by the Migratory Bird Treaty Act. Also, the common songbirds that could forage on the site would be protected pursuant to this Act. As long as there is no direct mortality of species protected pursuant to this Act caused by development of the site, there should be no constraints to development of the site. To comply with the Migratory Bird Treaty Act, all active nest sites would have to be avoided while such birds were nesting. Upon completion of nesting, the project could commence as otherwise planned. Please review specific requirements for avoidance of nest sites for potentially occurring species in the Impacts and Mitigations section below.

7.3 California Endangered Species Act

7.3.1 Section 2081 of the California Endangered Species Act

In 1984, the state legislated the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above),

CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If CDFW determines that a proposed project could impact a state-listed threatened or endangered species, CDFW will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from CDFW and/or USFWS (if it is a Federal listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a state-listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for Federal listed species). CDFW will issue an incidental take permit only if:

1) The authorized take is incidental to an otherwise lawful activity;
2) the impacts of the authorized take are minimized and fully mitigated;
3) measures required to minimize and fully mitigate the impacts of the authorized take:
    a) are roughly proportional in extent to the impact of the taking on the species;
    b) maintain the project applicant's objectives to the greatest extent possible; and,
    c) capable of successful implementation; and,
4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing a habitat conservation plan (HCP) as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve CDFW staff in development of the HCP. If a final Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the federal Endangered Species Act, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of "take." These species are listed in several statutes that identify "fully protected" species and "specified birds." *See* Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a "fully protected" species or a "specified bird" occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a "non-jeopardy*"* federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal incidental take permit) pursuant to the FESA, to submit the federal opinion or permit to CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days CDFW determines that the federal incidental take permit is consistent

with state law, and that all state-listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are state-listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a state CESA permit under Section 2081(b). Section 2081(b) is of no use if an affected species is state-listed, but not federally-listed.

State and federal incidental take permits are issued on a discretionary basis, and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

7.3.2 Applicability to The Proposed Project

No state-listed plant species would likely occur on the project site due to an absence of habitat. The project site does not support any trees and does not provide nesting habitat for the Swainson's hawk. Suitable nesting habitat for this hawk exists in the eucalyptus trees on the adjacent properties; thus, preconstruction nesting surveys will be necessary to ensure that earth-work or construction does not occur while this raptor is nesting nearby or that if it does, it does not disturb the nesting birds. If the proposed project follows the proposed mitigation measures as detailed in the Impacts and Mitigation section below, *an Incidental Take Permit (ITP) from the CDFW should not be necessary for this project.*

7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503, 3503.5, 3511, and 3513 prohibit the "take, possession, or destruction of birds, their nests or eggs." Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "take." Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

7.4.1 Applicability to the Proposed Project

Raptors that could be affected by the project include western burrowing owl, northern harrier, Swainson's hawk, red-shouldered hawk and red-tailed hawk. Preconstruction surveys would have to be conducted for these species to ensure that there is no direct take of these birds including their eggs, or young. Any active nests that were found during preconstruction surveys

would have to be avoided by the project. Suitable non-disturbance buffers would have to be established around nest sites until the nesting cycle is complete. More specifics on the size of buffers are provided below in the Impacts and Mitigations section.

7.5 City of American Canyon General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site. Only those applicable to the proposed project are discussed herein:

7.5.1 Goal 8, Objective 8.1 and Policies 8.1.1 and 8.1.4

- **Goal 8:** Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.
- **Objective 8.1:** Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.
- **Policy 8.1.1:** Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.
- **Policy 8.1.4:** Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

7.5.2 Applicability to the Proposed Project

Consistent with General Plan Policies 8.1.1 and 8.1.4, this report provides a detailed assessment of the biological resources present on the project site.

7.5.3 Objective 8.2 and Policy 8.2.1

- **Objective 8.2:** Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savannah, and wetland and riparian habitats, with new development in the City.
- **Policy 8.2.1:** Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified biologist to determine if sensitive habitats exist on-site. In instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

7.5.4 Applicability to the Proposed Project

Consistent with General Plan Policy 8.2.1, the project site has been evaluated for the presence of sensitive biological resources. This report represents a Biological Assessment Report documenting findings from background research, and presents the current habitats and species present on the project site.

7.5.5 Objective 8.3 and Policy 8.3.1

- **Objective 8.3:** Protect natural drainages and riparian corridors within the American Canyon Planning Area.
- **Policy 8.3.1:** Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:
    a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.

7.5.6 Applicability to the Proposed Project

No wetland, natural drainages or riparian habitats are proposed to be impacted, as there are none present on the 10-acre project site.

7.5.7 Policy 8.3.1 b

- **Policy 8.3.1 b:** Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).

7.5.8 Applicability to the Proposed Project

Proposed development on the project site does not impact watercourses, riparian habitat, vernal pools or wetlands.

7.5.9 Policy 8.3.1 e

- **Policy 8.3.1 e:** Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment.

7.5.10 Applicability to the Proposed Project

Previous disturbance on the project site prohibits presence of land linkages, corridors, or habitat areas. Similarly, because creation of a mitigation site is not necessary for this site, there will be no habitat area or otherwise natural space in need of buffering.

7.5.11 Policy 8.3.1 f

- **Policy 8.3.1 f:** Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.

7.5.12 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with Policy 8.3.1.f, and Policy 8.3.1.g roads and utilities have been designed to avoid conflicts with biological resources on the project site.

7.5.13 POLICY 8.3.1 G

- **Policy 8.3.1 g:** Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.

7.5.14 POLICIES 8.3.5 AND 8.3.6

- **Policy 8.3.5:** Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.
- **Policy 8.3.6:** Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

7.5.15 APPLICABILITY TO THE PROPOSED PROJECT

There are no drainages on the project site or significant biological habitats onsite; hence, these policies do not apply to the proposed project.

8. CITY OF AMERICAN CANYON –ORDINANCES

8.1 Trees (Ord. 18.40.110)

A. Existing trees shall be preserved on the site unless otherwise approved by the city council as a part of the site development plans.

B. Unless specifically approved by the city council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a twenty-four-inch box of the same species unless specifically approved by the city council. (Ord. 98-10 § 1 (part), 1998).

8.1.1 APPLICABILITY TO THE PROPOSED PROJECT

The project site does not support any trees.

9. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE

This section presents an overview of the criteria used by the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board, the State Water Resources Control Board, and CDFW to determine those areas within a project area that would be subject to their regulation.

9.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting

9.1.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill materials into any water of the United States.

In the Federal Register "waters of the United States" are defined as, "...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce..." (33 CFR Section 328.3).

Limits of Corps' jurisdiction:

(a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:

(1) Extends to the mean high tide line, or
(2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.

(c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:

(1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
(2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
(3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the ordinary high water mark (OHWM) or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is:

- the "line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

Wetlands are defined as: "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

9.1.1.1 Significant Nexus of Tributaries

On December 2, 2008, the Corps and the Environmental Protection Agency (EPA) issued joint guidance on implementing the U.S. Supreme Court decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (herein referred to simply as "Rapanos") which address the jurisdiction over waters of the United States under the Clean Water Act. In this joint guidance these agencies provide guidance on where they will assert jurisdiction over waters of the U.S.

The EPA and Corps will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (for example, typically three months).
- Wetlands that directly abut such tributaries.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and

- Significant nexus includes consideration of hydrologic and ecologic factors.

9.1.1.2 Isolated Areas Excluded from Section 404 Jurisdiction

In addition to areas that may be exempt from Section 404 jurisdiction, some isolated wetlands and waters may also be considered outside of Corps jurisdiction as a result of the Supreme Court's decision in Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers (531 U.S. 159 [2001]). Isolated wetlands and waters are those areas

that do not have a surface or groundwater connection to, and are not adjacent to a navigable "Waters of the U.S.," and do not otherwise exhibit an interstate commerce connection.

9.1.1.3 Permitting Corps Jurisdictional Areas

To remain in compliance with Section 404 of the Clean Water Act, project proponents and property owners (applicants) are required to be permitted by the Corps prior to discharging or otherwise impacting waters of the United States. In many cases, the Corps must visit a proposed project area (to conduct a "jurisdictional determination") to confirm the extent of area falling under their jurisdiction prior to authorizing any permit for that project area. Typically, at the time the jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to "waters of the United States."

Pursuant to Section 404 of the Clean Water Act, the Corps normally provides two alternatives for permitting impacts to the type of "waters of the United States" found in the project area. The first alternative would be to use Nationwide Permit(s) (NWP). The second alternative is to apply to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes public interest review procedures (i.e., public notice and receipt of public comments) and must contain an "alternatives analysis" that is prepared pursuant to Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). The alternatives analysis is also typically reviewed by the federal EPA and thus brings another resource agency into the permitting framework. Both the Corps and EPA take the initial viewpoint that there are practical alternatives to the proposed project if there would be impacts to waters of the U.S., and the proposed permitted action is not a water dependent project (e.g. a pier or a dredging project). Alternative analyses therefore must provide convincing reasons that the proposed permitted impacts are unavoidable. Individual Permits may be available for use in the event that discharges into regulated waters fail to meet conditions of NWP(s).

NWPs are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under NWP, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). In order to use NWP(s), a project must meet 27 general nationwide permit conditions, and all specific conditions pertaining to the NWP being used (as presented at 33 CFR Section 330, Appendices A and C). It is also important to note that pursuant to 33 CFR Section 330.4(e), there may be special regional conditions or modifications to NWPs that could have relevance to individual proposed projects. Finally, pursuant to 33 CFR Section 330.6(a), Nationwide permittees may, and in some cases must, request from the Corps confirmation that an activity complies with the terms and conditions of the NWP intended for use (*i.e.,* must receive "verification" from the Corps).

Prior to finalizing design plans, the applicant needs to be aware that the Corps maintains a policy of "no net loss" of wetlands (waters of the United States) from project area development. Therefore, it is incumbent upon applicants that propose to impact Corps regulated areas to submit a mitigation plan that demonstrates that impacted regulated areas would be recreated (*i.e.,* impacts would be mitigated). Typically, the Corps requires mitigation to be "in-kind" (i.e., if a

stream channel would be filled, mitigation would include replacing it with a new stream channel), and at a minimum of a 1:1 replacement ratio (i.e., one acre or fraction there of recreated for each acre or fraction thereof lost). Often a 2:1 replacement ratio is required. Usually the 2:1 ratio is met by recreation or enhancement of an equivalent amount of wetland as is impacted, in addition to a requirement to preserve an equivalent amount of wetland as is impacted by the project. In some cases, the Corps allows "out-of-kind" mitigation if the compensation site has greater value than the impacted site. For example, if project designs call for filling an intermittent drainage, mitigation should include recreating the same approximate jurisdictional area (same drainage widths) at an offsite location or on a set-aside portion of the project area. Finally, there are many Corps approved wetland mitigation banks where wetland mitigation credits can be purchased by applicants to meet mitigation compensation requirements. Mitigation banks have defined service areas and the Corps may only allow their use when a project would have minimal impacts to wetlands.

9.1.2 Applicability to the Proposed Project

M&A originally prepared a preliminary wetland delineation map of the 35 acre parcel in 2006; however, this map was never submitted to the Corps. In 2011, a formal wetland delineation was conducted on July 14th and July 20th by M&A biologists Ms. Hope Kingma and Mr. Tim O'Donnell. The wetland delineation report and map were submitted to the Corps on August 22, 2011, requesting confirmation of the extent of Corps jurisdiction at the American Canyon Flat Lands site. In a letter dated January 31, 2012 the extent of Corps jurisdiction was confirmed, based on a field investigation on September 21, 2011. That jurisdictional determination expired five (5) years from the date of that letter.

M&A biologists Ms. Hope Kingma and Mr. Devin Jokerst conducted another wetland delineation of the entire 35.85-acre parcel (known as Lot 3), which includes this project site, on November 16, 2016 to re-verify the extent of jurisdictional areas on the site. M&A used the Corps' 1987 *Wetlands Delineation Manual* in conjunction with the *Regional Supplement for the Arid West Region*. The jurisdictional determination request and the Draft Aquatic Resources Delineation Map (Sheet 2) were submitted to the Corps in December 2016. Mr. Bryan Matsumoto of the Corps conducted a site verification visit on May 18, 2017. On May 16, 2018 the Corps issued the jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the 35.43-acre parcel. The confirmed Jurisdictional Delineation Map (Sheet 2) and letter are attached. None of the jurisdictional features on that map occur on the 10-acre project site that is the subject of this report. *As such there will be no impacts to the waters of the U.S. for this project.*

9.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)

9.2.1 Section 401 of the Clean Water Act

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the United States, including wetlands and other waters, any Corps permit authorized for a proposed project would be inoperative unless it is an NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific

certification of water quality. Certification of NWPs requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the permit (the term is typically for five years). Certification must be consistent with the requirements of the federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification of water quality.

9.2.2 Applicability to the Proposed Project

The Corps' Confirmed Reverification Aquatic Resources Delineation Map dated May 22, 2017 is provided as Sheet 2. The proposed project will not impact any waters of the State. *Therefore Section 401 of the Clean Water Act is not necessary for this project.*

9.3 California Department of Fish and Wildlife Protections

9.3.1 Section 1602 of California Fish and Game Code

Pursuant to Section 1602 of the California Fish and Game Code: "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

(1) CDFW receives written notification regarding the activity in the manner prescribed by CDFW. The notification shall include, but is not limited to, all of the following:
   (A) A detailed description of the project's location and a map.
   (B) The name, if any, of the river, stream, or lake affected.
   (C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
   (D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
   (E) A copy of any other applicable local, state, or federal permit or agreement already issued.
   (F) Any other information required by CDFW" (Fish & Game Code 2014).

Please see Section 1602 of the current California Fish and Game Code for further details.

Please also note that while not stated in the regulations above, CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, would require entering into a Streambed Alteration Agreement (SBAA) with CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, CDFW typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

9.3.2 APPLICABILITY TO THE PROPOSED PROJECT

There are no streams or drainages on the project site that would be regulated by CDFW. *Hence, an SBAA with CDFW would not be necessary for this project*.

10. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT

10.1 Construction General Permit

While federal Clean Water Act NPDES regulations allow two permitting options for construction related stormwater discharges (individual permits and General Permits), the State Water Resources Control Board (SWRCB) has elected to adopt only one statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (CalTrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than one acre of land or those sites less than one acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters.

2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively-defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.

3. Perform inspections of all BMPs.

This Construction General Permit is implemented and enforced by the nine California Regional Water Quality Control Boards (RWQCBs). It is also enforceable through citizens' suits and represents a dramatic shift in the State Water Board's approach to regulating new and redevelopment sites, imposing new affirmative duties and fixed standards on builders and developers.

<u>Types of Construction Activity Covered by the Construction General Permit</u>

- clearing,
- grading,
- disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre or more of total land area.

Construction activity that results in soil disturbances to a smaller area would still be subject to this General Permit if the construction activity is part of a larger common plan of development that encompasses greater than one acre of soil disturbance, or if there is significant water quality impairment resulting from the activity.

Construction activity does not include:

- routine maintenance to maintain original line and grade,
- hydraulic capacity, or original purpose of the facility,
- nor does it include emergency construction activities required to protect public health and safety.

The Construction General Permit includes several "post-construction" requirements. These requirements entail that site designs provide no net increase in overall site runoff and match pre-project hydrology by maintaining runoff volume and drainage concentrations. To achieve the required results where impervious surfaces such as roofs and paved surfaces are being increased, developers must implement non-structural off-setting BMPs, such as landform grading, site design BMPs, and distributed structural BMPs (bioretention cells, rain gardens, and rain cisterns). This "runoff reduction" approach is essentially a State Water Board-imposed regulatory requirement to implement Low Impact Development ("LID") design features. Volume that cannot be addressed using non-structural BMPs must be captured in structural BMPs that are approved by the RWQCB.

Improving the quality of site runoff is necessary to improve water quality in impaired and threatened streams, rivers, and lakes (that is, water bodies on the EPA's 303(d) list). The RWQCB prioritizes the water bodies on the 303(d) list according to potential impacts to beneficial uses. Beneficial uses can include a wide range of uses, such as nautical navigation; wildlife habitat; fish spawning and migration; commercial fishing, including shellfish harvesting; recreation, including swimming, surfing, fishing, boating, beachcombing, and more; water supply for domestic consumption or industrial processes; and groundwater recharge, among other uses. The State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these impaired water bodies. The TMDL is the quantity of a pollutant that can be safely assimilated by a water body without violating the applicable water quality standards.

Pursuant to the CWA, the RWQCB regulates construction discharges under the National Pollutant Discharge Elimination System (NPDES). The project sponsor of construction or other activities that disturb more than 1 acre of land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB[1].

[1] CGP Order 2009-0009-DWQ remains in effect, but has been amended by CGP Order 2009-0014-DWQ, effective February 14, 2011, and CGP Order 2009-0016-DWQ, effective July 17, 2012. The first amendment merely provided additional clarification to Order 2009-0009-DWQ, while Order 2009-0016-DWQ eliminated numeric effluent limits on pH and turbidity (except in the case of active treatment systems), in response to a legal challenge to the original order.

10.1.1 APPLICABILITY TO THE PROPOSED PROJECT

To obtain coverage under the SWRCB administered Construction General Permit, the applicant (typically through its civil engineer) must electronically file a number of permit-related compliance documents (Permit Registration Documents (PRDs), including a Notice of Intent (NOI), a risk assessment, site map, signed certification, Stormwater Pollution Prevention Plan (SWPPP), Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). (QSDs are typically civil engineers, professional hydrologists, engineering geologists, or landscape architects.) Once filed, these documents become immediately available to the public for review and comment. At a minimum, the SWPPP shall identify Best Management Practices (BMPs) for implementation during project construction that are in accordance with the applicable guidance and procedures contained in the California Stormwater Quality Association's *California Stormwater Best Management Practices Handbook* (2015).

10.2 RWQCB Municipal Storm Water Permitting Programs

The federal Clean Water Act (CWA) was amended in 1987 to address urban stormwater runoff pollution of the nation's waters. In 1990, the U.S. Environmental Protection Agency (USEPA) promulgated rules establishing Phase 1 of the National Pollutant Discharge Elimination System (NPDES) stormwater program. The Phase 1 program for Municipal Separate Storm Sewer System (MS4s) requires operators that serve populations of 100,000 or greater to implement a stormwater management program to control polluted discharges from these MS4s. While Phase 1 of the municipal stormwater program has focused on large urban areas, Phase 2 of the municipal stormwater program was promulgated by the USEPA for smaller urban areas including non-traditional Small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes.

MS4 permits require the discharger (or dischargers that are permitted by the MS4 permittees) to develop and implement a Storm Water Management Plan/Program (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. The management programs specify what best management practices (BMPs) will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations. In general, medium and large municipalities are required to conduct chemical monitoring, though small municipalities are not.

10.2.1 NPDES C.3 REQUIREMENTS

The NPDES C.3 requirements went into effect for any project (public or private) that is "deemed complete" by the City or County (Lead Agency) on or after February 15, 2005, and which will result in the creation or replacement (other than normal maintenance) of at least 10,000 square feet of impervious surface area (roofs, streets, patios, parking lots, etc. Provision C.3 requires the onsite treatment of stormwater prior to its discharge into downstream receiving waters. Note that these requirements are in addition to the existing NPDES requirements for erosion and

sedimentation controls during project construction that are typically addressed through acquisition of coverage under the SWRCB administered Construction General Permit. The C.3 requirements are typically required to be implemented by MS4 permittees (and their constituencies).

Projects subject to Provision C3 must include the capture and onsite treatment of all stormwater from the site prior to its discharge, including rainwater falling on building rooftops. Project applicants are required to implement appropriate source control and site design measures and to design and implement stormwater treatment measures in order to reduce the discharge of stormwater pollutants to the *maximum extent practicable.* While the Clean Water Act does not define "maximum extent practicable," the Stormwater Quality Management Plans required as a condition of the municipal NPDES permits identify control measures (known as Best Management Plans, or BMPs) and, where applicable, performance standards, to establish the level of effort required to satisfy the maximum extent practicable criterion. It is ultimately up to the professional judgment of the reviewing municipal staff in the individual jurisdictions to determine whether a project's proposed stormwater controls will satisfy the maximum extent practicable criterion. However, there are numeric criteria used to ensure that treatment BMPs have been adequately sized to accommodate and treat a site's stormwater. The C3 requirements are quite extensive, and their complete explanation is not provided here. However, the following are minimums that should be understood and adhered to:

- The applicant must provide a detailed and realistic site design *and impervious surface area calculations*. This site design *and calculations* will be used by the Lead Agency (County or City) to determine/*verify* the amount of impervious surface area that is being created or replaced. It should include all proposed buildings, roads, walkways, parking lots, landscape areas, etc., that are being created or redeveloped. If large (greater than 10,000 square feet) lots are being created an effort will need to be made to determine the total impervious surface area that could be created on that parcel. For example, if only a portion of the lot is shown as a "building envelope" then the lead agency will need to consider that a driveway will have to be constructed to access the envelope and that the envelope will then be developed as shown. If the C.3 thresholds are met (creation/redevelopment of 10,000 square feet of impervious surface area), a Stormwater Control Plan (SWCP) (if required by the Lead Agency, or whatever steps for compliance with Provision C3 are required locally) must accompany the application.

- If a SWCP is required by the Lead Agency for the project it must be stamped by a Licensed Civil Engineer, Architect, or Landscape Architect.

10.2.2 Applicability to the Proposed Project

The Water Board issued county-wide municipal stormwater permits in the early 1990s to operators of MS4s. On November 19, 2015, the Water Board re-issued these county-wide municipal stormwater permits as one Municipal Regional Stormwater NPDES Permit to regulate stormwater discharges from municipalities and local agencies. Permittees in the San Francisco Bay area are included in a Municipal Regional Permit (MRP), issued to 76 cities, counties and

flood control districts in 2009 and revised in 2015. Each of the Permittee's must file an Annual Report that is comprised of three parts: regional, countywide, and individual. Some requirements of the MRP are being implemented by the Bay Area Stormwater Management Agencies Association (BASMAA) on behalf of all the MRP Permittees. Other elements are being implemented collaboratively by the Permittees through their respective countywide programs. As such, BASMAA and the countywide programs have submitted Annual Report elements on the regional and countywide collaborative tasks, respectively, on behalf of the MRP Permittees and the individual MRP Permittees have also submitted Annual Report elements on the Permit Provisions they have implemented individually.

It is the applicant's responsibility to ensure that the project civil engineer prepares all required Storm Water Planning documents for submittal to the City of American Canyon to comply with its MS4 permit requirements. In addition, if the project includes a requirement to obtain a Clean Water Act Section 401 permit from the RWQCB, the Storm Water Management Plan (or equivalent plan) must be submitted to the RWQCB with the application package submitted for acquisition of a Section 401 permit (aka "water quality certification").

The applicant is proposing to treat all stormwater falling on impervious surfaces in the detention/bioretention basin located on the western edge of the project site (see Sheet UP4). Once treated, stormwater would be conveyed to "level spreader outfalls" that will be installed along the western project site boundary. The level spreader outfalls consist of perforated pipe set on contour that will discharge flows uniformly across a gradual slope covered by riprap, which will mimic sheet flow conditions similar to current project site runoff (see Storm Drain Level Spreader Detail). Accordingly, the project will not violate any water quality standards.

11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g. an occupancy permit must be issued), the lead agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an "Initial Study." If there could be significant environmental impacts, the lead agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are "Categorical Exemptions" that apply to the proposed activity; thus, the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. If the project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a "Negative Declaration." If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a "Mitigated Negative Declaration" is typically prepared by the lead agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can't be mitigated to a level considered less than significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact

Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines "endangered" species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. "Rare" species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will "substantially affect a rare or endangered species of animal or plant or the habitat of the species." The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

This report has been prepared as a Biology section that is suitable for incorporation into a Mitigated Negative Declaration. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA and can be incorporated by the CEQA lead agency (in this case City of American Canyon) into an initial study or higher levels of CEQA review including incorporation into the biology section of an Environmental Impact Report.

12. IMPACTS ANALYSIS

Below the criteria used in assessing impacts to Biological Resources is presented.

12.1 Significance Criteria

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other Federal, State, and local agencies' considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as "significant," "potentially significant," or "less than significant." Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated "waters of the United States" and/or stream channels.

12.1.1 THRESHOLDS OF SIGNIFICANCE

12.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on federally protected "wetlands" as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

12.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged or fill material into waters of the United States, which includes wetlands, as discussed in the bulleted item above, and also includes "other waters" (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the state. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

12.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which CDFW typically considers including riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

13. IMPACT ASSESSMENT AND PROPOSED MITIGATION

In this section we discuss potential impacts to sensitive biological resources, including special-status wildlife species. We follow each impact with a mitigation prescription that when

implemented would reduce impacts to the greatest extent possible. This impact analysis is based on the Preliminary Site Plan (Sheet A-1).

13.1 Impact BIO-1. Development of the Project Could Have a Potentially Significant Impact on Nesting Swainson's hawks (Potentially Significant)

The Swainson's hawk is a state listed threatened species. While the Swainson's hawk has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800).

No Swainson's hawk nests have been observed on the site or offsite in the vicinity of the project site during M&A's multiple project site surveys; however, the nesting population appears to be increasing throughout its nesting range in northern California and thus, it could conceivably nest in trees near the project site in the future.

If Swainson's hawks are found to be nesting adjacent to the project site, implementation of the proposed project could be viewed by CDFW as a project that could impact nesting Swainson's hawks. Nest site disturbance which results in: (1) nest abandonment; (2) loss of young; (3) reduced health and vigor of eggs and/or nestlings (resulting in reduced survival rates), may ultimately result in the take (killing) of nestling or fledgling Swainson's hawks incidental to otherwise lawful activities. The taking of Swainson's hawks in this manner can be viewed by CDFW as a violation of the Section 2080 of the Fish and Game Code. This interpretation of take has been judicially affirmed by the landmark appellate court decision pertaining to CESA (CDFG v. ACID, 8 CA App. 4, 41554) (CDFG 1994).

Typically, CDFW requires that any impact to a Swainson's hawk nest be permitted through a Fish and Game Section 2081 management authorization. If an active nest is found adjacent to the project site within an area of influence (which is generally considered to be within 1,000 feet of the project site) "to avoid potential violation of Fish and Game Code 2080 (i.e., killing of listed species), project-related disturbance at active Swainson's hawk nesting sites should be reduced or eliminated during critical phases of the nesting cycle (March 1- September 15 annually)" (CDFG 1994). If disturbance would occur, a Fish and Game Section 2081 management authorization would be required. As such, in the absence of survey results, it must be concluded that impacts to Swainson's hawk from the proposed project would be *potentially significant pursuant to CEQA.* This impact could be mitigated to a level considered less than significant pursuant to CEQA.

The closest known record for nesting Swainson's hawk is 2.6 miles north of the project site (CNDDB Occurrence No. 2744). There are extensive foraging opportunities both around the closest nesting location and between this nesting location and the project site. Considering that the entire project site consisted of a eucalyptus grove until 2012, it did not historically provide potential foraging habitat. Also, as the project site is essentially surrounded by eucalyptus forest, it is not a foraging destination which would likely attract foraging Swainson's hawks. Furthermore, M&A has confirmed that the project site has a low rodent population, therefore development of the project site will not have a significant impact on Swainson's hawk foraging habitat. Therefore, no mitigation for the loss of foraging habitat is warranted for this project.

13.2 Mitigation Measure BIO-1. Mitigation for Potential Impacts to Nesting Swainson's Hawk

Preconstruction surveys shall be conducted for a quarter-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to the project's initiation. The survey period timing and methodology shall be conducted in accordance with CDFW's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (CDFG 1994), which identifies different survey windows throughout the pre-nesting and nesting season (ranging from January 1 through July 30/post-fledging) that have different survey methodologies and requirements.

If Swainson's hawks are found to be nesting on the project site or within a ¼-mile of the project site, consultation with CDFW will be required. The size of the nest protection buffer will be determined during consultation with CDFW but at a minimum there will be a 300-foot non-disturbance buffer around the nest site.

Implementation of this mitigation measure would reduce potential impacts to nesting Swainson's hawk to a level considered less than significant pursuant to CEQA.

13.3 Impact BIO-2. Development of the Project Could Have a Potentially Significant Impact on Western Burrowing Owl (Potentially Significant)

The western burrowing owl is a California Species of Special Concern. This raptor (that is, bird of prey) is also protected under the Migratory Bird Treaty Act (50 CFR 10.13) and its nest, eggs, and young are protected under California Fish and Game Code Sections 3503, 3503.5. While western burrowing owls have not been observed on the project site and their likelihood of presence on the project site is considered to be low, limited suitable nesting habitat occurs on the project site. Since the western burrowing owl is a mobile species that could move onto the project site prior to development, preconstruction surveys would be necessary to determine its presence. Thus, the project may result in impacts to the western burrowing owl; this would be a *potentially significant impact pursuant to CEQA***.** This impact could be mitigated to a level considered less than significant pursuant to CEQA.

13.4 Mitigation Measure BIO-2. Mitigation for Potential Impacts to Western Burrowing Owl

Based on the presence of this species in the project vicinity and the potential habitat found on the project site, a preconstruction survey for burrowing owls should be conducted 14 days prior or less to initiating ground disturbance. As burrowing owls may recolonize a site after only a few days, time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance to ensure absence. If no owls are found during these surveys, no further regard for the burrowing owl would be necessary.

a. Burrowing owl surveys should be conducted by walking the entire project site. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be 7 meters to 20 meters and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility.

Poor weather may affect the surveyor's ability to detect burrowing owls thus, avoid conducting surveys when wind speed is greater than 20 kilometers per hour and there is precipitation or dense fog. To avoid impacts to owls from surveyors, owls and/or occupied burrows should be avoided by a minimum of 50 meters (approximately 160 ft.) wherever practical to avoid flushing occupied burrows. Disturbance to occupied burrows should be avoided during all seasons.

b. If burrowing owls are detected on the site, the following restricted activity dates and setback distances are recommended per CDFW's Staff Report (2012).

- From April 1 through October 15, low disturbance and medium disturbance activities should have a 200 meter buffer while high disturbance activities should have a 500 meter buffer from occupied nests.
- From October 16 through March 31, low disturbance activities should have a 50 meter buffer, medium disturbance activities should have a 100 meter buffer, and high disturbance activities should have a 500 meter buffer from occupied nests.
- No earth-moving activities or other disturbance should occur within the afore-mentioned buffer zones of occupied burrows. These buffer zones should be fenced as well. If burrowing owls were found in the project area, a qualified biologist would also need to delineate the extent of burrowing owl habitat on the site.

Implementation of these mitigation measures would reduce potential impacts to burrowing owls to a level considered less than significant pursuant to CEQA.

13.5 Impact BIO-3: Development of the Project Would Have a Potentially Significant Impact on Tree or Ground Nesting Raptors (Potentially Significant)

Tree or ground nesting raptors that could be affected by the project include northern harrier, white-tailed kites, red-shouldered hawk and red-tailed hawk. Nesting raptors are protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711 and 50 CFR 10.13). All nesting raptors, their eggs and young are protected pursuant to California Fish and Game Code §3503.5. Specific surveys for nesting raptors have not been conducted. In the absence of survey results indicating otherwise, it is conservatively assumed that implementation of the proposed project may impact nesting raptors which could result in nest abandonment and death of eggs or young. Therefore, impacts to nesting raptors are regarded as *potentially significant pursuant to CEQA***.** This impact could be mitigated to a level considered less than significant pursuant to CEQA.

13.6 Mitigation Measure BIO-3: Mitigation for Potential Impacts to Tree or Ground Nesting Raptors

To ensure that impacts to tree or ground nesting raptors are avoided or offset, the following mitigation measures will be implemented:

a. In order to avoid impacts to nesting raptors, a preconstruction nesting survey will be conducted by a qualified raptor biologist prior to commencing with earth-moving or construction work if this work would commence between February 1st and August 31st. The survey should be

conducted within the 30 day period prior to site disturbance. The raptor nesting surveys will include examination of all trees and ruderal habitat within 200 feet of the project site.

b. If nesting raptors are identified during the surveys, the dripline of the nest tree or ground-nesting site must be fenced with orange construction fencing (provided the nest site is on the project site), and a 200-foot radius around the nest tree or nest site must be staked with orange construction fencing. If the tree or nest site is located off the project site, then the buffer should be demarcated per above where the buffer occurs on the project site. The size of the buffer may be altered if a qualified raptor biologist conducts behavioral observations and determines the nesting raptors are well acclimated to disturbance. If this occurs, the raptor biologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors. No construction or earth-moving activity should occur within the established buffer until it is determined by a qualified raptor biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by August 1st. This date may be earlier or later, and would have to be determined by a qualified raptor biologist. If a qualified biologist is not hired to watch the nesting raptors then the buffers should be maintained in place through the month of August and work within the buffer can commence on September 1st.

c. If the preconstruction nesting survey identifies a large stick or other type of raptor nest that appears inactive at the time of the survey, but there are territorial raptors evident in the nest site vicinity, a protection buffer (as described above) should be established around the potential nesting tree until the qualified raptor biologist determines that the nest is not being used. In the absence of conclusive observations indicating the nest site is not being used, the buffer should remain in place until a second follow-up nesting survey can be conducted to determine the status of the nest and eliminate the possibility that the nest is utilized by a late-spring nesting raptor (for example, red-tailed hawk). This second survey should be conducted even if construction has commenced. If during the follow-up late season nesting survey a nesting raptor is identified utilizing the nest, the protection buffer should remain until it is determined by a qualified raptor biologist that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If the nest remains inactive, the protection buffer can be removed and construction and earth-moving activities can proceed unrestrained.

Implementation of these mitigation measures would reduce potential impacts to nesting raptors to a level considered less than significant pursuant to CEQA.

13.7 Impact BIO-4: Development of the Project Would Have a Potentially Significant Impact on Nesting Passerine Birds. (Potentially Significant)

Nesting passerine birds (i.e., perching birds) are protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711 and 50 CFR 10.13) and by California Fish and Game Code §3503 and §3503.5 which protects nesting birds, their eggs and young. These birds frequently change nesting locations from year to year and thus, past nesting histories are not necessarily indicative of future nesting activities. Accordingly, impacts to nesting passerine birds, their eggs, and/or young resulting from the proposed project are considered potentially significant. *This impact could be mitigated to a level considered less than significant pursuant to CEQA.*

13.8 Mitigation Measure BIO-4: Mitigation for Potential Impacts to Nesting Passerine Birds.

To ensure that impacts to nesting passerine birds are avoided or offset, a nesting survey shall be conducted 15 days prior to commencing construction/ grading or tree removal activities if this work would commence between March 1 and September 1. If common passerine birds or special-status passerine birds are identified nesting on the project site, a non-disturbance buffer of 75 feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with orange construction fencing. Disturbance within the buffer shall be postponed until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.

Typically, most passerine birds in the region of the project site are expected to complete nesting by August 1st. However, many species can complete nesting by the end of June or in early to mid-July. Regardless, nesting buffers shall be maintained until August 1st unless a qualified ornithologist determines that young have fledged and are independent of their nests at an earlier date. If buffers are removed prior to August 1st, the qualified biologist conducting the nesting surveys should prepare a report that provides details about the nesting outcome and the removal of buffers. This report shall be submitted to the City of American Canyon Planning Department prior to the time that nest protection buffers are removed if the date is before August 1st.

Implementation of this mitigation measure would reduce potential impacts nesting passerine birds to a level considered less than significant pursuant to CEQA.

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Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 1. SDG 217 Commerce Distribution Center
Project Site Regional Map
City of American Canyon, California

County: Napa
Map Preparation Date: December 2006



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 2. SDG 217 Commerce Distribution Center
Project Site Location Map
City of American Canyon, California

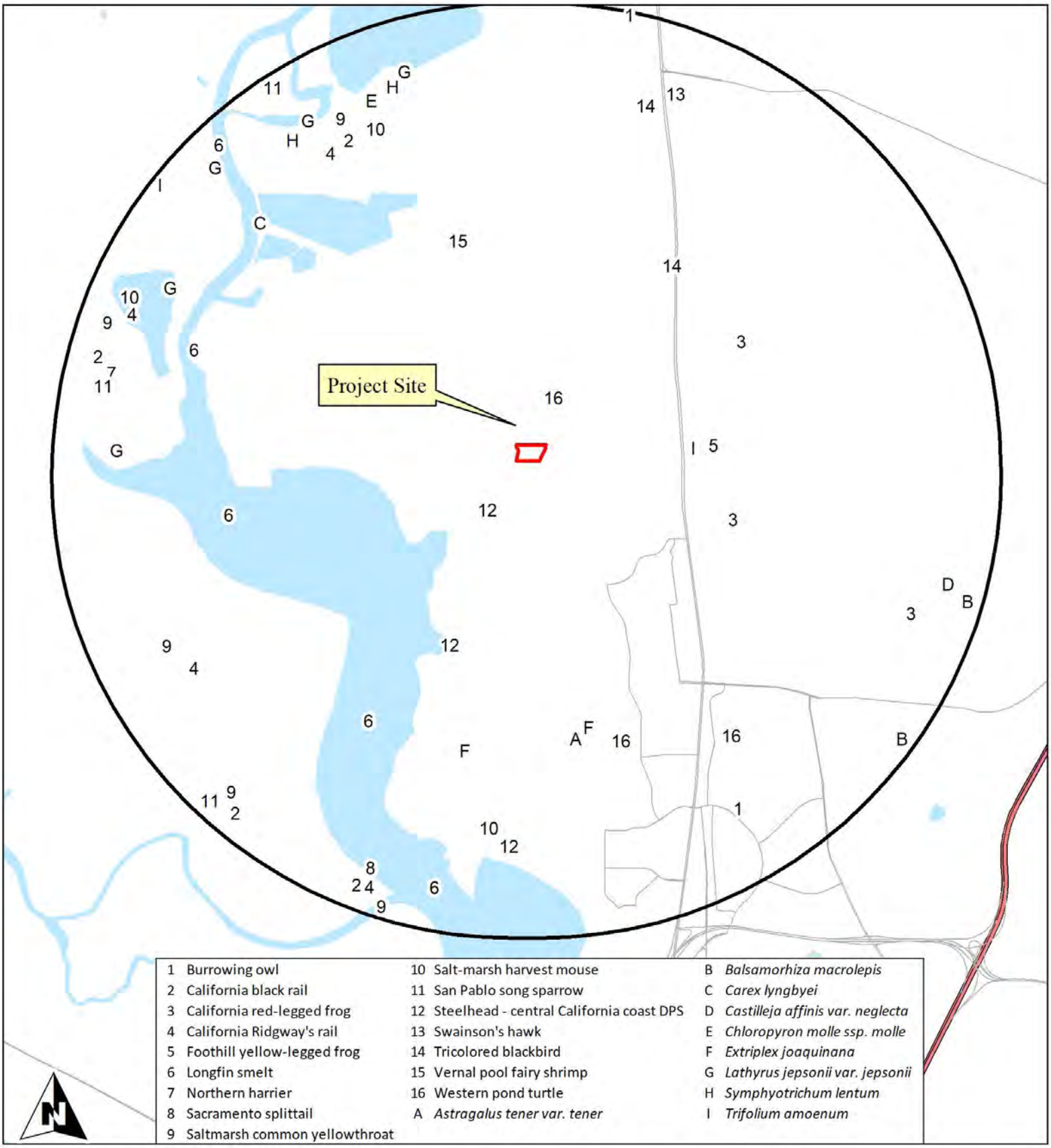
38.185626, -122.274079
Section: 23, T4N R4W
7.5-Minute Cuttings Wharf quadrangle
HUC08 Watershed CA: San Pablo Bay
Aerial Photograph Source: ESRI
Map Preparation Date: December 2007



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 3. SDG 217 Commerce Project Site
Aerial Photograph
City of American Canyon, California

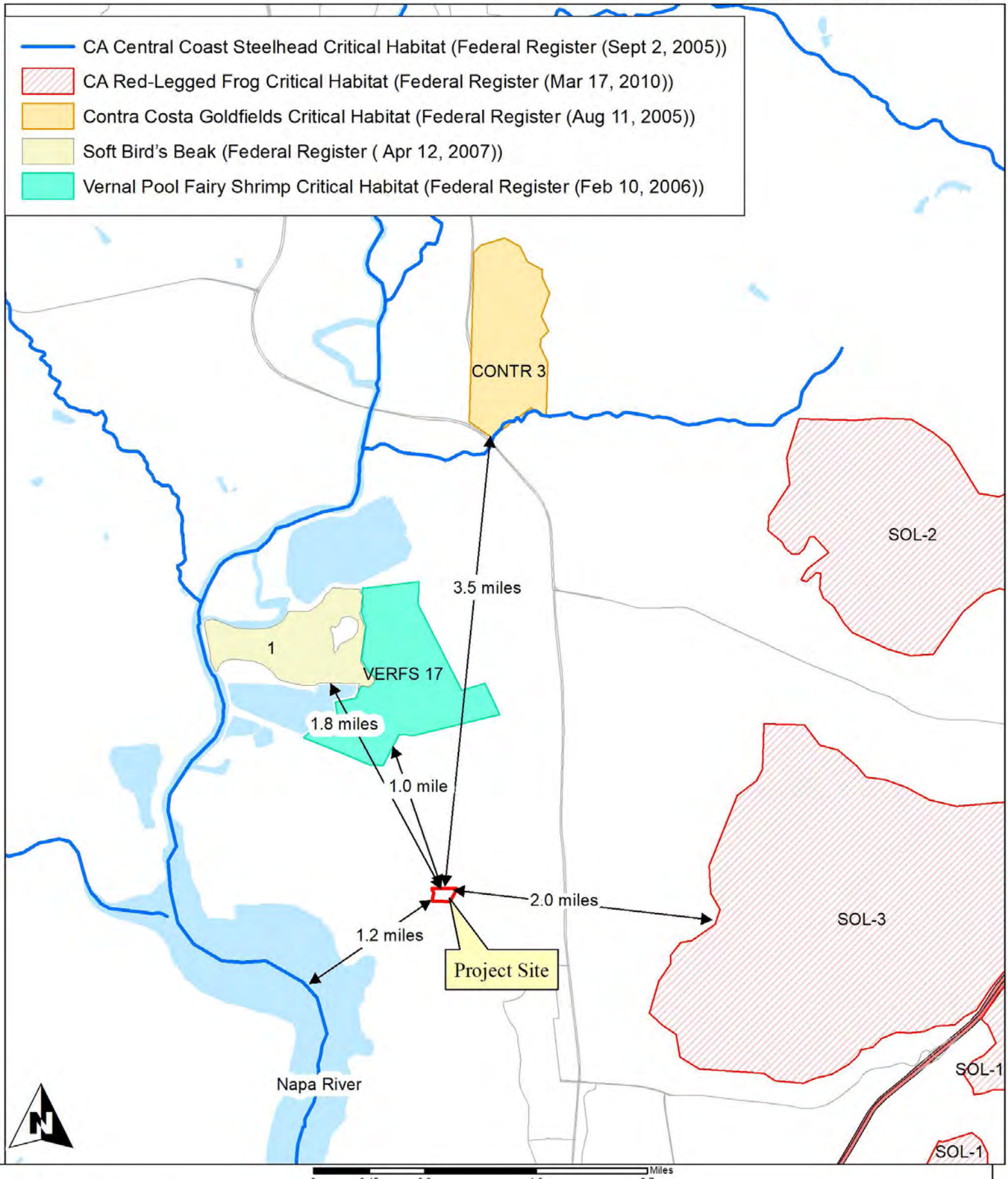
Aerial Photograph Source: ESRI
Map Preparation Date: December 2008



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 4. Known CNDDB Records for Special-Status Species Within 3 Miles of the SDG 217 Commerce Project Site

Map Preparation Date:
December 3, 2019
3-Mile Radius
Source: CDFW, California Natural Diversity Data Bas 2009



Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Figure 5. USFWS Critical Habitat
in the Vicinity of the
SDG 217 Commerce Distribution Center

Source: USFWS
Map Preparation Date: December 2(2010

Table 1

Plant Species Observed on the SDG 217 Commerce Distribution Center Project Site

Angiosperms - Dicots

Apiaceae	
Torilis sp.	sock destroyer
Asteraceae	
Baccharis pilularis subsp. pilularis	Baccharis
**Carduus pycnocephalus subsp. pycnocephalus*	Italian thistle
**Cirsium vulgare*	Bull thistle
**Dittrichia graveolens*	Stinkwort
**Hypochaeris radicata*	Rough cat's-ear
**Sonchus asper subsp. asper*	Prickly sow-thistle
Brassicaceae	
**Hirschfeldia incana*	Short-podded mustard
**Sinapis alba*	White mustard
Caryophyllaceae	
**Stellaria media*	Common chickweed
Convolvulaceae	
**Convolvulus arvensis*	Bindweed
Fabaceae	
**Medicago polymorpha*	California burclover
**Trifolium repens*	White clover
**Vicia sativa*	Common vetch
Geraniaceae	
**Erodium cicutarium*	Red-stem filaree
**Geranium dissectum*	Cut-leaf geranium
Montiaceae	
Claytonia perfoliata	Miner's lettuce
Myrsinaceae	
**Lysimachia arvensis*	Scarlet pimpernel
Orobanchaceae	
**Parentucellia viscosa*	Yellow glandweed
Papaveraceae	
**Fumaria parviflora*	Fumaria
Plantaginaceae	
**Plantago lanceolata*	English plantain
Polygonaceae	
**Rumex crispus*	Curly dock
Ranunculaceae	
**Ranunculus muricatus*	Spiny-fruit buttercup
Rubiaceae	
Galium aparine	Goose grass

* Indicates a non-native species

Table 1

Plant Species Observed on the SDG 217 Commerce Distribution Center Project Site

Angiosperms -Monocots

Iridaceae

Sisyrinchium californicum	Golden-eyed-grass

Juncaceae

Juncus occidentalis	Slender rush

Poaceae

**Avena barbata*	Slender wild oat
**Bromus diandrus*	Ripgut grass
**Bromus hordeaceus*	Soft chess
Elymus triticoides	Creeping wildrye
**Festuca perennis*	perennial ryegrass
**Hordeum murinum*	Wall barley
Phalaris angusta	Canary timothy grass

* Indicates a non-native species

Table 2
Wildlife Observed on the ICC SDG 217 Commerce Distribution Center Project Site

Amphibians	
Sierran treefrog	*Pseudacris sierra*
Reptiles	
Western fence lizard	*Sceloporus occidentalis*
Birds	
Northern flicker	*Colaptes auratus*
Great blue heron	*Ardea herodias*
Turkey vulture	*Cathartes aura*
Canada goose	*Branta canadensis*
Osprey	*Pandion haliaetus*
White-tailed kite	*Elanus leucurus*
Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
Ring-necked pheasant	*Phasianus colchicus*
Wild turkey	*Meleagris gallopavo*
California quail	*Callipepla californica*
Virginia rail	*Rallus limicola*
Eurasian collared-dove	*Streptopelia decaocto*
Mourning dove	*Zenaida macroura*
Barn owl	*Tyto alba*
Anna's hummingbird	*Calypte anna*
Belted kingfisher	*Megaceryle alcyon*
Nuttall's woodpecker	*Picoides nuttallii*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
California scrub jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
Tree swallow	*Tachycineta bicolor*
Cliff swallow	*Petrochelidon pyrrhonota*
Barn swallow	*Hirundo rustica*
Chestnut-backed chickadee	*Poecile rufescens*
Bushtit	*Psaltriparus minimus*
Brown creeper	*Certhia americana*
Bewick's wren	*Thryomanes bewickii*
Marsh wren	*Cistothorus palustris*
Ruby-crowned kinglet	*Regulus calendula*
Western bluebird	*Sialia mexicana*
American robin	*Turdus migratorius*
Wrentit	*Chamaea fasciata*
Northern mockingbird	*Mimus polyglottos*
European starling	*Sturnus vulgaris*
Yellow-rumped warbler	*Setophaga coronata*
Spotted towhee	*Pipilo maculatus*

Table 2
Wildlife Observed on the ICC SDG 217 Commerce Distribution Center Project Site

California towhee	*Pipilo crissalis*
Savannah sparrow	*Passerculus sandwichensis*
Song sparrow	*Melospiza melodia*
White-crowned sparrow	*Zonotrichia leucophrys*
Dark-eyed junco	*Junco hyemalis*
Red-winged blackbird	*Agelaius phoeniceus*
Brewer's blackbird	*Euphagus cyanocephalus*
Brown-headed cowbird	*Molothrus ater*
Bullock's oriole	*Icterus bullockii*
House finch	*Haemorhous mexicanus*
Lesser goldfinch	*Spinus psaltria*
House sparrow	*Passer domesticus*

Mammals

Western gray squirrel	*Sciurus griseus*
Black-tailed jackrabbit	*Lepus californicus*
California ground squirrel	*Otospermophilus beecheyi*
Columbian black-tailed deer	*Odocoileus hemionus ssp. columbianus*
Coyote	*Canis latrans*
Raccoon	*Procyon lotor*
Feral cat	*Felis catus*

Table 3

Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Asteraceae					
Balsamorhiza macrolepis Big-scale balsam-root	Fed: - State: - CNPS: Rank 1B.2	March-June	Cismontane woodland; chaparral; valley and foothill grassland; [sometimes serpentinite]. 90 - 1555 meters	Closest record is from 2011 and is 3.0 miles east of the project site (Occurrence No. 7).	None. The project site is highly disturbed. No suitable habitat on the project site.
Symphyotrichum lentum Suisun Marsh aster	Fed: - State: - CNPS: Rank 1B.2	August-November	Marshes and swamps (brackish and fresh water)	Closest record is from 1993 and is 2.5 miles northwest of the project site (Occurrence No. 128).	None. The project site is highly disturbed. No suitable habitat on the project site.
Chenopodiaceae					
Extriplex joaquinana San Joaquin spearscale	Fed: - State: - CNPS: Rank 1B.2	April-October	Chenopod scrub; meadows; valley and foothill grassland; [alkaline].	Closest record is from and is 1.8 miles south of the project site (Occurrence No. 58).	None. The project site is highly disturbed. No suitable habitat on the project site.
Cyperaceae					
Carex lyngbyei Lyngbye's sedge	Fed: - State: - CNPS: Rank 2	May-August	Marshes or swamps (brackish or freshwater)	Closest record is from 2008 and is 2.3 miles northwest of the project site (Occurrence No. 28).	None. The project site is highly disturbed. No suitable habitat on the project site.
Fabaceae					
Astragalus tener tener Alkali milkvetch	Fed: - State: - CNPS: Rank 1B.2	March-June	Playas; mesic grasslands (adobe clay), vernal pools (alkaline).	Closest record is from 1993 and is 1.8 miles south of the project site (Occurrence No. 50).	None. The project site is highly disturbed. No suitable habitat on the project site.

Table 3

Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Lathyrus jepsonii jepsonii Delta tule pea	Fed: - State: - CNPS: Rank 1B.2	May-September	Marshes and swamps (freshwater and brackish).	Closest record is from 1978 and is 2.6 miles northwest of the project site (Occurrence No. 13).	None. The project site is highly disturbed. No suitable habitat on the project site.
Trifolium amoenum Showy Indian clover	Fed: FE State: - CNPS: Rank 1B.1	April-June	Valley and foothill grassland (sometimes serpentinite)	Closest record is from 1952 and is 1.2 miles east of the project site (Occurrence No. 23).	None. The project site is highly disturbed. No suitable habitat on the project site.
Orobanchaceae					
Castilleja affinis neglecta Tiburon paintbrush	Fed: FE State: CT CNPS: Rank 1B.2	April-June	Valley and foothill grassland [serpentinite]	Closest record is from 2013 and is 3.0 miles east of the project site (Occurrence No. 5).	None. The project site is highly disturbed. No suitable habitat on the project site.
Chloropyron molle molle Soft bird's-beak	Fed: FE State: CR CNPS: Rank 1B.2	July-September	Marshes and swamps (coastal salt).	Closest record is from 2010 and is 2.3 miles north of the project site (Occurrence No. 3).	None. The project site is highly disturbed. No suitable habitat on the project site.

Table 3

Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site

***Status**

Federal:
FE - Federal Endangered
FT - Federal Threatened
FPE - Federal Proposed Endangered
FPT - Federal Proposed Threatened
FC - Federal Candidate

State:
CE - California Endangered
CT - California Threatened
CR - California Rare
CC - California Candidate
CSC - California Species of Special Concern

CNPS:
Rank 1A - Presumed extinct in California
Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/ high degree and immediacy of threat)
Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)
Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

CNPS Continued:
Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 2A - Extirpated in California, common elsewhere
Rank 2B.1 - Seriously endangered in California, but more common elsewhere
Rank 2B.2 - Fairly endangered in California, but more common elsewhere
Rank 2B.3 - Not very endangered in California, but more common elsewhere
Rank 3 - Plants about which we need more information (Review List)
Rank 3.1 - Plants about which we need more information (Review List) Seriously endangered in California
Rank 3.2 - Plants about which we need more information (Review List) Fairly endangered in California
Rank 4 - Plants of limited distribution - a watch list

Table 4

Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Invertebrates				
Vernal pool fairy shrimp *Branchinecta lynchi*	Fed: FT State: - Other:	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains. Inhabit static rain-filled/vernal pools, small, clear water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression	Closest record is from 2003 and is 1.5 miles north of the project site (Occurrence No. 232).	None. No suitable habitat on the project site.
Fish				
Steelhead - Central California Coast DPS *Oncorhynchus mykiss irideus*	Fed: FT State: - Other:	From Russian River south to Soquel Creek, and to Pajaro River. Also found in San Francisco & San Pablo Bay Basins. Spawn in clear, cool, well oxygenated streams greater than 18 cm deep.	Closest record is from 2000 and is 0.39 miles southwest of the project site (Occurrence No. 4).	None. No suitable habitat on the project site.
Longfin smelt *Spirinichus thaleichthys*	Fed: -- State: CT Other:	Endemic to the Sacramento-San Joaquin River system. Inhabits open waters in the Delta and Suisun Bay. After spawning, larvae are carried downstream to brackish nursery areas.	Closest record is from 2012 and is1.2 miles west of the project site (Occurrence No. 26).	None. No suitable habitat on the project site.
Sacramento splittail *Pogonichthys macrolepidotus*	Fed: State: CSC Other:	Endemic to the lakes and rivers of the Central Valley; now confined to the delta, Suisun Bay, and associated marshes. Inhabits slow moving river sections and dead-end sloughs. Needs flooded vegetation for spawning.	Closest record is from 2001 and is 2.9 miles southwest of the project site (Occurrence No. 12).	None. No suitable habitat on the project site.
Amphibians				
California red-legged frog *Rana draytonii*	Fed: FT State: CSC Other:	Occurs in lowlands and foothills in deeper pools and streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.	Closest record is from 2006 and is 1.4 miles east of the project site (Occurrence No. 896).	None. No suitable habitat on the project site.

Table 4

Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Foothill yellow-legged frog *Rana boylii*	Fed: -- State: CC Other:	Found in partially shaded, shallow streams with rocky substrates. Requires perenial pools or flowing water. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.	Closest record is from 193X and is 1.2 miles east of the project site (Occurrence No. 2341).	None. No suitable habitat on the project site.
Reptiles				
Western pond turtle ** *Emys marmorata*	Fed: - State: CSC Other:	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County.	Closest record is from 2002 and is 0.45 miles northeast of the project site (Occurrence No. 552).	None. No suitable habitat on or adjacent to the project site.
Birds				
Northern harrier *Circus cyaneus*	Fed: - State: CSC Other:	Nests on the ground or in shrubby vegetation typically in grasslands, fallow farm lands, near freshwater and salt water marshes.	Closest record is from 2004 and is 2.8 miles west of the project site (Occurrence No. 29).	Unlikely to nest onsite. Preconstruction surveys will be conducted.
Swainson's hawk *Buteo swainsoni*	Fed: - State: CT Other:	Migratory and resident raptor that breeds in open areas with scattered trees. Prefers riparian and sparse oak woodland habitats for nesting. Requires nearby grasslands, grain fields, or alfalfa for foraging.	Closest record is from 2013 and is 2.6 miles northeast of the project site (Occurrence No. 2744).	Unlikely to nest adjacent to project site. Preconstruction surveys will be conducted.
Ferruginous hawk *Buteo regalis*	Fed: -- State: WL Other:	Winter migrant to California where they prefer grasslands, cultivated fields and arid areas with an abundance of prey species, such as pocket gophers, black-tailed hares, and cottontails.	Closest record is from 1988 and is 3.0 miles north of the project site (Occurrence No. 28).	None. Does not nest in California.

Table 4

Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Peregrine falcon *Falco peregrinus*	Fed: - State: - Other:	Nests on high cliffs near wetlands, lakes, rivers, or other water; also nests on human-made structures. Nest consists of a scrape on a depression or ledge in an open site. Was formerly state and federally listed but delisted due to species recovery.	Closest record is from 2015 and is 3.0 miles east of the project site (Occurrence No. 42).	None. No suitable nesting habitat on or near the project site.
California black rail *Laterallus jamaicensis coturniculus*	Fed: -- State: CT Other:	Inhabits salt marshes bordering larger bays. Prefers tidal salt marshes of pickleweed.	Closest record is from 2011 and is 2.5 miles northwest of the project site (Occurrence No. 31).	None. No suitable habitat on the project site.
California Ridgway's rail *Rallus obsoletus obsoletus*	Fed: FE State: CE Other:	Inhabits salt water and brackish marshes with tidal sloughs in San Francisco Bay. Prefers dense pickleweed for cover, but forages for invertebrates along mud-bottomed sloughs.	Closest record is from 1989 and is 2.4 miles northwest of the project site (Occurrence No. 16).	None. No suitable habitat on the project site.
Western burrowing owl *Athene cunicularia hypugaea*	Fed: -- State: CSC Other:	Found in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Closest record is from 1989 and is 2.6 miles southeast of the project site (Occurrence No. 109).	Unlikely to nest on the project site. Preconstruction surveys will be conducted.
Salt marsh common yellowthroat *Geothlypis trichas sinuosa*	Fed: - State: CSC Other:	Resident of freshwater and salt water marshes in the San Francisco Bay region. Requires thick, continuous cover for foraging and tall grasses, tules, or willows for nesting.	Closest record is from 2004 and is 2.5 miles northwest of the project site (Occurrence No. 37).	None. No suitable habitat on the project site.
San Pablo song sparrow *Melospiza melodia samuelis*	Fed: -- State: CSC Other:	More properly known as Samuels Song Sparrow. Resident of salt marshes along the north side of San Francisco and San Pablo Bays. Inhabits tidal sloughs in the California marshes; nests in grindelia bordering slough channels.	Closest record is from 2004 and is 2.8 miles west of the project site (Occurrence No. 17).	None. No suitable habitat on the project site.

Table 4

Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Tricolored blackbird *Agelaius tricolor*	Fed: - State: CC Other: CSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	Closest record is from 2014 and is 1.6 miles northeast of the project site (Occurrence No. 243).	None. No suitable nesting habitat on the project site.
Mammals				
Salt marsh harvest mouse *Reithrodontomys raviventris*	Fed: FE State: CE Other:	Inhabits saline marshes in the San Francisco Estuary. Prefers pickleweed marshes. Requires higher areas for escaping high water.	Closest record is from 1989 and is 2.4 miles south of the project site (Occurrence No. 150).	None. No suitable habitat on the project site.

***Status**

Federal:	State:
FE - Federal Endangered	CE - California Endangered
FT - Federal Threatened	CT - California Threatened
FPE - Federal Proposed Endangered	CR - California Rare
FPT - Federal Proposed Threatened	CC - California Candidate
FC - Federal Candidate	CSC - California Species of Special Concern
FPD - Federally Proposed for delisting	FP - Fully Protected
	WL - Watch List. Not protected pursuant to CEQA

**The USFWS hopes to finish a 12-month finding for western pond turtle in 2021 but until formally listed, it is not afforded the protections of FESA.

- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army Corps of Engineers
San Francisco District
Regulatory Division

American Canyon Flat Lands
American Canyon, Napa County, California
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID. **2011-00322** Date: **March 6, 2018** Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees

W 1
LW 1
W2
LW2
IW 1
3'
3'

0 50 100 200 300 400 500 Feet Scale: 1 inch = 100 feet

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
Walnut Creek, California 94595
(925) 947-4867

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map
American Canyon Flat Lands, Lot 3
City of American Canyon, Napa County, California

Corps Verification Date: May 18, 2017
Confirmed by Bryan Matsumoto
Delineation Conduced by: Hope Kingma & Devin Jokerst
Aerial Photograph Source: ESRI
Map Revision Date: May 22, 2017

September 3, 2020

Industrial and Commercial Contractors, LP
403 W. Yosemite Avenue, Suite 105
Madera, California 93637

Attention: Mr. Brian Doswald

RE: Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site
SDG Commerce 217 Distribution Center, Napa, California
APN: 058-030-065-000

Dear Mr. Doswald:

1. INTRODUCTION

Monk & Associates, Inc., (M&A) has prepared this Addendum to our March 2, 2020, *Revised Biological Resource Analysis* (biology report) for the SDG Commerce 217 Distribution Center located in the City of American Canyon, California (the "project site"). Since the time M&A prepared our biology report for the project site, it has been determined that it will be necessary to acquire soil from the adjacent parcel to the south (the "borrow area parcel") and transport this soil for use as clean fill on the project site. M&A has prepared this Addendum to our biology report to address the transportation of soil from the offsite borrow area parcel onto the project site and to analyze any affects this activity could have on mapped jurisdictional waters of the United States/State that lie inbetween the project site and the adjacent borrow area parcel. Mapped waters of the United States are shown on the attached exhibits.

2. DESCRIPTION OF THE PROJECT SITE AND ADJACENT BORROW AREA PARCEL

The project site and the adjacent borrow area parcel were once part of a contiguous approximately 35-acre project site that M&A conducted surveys on over multiple years dating between 2006 and 2018. Both the project site and adjacent borrow area parcel are dominated by ruderal (weedy) vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). These non-native, weedy species provide little habitat value to wildlife and they do not constitute a native plant community. Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, is also common on the 35 acres. Ruderal vegetation is the only vegetation community found on the project site. The adjacent borrow area parcel, however, in addition to supporting a ruderal herbaceous community also supports waters of the United States, as described below.

On May 16, 2018, the U.S. Army Corps of Engineers issued a jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the approximately 35-acre

parcel that comprises the project site, the adjacent borrow area parcel, and another property now known as 330 Commerce Center (see attached exhibits). The entire 0.043-acre of waters of the U.S. confirmed by the Corps is found on the adjacent borrow area parcel as shown on the attached exhibit "Borrow Site Rough Grading," Sheet 1 prepared by RSA on August 21, 2020. There are no waters of the United States or State on the project site.

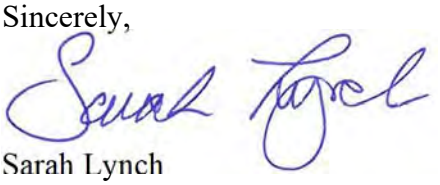
3. DISCUSSION OF PROPOSED ACTIVITIES AND AVOIDANCE OF IMPACTS TO MAPPED WATERS OF THE UNITED STATES

The project applicant intends to rough grade the borrow area parcel and transport soil from that parcel onto the project site for use in development of the project site. In order to protect the waters of the United States/State that occur in between the project site and the borrow area parcel, a 25-foot buffer area around the outside edge of the wetlands will be staked and protected with fiber roll, silt fencing and high visibility orange construction fencing to prevent equipment from driving into the wetlands during hauling activities. See the attached exhibit.

With these protection measures in place, as shown on the attached Borrow Site Rough Grading exhibit, Sheet 1, attached, *there are no expected impacts to waters of the U.S./State from the transport of soil/materials from the borrow area parcel to the project site*.

This concludes our addendum to our biology report. If you have any questions or require additional information, please do not hesitate to contact me at (925) 323-4850 or Sarah@monkassociates.com. Thank you.

Sincerely,



Sarah Lynch
Senior Associate Biologist

Attachments: U.S. Army Corps of Engineers Confirmed Aquatic Resources Delineation Map;
Sheet 1, Borrow Site Rough Grading prepared by RSA, August 21, 2020

GRAPHIC SCALE

60 0 60 120

(IN FEET)
1 inch = 60 FT

14,880± CU. YD. STOCKPILE
11.9 RG/CONF
12.2 RG/CONF
2,349± CU. YD. STOCKPILE
46,700 CU. YD. BORROW SITE INCLUSIVE OF STOCKPILES - FINE GRADE AS REQUIRED TO PROVIDE POSITIVE DRAINAGE - NO LOW SPOTS.
13.5 RG/CONF
16.0 RG/TC/CONF
(E) 1.7%
0.6%
0.4%
(E) 1.7%
1.9%
3%
2.3%
16.0 RG/TC
25.0 RG
5:1 SLOPE
10:1 SLOPE
INSTALL FIBER ROLL, SILT FENCE, AND ORANGE CONSTRUCTION FENCE AT 25' BUFFER FROM MAPPED WETLAND
INSTALL FIBER ROLL, SILT FENCE, AND ORANGE CONSTRUCTION FENCE AT 25' BUFFER FROM MAPPED LINEAR WETLAND
20' WIDE HAUL ROAD
COMMERCE 330 DISTRIBUTION CENTER - UNDER SEPARATE PERMIT
(P) COMMERCE 217 DISTRIBUTION CENTER
COMMERCE COURT EXTENSION - UNDER SEPARATE PERMIT
61002 23.77
61003 23.22
61001 25.54
61004 23.51
61005 DBC 20
61006 DBC 20
61007 30.22
61008 30.54

NO.	DATE	REVISIONS	BY	APP'D

RSA+
1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE | 707.252.2301
+ www.RSAcivil.com +
RSA+ | CONSULTING CIVIL ENGINEERS + SURVEYORS + | YOU |

SDG COMMERCE 217 DISTRIBUTION CENTER
BORROW SITE ROUGH GRADING
AMERICAN CANYON
CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNOCK
No. 82758
Exp. 9-30-20
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	AUG. 21, 2020
DRAWN	DRL
DESIGNED	DRL
CHECKED	PSW
JOB NO.	4119037.0
SHEET NO.	1
	1 OF 1 SHEETS

R:\2019\4119037.0_SDG_Commerce_310_Distribution_Center\CIVIL\EXHIBITS\Borrow Exhibit\Exh-BorrowSite.dwg 09/21/2020 12:08:48PM dlobergo COPYRIGHT RSA+

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PRELIMINARY - NOT FOR CONSTRUCTION

- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
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File ID. **2011-00322** Date: **March 6, 2018** Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees

W 1
LW 1
W2
LW2
IW 1
3'
3'

0 50 100 200 300 400 500 Feet Scale: 1 inch = 100 feet

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Corps Verification Date: May 18, 2017
Confirmed by Bryan Matsumoto
Delineation Conduced by: Hope Kingma & Devin Jokerst
Aerial Photograph Source: ESRI
Map Revision Date: May 22, 2017

NOTE: SEE SHEET C3.0 FOR ADDITIONAL GRADING.

(P) COMMERCE 217
DISTRIBUTION CENTER

INSTALL FIBER ROLL, SILT FENCE, AND ORANGE CONSTRUCTION FENCE AT 25' BUFFER FROM MAPPED WETLAND (SEE NOTE 1)

FIBER ROLL, TYP. PER (1/C5.1)

13.4ft RG/CONF

10:1 SLOPE

(E) 1.7%

1.4%

(E) GRAVEL ROAD

25.00 RG

INSTALL FIBER ROLL, SILT FENCE, AND ORANGE CONSTRUCTION FENCE AT 25' BUFFER FROM MAPPED LINEAR WETLAND. (SEE NOTE 1)

24,576 CU. YD. BORROW SITE INCLUSIVE OF STOCKPILES - FINE GRADE AS REQUIRED TO PROVIDE POSITIVE DRAINAGE - NO LOW SPOTS.

2.1%

2.1%

PRESERVE EXISTING VEGETATION OUTSIDE OF THE PROJECT FOOTPRINT TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION.

2,399± CU. YD. STOCKPILE

12.13 RG/CONF

14,880± CU. YD. STOCKPILE

12.16 RG/CONF

(E) 1.7%

15.82 RG/CONF

1.1%

21.00 RG

5:1 SLOPE

5:1 SLOPE

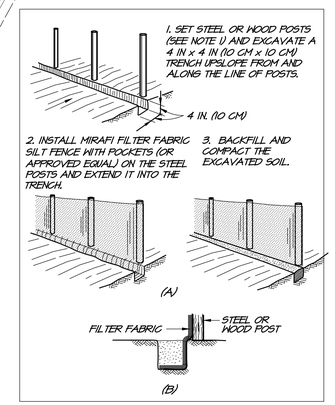
(E) AREA GRADED TO DRAIN

COMMERCE COURT

COMM

(E) COMMERCE 330
DISTRIBUTION CENTER -
UNDER SEPARATE PERMIT

GRAPHIC SCALE
40 0 40 80
(IN FEET)
1 inch = 40 FT



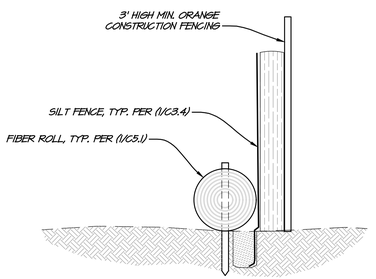
CONSTRUCTION OF A SILT FENCE:
(A) INSTALLATION SEQUENCE
(B) EXTENSION OF FABRIC INTO THE TRENCH

INSTALLATION OF SILT FENCE SEDIMENT BARRIER

1. LAY OUT A SUITABLE FENCE LINE AND SET POSTS ALONG IT. ON SLOPES, ALIGN THE FENCE ALONG THE CONTOUR AS CLOSELY AS POSSIBLE. IN SMALL SWALES, CURVE THE FENCE LINE UPSTREAM AT THE SIDES TO DIRECT THE FLOW TOWARD THE MIDDLE OF THE FENCE. THE SIDES SHOULD BE HIGHER THAN THE CENTER AS ILLUSTRATED AT RIGHT. SPACE POSTS ON 6' CENTERS AND DRIVE THEM A MINIMUM OF 12 IN (30 CM) INTO THE GROUND. POSTS FOR SILT FENCES CAN BE EITHER 1 1/2" (3.8 CM) MIN DIA. HARD WOOD OR 1.33 LB/FT (1.97 KG/M) STEEL WITH A MINIMUM LENGTH OF 5 FT (1.5 M). STEEL POSTS MUST HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
2. FASTEN THE FILTER FABRIC TO THE UPHILL SIDE OF THE FENCE POSTS, AND EXTEND TO 6 TO 8 IN (15 TO 20 CM) INTO THE TRENCH. THE HEIGHT OF THE FENCE SHOULD NOT EXCEED 36 IN (0.9 M). DO NOT STAPLE FABRIC ONTO TREES. CUT THE FILTER FABRIC FROM A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, SPLICE THE FILTER CLOTH AT A SUPPORT POST, WITH A MINIMUM 6 IN (15 CM) OVERLAP, AND SECURELY FASTEN BOTH ENDS TO THE POST.
3. BACKFILL THE TRENCH OVER THE TOE OF THE FABRIC AND COMPACT THE SOIL.
4. PREFABRICATED SILT FENCE WITH POSTS MAY BE USED AS AN ALTERNATE TO SETTING STEEL OR WOOD POSTS.

1 SILT FENCE SEDIMENT BARRIER
RSA EC0000-13 NOT TO SCALE

NOTE
1. PRIOR TO START OF ANY GRADING WORK, CONTRACTOR SHALL INSTALL WETLAND PROTECTION MEASURES (FIBER ROLL, SILT FENCE, AND DRAINAGE CONSTRUCTION FENCE.)



2 WETLANDS PROTECTION DETAIL
NOT TO SCALE

City of American Canyon
Public Works
Job Site Copy
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SDG COMMERCE 217 DISTRIBUTION CENTER
BORROW SITE GRADING PLAN
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER NICHOLAS AARON WEBER C85746 Exp. 9-30-24 CIVIL STATE OF CALIFORNIA

DATE	MAR. 16, 2023
DRAWN	LMM
DESIGNED	NAW
CHECKED	PSW
JOB NO.	4119037.0

SHEET NO.
C3.5
14 OF 20 SHEETS

R:\2019\4119037.0_SDG_Commerce_210_Distribution_Center\Civil\CAD\C3.5-GRAD-BORROW SITE.dwg 03/16/2023 3:01:32PM lmlgrom COPYRIGHT RSA+

2027

C.3 - Commerce 220 Documents

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Pinecrest Environmental Consulting

PINECREST ENVIRONMENTAL CONSULTING
6425 TELEGRAPH AVE. #8
OAKLAND, CA 94609

510.881.3039 TEL
INFO@PINECRESTENVIRONMENTAL.ORG
WWW.PINECRESTENVIRONMENTAL.ORG

SPECIAL-STATUS ANIMAL SURVEY REPORT

Date: August 8, 2023

To: Robert Carroll, FCS International.

From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc.

Subject: Results of special-status animal surveys at 220 Commerce Court, Napa County, CA (FCS Project 5639.0001)

Robert Carroll,

This special-status animal survey report (Report) details the findings of eleven (11) wildlife surveys conducted between January 18 and July 2 in 2023 at the above-referenced property located in the County of Napa. The site consists of one parcel measuring 10.2 acres and assigned APN 058-030-069. Surveys were conducted in order to determine the pre-construction presence or absence of the following special-status animals: burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), nesting raptors, nesting passerine birds, and Western pond turtle. Surveys were conducted by consulting biologist Dr. Christopher DiVittorio.

Site Description

The entirety of the site is disked and mowed ruderal grassland, with the exception of a row of Eucalyptus trees along the northern property line. The ruderal grassland exhibits low cover of plants and low species diversity with very few native species (Figure 1). The habitat type of this area as determined by Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV) is *Bromus* (*diandrus, hordeaceous*)-*Brachypodium distachyon* Semi-Natural Herbaceous Stand. On the north side of the parcels is a row of bluegum Eucalyptus. The MCV classification of this habitat is *Eucalyptus* (*globulus, camaldulensis*) Semi-Natural Woodland Stands.

Methods

Between January 18 and July 2, 2023, eleven (11) surveys were conducted for nesting passerine birds, raptors (including Swainson's hawk), burrowing owl, and Western pond turtle. During each survey, the entirety of the "Commerce 220" site as well as the adjacent "Commerce 217" site were examined. These surveys included the entirety of both legal parcels, as well all of the vegetated areas up to the concrete paved area on the developed parcel to the south. Relevant adjacent areas were also examined with binoculars where possible. A total of approximately 45 survey hours were completed across all survey dates. All of the aforementioned animal types were surveyed for at each of the eleven site visits. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting fSurveys in California's Central Valley*, and the *Staff Report on*

Burrowing Owl Mitigation.[1,2] Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10 a.m.). Surveys were conducted on foot. Survey dates with the corresponding Swainson's hawk survey periods are shown below.

Date	Swainson's Hawk Survey Period
1/18/2023	1st survey in Period I
3/20/2023	1st survey in Period II
3/31/2023	2nd survey in Period II
4/4/2023	3rd survey in Period II
4/5/2023	1st survey in Period III
4/6/2023	2nd survey in Period III
4/7/2023	3rd survey in Period III
4/24/2023	1st survey in Period IV
4/28/2023	2nd survey in Period IV
5/29/2023	3rd survey in Period IV
7/2/2023	1st survey in Period V

Results & Recommendations

A total of 56 unique species of birds were observed across the eleven site visits. A total of 4 other species of animals were observed across the eleven site visits. Transcribed field notes from each of the eleven site visits are provided in Appendix A, below. A master list of all species of birds and other animals encountered across the eleven site visits is provided in Appendix B, below.

Due to the lack of suitable nesting habitat on the project site itself, no nesting birds were observed in the project area, although nesting birds were observed in the *Eucalyptus* stands offsite. Of the nesting birds in the offsite *Eucalyptus* stands, none of these were special-status including raptors. White tailed kites (*Elanus leucurus*) were observed foraging in the field, but they did not appear to be nesting nearby, as described below. No Swainson's hawk or burrowing owl were observed during any of the avian surveys. No adults or nests of Western pond turtle were observed (Appendix A & B).

[1] Swainson's Hawk Technical Advisory Committee. 2000. *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*. California Department of Fish and Wildlife, May 31, 2000.

[2] California Department of Fish and Wildlife 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

Swainson’s hawk

No individuals of Swainson's hawk were observed during any of the surveys, and no raptor nests that could belong to Swainson's hawk were observed. The presence of other birds-of-prey utilizing territories onsite also indicates that Swainson's hawk are not utilizing this habitat currently since these species are antagonistic and do not typically share ranges. The negative survey results for Swainson’s hawk despite approximately 45 survey hours satisfies the requirements of the survey protocol for this species, therefore it is reasonable to conclude Swainson's hawk are absent from the project site.

Nesting Birds (Including Raptors)

No active raptor nests were observed within the vicinity of the project site. Several American crow were loitering around the *Eucalyptus* grove to the east of the parcel and harassing White-tail kites that approached the grove, however their nest could not be located. Several White-tail kites were observed each day foraging over the grassland habitat, however each time they flew off to the southwest out of sight and the location of their nest could not be determined. One juvenile red-shouldered hawk was observed within a large *Eucalyptus* tree along the north property line however this individual flew offsite after approximately 20 minutes. No other active nests were observed during any of the eleven site visits.

Burrowing Owl

No evidence of burrowing owl activity was observed during any of the eleven field surveys. No California ground squirrel burrows were observed on-site, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl. Therefore, it is reasonable to conclude burrowing owl is absent from the project site.

Western Pond Turtle

No evidence of Western pond turtle activity was observed during any of the eleven field surveys. There are some wetland features onsite, however there are no ponds or streams onsite that would be suitable for Western pond turtle foraging or breeding. No signs of adults or nests were observed onsite or in the accessible vicinity of the site. Therefore, it is reasonable to conclude Western pond turtle is absent from the project site.

Based on the results of these eleven surveys, we conclude that there are no special-status animal species currently occupying the project site, and no compensatory mitigation for impacts to special-status animal species is recommended at this time. These results do not however, preclude the future existence of the above-referenced species onsite as they may recolonize the site if sufficient time has passed between these surveys and site development.

Please let me know if you have any questions about this or any other studies we've performed for this project.

Sincerely,



Christopher DiVittorio, PhD
President, PEC
(510) 881-3039
chris@pinecrestenvironmental.org

Figure 1: Ruderal Grassland



SOURCES: PEC Inc.

APN 058-030-069-000
220 Commerce Court, American Canyon, CA 94503

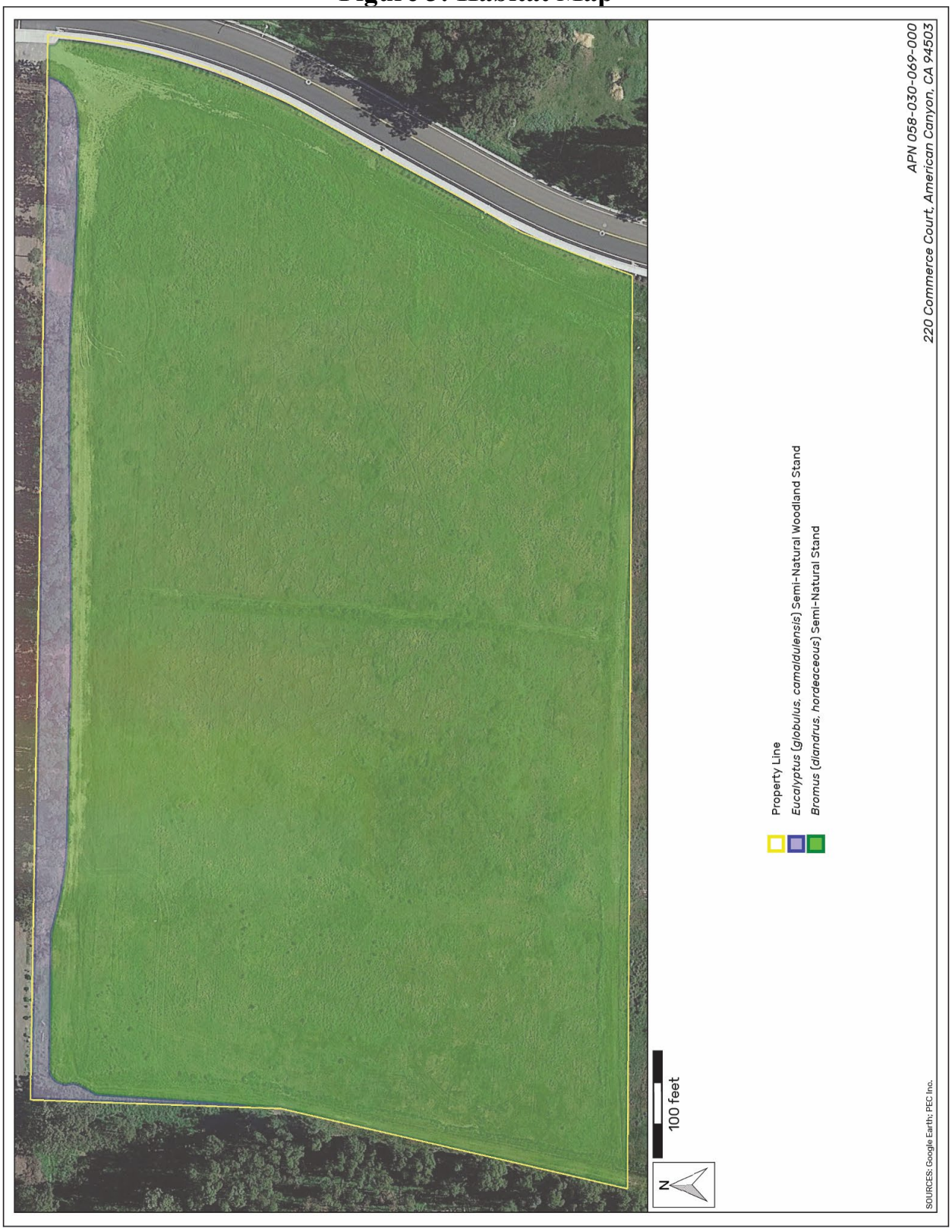
Figure 2: Eucalyptus Stands



SOURCES: PEC Inc.

APN 058-030-069-000
220 Commerce Court, American Canyon, CA 94503

Figure 3: Habitat Map



Appendix A: Animal Survey Field Notes

The following is a transcription of field notes for each of the eleven (11) protocol-level surveys conducted at the project site. Special-status species, if any, are denoted with an asterisk (*).

Site Visit: 1/18/23

Time: 12:00 PM (approx.)
Weather: clear, no wind, 56degF
Notes: started mid-day
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Birds: juvenile red-shouldered hawk (*Buteo lineatus*) sitting in Eucalyptus tree on N fenceline, Western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American pelican (*Pelecanus erythrorhynchos*), black phoebe (*Sayornis nigricans*), white-crowned sparrow (*Zonotrichia leucophrys*), Northern flicker (*Colaptes auratus*), crow (*Corvus brachyrhynchos*)

Other Animals: None

Site Visit: 3/20/23

Time: 6:35 AM
Weather: no wind, 49 degF, 46% RH
Notes: start at sunrise; park in SE corner
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; early season plant survey
Personnel: Dr. Christopher DiVittorio

Bird Species: wild turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), Canada goose (*Branta canadensis*), crow (*Corvus brachyrhynchos*), raven (*Corvus corax*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Western bluebird (*Sialia mexicana*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), red-shouldered hawk (*Buteo lineatus*) two individuals soaring over the Eucalyptus grove to the E of the site, house wren (*Troglodytes aedon*), American robin (*Turdus migratorius*), golden-crowned sparrow (*Zonotrichia atricapilla*), Nuttal's woodpecker (*Picoides nuttallii*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), purple finch (*Haemorhous purpureus*), tree swallow (*Tachycineta bicolor*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), California gull (*Larus californicus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), chestnut-backed chickadee (*Poecile rufescens*), White-tailed kite (*Elanus leucurus*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 3/31/23

Time: 6:30 AM
Weather: clear, wind 0 mph, 44.5 degF, 76.5% RH
Notes: parked NE corner
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Bird species: American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), Canada goose (*Branta canadensis*), American goldfinch (*Spinus tristis*), house sparrow (*Passer domesticus*), Allen's hummingbird (*Selasphorus sasin*), kildeer (*Charadrius vociferus*), raven (*Corvus corax*), unknown gull likely Western or California, American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*),

Other Animals: Mule deer (*Odocoileus hemionus*), domestic cat (*Felis catus*),

Site Visit: 4/4/23

Start time: 6:35 AM
Weather: clear, 49 degF, no wind, 81% RH
Notes: parked SW corner; 6:15 AM first light, 7:15 first direct sunlight
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; mid-season plant survey
Personnel: Dr. Christopher DiVittorio

Bird Species: red-shouldered hawk (*Buteo lineatus*) perched on Eucalyptus tree on N fenceline , wild turkey (*Meleagris gallopavo*) calling and all over parking area, White-tailed kite (*Elanus leucurus*) foraging and calling, house wren (*Troglodytes aedon*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), purple finch (*Haemorhous purpureus*), song sparrow (*Melospiza melodia*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), rock wren (*Salpinctes obsoletus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), fox sparrow (*Passerella iliaca*), Northern mockingbird (*Mimus polyglottos*), tree swallow (*Tachycineta bicolor*), Canada goose (*Branta canadensis*), kildeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), Western bluebird (*Sialia mexicana*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 4/5/23

Start time: 6:08 AM
Weather: 39 degF, 80% RH, no wind
Notes: met Jerry with Stravinsky onsite; parked SW corner
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Bird Species: red-shouldered hawk (*Buteo lineatus*) called from southwest corner of Eucalyptus grove once, wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), raven (*Corvus corax*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), White-tailed kite (*Elanus leucurus*) 3 hovering various times over the field, Nuttal's woodpecker (*Picoides nuttallii*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*),

Other Animals: None

Site Visit: 4/6/23

Start time: 6:17 AM
Weather: clear, 44 degF, 80% RH, no wind
Notes: fewer wildlife than yesterday; met Jerry with Stravinsky onsite; parked SW corner
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Bird Species: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), brown creeper (*Certhia americana*), raven (*Corvus corax*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), red-shouldered hawk (*Buteo lineatus*) called from southwest corner of Eucalyptus grove once similar to other mornings, White-tailed kite (*Elanus leucurus*) two individuals over east Eucalyptus grove being chased by crows, song sparrow (*Melospiza melodia*), great blue heron (*Ardea herodias*) soaring overhead, unknown gulls soaring, lesser goldfinch (*Spinus psaltria*), Anna's hummingbird (*Calypte anna*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*) runways, California vole (*Microtus californicus*) runways

Site Visit: 4/7/23

Start time: 6:30 AM
Weather: cloudy, 54.5 degF, 79% RH, wind 1-2 mph, fewer birds today
Notes: met Jerry with Stravinsky onsite
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Bird Species: Bewick's wren (*Thryomanes bewickii*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), hermit thrush (*Catharus guttatus*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), Nuttal's woodpecker (*Picoides nuttallii*), White-tailed kites (*Elanus leucurus*) being chased by crows then two foraging in field, cliff swallow (*Petrochelidon pyrrhonota*), cedar waxwing (*Bombycilla cedrorum*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 4/24/23

Start time: 6:30 AM
Weather: cloudy, then sunny; 61 degF, 64% RH, 1-3 mph wind
Notes: met Jerry with Stravinsky onsite for survey at 6:30, began preconstruction meeting 8:00 AM
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; preconstruction meeting with geotechnical engineer, Stravinsky, civil engineer, SWPP monitor, etc.
Personnel: Dr. Christopher DiVittorio

Birds: violet-green swallow (*Tachycineta thalassina*), Brewer's blackbird (*Euphagus cyanocephalus*), California towhee (*Melozone crissalis*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), Nuttal's woodpecker (*Picoides nuttallii*), American goldfinch (*Spinus tristis*), Western bluebird (*Sialia mexicana*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), White-tailed kite (*Elanus leucurus*) soaring and hovering over field, juvenile red-tailed hawk (*Buteo jamaicensis*) offsite to E flushed immediately out of site to the SE, peregrine falcon (*Falco peregrinus*) fly-through overhead, unidentified species of sparrow,

Other Animals: none

Other Notes: Red-tailed hawk nest on south side of existing warehouse to the south of project site is not active this year.

Site Visit: 4/28/23

Start time: 5:45 AM
Weather: cloudy, cold
Notes: met Jerry with Stravinsky onsite, Commerce 217 will be graded tomorrow; silt fencing installed and grass has been mowed since last visit; no burrows or other animal sign onsite; this counts towards the 24-hour BUOW preconstruction survey requirement
Purpose: preconstruction Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Birds: White-tailed kite (*Elanus leucurus*) hovering over field, turkey vulture (*Cathartes aura*), wild turkey (*Meleagris gallopavo*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 5/29/23

Start time: 8:30 AM
Weather: sunny
Notes: Commerce 220 site has been graded in addition to Commerce 217
Purpose: Swainson's hawk, other raptor, nesting passerine bird, BUOW, western pond turtle survey
Personnel: Dr. Christopher DiVittorio

Birds: no sign of BUOW or Swainson's hawk; presence/absence survey only; no comprehensive bird list completed

Other Animals: none

Site Visit: 7/2/23

Start time: 1:00 PM
Weather: clear, sunny, 85 degF, 51% RH, 3-8 mph wind
Note: many species appear to have migrated offsite for the summer
Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Bird Species:

house finch (*Haemorhous mexicanus*), Osprey (*Pandion haliaetus*), turkey vulture (*Cathartes aura*), lesser goldfinch (*Spinus psaltria*), red-tailed hawk (*Buteo jamaicensis*), Nuttal's woodpecker (*Picoides nuttallii*), kildeer (*Charadrius vociferus*), White-tailed kite (*Elanus leucurus*)

Other Animals: none

Appendix B: Master Species List

The following is a list of animal species observed across the eleven (11) site visits at the project site. Special-status species, if any, are denoted with an asterisk (*).

MASTER BIRD LIST

Allen's hummingbird (*Selasphorus sasin*)
American coot (*Fulica americana*)
American goldfinch (*Spinus tristis*)
American pelican (*Pelecanus erythrorhynchos*)
American pipit (*Anthus rubescens*)
American robin (*Turdus migratorius*)
Anna's hummingbird (*Calypte anna*)
Bewick's wren (*Thryomanes bewickii*)
black phoebe (*Sayornis nigricans*)
Brewer's blackbird (*Euphagus cyanocephalus*)
brown creeper (*Certhia americana*)
brown-headed cowbird (*Molothrus ater*)
California gull (*Larus californicus*)
California towhee (*Melozone crissalis*)
Canada goose (*Branta canadensis*)
cedar waxwing (*Bombycilla cedrorum*)
chestnut-backed chickadee (*Poecile rufescens*)
cliff swallow (*Petrochelidon pyrrhonota*)
crow (*Corvus brachyrhynchos*)
dark-eyed junco (*Junco hyemalis*)
European starling (*Sturnus vulgaris*)
fox sparrow (*Passerella iliaca*)
golden-crowned sparrow (*Zonotrichia atricapilla*)
great blue heron (*Ardea herodias*)
hermit thrush (*Catharus guttatus*)
house finch (*Haemorhous mexicanus*)
house sparrow (*Passer domesticus*)
house wren (*Troglodytes aedon*)
kildeer (*Charadrius vociferus*)
lesser goldfinch (*Spinus psaltria*)
mallard ducks (*Anas platyrhynchos*)
mourning dove (*Zenaida macroura*)
Northern flicker (*Colaptes auratus*)
Northern mockingbird (*Mimus polyglottos*)
Nuttal's woodpecker (*Picoides nuttallii*)
Osprey (*Pandion haliaetus*)
peregrine falcon (*Falco peregrinus*)
purple finch (*Haemorhous purpureus*)
raven (*Corvus corax*)
red-shouldered blackbird (*Agelaius phoeniceus*)
red-shouldered hawk (*Buteo lineatus*)
red-tailed hawk (*Buteo jamaicensis*)

rock wren (*Salpinctes obsoletus*)
ruby-crowned kinglet (*Regulus calendula*)
song sparrow (*Melospiza melodia*)
tree swallow (*Tachycineta bicolor*)
turkey vulture (*Cathartes aura*)
violet-green swallow (*Tachycineta thalassina*)
Western bluebird (*Sialia mexicana*)
Western scrub jay (*Aphelocoma californica*)
white-crowned sparrow (*Zonotrichia leucophrys*)
White-tailed kite (*Elanus leucurus*)
wild turkey (*Meleagris gallopavo*)
yellow-rumped warbler (*Setophaga coronata*)
unidentified gull likely Western or California
unidentified species of sparrow

MASTER OTHER ANIMALS LIST

black-tailed deer (*Odocoileus hemionus*)
black-tailed jackrabbit (*Lepus californicus*)
California vole (*Microtus californicus*) runways
domestic cat (*Felis catus*)

Pinecrest Environmental Consulting

PINECREST ENVIRONMENTAL CONSULTING
6425 TELEGRAPH AVE. #8
OAKLAND, CA 94609

510.881.3039 TEL
INFO@PINECRESTENVIRONMENTAL.ORG
WWW.PINECRESTENVIRONMENTAL.ORG

SPECIAL-STATUS PLANT SURVEY REPORT

Date: July 21, 2023

To: Jason Brandman, FCS International.

From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc.

Subject: Results of special-status plant surveys at 220 Commerce Court, Napa County, CA (FCS Project 5639.0001)

To Whom It May Concern,

This rare plant survey report (Report) details the findings of three protocol-level special-status plant surveys conducted in 2023 at the above-referenced property located in the County of Napa. The site consists of one parcel measuring 10.2 acres and assigned APN 058-030-069.

Site Description

The entirety of the site is disked and mowed ruderal grassland, with the exception of some emergent wetland along the north property line. A stand of non-native *Eucalyptus* spp. exists to the west but this is offsite and located on the adjacent parcel. The ruderal grassland exhibits low cover of plants and low species diversity with very few native species (Figure 1). The habitat type of this area as determined by Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV) is *Bromus* (*diandrus, hordeaceous*)-*Brachypodium distachyon* Semi-Natural Herbaceous Stand. There is also some disturbed/previously developed habitat in the southeast corner (Figure 3). The project will affect only the ruderal grassland portion of the site.

Methods

Special-status plants are defined here to include: (1) all plants that are federal- or state-listed as rare, threatened or endangered, (2) all federal and state candidates for listing, (3) all plants included in Lists 1 through 4 of the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380. Background information searches were conducted prior to all site visits to identify potential rare plant species or sensitive plant communities recognized by the California Department of Fish and Wildlife (CDFW) that may occur in the Study Area vicinity.

A table of these species, and their protection status, habitat requirements, and likelihood to occur in the Study Area is provided below in Appendix A. Sources for this table include the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CDFW 2023), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023), and the knowledge of PEC staff. CNDDB searches were performed within a "9-quad" area encompassing the surrounding region.

Site visits were performed during the growing season of 2023. An early-season site visit was performed on March 20. Mid-season site visits were performed on April 6, April 7, and May 29. A late-season site visit was also performed on July 2. Between the mid-season and late-season site visits the site was graded thus the late-season site visit focused on remaining vegetation surrounding the areas of disturbance. Site visits were performed by PEC botanist Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by PEC botanist Dr. Zoya Akulova. During each site visit, Dr. DiVittorio surveyed the entirety of the project area using methods as specified in the California Department of Fish & Wildlife (CDFW) publication titled *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*, dated March 20, 2018.

During each survey, the entirety of the "Commerce 220" site as well as the adjacent "Commerce 217" site were examined. These surveys included the entirety of both legal parcels, as well all of the vegetated areas up to the concrete paved area on the developed parcel to the south. Field surveys were conducted by walking the entire project area on foot in parallel lines approximately 15 feet apart, identifying every species that was flowering, and making note of any species that were past flowering or that had not yet flowered. Voucher specimens were taken of any species that required identification in the laboratory. All terminology follows currently accepted nomenclature as described in *The Jepson Manual* (2012).

Results & Recommendations

The project area is comprised of routinely disked ruderal *Bromus* (*diandrus, hordeaceous*) Semi-Natural Stands with some isolated individuals of *Baccharis pilularis* mostly near the edges of the site. A map of habitat types is shown in Figure 3. No special-status plant species or sensitive habitats were positively identified in the project area. A full list of the species encountered during the surveys is provided below in Appendix B. In total, 15 native species were observed onsite and 57 non-native species were observed. No special-status species were found thus we have no recommendations for mitigation or avoidance for this project.

Please let me know if you have any questions about this or any other studies we've performed for this project.

Sincerely,



Christopher DiVittorio, PhD
President, PEC
(510) 881-3039
chris@pinecrestenvironmental.org

Figure 1: Ruderal Grassland



SOURCES: PEC Inc.

APN 058-030-069-000
220 Commerce Court, American Canyon, CA 94503

Figure 2: Eucalyptus Stands



SOURCES: PEC Inc.

APN 058-030-069-000
220 Commerce Court, American Canyon, CA 94503

Figure 3: Habitat Map



Appendix A: Special-Status Species Considered

The following is a list of sensitive and/or rare plants and habitats generated based on knowledge of the species and habitats of Napa County by PEC staff, from various State and Federal databases, and from the California Natural Diversity Database (CNDDB). Known occurrences within a "9-quad" region around the project site are shown in bold.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
PLANTS			
Alkali milk-vetch (*Astragalus tener* var. *tener*)	**—/—/1B.2**	**Alkali grassland**	**Very Low: No alkali habitat exists in the project area.**
Anthony peak lupine (*Lupinus antoninus*)	—/—/1B.2	Coniferous forest	None: No coniferous forest habitat exists in the project area.
Baker's goldfields (*Lasthenia californica* ssp. *bakeri*)	—/—/1B.2	Coastal grasslands	Very Low: Some grassland habitat exists in the project area.
Baker's larkspur (*Delphinium bakeri*)	FE/SE/1B.1	Coastal scrub	Very Low: No coastal scrub habitat exists in the project area.
Baker's manzanita (*Arctostaphylos bakeri* ssp. *bakeri*)	—/—/1B.1	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)	**—/—/1B.1**	**Vernal pool**	**None: No vernal pool habitat exists in the project area.**
Beaked tracyina (*Tracyina rostrata*)	—/—/1B.2	Grassland, foothill woodland	Low: Some grassland habitat exists in the project area.
Bent flowered fiddleneck (*Amsinckia lunaris*)	—/—/1B.2	Grassland, foothill woodland	Low: Some grassland habitat exists in the project area.
Big-scale balsamroot (*Balsamorhiza macrolepis*)	**—/—/1B.2**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Big tarplant (*Blepharizonia plumosa*)	**—/—/1B.1**	**Chaparral, grassland**	**Low: Some grassland habitat exists in the project area.**
Blasdale's bent grass (*Agrostis blasdalei*)	—/—/1B.2	Coastal grassland	Very Low: Some grassland habitat exists in the project area.
Blue coast gilia (*Gilia capitata* ssp. *chamissonis*)	—/—/1B.1	Coastal sand dunes	None: No sand dune habitat exists in the project area.
Bluff wallflower (*Erysimum concinnum*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Bogg's Lake hedge-hyssop (*Gratiola heterosepala*)	—/—/1B.2	Vernal pool, pond	None: No vernal pool habitat exists in the project area.
Bolander's horkelia (*Horkelia bolanderi*)	—/—/1B.2	Coniferous forest, grassland	Low: Some grassland exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Bolander's water hemlock (*Cicuta maculata var. bolanderi*)	**—/—/2B.1**	**Salt marsh**	**None: No salt marsh habitat exists in the project area.**
Brandegee's eriastrum (*Eriastrum brandegeeae*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Brewer's calandrinia (*Calandrinia breweri*)	**—/—/4.2**	**Coastal scrub**	**None: No coastal scrub habitat exists in the project area.**
Brewer's western flax (*Hesperolinon breweri*)	**—/—/1B.2**	**Chaparral, grassland**	**Low: Some grassland habitat exists in the project area.**
Bristly leptosiphon (*Leptosiphon aureus*)	**—/—/4.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Bristly sedge (*Carex comosa*)	—/—/2B.1	Wetland, riparian	None: No potential wetland habitat exists in the project area.
Brownish beaked-rush (*Rhynchospora capitellata*)	—/—/2B.2	Wetland, riparian	None: No potential wetland habitat exists in the project area.
Burke's goldfields (*Lasthenia burkei*)	FE/SE/1B.1	Vernal pools, grassland	Low: Some grassland habitat exists in the project area.
California alkali grass (*Puccinellia simplex*)	—/—/1B.2	Alkali grassland	Very Low: No alkali grassland habitat exists in the project area.
California beaked-rush (*Rhynchospora californica*)	**—/—/1B.1**	**Freshwater wetlands**	**None: No potential wetland habitat exists in the project area.**
California satintail (*Imperata brevifolia*)	—/—/2B.1	Chaparral, coastal scrub	None: No chaparral habitat exists in the project area.
California sedge (*Carex californica*)	—/—/2B.3	Wetlands	None: No wetland habitat exists in the project area.
Calistoga ceanothus (*Ceanothus divergens*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Calistoga popcornflower (*Plagiobothrys strictus*)	FE/ST/1B.1	Wetland, riparian	None: No wetland habitat exists in the project area.
Carquinez goldenbrush (*Isocoma arguta*)	**—/—/1B.1**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Chaparral ragwort (*Senecio aphanactis*)	**—/—/1B.1**	**Coastal scrub, woodland**	**None: No coastal scrub habitat exists in the project area.**
Clara Hunt's milk vetch (*Astragalus claranus*)	—/—/1B.1	Chaparral, grassland	Low: Some grassland habitat exists in the project area.
Coast iris (*Iris longipetala*)	**—/—/4.2**	**Coastal grassland, wetland**	**Low: Some grassland habitat exists in the project area.**
Coast lily (*Lilium maritimum*)	—/—/1B.1	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*)	—/—/1B.2	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Cobb Mountain lupine (*Lupinus sericatus*)	**—/—/1B.2**	**Chaparral, coniferous forest**	**None: No chaparral habitat exists in the project area.**
Colusa layia (*Layia septentrionalis*)	—/—/1B.2	Chaparral, valley grassland	Low: Some grassland habitat exists in the project area.
Congdon's tarplant (*Centromadia parryi ssp. congdonii*)	**—/—/1B.1**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)	—/—/1B.2	Grassland, coastal scrub	Low: Some grassland habitat exists in the project area.
Contra Costa goldfields (*Lasthenia conjugens*)	**FE/—/1B.1**	**Vernal pool**	**None: No vernal pool habitat exists in the project area.**
Crystal Springs lessingia (*Lessingia arachnoidea*)	—/—/1B.2	Serpentine grassland	None: No serpentine grassland habitat exists in the project area.
Cunningham Marsh cinquefoil (*Potentilla uliginosa*)	—/—/1A	Wetland	None: No wetland habitat exists in the project area.
Dark-eyed gilia (*Gilia millefoliata*)	—/—/1B.2	Coastal sand dunes	None: No coastal sand dune habitat exists in the project area.
Dark-mouthed triteleia (*Triteleia lugens*)	**—/—/4.3**	**Grassland, chaparral**	**Low: Some grassland habitat exists in the project area.**
Deceiving sedge (*Carex saliniformis*)	—/—/1B.2	Grassland	Low: Some grassland habitat exists in the project area.
Deep-scarred cryptantha (*Cryptantha excavata*)	—/—/1B.2	Woodland	None: No woodland habitat exists in the project area.
Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*)	**—/—/1B.2**	**Freshwater and brackish marsh**	**None: No marsh habitat exists in the project area.**
Diablo helianthella (*Helianthella castanea*)	**—/—/1B.2**	**Chaparral, grassland**	**Low: Some grassland habitat exists in the project area.**
Dimorphic snapdragon (*Antirrhinum subcordatum*)	—/—/4.3	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Dwarf downingia (*Downingia pusilla*)	**—/—/2B.2**	**Vernal pool, wetland**	**None: No vernal pool habitat exists in the project area.**
Dwarf soaproot (*Chlorogalum pomeridianum* var. *minus*)	—/—/1B.2	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Eel-grass pondweed (*Potamogeton zosteriformis*)	—/—/2B.2	Wetland, pond	None: No wetland habitat exists in the project area.
Fragrant fritillary (*Fritillaria liliacea*)	**—/—/1B.2**	**Grassland**	**Low: Some grassland habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Few-flowered navarretia (*Navarretia leucocephala* ssp. *pauciflora*)	FE/SE/1B.1	Vernal pool, wetland	None: No vernal pool habitat exists in the project area.
Franciscan onion (*Allium peninsulare* var. *franciscanum*)	**—/—/1B.2**	**Coastal grassland**	**Very Low: No coastal grassland habitat exists in the project area.**
Geysers panicum (*Panicum acuminatum* var. *thermale*)	—/—/1B.2	Chaparral, wetland	None: No chaparral habitat exists in the project area.
Glandular western flax (*Hesperolinon adenophyllum*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Golden larkspur (*Delphinium luteum*)	FE/SR/1B.1	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Grassleaf water plantain (*Alisma gramineum*)	—/—/2B.2	Wetland, pond	None: No wetland habitat exists in the project area.
Green monardella (*Monardella viridis*)	**—/—/4.3**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Greene's narrow-leaved daisy (*Erigeron greenei*)	**—/—/1B.2**	**Serpentine chaparral**	**None: No serpentine chaparral habitat exists in the project area.**
Hall's harmonia (*Harmonia hallii*)	—/—/1B.2	Serpentine chaparral	None: No chaparral habitat exists in the project area.
Henderson's bent grass (*Agrostis hendersonii*)	**—/—/3.2**	**Vernal pool**	**None: No vernal pool habitat exists in the project area.**
Hoffman's bristly jewelflower (*Streptanthus glandulosus* spp. *hoffmanii*)	—/—/1B.3	Chaparral, woodland	None: No chaparral habitat exists in the project area.
Holly-leaved ceanothus (*Ceanothus purpureus*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*)	—/—/1B.2	Woodland	None: No woodland habitat exists in the project area.
Humboldt County milk vetch (*Astragalus agnicidus*)	—/—/1B.1	Coniferous forest	None: No coniferous forest habitat exists in the project area.
Jepson's coyote thistle (*Eryngium jepsonii*)	**—/—/4.2**	**Wetland, vernal pool**	**None: No wetland habitat exists in the project area.**
Jepson's leptosiphon (*Leptosiphon jepsonii*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Jepson's milk-vetch (*Astragalus rattanii* var. *jepsonianus*)	—/—/1B.2	Chaparral, grassland	Very Low: Some grassland habitat exists in the project area.
Johnny-nip (*Castilleja ambigua var. ambigua*)	—/—/4.2	**Wetland, riparian**	**None: No wetland habitat exists in the project area.**
Kenwood Marsh checkerbloom (*Sidalcea oregana* ssp. *valida*)	FE/SE/1B.1	Wetland	None: No wetland habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Konocti manzanita (*Arctostaphylos manzanita* ssp. *elegans*)	—/—/1B.3	Chaparral, woodland	None: No chaparral habitat exists in the project area.
Lake County stonecrop (*Sedella leiocarpa*)	—/—/1B.1	Wetland	None: No wetland habitat exists in the project area.
Legenere (*Legenere limosa*)	**—/—/1B.1**	**Wetland, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Loch Lomond button-celery (*Eryngium constancei*)	FE/SE/1B.1	Vernal pool	None: No vernal pool habitat exists in the project area.
Lobb's aquatic buttercup (*Ranunculus lobbii*)	**—/—/4.2**	**Vernal pool**	**None: No vernal pool habitat exists in the project area.**
Long-styled sand-spurrey (*Spergularia macrotheca* var. *longistyla*)	**—/—/1B.2**	**Wetland, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Lyngbye's sedge (*Carex lyngbyei*)	**—/—/2B.2**	**Salt marsh**	**None: No salt marsh habitat exists in the project area.**
Many-flowered navarretia (*Navarretia leucocephala* spp. *plieantha*)	FE/SE/1B.2	Vernal pool	None: No wetland habitat exists in the project area.
Maple-leaved checkerbloom (*Sidalcea malachroides*)	—/—/4.2	Coastal grassland, coniferous forest	Very Low: No coastal grassland habitat exists in the project area.
Marin checker lily (*Fritillaria lanceolata* var. *tristulis*)	—/—/1B.1	Grassland	Low: Some grassland habitat exists in the project area.
Marin checkerbloom (*Sidalcea hickmanii* spp. *viridis*)	—/—/1B.2	Grassland	Low: Some grassland habitat exists in the project area.
Marin County navarretia (*Navarretia rosulata*)	—/—/1B.2	Serpentine forest	None: No serpentine habitat exists in the project area.
Marin knotweed (*Polygonum marinense*)	**—/—/3.1**	**Coastal salt marsh**	**None: No coastal salt marsh habitat exists in the project area.**
Marin manzanita (*Arctostaphylos virgata*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Marin western flax (*Hesperolinon congestum*)	FT/ST/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Marsh checkerbloom (*Sidalcea oregana* ssp. *hydrophila*)	—/—/1B.2	Wetland, riparian	None: No wetland habitat exists in the project area.
Marsh microseris (*Microseris paludosa*)	—/—/1B.2	Wetland, grassland	Very Low: Some grassland habitat exists in the project area.
Marsh pea (*Lathyrus palustris*)	—/—/2B.1	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Mason's ceanothus (*Ceanothus masonii*)	—/SR/1B.2	Chaparral	None: No chaparral habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Mason's lilaeopsis (*Lilaeopsis masonii*)	**—/SR/1B.1**	**Freshwater and brackish marsh**	**None: No marsh habitat exists in the project area.**
Milo Baker's lupine (*Lupinus milo-bakeri*)	—/—/1B.1	Woodland, grassland	None: No woodland habitat exists in the project area.
Modest rockcress (*Arabis modesta*)	**—/—/4.3**	**Chaparral, forest**	**None: No chaparral habitat exists in the project area.**
Morrison's jewelflower (*Streptanthus morrisonii* ssp. *morrisonii*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Mt. Diablo fairy-lantern (*Calochortus pulchellus*)	**—/—/1B.2**	**Chaparral, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Mt. St. Helena morning glory (*Calystegia collina* ssp. *oxyphylla*)	—/—/4.2	Serpentine chaparral	None: No serpentine habitat exists in the project area.
Mt. Tamalpais bristly jewelflower (*Streptanthus glandulosus* spp. *pulchellus*)	—/—/1B.2	Chaparral, grassland	Very Low: Some grassland habitat exists in the project area.
Mt. Tamalpais manzanita (*Arctostaphylos montana* spp. *montana*)	—/—/1B.3	Chaparral	None: No chaparral habitat exists in the project area.
Mt. Tamalpais thistle (*Cirsium hydrophilum* var. *vaseyi*)	—/—/1B.2	Grassland	Low: Some grassland habitat exists in the project area.
Napa bluecurls (*Trichostema ruygtii*)	**—/—/1B.2**	**Grassland**	**Medium: Some grassland habitat exists in the project area.**
Napa blue grass (*Poa napensis*)	FE/SE/1B.1	Wetland, grassland	Very Low: Some grassland habitat exists in the project area.
Napa checkerbloom (*Sidalcea hickmanii* ssp. *napensis*)	**—/—/1B.1**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Napa false indigo (*Amorpha californica* var. *napensis*)	**—/—/1B.2**	**Forest, woodland**	**None: No woodland habitat exists in the project area.**
Napa lomatium (*Lomatium repostum*)	**—/—/1B.2**	**Woodland, chaparral**	**None: No woodland habitat exists in the project area.**
Narrow-anthered brodiaea (*Brodiaea leptandra*)	**—/—/1B.2**	**Woodland, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Nodding harmonia (*Harmonia nutans*)	**—/—/4.3**	**Woodland, chaparral**	**None: No chaparral habitat exists in the project area.**
North Coast semaphore grass (*Pleuropogon hooverianus*)	—/—/1B.1	Wetland, vernal pool	None: No wetland habitat exists in the project area.
Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*)	—/—/2B.2	Pond	None: No pond habitat exists in the project area.
Oval-leaved viburnum (*Viburnum ellipticum*)	**—/—/2B.3**	**Chaparral**	**None: No chaparral habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Pacific gilia (*Gilia capitata* ssp. *pacifica*)	—/—/1B.2	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Pacific Grove clover (*Trifolium polyodon*)	—/—/1B.1	Grassland, wetland	Very Low: Some grassland habitat exists in the project area.
Pappose tarplant (*Centromadia parryi* ssp. *parryi*)	**—/—/1B.2**	**Grassland, wetland**	**Low: Some grassland habitat exists in the project area.**
Parry's rough tarplant (*Centromadia parryi ssp. rudisi*)	**—/—/4.2**	**Grassland**	**Low: Some grassland habitat exists in the project area.**
Pennell's bird's beak (*Cordylanthus tenuis* ssp. *capillaris*)	FE/SR/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Perennial goldfields (*Lasthenia californica* ssp. *macrantha*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*)	—/—/1B.2	Parasitic plant, grassland, chaparral	Low: Some grassland habitat exists in the project area.
Petaluma popcornflower (*Plagiobothrys mollis* var. *vestitus*)	—/—/1A	Coastal salt marsh	None: No coastal salt marsh habitat exists in the project area.
Pink sand verbena (*Abronia umbellata* var. *breviflora*)	—/—/1B.1	Coastal sand dune	None: No sand dune habitat exists in the project area.
Pitkin Marsh lily (*Lilium pardalinum* ssp. *pitkinense*)	FE/SE/1B.1	Wetland	None: No wetland habitat exists in the project area.
Pitkin Marsh paintbrush (*Castilleja uliginosa*)	FE/SE/1A	Wetland	None: No wetland habitat exists in the project area.
Point Reyes checkerbloom (*Sidalcea calycosa* ssp. *rhizomata*)	—/—/1B.2	Coastal salt marsh	None: No salt marsh habiat exists in the project area.
Point Reyes salty bird's beak (*Chloropyron maritimum* ssp. *palustre*)	—/—/1B.2	Coastal salt marsh	None: No salt marsh habitat exists in the project area.
Purple-stemmed checkerbloom (*Sidalcea malviflora* spp. *purpurea*)	—/—/1B.2	Wetland	None: No wetland habitat exists in the project area.
Pygmy cypress (*Hesperocyparis pygmaea*)	—/—/1B.2	Hardpan soil	None: No hardpan forest habitat exists in the project area.
Raiche's manzanita (*Arctostaphylos stanfordiana* ssp. *raichei*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Raiche's red ribbons (*Clarkia concinna* spp. *raichei*)	—/—/1B.1	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Redwood lily (*Lilium rubescens*)	**—/—/4.2**	**Chaparral, forest**	**None: No chaparral habitat exists in the project area.**
Rincon Ridge ceanothus (*Ceanothus confusus*)	**—/—/1B.1**	**Chaparral**	**None: No chaparral habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Rincon Ridge manzanita (*Arctostaphylos stanfordiana* ssp. *decumbens*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Rose leptosiphon (*Leptosiphon rosaceus*)	—/—/1B.1	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Round-headed beaked rush (*Rhynchospora globularis*)	—/—/2B.1	Wetland, riparian	None: No wetland habitat exists in the project area.
Round-headed Chinese houses (*Collinsia corymbosa*)	—/—/1B.2	Coastal grassland	None: No coastal grassland habitat exists in the project area.
Round-leaved filaree (*California macrophylla*)	—/—/1B.2	Foothill grassland	Low: Some grassland habitat exists in the project area.
Saline clover (*Trifolium hydrophilum*)	**—/—/1B.2**	**Wetland, riparian**	**None: No potential wetland habitat exists in the project area.**
San Antonio Hills monardella (*Monardella antonina ssp. antonina*)	**—/—/3.0**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
San Francisco spineflower (*Chorizanthe cuspidata* var. *cuspidata*)	—/—/1B.2	Coastal sand dunes	None: No coastal sand dune habitat exists in the project area.
San Joaquin spearscale (*Extriplex joaquinana*)	**—/—/1B.2**	**Alkali scrub, grassland**	**Very Low: Some grassland habitat exists in the project area.**
Santa Cruz clover (*Trifolium buckwestiorum*)	—/—/1B.1	Wetland, grassland	Very Low: Some grassland habitat exists in the project area.
Santa Cruz microseris (*Stebbinsoseris decipiens*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Santa Cruz tarplant (*Holocarpha macradenia*)	FT/SE/1B.1	Coastal grassland	None: No coastal grassland habitat exists in the project area.
Santa Rosa horkelia (*Horkelia tenuiloba*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Seaside bittercress (*Cardamine angulata*)	—/—/2B.2	Forest, riparian	None: No forest habitat exists in the project area.
Sebastopol meadowfoam (*Limnanthes vinculans*)	FE/SE/1B.1	Wetland, vernal pool	None: No wetland habitat exists in the project area.
Serpentine cryptantha (*Cryptantha dissita*)	—/—/1B.2	Serpentine chaparral	None: No chaparral habitat exists in the project area.
Serpentine daisy (*Erigeron serpentinus*)	—/—/1B.3	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Short-leaved evax (*Hesperevax sparsiflora var. brevifolia*)	—/—/1B.2	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Slender Orcutt grass (*Orcuttia tenuis*)	FT/SE/1B.1	Vernal pool	None: No vernal pool habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Small-flowered calycadenia (*Calycadenia micrantha*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists in the project area.
Small groundcone (*Kopsiopsis hookeri*)	—/—/2B.3	Redwood forest	None: No redwood forest habitat exists in the project area.
Small spikerush (*Eleocharis parvula*)	**—/—/3.0**	**Woodland, chaparral**	**None: No chaparral habitat exists in the project area.**
Soft salty bird's beak (*Chloropyron molle* ssp. *molle*)	**FE/ST/1B.2**	**Coastal salt marsh**	**None: No salt marsh habitat exists in the project area.**
Sonoma alopecurus (*Alopecurus aequalis* var. *sonomensis*)	FE/—/1B.1	Wetland, vernal pool	None: No wetland habitat exists in the project area.
Sonoma beardtongue (*Penstemon newberryi* var. *sonomensis*)	—/—/1B.3	Chaparral	None: No chaparral habitat exists in the project area.
Sonoma ceanothus (*Ceanothus sonomensis*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Sonoma spineflower (*Chorizanthe valida*)	FE/SE/1B.1	Coastal grassland	Very Low: Some grassland habitat exists in the project area.
Sonoma sunshine (*Blennosperma bakeri*)	**FE/SE/1B.1**	**Grassland, wetland**	**Very Low: Some grassland habitat exists in the project area.**
St. Helena fawn lily (*Erythronium helenae*)	**—/—/4.2**	**Grassland, chaparral**	**Very Low: Some grassland habitat exists in the project area.**
Streamside daisy (*Erigeron biolettii*)	**—/—/4.2**	**Grassland, chaparral**	**Very Low: Some grassland habitat exists in the project area.**
Suisun marsh aster (*Symphyotrichum lentum*)	**—/—/1B.2**	**Freshwater and brackish marsh**	**None: No marsh habitat exists in the project area.**
Supple daisy (*Erigeron supplex*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists in the project area.
Swamp harebell (*Campanula californica*)	—/—/1B.2	Coastal grassland, wetland	Very Low: Some grassland habitat exists in the project area.
Tamalpais jewelflower (*Streptanthus batrachopus*)	—/—/1B.3	Serpentine	None: No serpentine habitat exists in the project area.
Tamalpais lessingia (*Lessingia micradenia* var. *micradenia*)	—/—/1B.2	Grassland	Low: Some grassland habitat exists in the project area.
Tamalpais oak (*Quercus parvula* var. *tamalpaisensis*)	—/—/1B.3	Woodland	None: No woodland habitat exists in the project area.
The Cedars fairy lantern (*Calochortus raichei*)	—/—/1B.2	Hardpan chaparral	None: No chaparral habitat exists in the project area.
The Cedars manzanita (*Arctostaphylos bakeri* ssp. *sublaevis*)	—/—/1B.2	Hardpan chaparral	None: No chaparral habitat exists in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Thin-lobed horkelia (*Horkelia tenuiloba*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Thurber's reed grass (*Calamagrostis crassiglumis*)	—/—/2B.1	Coastal scrub, wetland	None: No wetland habitat exists in the project area.
Tiburon buckwheat (*Eriogonum luteolum* var. *caninum*)	—/—/1B.2	Serpentine grassland	Very Low: No serpentine grassland exists in the project area.
Tiburon paintbrush (*Castilleja affinis* var. *neglecta*)	**FE/ST/1B.2**	**Serpentine grassland**	**Very Low: No serpentine grassland exists in the project area.**
Tracy's clarkia (*Clarkia gracilis ssp. tracyi*)	**—/—/4.2**	**Serpentine chaparral**	**None: No serpentine grassland exists in the project area.**
Two-carpellate western flax (*Hesperolinon bicarpellatum*)	—/—/1B.2	Serpentine chaparral	None: No serpentine chaparral exists in the project area.
Twig-like snapdragon (*Antirrhinum virga*)	**—/—/1B.1**	**Serpentine chaparral**	**None: No serpentine habitat exists in the project area.**
Two-carpellate western flax (*Hesperolinon bicarpellatum*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists in the project area.**
Two-fork clover (*Trifolium amoenum*)	**FE/—/1B.1**	**Grassland, wetland**	**Very Low: Some grassland habitat exists in the project area.**
Vine Hill ceanothus (*Ceanothus foliosus* var. *vineatus*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Vine Hill clarkia (*Clarkia imbricata*)	FE/SE/1B.1	Chaparral, grassland	Very Low: Some grassland habitat exists in the project area.
Vine Hill manzanita (*Arctostaphylos densiflora*)	—/SE/1B.1	Chaparral	None: No chaparral habitat exists in the project area.
Watershield (*Brasenia schreberi*)	—/—/2B.3	Pond	None: No pond habitat exists in the project area.
Western leatherwood (*Dirca occidentalis*)	**—/—/1B.2**	**Woodland, chaparral**	**None: No woodland habitat exists in the project area.**
White-beaked rush (*Rhynchospora alba*)	—/—/2B.2	Wetland, riparian	None: No wetland habitat exists in the project area.
White-flowered rein orchid (*Piperia candida*)	—/—/1B.2	Coniferous forest	None: No coniferous forest habitat exists in the project area.
White-rayed pentachaeta (*Pentachaeta bellidiflora*)	FE/SE/1B.1	Grassland	Low: Some grassland habitat exists in the project area.
Wolly-headed gilia (*Gilia capitata* ssp. *tomentosa*)	—/—/1B.1	Coastal grassland	Very Low: No coastal grassland habitat exists in the project area.
Wolly-headed lessingia (*Lessingia hololeuca*)	**—/—/3.0**	**Forest, grassland**	**Very Low: Some grassland habitat exists in the project area.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Wolly meadowfoam (*Limnanthes floccosa* ssp. *floccosa*)	—/—/4.2	Vernal pool	None: No wetland habitat exists in the project area.
Wolly spineflower (*Chorizanthe cuspidata* var. *villosa*)	—/—/1B.2	Coastal sand dunes	None: No sand dune habitat exists in the project area.
MOSSES, LICHENS & LIVERWORTS			
Angel's hair lichen (*Ramalina thrausta*)	—/—/2B.1	Forest, woodland	None: No forest habitat exists in the project area.
Coastal triquetrella (*Triquetrella californica*)	—/—/1B.2	Forest, woodland	None: No forest habitat exists in the project area.
Elongate copper moss (*Mielichhoferia elongata*)	—/—/4.3	Rock outcrops	None: No rock outcrop habitat exists in the project area.
Koch's cord moss (*Entosthodon kochii*)	—/—/1B.3	Forest, woodland	None: No forest habitat exists in the project area.
Methuselah's beard lichen (*Dolichousnea longissima*)	—/—/4.2	Forest, woodland	None: No forest habitat exists in the project area.
Slender silver moss (*Anomobryum julaceum*)	—/—/4.2	Rocky substrates in forests	None: No forest habitat exists in the project area.
Torren's grimmia (*Grimmia torenii*)	—/—/1B.3	Forest, woodland	None: No forest habitat exists in the project area.
HABITATS			
Coastal & Valley Freshwater Marsh (CVFM)	—	—	None: No marsh habitat exists in the project area.
Coastal Brackish Marsh (CVFM)	**—**	**—**	**None: No brackish marshes exist in the project area.**
Northern Coastal Salt Marsh (NCSM)	**—**	**—**	**None: No salt marsh habitat exists in the project area.**
Northern Hardpan Vernal Pool (NHVP)	—	—	None: No hardpan vernal pool habitat exists in the project area.
Northern Vernal Pool (NVP)	**—**	**—**	**None: No vernal pool habitat exists in the project area.**
Serpentine Bunchgrass (SBG)	**—**	**—**	**None: No serpentine bunchgrass habitat exists in the project area.**
Sycamore Alluvial Woodland (SAW)	—	—	None: No woodland habitat exists in the project area.
Valley Needlegrass Grassland (VNG)	—	—	Low: Some grassland habitat exists in the project area.
Valley Oak Woodland (VOW)	—	—	None: No valley oaks exist in the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Valley Sink Scrub (VSS)	—	—	None: No sink scrub habitat exists in the project area.

[1] Status:
Federal
FE = Federally Endangered Species
FT = Federally Threatened Species

State
SE = State Endangered Species
ST = State Threatened Species
SSC = California Species of Special Concern
CFP = California Fully Protected Species

CNPS (applies to plants only)
List 1B = plants considered rare, threatened, or endangered in California and elsewhere
List 2B = plants rare, threatened or endangered in California, but more common elsewhere
List 3 = plant is likely rare but more information is required
List 4 = plants of limited distribution

Appendix B: Plant Species Observed Onsite

The following is a list of plant species generated based on knowledge of the species and habitats of Napa County by PEC staff, and from various State and Federal databases, as described in the *Methods* section, above. Special-status species, if any, are denoted with an asterisk (*).

Non-Native Plant Species:

bird's foot trefoil (*Lotus corniculatus*)
bishop's weed (*Ammi majus*)
black mustard (*Brassica nigra*)
bluegum (*Eucalyptus globulus*)
bristly ox-tongue (*Helminthotheca echioides*)
bull thistle (*Cirsium vulgare*)
bur clover (*Medicago polymorpha*)
cheeseweed (*Malva parviflora*)
chicory (*Cichorium intybus*)
common dandelion (*Taraxacum officinale*)
common groundsel (*Senecio vulgaris*)
crane's bill filaree (*Erodium botrys*)
curly dock (*Rumex crispus*)
false brome (*Brachypodium distachyon*)
fennel (*Foeniculum vulgare*)
field bindweed (*Convolvulus arvensis*)
field marigold (*Calendula arvensis*)
foxtail barley (*Hordeum murinum*)
Fuller's teasel (*Dipsacus fullonum*)
hairgrass (*Aira caryophyllea*)
hairy vetch (*Vicia villosa*)
Harding grass (*Phalaris aquatica*)
hedge parsley (*Torilis arvensis*)
Himalayan blackberry (*Rubus armeniacus*)
Italian ryegrass (*Festuca perennis*)
Italian thistle (*Circium pycnocephalus*)
Jersey cudweed (*Pseudognaphalium luteoalbum*)
narrowleaf cottonrose (*Logfia gallica*)
New Zealand flax (*Phormium colensoi*)
pennyroyal (*Mentha pulegium*)
pineapple weed (*Matricaria discoidea*)
poison hemlock (*Conium maculatum*)
prickly lettuce (*Lactuca serriola*)
purple star thistle (*Centaurea calcitrapa*)
red brome (*Bromus madritensis*)
reed fescue (*Festuca arundinacea*)
ribwort (*Plantago lanceolata*)
ripgut brome (*Bromus diandrus*)
rose clover (*Trifolium hirtum*)
scarlet pimpernel (*Lysimachia arvensis*)
seaside barley (*Hordeum marinum*)

sheep sorrel (*Rumex acetocella*)
shortpod mustard (*Hirschfeldia incana*)
shrubby germander (*Teucrium fruticans*)
smooth cat's ear (*Hypochaeris glabra*)
soft chess (*Bromus hordeaceous*)
spring vetch (*Vicia sativa*)
sweet pea (*Lathyrus latifolius*)
tall flatsedge (*Cyperus eragrostis*)
weedy brome (*Bromus caroli-henrici*)
wild geranium (*Geranium dissectum*)
wild lettuce (*Lactuca saligna*)
wild oatgrass (*Avena barbata*)
wild radish (*Raphanus sativa*)
woolly grevillea (*Grevillea lanigera*)
yellow star thistle (*Centaurea solstitialis*)
Zorro fescue (*Festuca myuros*)

Native Plant Species:

blue-eyed grass (*Sisyrinchium bellum*)
bog rush (*Juncus patens*)
California poppy (*Eschscholzia californica*)
common madia (*Madia elegans*)
common yarrow (*Achillea millefolium*)
coyote brush (*Baccharis pilularis*)
hairy gumweed (*Grindelia hirsutula*)
ladies' tobacco (*Pseudognaphalium californicum*)
meadow barley (*Hordeum brachyantherum*)
mountain dandelion (*Agoseris heterophylla*)
narrow-leaved miner's lettuce (*Claytonia parviflora*)
poison oak (*Toxicodendron diversilobum*)
saltgrass (*Distichlis spicata*)
slender tarweed (*Madia gracilis*)
toyon (*Heteromeles arbutifolia*)

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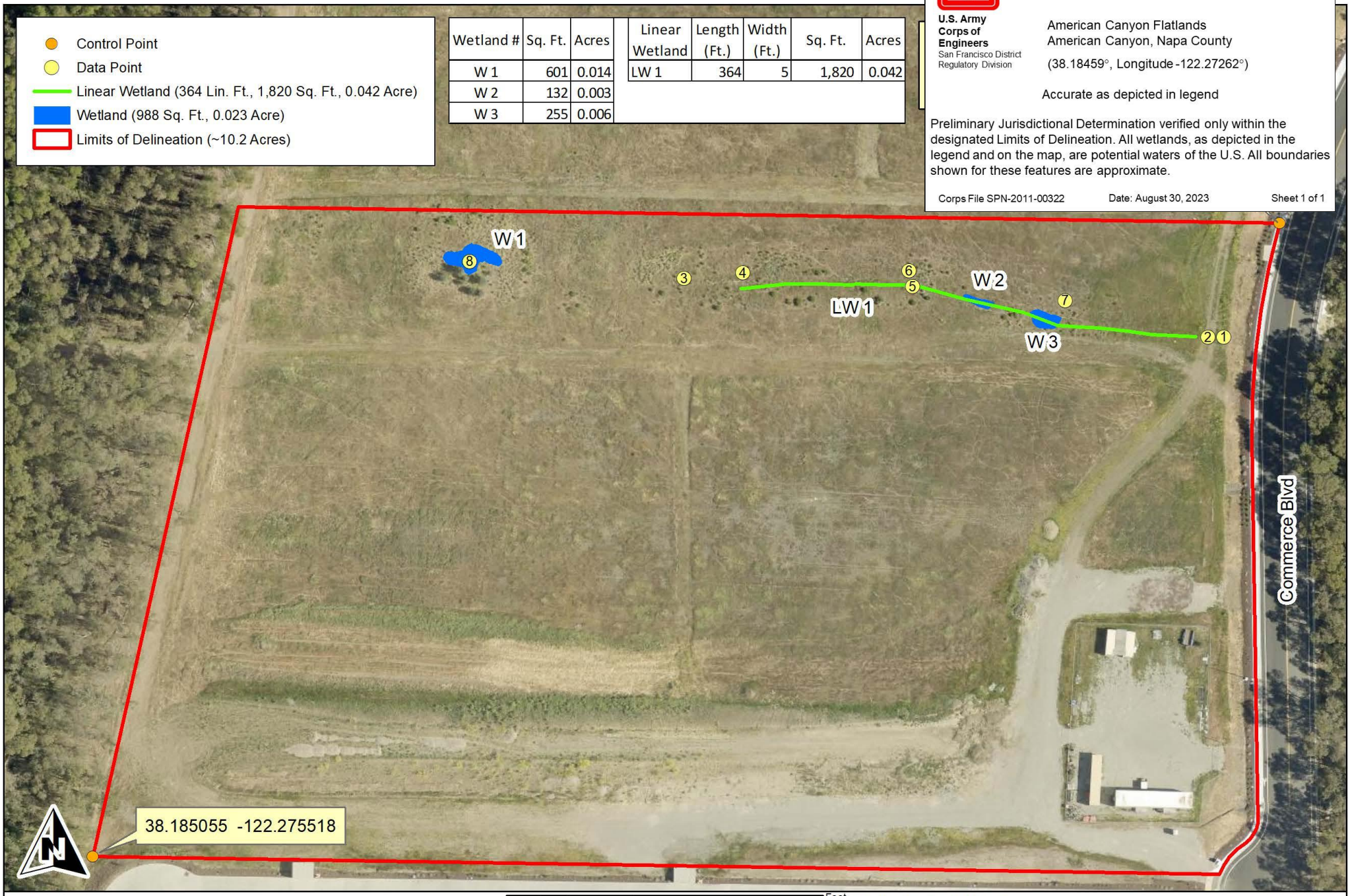

Wetland #	Sq. Ft.	Acres
W 1	601	0.014
W 2	132	0.003
W 3	255	0.006

Linear Wetland	Length (Ft.)	Width (Ft.)	Sq. Ft.	Acres
LW 1	364	5	1,820	0.042

U.S. Army Corps of Engineers
San Francisco District
Regulatory Division

Preliminary Jurisdictional Determination
pursuant to Section 404 Clean Water Act

American Canyon Flatlands
American Canyon, Napa County
(38.18459°, Longitude -122.27262°)

Accurate as depicted in legend

Preliminary Jurisdictional Determination verified only within the designated Limits of Delineation. All wetlands, as depicted in the legend and on the map, are potential waters of the U.S. All boundaries shown for these features are approximate.

Corps File SPN-2011-00322 Date: August 30, 2023 Sheet 1 of 1

Monk & Associates
Environmental Consultants
1136 Saranap Avenue, Suite Q
lnut Creek, California 94595
5) 947-4867

2064

Sheet 1. Draft Aquatic Resources Delineation Map
SDG Commerce 220 Project Site
City of American Canyon, California

Delineation Conducted on: May 2, 2023
Delineation Conducted by: Sarah Lynch and Zarina Sheikh
Aerial Photograph Source: ESRI
Map Preparation Date: May 10, 2023

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Appendix D:
Cultural Resources Supporting Information

Appendix D contains sensitive information pertaining to cultural resources and has been withheld from public distribution pursuant to Public Resources Code, Sections 5097.9 and 5097.993.

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Appendix E:
Geotechnical Report

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GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED SDG COMMERCE 220, LLC
DISTRIBUTION CENTER
1055 COMMERCE COURT
AMERICAN CANYON, CALIFORNIA

PROJECT NO. 032-20054
JULY 25, 2023

Prepared for:

MR. JOHN WOJTAS
INDUSTRIAL AND COMMERCIAL CONTRACTORS, L.P.
413 W. YOSEMITE AVENUE, SUITE 105
MADERA, CALIFORNIA 93637

Prepared by:

KRAZAN & ASSOCIATES, INC.
GEOTECHNICAL ENGINEERING DIVISION
4320 ORANGE GROVE AVENUE, SUITE E-F
SACRAMENTO, CALIFORNIA 95841
(916) 564-2200

Krazan & ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

July 25, 2023

KA No. 032-20054

Mr. John Wojtas
Industrial and Commercial Contractors, L.P.
413 W. Yosemite Avenue, Suite 105
Madera, California 93637

RE: Geotechnical Engineering Investigation
Proposed SDG Commerce 220, LLC Distribution Center
1055 Commerce Court
American Canyon, California

Dear Mr. Wojtas:

In accordance with your request, we have completed a Geotechnical Engineering Investigation for the above-referenced site. The results of our investigation are presented in the attached report.

If you have any questions or if we may be of further assistance, please do not hesitate to contact our office at or (916) 564-2200.



Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

David R. Jarosz, II
Managing Engineer
RGE No. 2698/RCE No. 60185

DRJ:ht

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January 18, 2021 KA Project No. 032-20054

GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED SDG COMMERCE 220, LLC DISTRIBUTION CENTER
1055 COMMERCE COURT
AMERICAN CANYON, CALIFORNIA

INTRODUCTION

This report presents the results of our Geotechnical Engineering Investigation for the proposed SDG Commerce 220 Distribution Center to be located at Commerce Court near Eucalyptus Drive in American Canyon, California. Discussions regarding site conditions are presented herein, together with conclusions and recommendations pertaining to site preparation, Engineered Fill, utility trench backfill, drainage and landscaping, foundations, concrete floor slabs and exterior flatwork, retaining walls, pavement design and soil cement reactivity.

A site plan showing the approximate boring locations is presented following the text of this report. A description of the field investigation, boring logs, and the boring log legend are presented in Appendix A. Appendix A contains a description of the laboratory-testing phase of this study, along with the laboratory test results. Appendices B and C contain guides to earthwork and pavement specifications. When conflicts in the text of the report occur with the general specifications in the appendices, the recommendations in the text of the report have precedence.

PURPOSE AND SCOPE

This investigation was conducted to evaluate the soil and groundwater conditions at the site, to make geotechnical engineering recommendations for use in design of specific construction elements, and to provide criteria for site preparation and Engineered Fill construction.

Our scope of services was outlined in our proposal dated October 13, 2020 (KA Proposal P721-20 and included the following:

- A site reconnaissance by a member of our engineering staff to evaluate the surface conditions at the project site.
- A field investigation consisting of drilling 24 borings to depths ranging from approximately 10 to 50 feet for evaluation of the subsurface conditions at the project site.
- Performing laboratory tests on representative soil samples obtained from the borings to evaluate the physical and index properties of the subsurface soils.

- Evaluation of the data obtained from the investigation and an engineering analysis to provide recommendations for use in the project design and preparation of construction specifications.

- Preparation of this report summarizing the results, conclusions, recommendations, and findings of our investigation.

PROPOSED CONSTRUCTION

We understand that design of the proposed development is currently underway; structural load information and other final details pertaining to the structures are unavailable. On a preliminary basis, it is understood that development will include the construction of an approximately 220,000 square foot distribution center building. It is anticipated the building will be a single-story concrete tilt-up structure utilizing concrete slab-on-grade construction. Foundation loads are anticipated to be light to moderate. On-site paved areas and landscaping are also planned for the development of the project.

In the event, these structural or grading details are inconsistent with the final design criteria, the Soils Engineer should be notified so that we may update this writing as applicable.

SITE LOCATION, SITE HISTORY AND SITE DESCRIPTION

The site is roughly rectangular in shape encompasses approximately 10.17 acres. The site is located near the south end of Commerce Court, approximately ¾ mile south of Green Island Road in American Canyon, California. The site has a street address of 1055 Commerce Court. The site is surrounded by vacant land, wetlands, groves of trees, and industrial developments.

Site history was obtained by reviewing historical aerial photographs taken in 1948, 1982, 1993, 2002, 2005, 2010, 2012 and 2018. Review of the 1948 aerial photograph indicates that the project site was occupied by a grove of trees. Commerce Boulevard Extension trended north-south along the eastern edge of the site. The surrounding land was occupied by groves of trees. A stream trending north-south was located west of the project site.

Review of the 1982 through 2010 aerial photographs indicate that the project site conditions appeared to be relatively similar to that noted in the 1948 aerial photograph.

Review of the 2012 and 2018 aerial photographs indicate that the project site and the land to the north and south had been cleared of the trees and were vacant.

Presently, the site predominately consists of vacant land. Several stockpiles of soil and rock are located within the site. The southeast corner of the site is utilized as a storage area with chain link fencing. The surface soils have a loose consistency and contain a moderate amount of grass and weeds. The site is bordered by vacant land with some wetlands to the north, Commerce Court and a grove of trees to the east, a warehouse and parking lot to the south, and a grove of trees, wetlands and river to the west. Commerce Court is a paved road and is elevated several feet above the project site. Buried utility lines may be located along Commerce Court. The site gently slopes from east to west.

GEOLOGIC SETTING

The subject site is located in the north-eastern portion of the San Francisco Bay Region, within the Coast Ranges Geomorphic Province of California. The Coast Range Geomorphic Province borders the Coast of California and generally consists, more or less, of a discontinuous series of northwesterly/southeasterly trending mountain ranges, ridges, and intervening valleys characterized by intense, complex folding and faulting. The ridges are most often comprised of granitic, metavolcanic, and metasedimentary rocks. Numerous northwest to southeast trending faults parallel the trend of the Coast Ranges.

The project site is located in a seismically active region, which is situated on a tectonic plate boundary marked by the San Andreas Fault System and several northwest trending active and potentially active faults. The site is in close proximity to several major faults, including the West Napa, Green Valley, Hayward-Rodgers Creek, Mount Diablo Thrust, Calaveras, and San Andreas faults located approximately 0.8 miles west, 8.0 miles east, 11 miles west, 24 miles south, 29 miles southeast, and 30 miles west of the site, respectively. Although the site is in close proximity to several faults, the site is not within a State of California Earthquake Fault Zone or Special Study Zone for faulting. The site is located approximately 3,200 feet west of the West Napa Fault and 600 feet from the California Earthquake fault zone for the West Napa Fault. The site is not located on a State of California Seismic Hazard Zone Map.

The probability of one or more earthquakes of magnitude 6.7 (Richter scale) or higher occurring in the San Francisco Bay Area within a 30-year period of time is evaluated by the U.S. Geological Survey (USGS) Working Group on California Earthquake Probabilities on a periodic basis. The result of the 2008 evaluation indicated a 63 percent likelihood that such an earthquake event will occur in the Bay Area between 2007 and 2036 (USGS 2008). The faults with the greater probability of a magnitude 6.7 or higher earthquake are the Hayward fault at 31 percent and the San Andreas fault at 21 percent.

Based on published geologic maps of the area the near-surface deposits in the vicinity of the subject site are indicated to be comprised of late Pleistocene to Holocene fan deposits of sand, gravel, silt and clay that are moderately to poorly sorted and moderately to poorly bedded. The site is located at an elevation of approximately 20 feet above sea level. Groundwater in the vicinity of the site is typically encountered at depths of approximately 11 to 25 feet.

FIELD AND LABORATORY INVESTIGATIONS

Subsurface soil conditions were explored by drilling 24 borings to depths ranging from approximately 10 to 50 feet below existing site grade, using a truck-mounted drill rig. In addition, 3 bulk subgrade samples were obtained from the site for laboratory R-value testing. The approximate boring and bulk sample locations are shown on the site plan. During drilling operations, penetration tests were performed at regular intervals to evaluate the soil consistency and to obtain information regarding the engineering properties of the subsoils. Soil samples were retained for laboratory testing. The soils encountered were continuously examined and visually classified in accordance with the Unified Soil Classification System. A more detailed description of the field investigation is presented in Appendix A.

Laboratory tests were performed on selected soil samples to evaluate their physical characteristics and engineering properties. The laboratory-testing program was formulated with emphasis on the evaluation of natural moisture, density, gradation, shear strength, consolidation potential, expansion potential, plasticity, R-value and moisture density relationships of the materials encountered. In addition, chemical tests were performed to evaluate the soil-cement reactivity. Details of the laboratory test program and results of the laboratory test are summarized in Appendix A. This information, along with the field observations, was used to prepare the final boring logs in Appendix A.

SOIL PROFILE AND SUBSURFACE CONDITIONS

Based on our findings, the subsurface conditions encountered appear typical of those found in the geologic region of the site. In general, the surface soils consisted of approximately 6 to 12 inches of soft silty clay or sandy clay, or very loose silty sand. These soils are disturbed, have low strength characteristics, and are highly compressible when saturated. Within portions of the site, approximately 6 to 12 inches of fill material was encountered. The fill material predominately consisted of sandy silt, silty sand, gravelly clayey sand, or gravelly sand. The thickness and extent of fill material was determined based on limited test borings and visual observation. Thicker fill may be present at the site. Limited testing was performed on the fill soils during the time of our field and laboratory investigations. The limited testing indicates that the fill soils ranged from loosely placed to compacted.

Beneath the loose surface soils and fill material, approximately 17½ feet of stiff to hard sandy clay, silty clay, and medium dense/very stiff clayey sand/sandy clay were encountered. Field and laboratory tests suggest that these soils are moderately strong and slightly to moderately compressible. The clayey soils had a moderate to high potential for expansion. Penetration resistance ranged from 12 to 63 blows per foot. Dry densities ranged from 89 to 122 pcf. Representative soil samples consolidated approximately 0 to 6 percent under a 2 ksf load when saturated. Representative soil samples had angles of internal friction between 12 and 18 degrees. A representative sample of the clayey soil had an expansion index of 89.

Below 18½ feet, layers of predominately stiff to very stiff sandy clay and silty clay, and medium dense silty sand/sandy silt were encountered. These soils contained varying amounts of gravel. Field and laboratory tests suggest that these soils are moderately strong and slightly compressible. Penetration resistance ranged from 13 to 29 blows per foot. Dry densities ranged from 90 to 111 pcf. These soils had similar strength characteristics than the upper soils and extended to the termination depth of our borings.

For additional information about the soils encountered, please refer to the logs of borings in Appendix A.

GROUNDWATER

Test boring locations were checked for the presence of groundwater during and immediately following the drilling operations. The historic high groundwater depth for the region was determined to be 10 feet below existing site grade, based on the State of California Department of Water Resources data from 2

wells within 1.5 miles of the site. Free groundwater was encountered between depths of 18½ and 22½ feet during our subsurface investigation.

It should be recognized that water table elevations may fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use, and climatic conditions, as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.

SOIL LIQUEFACTION

Soil liquefaction is a state of soil particle suspension, caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs in soils, such as sands, in which the strength is purely frictional. However, liquefaction has occurred in soils other than clean sands. Liquefaction usually occurs under vibratory conditions, such as those induced by seismic events.

To evaluate the liquefaction potential of the site, the following items were evaluated:

1) Soil type

2) Groundwater depth

3) Relative density

4) Initial confining pressure

5) Intensity and duration of groundshaking

The predominant soils within the project site consist of alternating layers of silty clays, sandy clays, clayey sands, and silty sand/sandy silt. Groundwater was encountered at depths as shallow as 18½ feet below existing site grade during our exploratory drilling. Information obtained from the Department of Water Resources indicated that water wells had historic groundwater elevations as shallow as 10 feet below existing site grade within the project site vicinity.

The potential for soil liquefaction during a seismic event was evaluated using the LIQUEFYPRO computer program (version 5.9d) developed by CivilTech Software. For the analysis, a maximum earthquake magnitude of 6.7 was used. A peak horizontal ground surface acceleration of 0.986g was considered conservative and appropriate for the liquefaction analysis. An estimated high groundwater depth of 10 feet was used for our analysis. The computer analysis indicates that soils above a depth of 10 feet are non-liquefiable due to the absence of groundwater. The soils below a depth of 10 feet have a slight to very low potential for liquefaction under seismic shaking due to predominately medium dense/stiff to very stiff sandy and clayey soils. The analysis also indicates that the total and differential seismic induced settlement is not anticipated to exceed 1 and ⅔ inch, respectively. Accordingly, measures to mitigate liquefaction potential are not necessary.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of our field and laboratory investigations, along with previous geotechnical experience in the project area, the following is a summary of our evaluations, conclusions, and recommendations.

Administrative Summary

In brief, the subject site and soil conditions, with the exception of the loose surface soils, fill material, expansive nature of the clayey soils, moderately compressible upper native soils, and previous and existing developments, appear to be conducive to the development of the project. The surface soils and fill material have a loose consistency. These soils are disturbed, have low strength characteristics, and are highly compressible when saturated. Accordingly, it is recommended that the surface soils be recompacted. This compaction effort should stabilize the surface soils and locate any unsuitable or pliant areas not found during our field investigation.

The site was previously utilized as agricultural land consisting of orchards. In addition, a fenced storage area is located in the southeast corner and several stockpiles of soil and rock are located within the site. Associated with these developments may be buried structures, such as utility lines and irrigation lines that extend into portions of the project site. Demolition activities should include proper removal of any buried structures. Any surface or buried structures, including utilities or loosely backfilled excavations, encountered during construction should be properly removed and the resulting excavations backfilled with Engineered Fill. It is suspected that demolition activities of the existing structures will disturb the upper soils. After demolition activities it is recommended that these disturbed soils be removed and/or recompacted. This compaction effort should stabilize the upper soils and locate any unsuitable or pliant areas not found during our field investigation.

The upper native soils at the site are moderately compressible and subject to excessive total and differential settlement. Therefore, it is recommended that following stripping and fill removal operations, the upper 24 inches of soil within the proposed building areas be excavated worked until uniform and free from large clods, moisture-conditioned to a minimum of 2 percent above optimum moisture content and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. In addition, in order to reduce the potential for differential settlement, it is recommended that the proposed structure foundations be supported by a minimum of 24 inches of Engineered Fill. Over-excavation should extend to a minimum of 5 feet beyond structural elements. The on-site, native soils and fill material will be suitable for reuse as Engineered Fill, provided they are cleansed of excessive organics, debris, and fragments larger than 4 inches in maximum dimension. Prior to backfilling, the bottom of the excavation should be proof rolled and observed by Krazan & Associates, Inc. to verify stability. This compaction effort should stabilize the surface soils and locate any unsuitable or pliant areas not found during our field investigation. Fill material should be compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

The upper soils within the site are predominately silty clays, sandy clays, clayey sands, gravelly clayey sands, sandy silts, silty sands, and gravelly sands. The clayey soils appeared to have a moderate to high swell potential. The estimated swell pressures of the clayey soils may cause minor movement effecting

slabs and possible stucco or similar brittle exterior finishes. To reduce potential soil movement, it is recommended the upper 30 inches of soil within slab-on-grade and adjacent exterior flatwork areas consist of 24 inches of non-expansive Engineered Fill overlain by 6 inches of Class 2 aggregate base. During construction, it is recommended that additional tests should be performed on the on-site soils to verify their physical and index properties.

As an alternative to the use of non-expansive soils, the upper 30 inches of soil supporting the slab areas can consist of lime-treated clayey soils. The lime-treated soils should be recompacted to a minimum of 90 percent of maximum density. Preliminary application rate of lime should be 5 percent by dry weight. The lime material should be calcium oxide, commonly known as quick-lime. The clayey soils should be above optimum moisture during the mixing operations.

Sidewalks not located adjacent to the buildings may be supported on 4 inches of Class 2 aggregate base compacted to a minimum of 95 percent of maximum density. Prior to placing the aggregate base, the subgrade soils should be excavated/scarified to a minimum depth of 12 inches, moisture-conditioned to a minimum of 3 percent above optimum moisture content and compacted to between 90 and 95 percent of maximum density based on ASTM Test Method D1557. As an alternative, the aggregate base can be placed over 12 inches of lime-treated subgrade. The Owner should be aware some movement of the sidewalks may occur which could result in cracking and vertical offsets.

Buried utility lines are located along Commerce Court on the east side of the site and may extend into the site. Demolition activities should include proper removal of any buried structures. Any buried structures encountered during construction should be properly removed and the resulting excavations cleaned to firm native ground and backfilled with Engineered Fill. Disturbed areas caused by demolition activities should be removed and/or recompacted.

The site was previously occupied by a eucalyptus grove. Tree removal operations should include roots greater than 1 inch in diameter. The resulting excavations should be cleaned to firm native ground and backfilled with Engineered Fill compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

Sandy soil conditions were encountered at the site. These cohesionless soils have a tendency to cave in trench wall excavations. Shoring or sloping back trench sidewalls may be required within these sandy soils.

A bioretention/detention pond is included in the project plans. The biorention/detention pond should be located at least 50 feet from the structure. Alternatively, the pond can be lined.

After completion of the recommended site preparation, the site should be suitable for shallow footing support. The proposed structure footings may be designed utilizing an allowable bearing pressure of 3,000 psf for dead-plus-live loads. Footings should have a minimum embedment of 18 inches.

Groundwater Influence on Structures/Construction

During our field investigations, groundwater was encountered at depths of 18½ and 22½ feet below site grade. Therefore, dewatering and/or waterproofing may be required should structures or excavations extend below the groundwater table. If groundwater is encountered, our firm should be consulted prior to dewatering the site. Installation of a standpipe piezometer is suggested prior to construction should groundwater levels be a concern.

In addition to the groundwater level, if earthwork is performed during or soon after periods of precipitation, the subgrade soils may become saturated, "pump," or not respond to densification techniques. Typical remedial measures include: discing and aerating the soil during dry weather; mixing the soil with dryer materials; removing and replacing the soil with an approved fill material; or mixing the soil with an approved lime or cement product. Our firm should be consulted prior to implementing remedial measures to observe the unstable subgrade conditions and provide appropriate recommendations.

Site Preparation

General site clearing should include removal of vegetation; concrete and metal debris; existing utilities; structures including foundations; basement walls and floors; existing stockpiled soil; trees and associated root systems; rubble; rubbish; and any loose and/or saturated materials. Site stripping should extend to a minimum depth of 2 to 4 inches, or until all organics in excess of 3 percent by volume are removed. Deeper stripping may be required in localized areas. These materials will not be suitable for use as Engineered Fill. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas.

The site was previously utilized as agricultural land consisting of orchards. In addition, a fenced storage area is located in the southeast corner and several stockpiles of soil and rock are located within the site. Associated with these developments are buried structures such, as utility lines that are located along the edges of the site and within the project site vicinity. Demolition activities should include proper removal of any buried structures. Any buried structures encountered during construction should be properly removed and/or relocated and the resulting excavations backfilled. Excavations, depressions, or soft and pliant areas extending below planned finished subgrade levels should be cleaned to firm, undisturbed soil and backfilled with Engineered Fill. In general, any septic tanks, debris pits, cesspools, or similar structures should be entirely removed. Concrete footings should be removed to an equivalent depth of at least 3 feet below proposed footing elevations or as recommended by the Soils Engineer. Any other buried structures should be removed in accordance with the recommendations of the Soils Engineer. The resulting excavations should be backfilled with Engineered Fill.

The site was previously occupied by a eucalyptus grove. Tree root removal operations should include roots greater than 1 inch in diameter. The resulting excavations should be backfilled with Engineered Fill compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

It is recommended that following stripping, tree removal operations and fill removal operations, the upper 24 inches of native soils within the proposed building areas be excavated, worked until uniform and free from large clods, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. In addition, it is recommended that the proposed structure foundations be supported by a minimum of 24 inches of Engineered Fill. Over-excavation should extend to a minimum of 5 feet beyond structural elements. The on-site, native soil and fill material will be suitable for reuse as Engineered Fill, provided it is cleansed of excessive organics, debris, and fragments larger than 4 inches in maximum dimension. Prior to backfilling, the bottom of the excavation should be proof rolled and observed by Krazan & Associates, Inc. to verify stability. This compaction effort should stabilize the surface soils and locate any unsuitable or pliant areas not found during our field investigation. Fill material should be compacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

Following stripping and fill removal operations, the exposed subgrade in exterior flatwork and pavement areas should be excavated/scarified to a minimum depth of 12 inches, worked until uniform and free from large clods, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. Limits of recompaction should extend 3 feet beyond structural elements. This compaction effort should stabilize the surface soils and located any unsuitable or pliant areas not found during our field investigation.

It is recommended that the upper 30 inches of soil within proposed slab-on-grade and adjacent exterior flatwork areas consist of non-expansive or lime-treated Engineered Fill. The intent is to support slab-on-grade and exterior flatwork areas with 24 inches of non-expansive or lime-treated fill, overlain by 6 inches of compacted Class 2 aggregate base. Alternatively, the upper 30 inches may consist of lime-treated Engineered Fill. The fill placement serves two functions: 1) it provides a uniform amount of soil, which will more evenly distribute the soil pressures and 2) it reduces moisture content fluctuation in the clayey material beneath the building area. The non-expansive fill material should be a well-graded silty sand or sandy silt soil. A clean sand or very sandy soil is not acceptable for this purpose. A sandy soil will allow the surface water to drain into the expansive clayey soil below, which may result in soil swelling. Imported Fill should be approved by the Soils Engineer prior to placement. The fill should be placed as specified as Engineered Fill. In addition, it is recommended conventional foundations and slabs be nominally reinforced to reduce cracking and vertical offsets.

Sidewalks not located adjacent to the buildings may be supported on 4 inches of Class 2 aggregate base compacted to a minimum of 95 percent of maximum density. Prior to placing the aggregate base, the subgrade soils should be excavated/scarified to a minimum depth of 12 inches, moisture-conditioned to a minimum of 3 percent above optimum moisture content and compacted to between 90 and 95 percent of maximum density based on ASTM Test Method D1557. As an alternative, the aggregate base can be placed over 12 inches of lime-treated subgrade. The Owner should be aware some movement of the sidewalks may occur which could result in cracking and vertical offsets.

The upper soils, during wet winter months, become very moist due to the absorptive characteristics of the soil. Earthwork operations performed during winter months may encounter very moist unstable soils, which may require removal to grade a stable building foundation. Project site winterization consisting of placement of aggregate base and protecting exposed soils during the construction phase should be performed.

A bioretention/detention pond is included in the project plans. The biorention/detention pond should be located at least 50 feet from the structure. Alternatively, the pond can be lined.

A representative of our firm should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction is dependent upon compaction of the material and the stability of the material. The Soils Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section and the Engineered Fill section.

Engineered Fill

The organic-free, on-site, upper native soils and fill material are predominately silty clays, sandy clays, clayey sands, gravelly clayey sands, sandy silts, silty sands, and gravelly sands. The clayey soils will not be suitable for re-use as non-expansive Engineered Fill. These clayey soils will be suitable for reuse for fill placement within the upper 30 inches of slab-on-grade and adjacent exterior flatwork areas, provided they are lime-treated. The preliminary application rate of lime should be 5 percent by dry weight. The lime material should be calcium oxide, commonly known as quick-lime. The clayey soils should be at or near optimum moisture-condition during mixing operations. Additional testing is recommended to determine the appropriate application rate of lime prior to placement. These clayey soils will be suitable for reuse as General Engineered Fill, provided they are cleansed of excessive organics, debris, and moisture-conditioned to at least 2 percent above optimum moisture. It is recommended that additional testing be performed on the on-site soils and fill material to evaluate the physical and index properties prior to reuse as Engineered Fill.

The preferred materials specified for Engineered Fill are suitable for most applications with the exception of exposure to erosion. Project site winterization and protection of exposed soils during the construction phase should be the sole responsibility of the Contractor, since he has complete control of the project site at that time.

Imported Fill material should be predominately non-expansive granular material with a plasticity index less than 10 and a UBC Expansion Index less than 15. Imported Fill should be free from rocks and lumps greater than 4 inches in diameter. All Imported Fill material should be submitted for approval to the Soils Engineer at least 48 hours prior to delivery to the site.

Fill soils should be placed in lifts approximately 6 inches thick, moisture-conditioned to a minimum of 2 percent above optimum moisture content, and compacted to achieve at least 90 percent of maximum density based on ASTM Test Method D1557. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.

Drainage and Landscaping

The ground surface should slope away from building pad and pavement areas toward appropriate drop inlets or other surface drainage devices. In accordance with Section 1804 of the 2019 California Building Code, it is recommended that the ground surface adjacent to foundations be sloped a minimum of 5 percent for a minimum distance of 10 feet away from structures, or to an approved alternative means of drainage conveyance. Swales used for conveyance of drainage and located within 10 feet of foundations should be sloped a minimum of 2 percent. Impervious surfaces, such as pavement and adjacent exterior concrete flatwork, within 10 feet of building foundations should be sloped a minimum of 1 percent away from the structure. Drainage gradients should be maintained to carry all surface water to collection facilities and off-site. These grades should be maintained for the life of the project.

Slots or weep holes should be placed in drop inlets or other surface drainage devices in pavement areas to allow free drainage of adjoining base course materials. Cutoff walls should be installed at pavement edges adjacent to vehicular traffic areas these walls should extend to a minimum depth of 12 inches below pavement subgrades to limit the amount of seepage water that can infiltrate the pavements. Where cutoff walls are undesirable subgrade drains can be constructed to transport excess water away from planters to drainage interceptors. If cutoff walls can be successfully used at the site, construction of subgrade drains is considered unnecessary.

Utility Trench Backfill

Utility trenches should be excavated according to accepted engineering practices following OSHA (Occupational Safety and Health Administration) standards by a Contractor experienced in such work. The responsibility for the safety of open trenches should be borne by the Contractor. Traffic and vibration adjacent to trench walls should be reduced; cyclic wetting and drying of excavation side slopes should be avoided. Depending upon the location and depth of some utility trenches, groundwater flow into open excavations could be experienced, especially during or shortly following periods of precipitation.

Sandy soil conditions were encountered at the site. These cohesionless soils have a tendency to cave in trench wall excavations. Shoring or sloping back trench sidewalls may be required within these sandy soils.

Utility trench backfill placed in or adjacent to buildings and exterior slabs should be compacted to at least 90 percent of maximum density based on ASTM Test Method D1557. The utility trench backfill placed in pavement areas should be compacted to at least 90 percent of maximum density based on ASTM Test Method D1557. Pipe bedding should be in accordance with pipe manufacturer's recommendations.

The Contractor is responsible for removing all water-sensitive soils from the trench regardless of the backfill location and compaction requirements. The Contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

Foundations

The proposed structure may be supported on a shallow foundation system bearing on a minimum of 24 inches of Engineered Fill. Spread and continuous footings can be designed for the following maximum allowable soil bearing pressures:

Load	Allowable Loading
Dead Load Only	2,250 psf
Dead-Plus-Live Load	3,000 psf
Total Load, Including Wind or Seismic Loads	4,000 psf

The footings should have a minimum depth of 18 inches below pad subgrade (soil grade) or adjacent exterior grade, whichever is lower. Footings should have a minimum width of 12 inches, regardless of load. Ultimate design of foundations and reinforcement should be performed by the project Structural Engineer. A modulus of subgrade reaction of 35 pci can be used for the on-site soils.

The total soil movement is not expected to exceed 1 inch. Differential movement measured across a horizontal distance of 40 feet should be less than 1 inch. Most of the settlement is expected to occur during construction as the loads are applied. However, additional post-construction settlement may occur if the foundation soils are flooded or saturated.

The footing excavations should not be allowed to dry out any time prior to pouring concrete. It is recommended that footings be reinforced by at least one No. 4 reinforcing bar in both top and bottom.

Resistance to lateral footing displacement can be computed using an allowable friction factor of 0.3 acting between the base of foundations and the supporting subgrade. Lateral resistance for footings can alternatively be developed using an allowable equivalent fluid passive pressure of 250 pounds per cubic foot acting against the appropriate vertical footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance. A ⅓ increase in the above value may be used for short duration, wind, or seismic loads.

Floor Slabs and Exterior Flatwork

In areas that will utilize moisture-sensitive floor coverings, concrete slab-on-grade floors should be underlain by a water vapor retarder. The water vapor retarder should be installed in accordance with accepted engineering practice. The water vapor retarder should consist of a vapor retarder sheeting underlain by a minimum of 3 inches of compacted, clean, gravel of ¾-inch maximum size. To aid in concrete curing an optional 2 to 4 inches of granular fill may be placed on top of the vapor retarder. The granular fill should consist of damp clean sand with at least 10 to 30 percent of the sand passing the 100

sieve. The sand should be free of clay, silt, or organic material. Rock dust which is manufactured sand from rock crushing operations is typically suitable for the granular fill. This granular fill material should be compacted. Floor slabs subject to forklift traffic should be underlain by a minimum of 2 inches of Class 2 aggregate base compacted to a minimum of 95 percent of maximum density based on ASTM Test Method D1557. Slabs can be designed utilizing a modulus of subgrade reaction of 100 pci.

The floor slab should be a minimum of 6 inches thick and reinforced at a minimum with No. 4 reinforcement bars at 24 inches on-center each way within the middle one-third. Thicker floor slabs with increased concrete strength and reinforcement should be designed wherever large vehicular loads, heavy concentrated loads, heavy equipment, or machinery is anticipated.

The exterior floors should be poured separately in order to act independently of the walls and foundation system. All fills required to bring the building pads to grade should be Engineered Fills.

Moisture within the structure may be derived from water vapors, which were transformed from the moisture within the soils. This moisture vapor can travel through the vapor membrane and penetrate the slab-on-grade. This moisture vapor penetration can affect floor coverings and produce mold and mildew in the structure. To reduce moisture vapor intrusion, it is recommended that a vapor retarder be installed. It is recommended that the utility trenches within the structure be compacted, as specified in our report, to reduce the transmission of moisture through the utility trench backfill. Special attention to the immediate drainage and irrigation around the building is recommended. Positive drainage should be established away from the structure and should be maintained throughout the life of the structure. Ponding of water should not be allowed adjacent to the structure. Over-irrigation within landscaped areas adjacent to the structure should not be performed. In addition, ventilation of the structure (i.e. ventilation fans) is recommended to reduce the accumulation of interior moisture.

Lateral Earth Pressures and Retaining Walls

Walls retaining horizontal backfill and capable of deflecting a minimum of 0.1 percent of its height at the top may be designed using an equivalent fluid active pressure of 50 pounds per square foot per foot of depth. Walls that are incapable of this deflection or walls that are fully constrained against deflection may be designed for an equivalent fluid at-rest pressure of 70 pounds per square foot per foot per depth. Expansive soils should not be used for backfill against walls. The wedge of non-expansive backfill material should extend from the bottom of each retaining wall outward and upward at a slope of 2:1 (horizontal to vertical) or flatter. The stated lateral earth pressures do not include the effects of hydrostatic water pressures generated by infiltrating surface water that may accumulate behind the retaining walls; or loads imposed by construction equipment, foundations, or roadways.

Retaining and/or below grade walls should be drained with either perforated pipe encased in free-draining gravel or a prefabricated drainage system. The gravel zone should have a minimum width of 12 inches wide and should extend upward to within 12 inches of the top of the wall. The upper 12 inches of backfill should consist of native soils, concrete, asphaltic concrete or other suitable backfill to minimize surface drainage into the wall drain system. The aggregate should conform to Class 2 permeable materials graded in accordance with the CalTrans Standard Specifications (2018). Prefabricated

drainage systems, such as Miradrain®, Enkadrain®, or an equivalent substitute, are acceptable alternatives in lieu of gravel provided they are installed in accordance with the manufacturer's recommendations. If a prefabricated drainage system is proposed, our firm should review the system for final acceptance prior to installation.

Drainage pipes should be placed with perforations down and should discharge in a non-erosive manner away from foundations and other improvements. The pipes should be placed no higher than 6 inches above the heel of the wall in the center line of the drainage blanket and should have a minimum diameter of 4 inches. Collector pipes may be either slotted or perforated. Slots should be no wider than ⅛ inch, while perforations should be no more than ¼ inch in diameter. If retaining walls are less than 6 feet in height, the perforated pipe may be omitted in lieu of weep holes on 4 feet maximum spacing. The weep holes should consist of 4-inch diameter holes (concrete walls) or unmortared head joints (masonry walls) and not be higher than 18 inches above the lowest adjacent grade. Two 8-inch square overlapping patches of geotextile fabric (conforming to the CalTrans Standard Specifications for "edge drains") should be affixed to the rear wall opening of each weep hole to retard soil piping.

During grading and backfilling operations adjacent to any walls, heavy equipment should not be allowed to operate within a lateral distance of 5 feet from the wall or within a lateral distance equal to the wall height, whichever is greater, to avoid developing excessive lateral pressures. Within this zone, only hand operated equipment ("whackers," vibratory plates, or pneumatic compactors) should be used to compact the backfill soils.

R-Value Test Results and Pavement Design

Three subgrade soil samples were obtained from the project site for R-Value testing at the locations shown on the attached site plan. The samples were tested in accordance with the State of California Materials Manual Test Designation 301. The results of the tests are as follows:

Sample	Depth	Description	R-Value at Equilibrium
1	12-24"	Silty Clay (CL)	Less than 5
2	12-24"	Silty Clay (CL)	Less than 5
3	12-24"	Silty Clay (CL)	Less than 5

The test results are low and indicate poor subgrade support characteristics under dynamic traffic loads. The following table shows the recommended pavement sections for various traffic indices.

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Class III Aggregate Subbase	Compacted Subgrade**
4.0	2.0"	8.5"	--	12.0"
4.0	2.0"	4.5"	4.5"	12.0"
4.5	2.5"	9.0"	--	12.0"
4.5	2.5"	4.0"	5.5"	12.0"

5.0	2.5"	11.0"	--	12.0"
5.0	2.5"	5.0"	6.5"	12.0"
5.5	3.0"	11.5"	--	12.0"
5.5	3.0"	5.0"	7.0"	12.0"
6.0	3.0"	13.5"	--	12.0"
6.0	3.0"	6.5"	8.0"	12.0"
6.5	3.5"	14.0"	--	12.0"
6.5	3.5"	6.0"	9.0"	12.0"
7.0	4.0"	15.5"	--	12.0"
7.0	4.0"	6.5"	10.0"	12.0"
7.5	4.0"	17.0"	--	12.0"
7.5	4.0"	7.5"	10.5"	12.0"

**** 95% compaction based on ASTM Test Method D1557 or CAL 216***
***** 90% compaction based on ASTM Test Method D1557 or CAL 216***

The following table shows the recommended pavement sections for various traffic indices based on the upper 12 inches of subgrade soil being lime-treated with 5 percent Calcium Quicklime.

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Lime-Treated Compacted Subgrade**
4.0	2.0"	4.0"	12.0"
4.5	2.5"	4.0"	12.0"
5.0	2.5"	4.0"	12.0"
5.5	3.0"	4.0"	12.0"
6.0	3.0"	5.0"	12.0"
6.5	3.5"	5.0"	12.0"
7.0	4.0"	6.0"	12.0"
7.5	4.0"	6.0"	12.0"

**** 95% compaction based on ASTM Test Method D1557 or CAL 216***
***** 90% compaction based on ASTM Test Method D1557 or CAL 216***

If traffic indices are not available, an estimated (typical value) index of 4.5 may be used for light automobile traffic, and an index of 7.0 may be used for light truck traffic.

The following recommendations are for light-duty and heavy-duty Portland Cement Concrete Pavement Sections based on the design procedures developed by the Portland Cement Association. The PCC Pavement should be reinforced with a minimum of No. 4 bars placed at a minimum of 24 inches on center in each direction.

PORTLAND CEMENT PAVEMENT
LIGHT DUTY

Traffic Index	Portland Cement Concrete***	Class II Aggregate Base*	Compacted Subgrade**
4.5	6.0"	5.0"	12.0"
4.5	6.0"	2.0"	12.0"****

HEAVY DUTY

Traffic Index	Portland Cement Concrete***	Class II Aggregate Base*	Compacted Subgrade**
7.0	7.0"	6.0"	12.0"
7.0	6.5"	1.5"	12.0"****

**** 95% compaction based on ASTM Test Method D1557 or CAL 216***
***** 90% compaction based on ASTM Test Method D1557 or CAL 216***
******Minimum compressive strength of 4000 psi***
*******Lime-Treated subgrade compacted to a minimum of 90% of maximum density based on ASTM Test Method D1557***

It is recommended that any uncertified fill material encountered within pavement areas be removed and/or recompacted. The fill material should be moisture-conditioned to near optimum moisture and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557. As an alternative, the Owner may elect not to recompact the existing fill within paved areas. However, the Owner should be aware that the paved areas may settle which may require annual maintenance. At a minimum, it is recommended that the upper 12 inches of subgrade soil be moisture-conditioned as necessary and recompacted to a minimum of 90 percent of maximum density based on ASTM Test Method D1557.

Seismic Parameters – 2019 California Building Code

The Site Class per Section 1613 of the 2019 California Building Code (2019 CBC) and ASCE 7-16, Chapter 20 is based upon the site soil conditions. It is our opinion that a Site Class D is most consistent with the subject site soil conditions. For seismic design of the structures based on the seismic provisions of the 2019 CBC, we recommend the following parameters:

Seismic Item	Value	CBC Reference
Site Class	D	Section 1613.2.2
Site Coefficient F_a	1.000	Table 1613.2.3 (1)
S_s	2.162	Section 1613.2.1
S_{MS}	2.162	Section 1613.2.3
S_{DS}	1.442	Section 1613.2.4
Site Coefficient F_v	1.700	Table 1613.2.3 (2)
S_1	0.782	Section 1613.2.1
S_{M1}	1.329	Section 1613.2.3
S_{D1}	0.886	Section 1613.2.4
T_S	0.615	Section 1613.2

* Based on Equivalent Lateral Force (ELF) Design Procedure being used.

Soil Cement Reactivity

Excessive sulfate in either the soil or native water may result in an adverse reaction between the cement in concrete (or stucco) and the soil. HUD/FHA and CBC have developed criteria for evaluation of sulfate levels and how they relate to cement reactivity with soil and/or water.

Soil samples were obtained from the site and tested in accordance with State of California Materials Manual Test Designation 417. The sulfate concentrations detected from these soil samples were greater than 0.02 percent and are above the maximum allowable values established by HUD/FHA and CBC. Therefore, it is recommended that a Type II cement be used within the concrete to compensate for sulfate reactivity with the cement.

Chemical tests were performed on a near-surface soil sample. The test results indicate that the soils are moderately corrosive to buried metal objects. Therefore, buried metal should be protected using either non-corrosive backfill, protective coatings, wrappings, sacrificial anodes, or a combination of these methods in accordance with the manufacturer's recommendations.

Compacted Material Acceptance

Compaction specifications are not the only criteria for acceptance of the site grading or other such activities. However, the compaction test is the most universally recognized test method for assessing the performance of the Grading Contractor. The numerical test results from the compaction test cannot be used to predict the engineering performance of the compacted material. Therefore, the acceptance of compacted materials will also be dependent on the stability of that material. The Soils Engineer has the option of rejecting any compacted material regardless of the degree of compaction if that material is considered to be unstable or if future instability is suspected. A specific example of rejection of fill material passing the required percent compaction is a fill which has been compacted with an in-situ moisture content significantly less than optimum moisture. This type of dry fill (brittle fill) is susceptible to future settlement if it becomes saturated or flooded.

Testing and Inspection

A representative of Krazan & Associates, Inc. should be present at the site during the earthwork activities to confirm that actual subsurface conditions are consistent with the exploratory fieldwork. This activity is an integral part of our service, as acceptance of earthwork construction is dependent upon compaction testing and stability of the material. This representative can also verify that the intent of these recommendations is incorporated into the project design and construction. Krazan & Associates, Inc. will not be responsible for grades or staking, since this is the responsibility of the Prime Contractor.

LIMITATIONS

Soils Engineering is one of the newest divisions of Civil Engineering. This branch of Civil Engineering is constantly improving as new technologies and understanding of earth sciences advance. Although your site was analyzed using the most appropriate and most current techniques and methods, undoubtedly there will be substantial future improvements in this branch of engineering. In addition to

advancements in the field of Soils Engineering, physical changes in the site, either due to excavation or fill placement, new agency regulations, or possible changes in the proposed structure after the soils report is completed may require the soils report to be professionally reviewed. In light of this, the Owner should be aware that there is a practical limit to the usefulness of this report without critical review. Although the time limit for this review is strictly arbitrary, it is suggested that 2 years be considered a reasonable time for the usefulness of this report.

Foundation and earthwork construction is characterized by the presence of a calculated risk that soil and groundwater conditions have been fully revealed by the original foundation investigation. This risk is derived from the practical necessity of basing interpretations and design conclusions on limited sampling of the earth. The recommendations made in this report are based on the assumption that soil conditions do not vary significantly from those disclosed during our field investigation. If any variations or undesirable conditions are encountered during construction, the Soils Engineer should be notified so that supplemental recommendations may be made.

The conclusions of this report are based on the information provided regarding the proposed construction. If the proposed construction is relocated or redesigned, the conclusions in this report may not be valid. The Soils Engineer should be notified of any changes so the recommendations may be reviewed and re-evaluated.

This report is a Geotechnical Engineering Investigation with the purpose of evaluating the soil conditions in terms of foundation design. The scope of our services did not include any Environmental Site Assessment for the presence or absence of hazardous and/or toxic materials in the soil, groundwater, or atmosphere; or the presence of wetlands. Any statements, or absence of statements, in this report or on any boring log regarding odors, unusual or suspicious items, or conditions observed, are strictly for descriptive purposes and are not intended to convey engineering judgment regarding potential hazardous and/or toxic assessment.

The geotechnical engineering information presented herein is based upon professional interpretation utilizing standard engineering practices and a degree of conservatism deemed proper for this project. It is not warranted that such information and interpretation cannot be superseded by future geotechnical engineering developments. We emphasize that this report is valid for the project outlined above and should not be used for any other sites.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (916) 564-2200.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

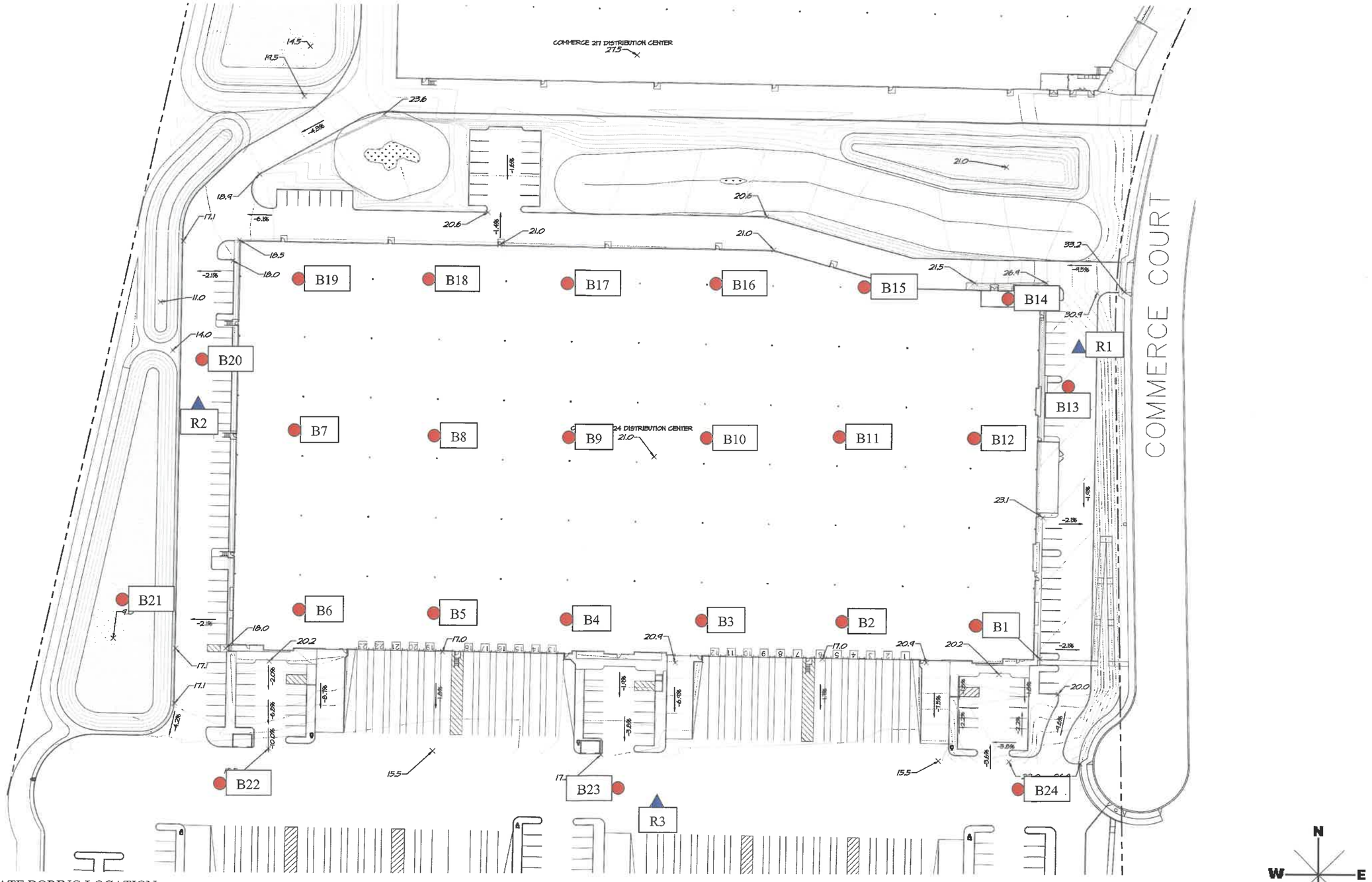
REGISTERED PROFESSIONAL ENGINEER
MADISON K. WEBER
81935
CIVIL
STATE OF CALIFORNIA

Madison K. Weber
Project Engineer
RCE No. 81935

REGISTERED PROFESSIONAL ENGINEER
DAVID R. JAROSZ II
2698
GEOTECHNICAL
STATE OF CALIFORNIA

David R. Jarosz, II
Managing Engineer
RGE No. 2698/RCE No. 60185

MKW/DRJ:ht



SITE MAP	**Scale:** NTS	**Date:** January 2021	Krazan GEOTECHNICAL ENGINEERING
Commerce 220 Distribution Center **1055 Commerce Court** **American Canyon, California**	**Drawn by:** HT	**Approved by:** DJ	
	Project No. 032-20054	**Figure No.** 1	

APPENDIX A

FIELD AND LABORATORY INVESTIGATIONS

Field Investigation

The field investigation consisted of a surface reconnaissance and a subsurface exploratory program. Twenty-four 4½-inch to 6½-inch exploratory borings were advanced. The boring locations are shown on the site plan.

The soils encountered were logged in the field during the exploration and, with supplementary laboratory test data, are described in accordance with the Unified Soil Classification System.

Modified standard penetration tests and standard penetration tests were performed at selected depths. These tests represent the resistance to driving a 2½-inch and 1½-inch diameter split barrel sampler, respectively. The driving energy was provided by a hammer weighing 140 pounds falling 30 inches. Relatively undisturbed soil samples were obtained while performing this test. Bag samples of the disturbed soil were obtained from the auger cuttings. The modified standard penetration tests are identified in the sample type on the boring logs with a full shaded in block. The standard penetration tests are identified in the sample type on the boring logs with half of the block shaded. All samples were returned to our Clovis laboratory for evaluation.

Laboratory Investigation

The laboratory investigation was programmed to determine the physical and mechanical properties of the foundation soil underlying the site. Test results were used as criteria for determining the engineering suitability of the surface and subsurface materials encountered.

In-situ moisture content, dry density, consolidation, direct shear, and sieve analysis tests were completed for the undisturbed samples representative of the subsurface material. Atterberg limits, expansion index and R-value tests were completed for select bag samples obtained from auger cuttings. These tests, supplemented by visual observation, comprised the basis for our evaluation of the site material.

The logs of the exploratory borings and laboratory determinations are presented in this Appendix.

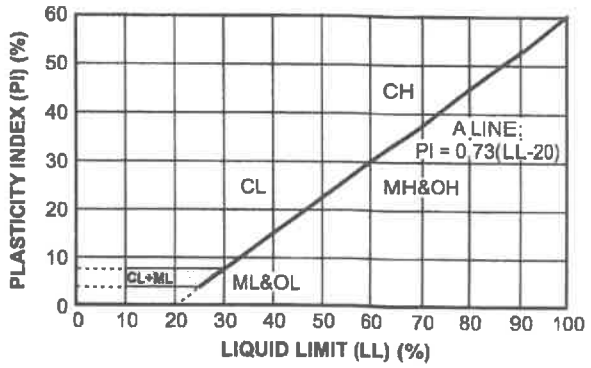
UNIFIED SOIL CLASSIFICATION SYSTEM

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART			
COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size.)			
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	Clean Gravels (Less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravels with fines (More than 12% fines)	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	Clean Sands (Less than 5% fines)	SW	Well-graded sands, gravelly sands, little or no fines
		SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with fines (More than 12% fines)	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)			
SILTS AND CLAYS Liquid limit less than 50%		ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils

CONSISTENCY CLASSIFICATION	
Description	**Blows per Foot**
Granular Soils	
Very Loose	< 5
Loose	5 – 15
Medium Dense	16 – 40
Dense	41 – 65
Very Dense	> 65
Cohesive Soils	
Very Soft	< 3
Soft	3 – 5
Firm	6 – 10
Stiff	11 – 20
Very Stiff	21 – 40
Hard	> 40

GRAIN SIZE CLASSIFICATION		
Grain Type	*Standard Sieve Size*	*Grain Size in Millimeters*
Boulders	Above 12 inches	Above 305
Cobbles	12 to 13 inches	305 to 76.2
Gravel	3 inches to No. 4	76.2 to 4.76
Coarse-grained	3 to ¾ inches	76.2 to 19.1
Fine-grained	¾ inches to No. 4	19.1 to 4.76
Sand	No. 4 to No. 200	4.76 to 0.074
Coarse-grained	No. 4 to No. 10	4.76 to 2.00
Medium-grained	No. 10 to No. 40	2.00 to 0.042
Fine-grained	No. 40 to No. 200	0.042 to 0.074
Silt and Clay	Below No. 200	Below 0.074

PLASTICITY CHART



Log of Boring B1

Project: Commerce 220 Distribution Center

Project No: 032-20054

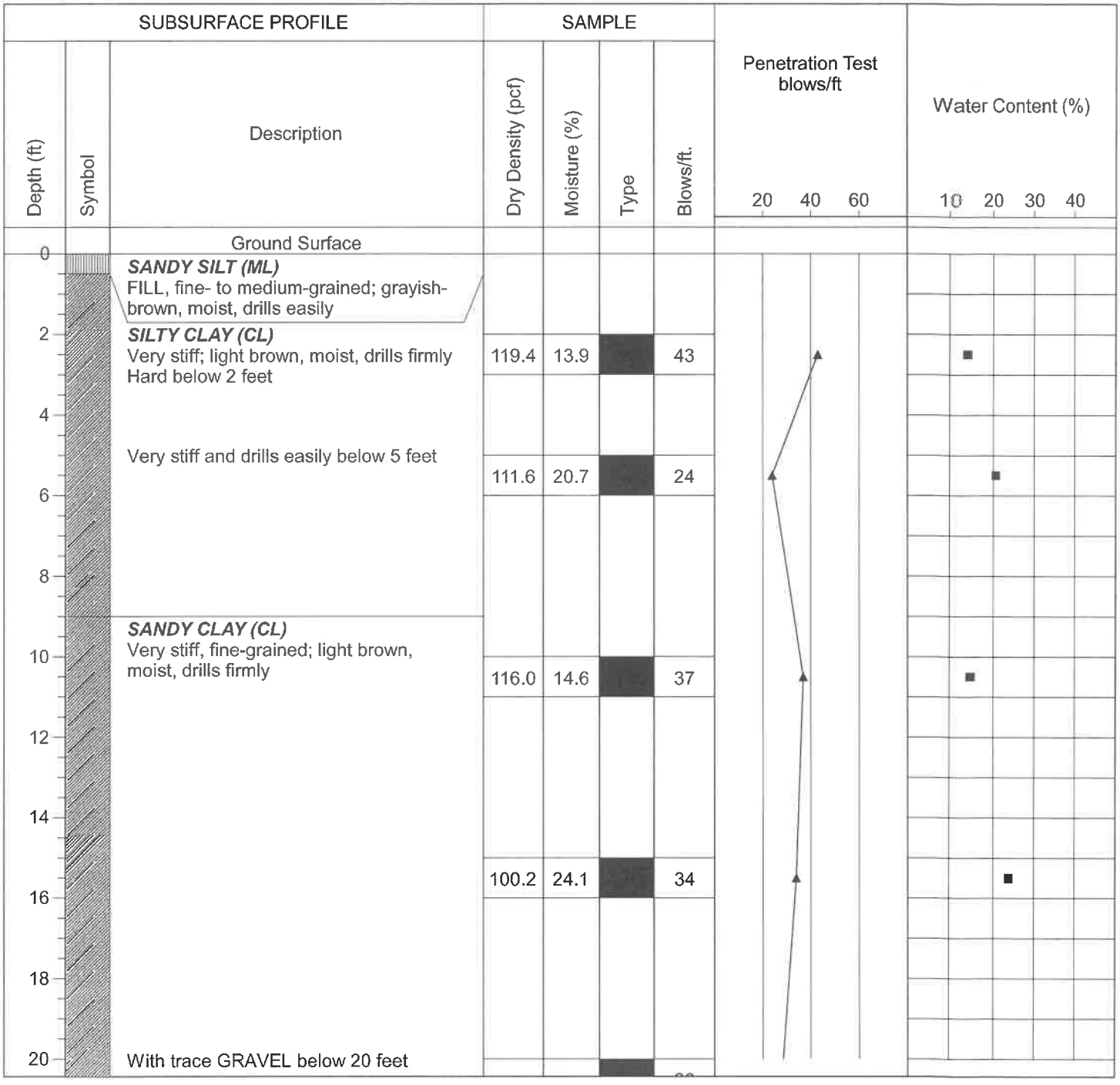
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-1

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 22½ Feet **At Completion:** 22½ Feet



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 25 Feet

2095

Log of Boring B1

Project: Commerce 220 Distribution Center

Project No: 032-20054

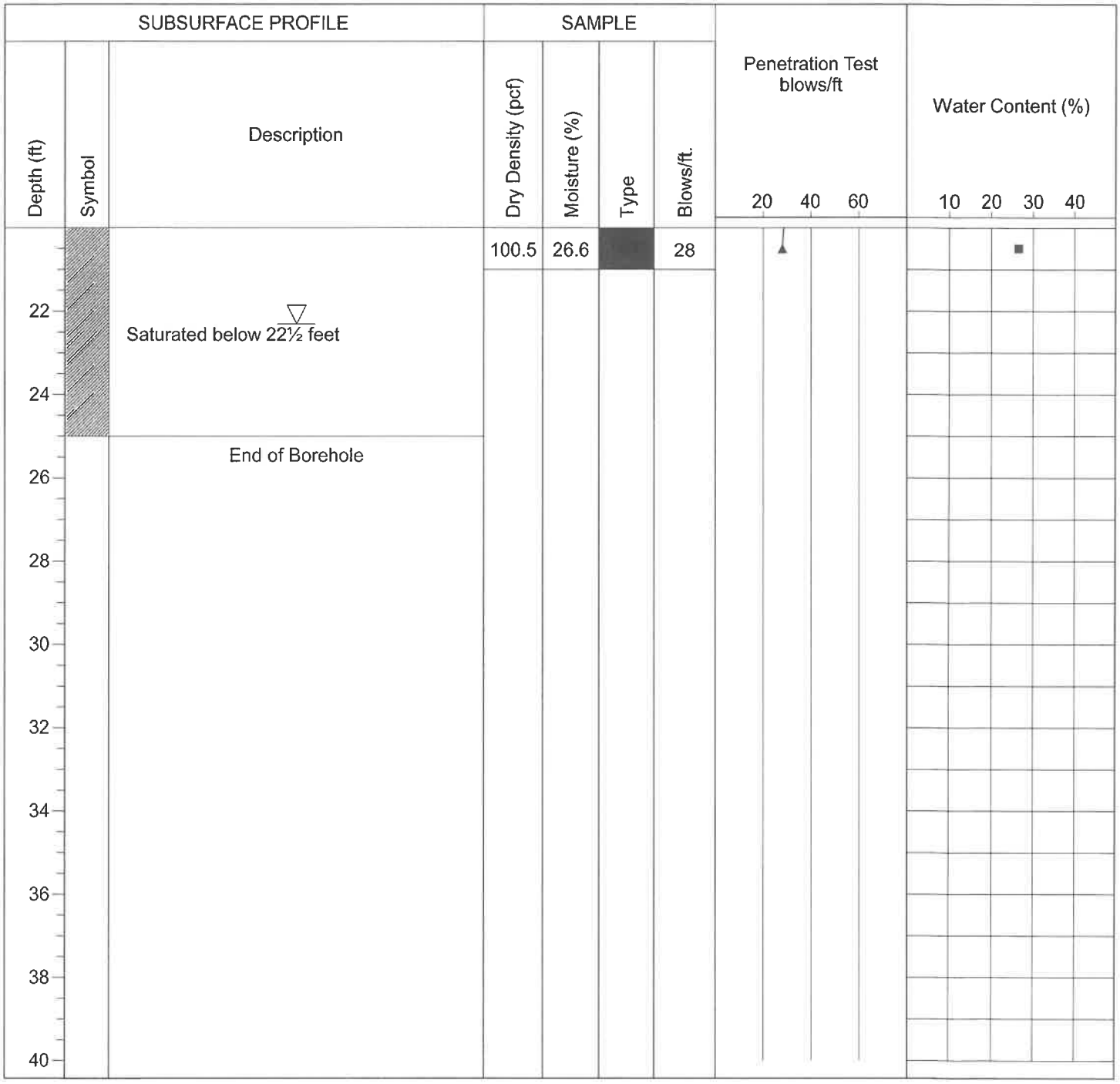
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-1

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 22½ Feet **At Completion:** 22½ Feet



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 25 Feet

2096

Log of Boring B2

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-2

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** None **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0		Ground Surface				
0		***SANDY CLAY (CL)*** Soft, fine-grained; brown, moist, drills easily				
2		Very stiff below 12 inches Hard and drills firmly below 2 feet	116.5	14.3		40
4		Light brown below 4 feet				
6			112.8	17.9		42
10		End of Borehole				

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight

Drill Rig: CME 45B

Driller: Brent Snyder

Krazan and Associates

Drill Date: 12-8-20

Hole Size: 4½ Inches

Elevation: 10 Feet

Sheet: 1 of 1

2097

Log of Boring B3

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-3

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** None **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0		Ground Surface				
0		***SANDY CLAY (CL)*** Soft, fine-grained; brown, moist, drills easily				
2		Stiff below 12 inches Very stiff below 2 feet	111.0	16.8		26
4		***SILTY CLAY (CL)*** Very stiff; light grayish-brown, moist, drills easily	106.8	21.7		30
8		***SANDY CLAY (CL)*** Very stiff, fine- to medium-grained; light brown, moist, drills easily				
10		Drills firmly below 10½ feet	118.5	11.7		34
16		End of Borehole				
20						

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight

Drill Date: 12-8-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 15 Feet

Sheet: 1 of 1

2098

Log of Boring B4

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-4

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water>

Initial: None

At Completion: None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0		Ground Surface				
0		***SILTY CLAY (CL)*** Soft; brown, moist, drills easily Firm below 12 inches Stiff below 2 feet				
2			104.8	15.8		18
4		Very stiff and light gray below 3½ feet				
6			100.9	24.1		26
10		End of Borehole				

Penetration Test blows/ft: 20, 40, 60

Water Content (%): 10, 20, 30, 40

Drill Method: Solid Flight

Drill Date: 12-8-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 10 Feet

Sheet: 1 of 1

2099

Log of Boring B5

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-5

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0		Ground Surface				
0		***SILTY CLAY (CL)*** Soft; brown, moist, drills easily Stiff below 12 inches Very stiff below 2 feet				
2		***SANDY CLAY (CL)*** Very stiff, fine-grained; light gray, moist, drills firmly	122.3	13.9		34
4		***SILTY CLAY (CL)*** Very stiff; light brown, moist, drills easily	112.3	16.7		31
6						
8						
10			111.9	20.2		37
12		***SAND (SP)*** Medium dense, fine- to medium-grained; tan, moist, drills easily				
14		***SILTY CLAY (CL)*** Very stiff; light brown, moist, drills easily				
16			105.3	23.2		33
18						
20						

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight | **Drill Date:** 12-8-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 20 Feet

Krazan and Associates

Log of Boring B6

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-6

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0		Ground Surface				
0		***SANDY CLAY (CL)*** Soft, fine-grained; brown, moist, drills easily Stiff below 12 inches Very stiff below 2 feet				
2			119.2	7.5		32
4		***SILTY CLAY (CL)*** Hard; light brown, moist, drills firmly				
6			118.2	12.9		47
10		End of Borehole				

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight | **Drill Date:** 12-8-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 10 Feet

Krazan and Associates

Log of Boring B7

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-7

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0		Ground Surface				
0		***SANDY CLAY (CL)*** Soft, fine-grained; brown, moist, drills easily Stiff below 12 inches				
2		***SILTY CLAY (CL)*** Very stiff; light brown, moist, drills firmly	107.2	18.8		32
6			119.9	14.1		38
10		***SAND (SP)*** Medium dense, fine- to medium-grained; light brown, moist, drills firmly	110.6	19.3		36
12		***SILTY CLAY (CL)*** Very stiff; light brown, moist, drills firmly				
16			96.0	28.9		31
20						

Penetration Test blows/ft: 20, 40, 60

Water Content (%): 10, 20, 30, 40

Drill Method: Solid Flight | **Drill Date:** 12-8-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 25 Feet

Krazan and Associates

Log of Boring B7

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-7

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft	Water Content (%)
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.	20 40 60	10 20 30 40
			90.0	30.0		29		
22								
24								
		End of Borehole						
26								
28								
30								
32								
34								
36								
38								
40								

Drill Method: Solid Flight | **Drill Date:** 12-8-20

Drill Rig: CME 45B | **Krazan and Associates** | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 25 Feet

Log of Boring B8

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-8

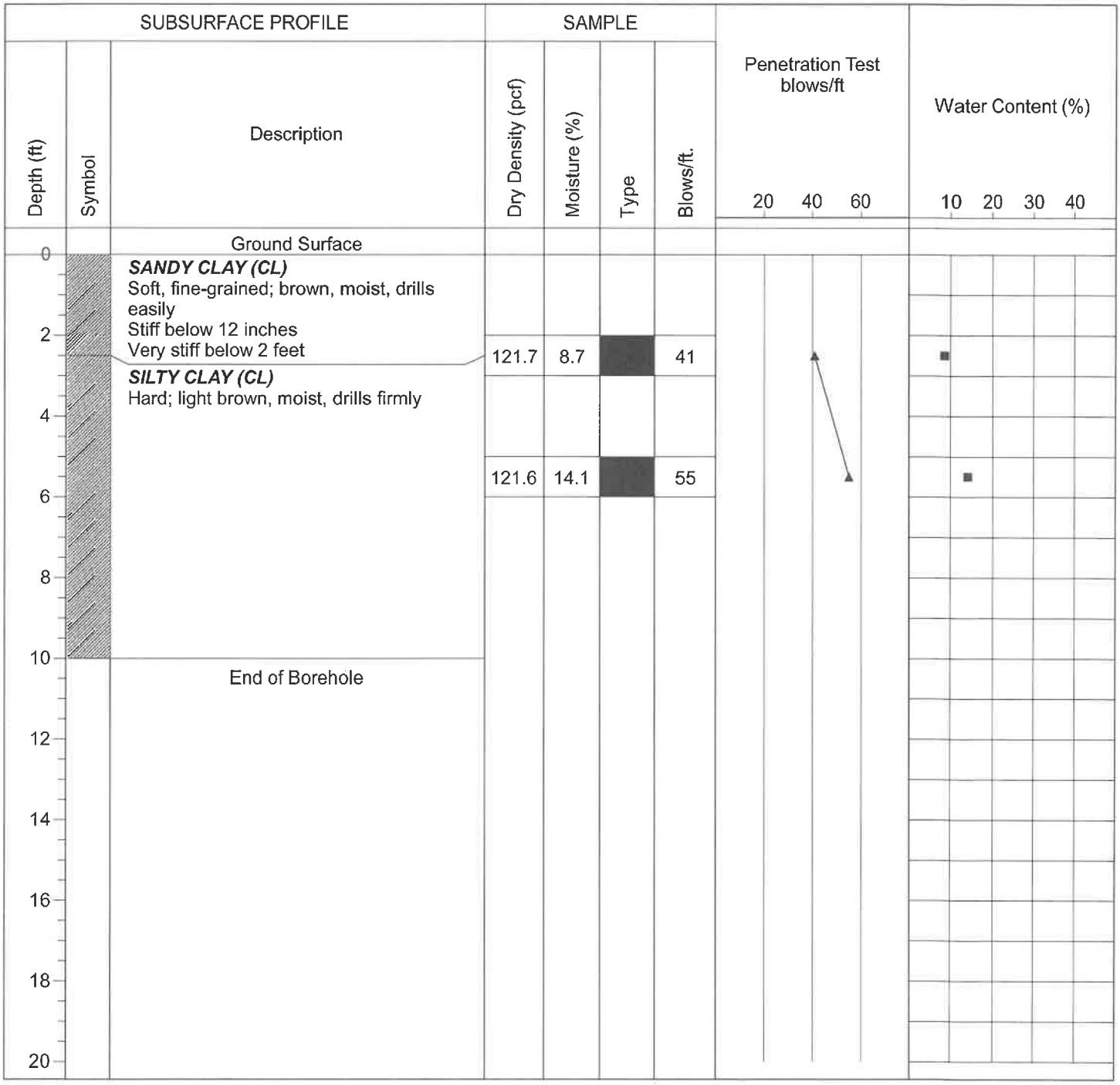
Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water>

Initial: None

At Completion: None



Drill Method: Solid Flight

Drill Date: 12-8-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 10 Feet

Sheet: 1 of 1

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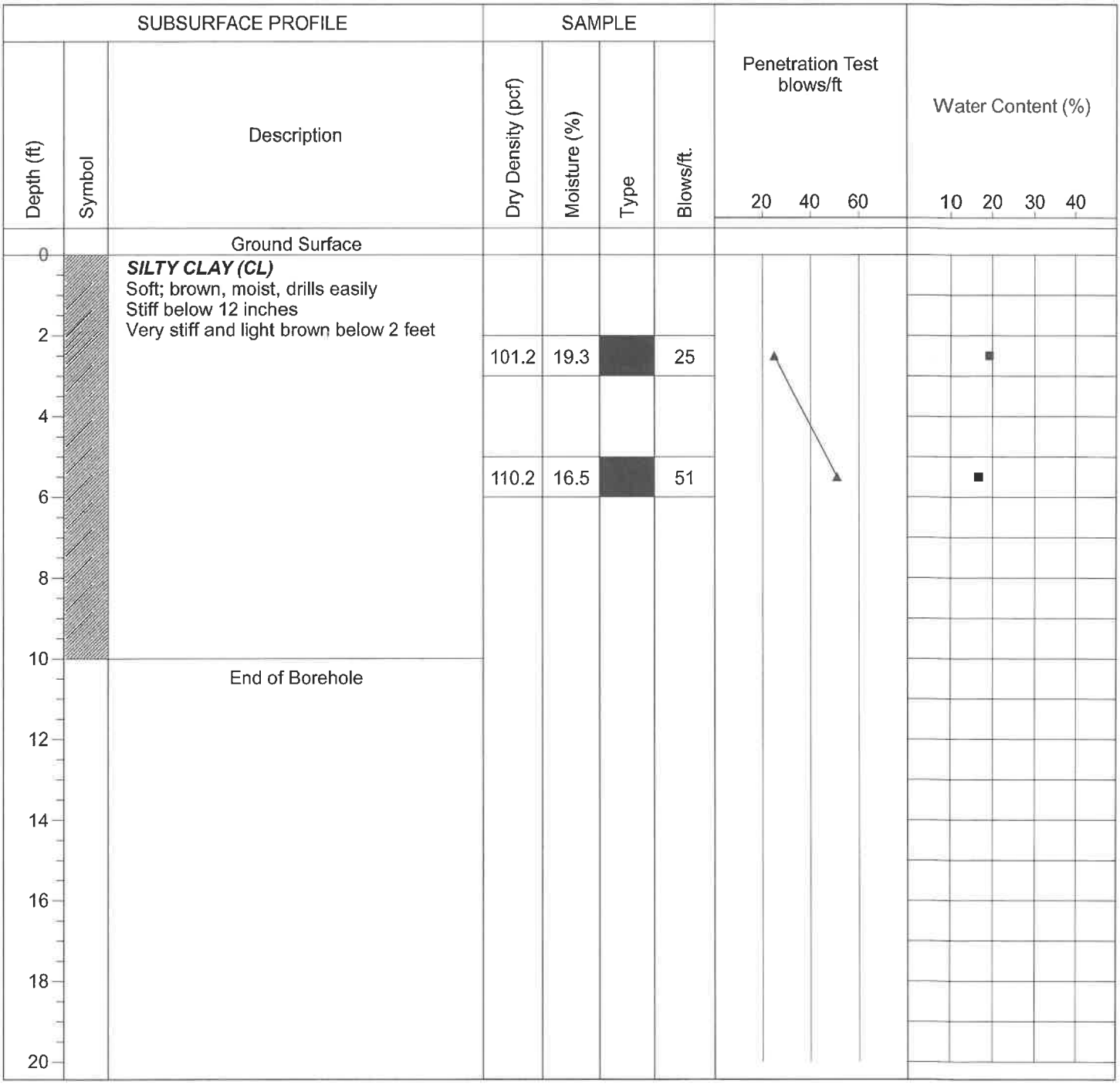
Log of Boring B9

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-9

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None



Drill Method: Solid Flight | **Drill Date:** 12-8-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 10 Feet

Krazan and Associates

Log of Boring B10

Project: Commerce 220 Distribution Center

Project No: 032-20054

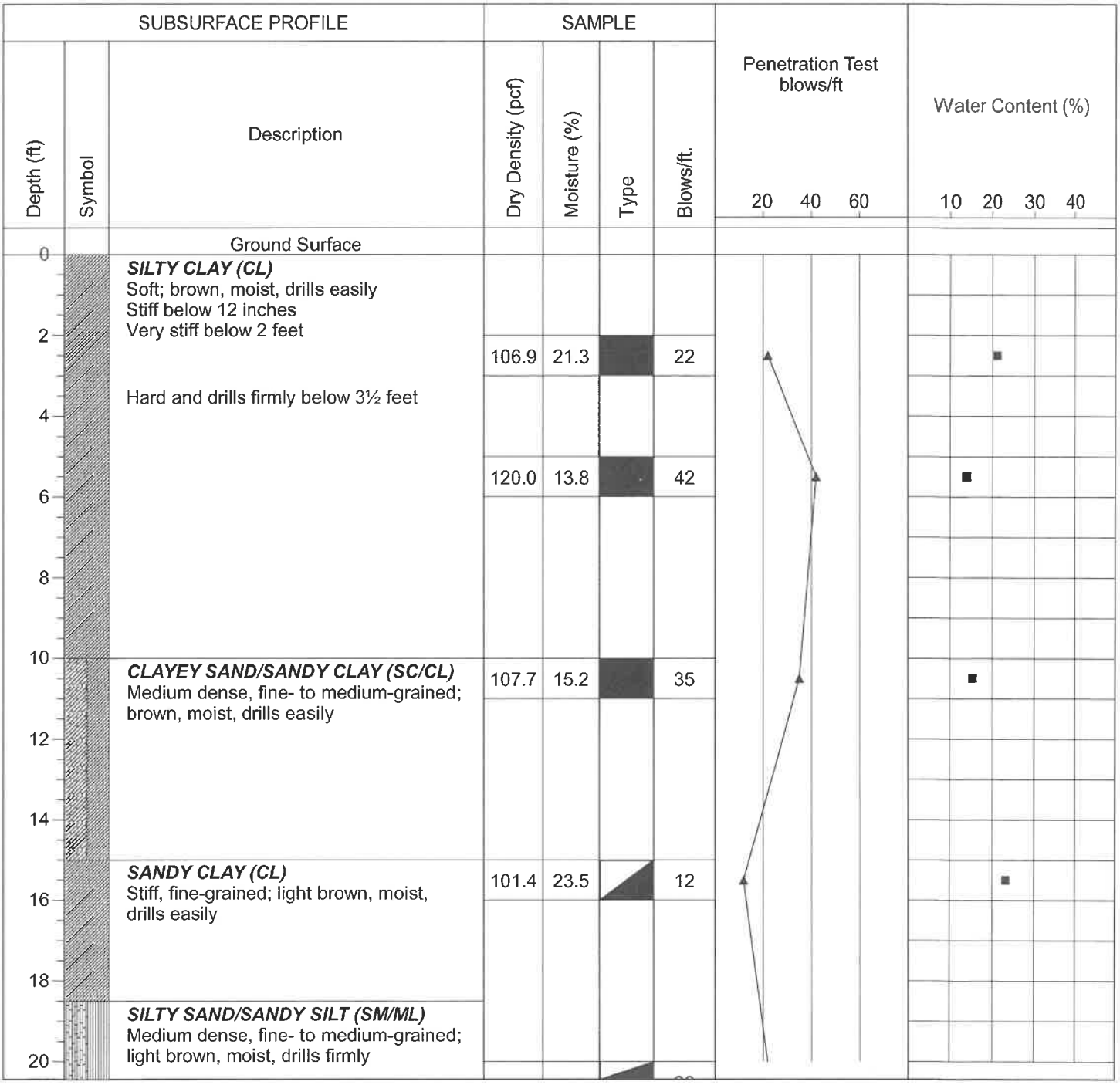
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-10

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 22½ Feet **At Completion:** 22½ Feet



Drill Method: Hollow Stem

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 6½ Inches

Driller: Brent Snyder

Elevation: 50 Feet

Log of Boring B10

Project: Commerce 220 Distribution Center

Project No: 032-20054

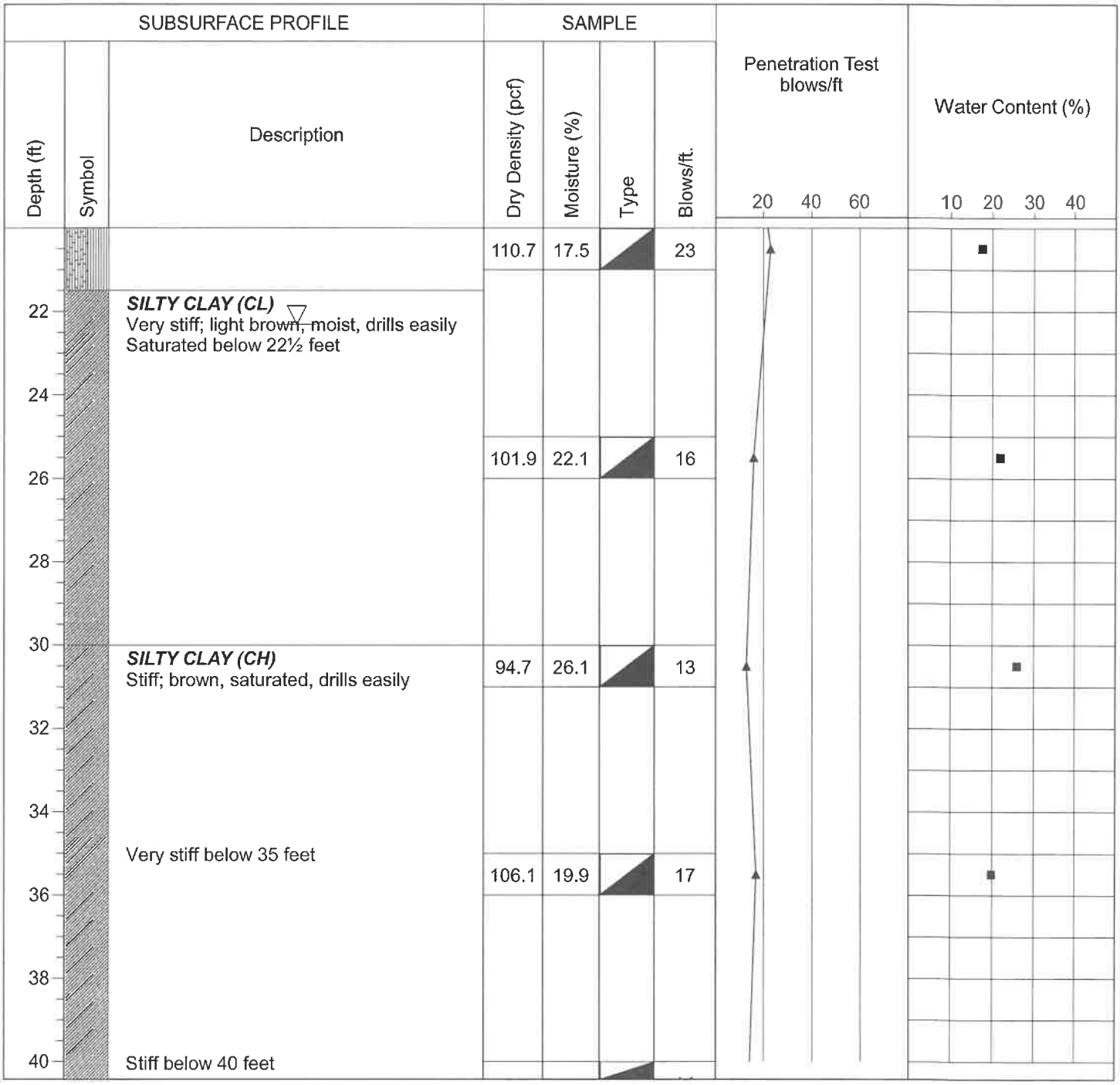
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-10

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 22½ Feet **At Completion:** 22½ Feet



Drill Method: Hollow Stem

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 6½ Inches

Driller: Brent Snyder

Elevation: 50 Feet

Log of Boring B10

Project: Commerce 220 Distribution Center

Project No: 032-20054

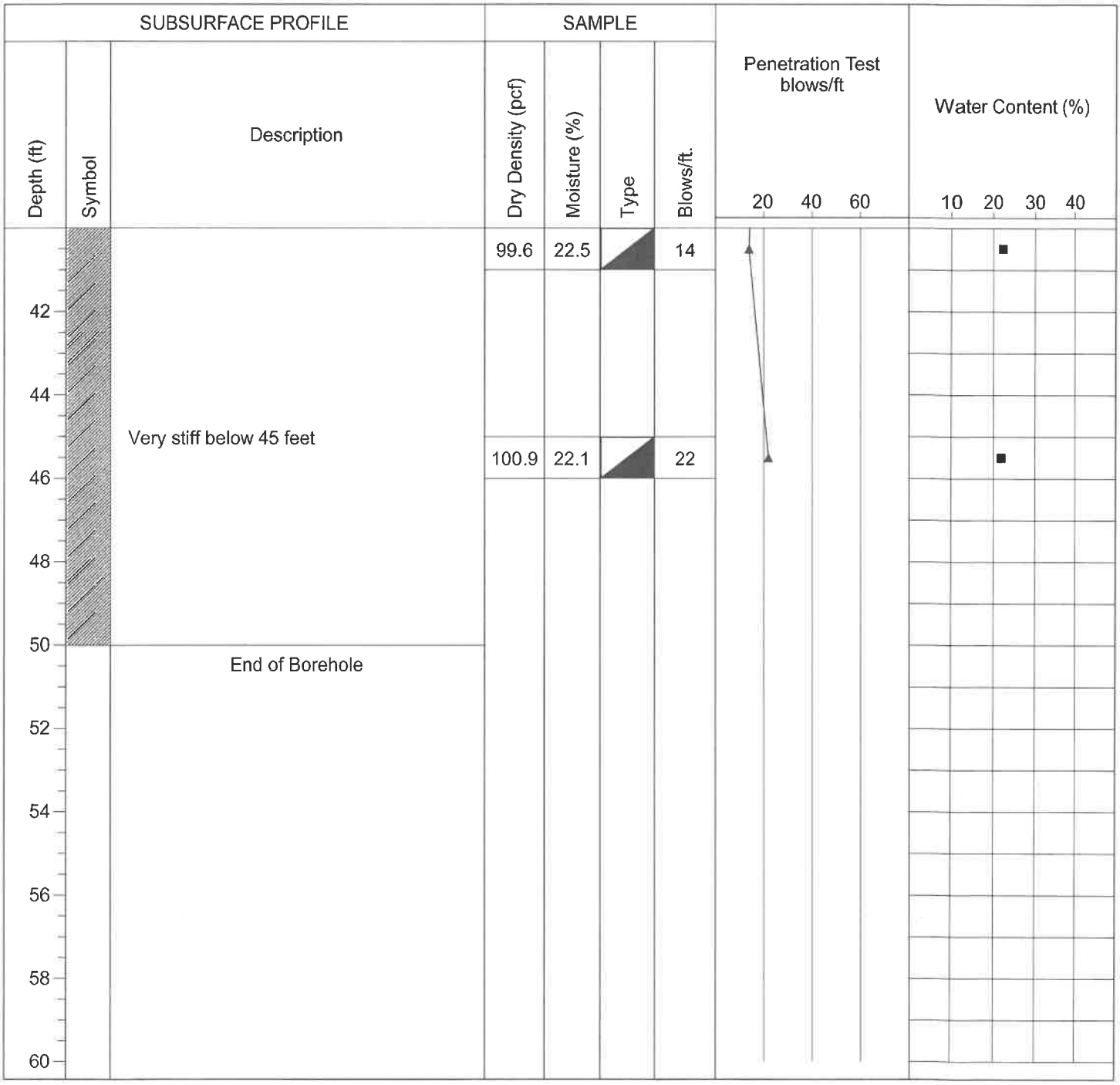
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-10

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 22½ Feet **At Completion:** 22½ Feet



Drill Method: Hollow Stem

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 6½ Inches

Driller: Brent Snyder

Elevation: 50 Feet

Log of Boring B11

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-11

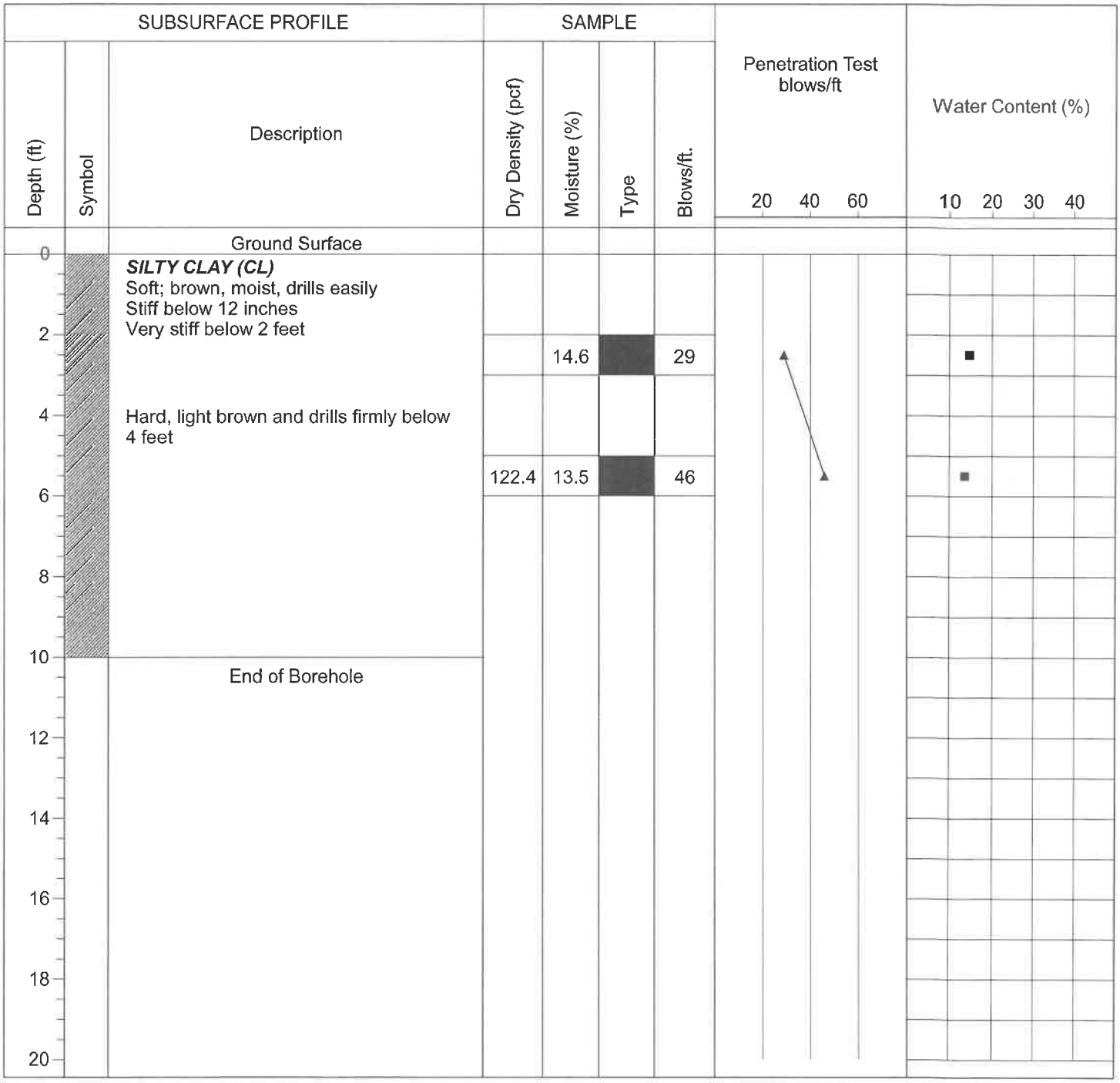
Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water>

Initial: None

At Completion: None



Drill Method: Solid Flight

Drill Date: 12-8-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 10 Feet

Sheet: 1 of 1

2109

Log of Boring B12

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-12

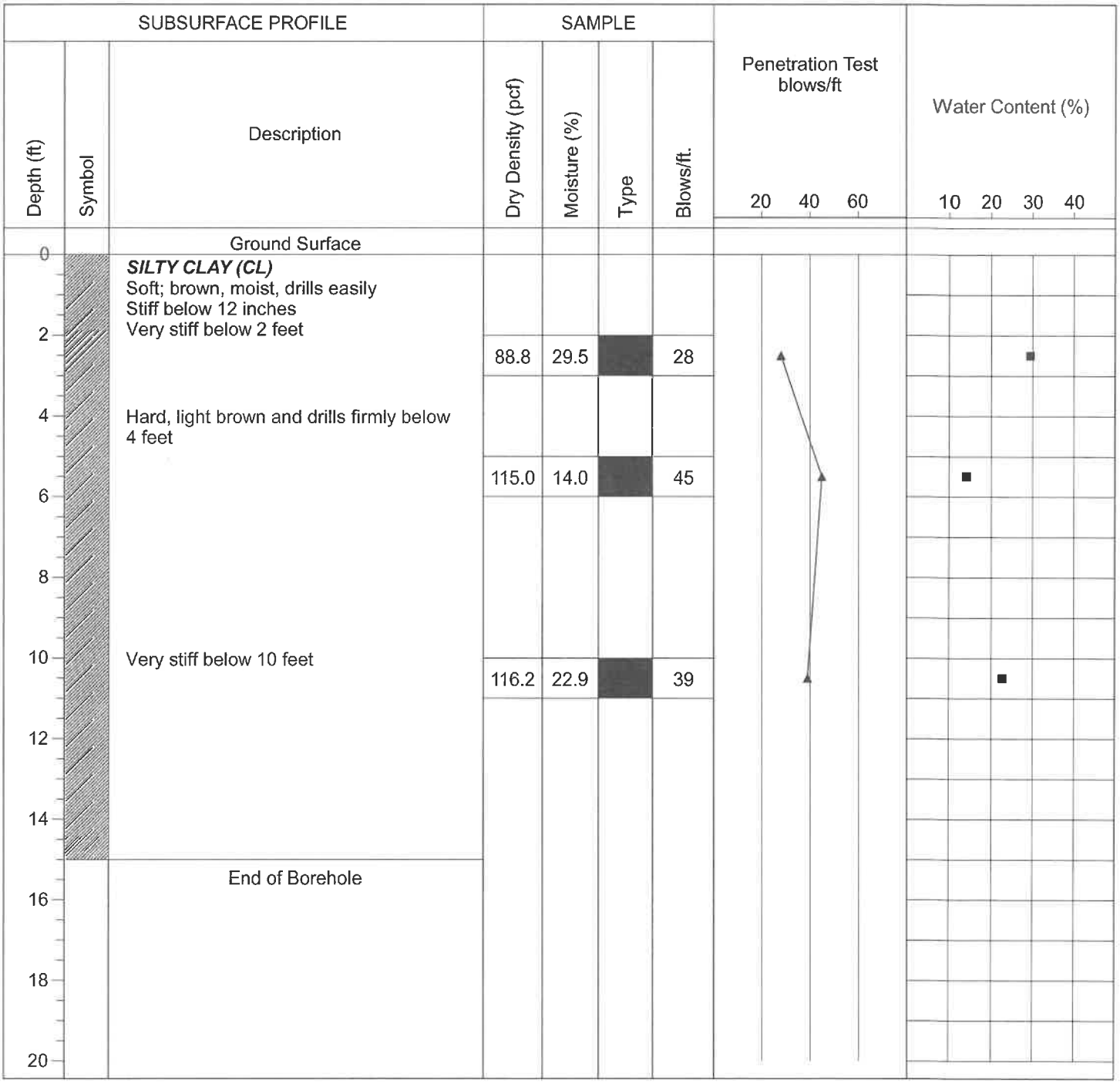
Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water>

Initial: None

At Completion: None



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 15 Feet

Sheet: 1 of 1

Log of Boring B13

Project: Commerce 220 Distribution Center

Project No: 032-20054

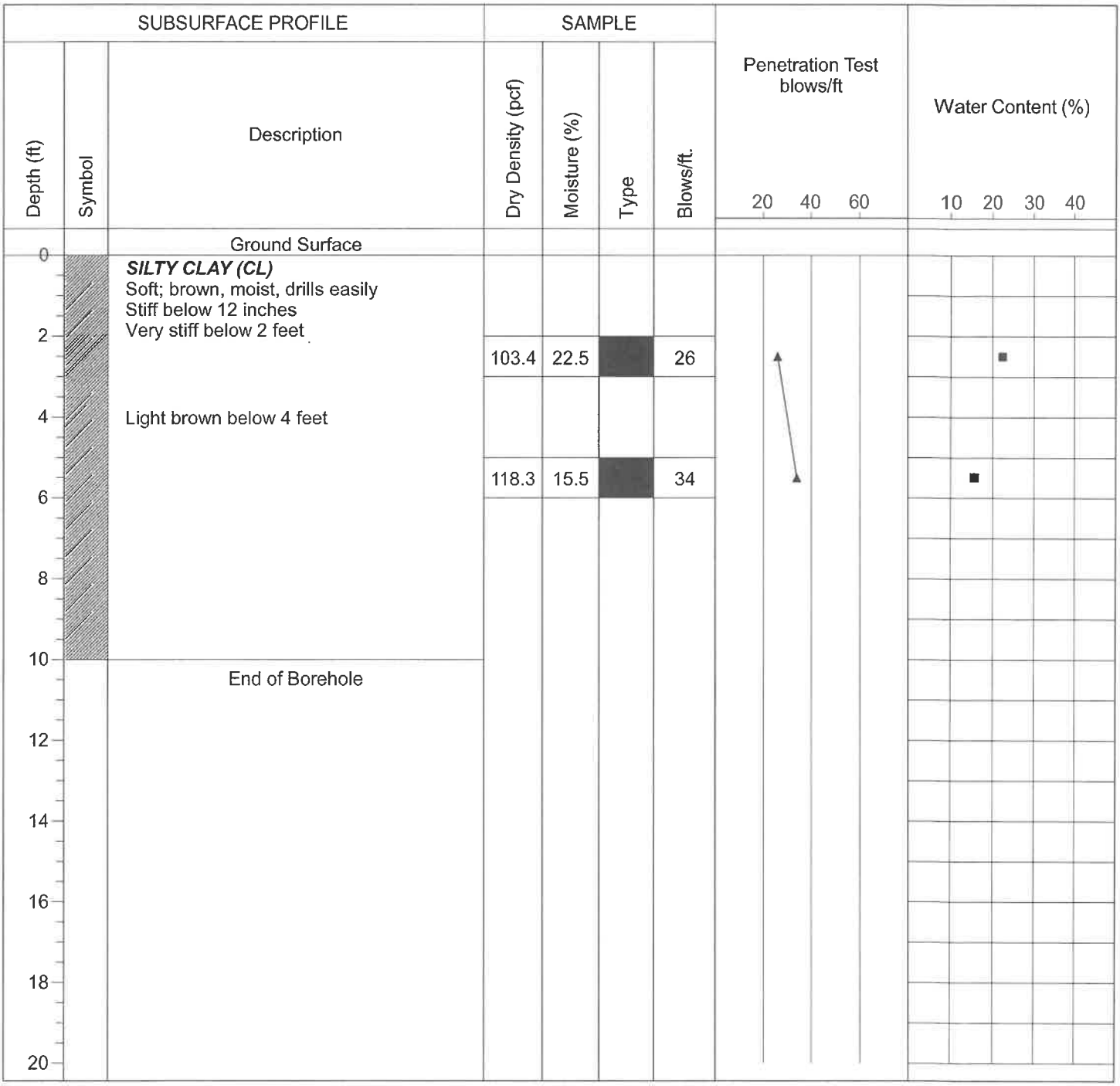
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-13

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** None **At Completion:** None



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 10 Feet

Sheet: 1 of 1

Log of Boring B14

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-14

Location: 1055 Commerce Court, American Canyon, California

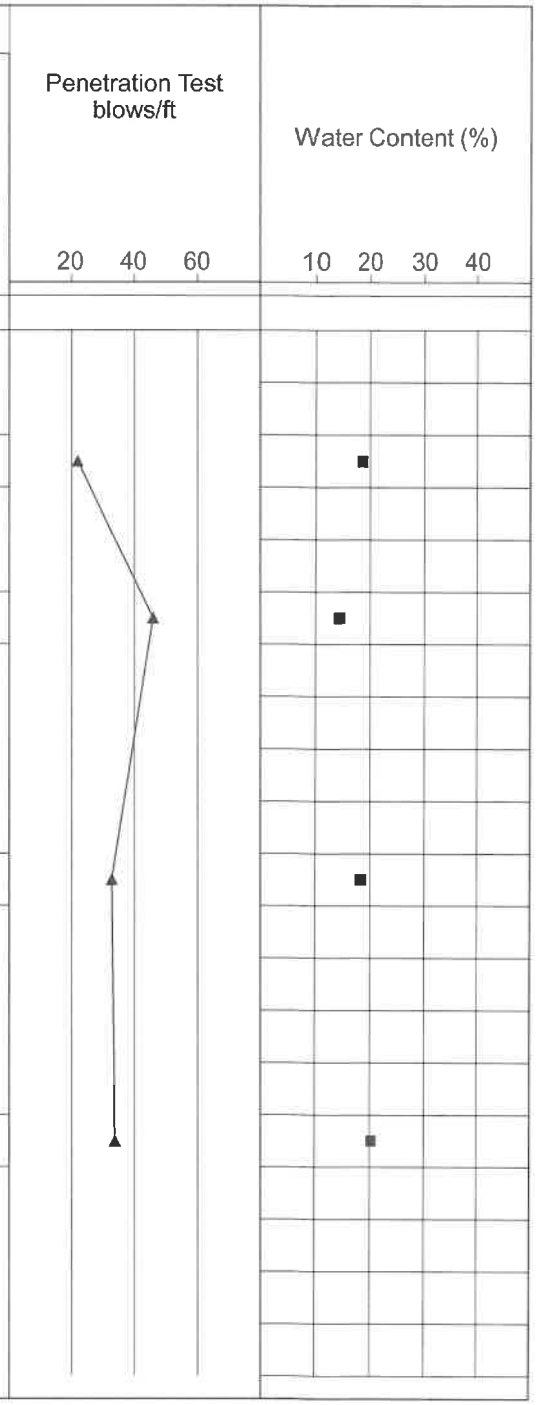
Logged By: R. Alexander

Depth to Water>

Initial: None

At Completion: None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
		Ground Surface				
0		***SILTY CLAY (CL)*** Soft; brown, moist, drills easily Stiff below 12 inches Very stiff below 2 feet				
2			95.8	18.6		22
4		Hard and light brown below 3½ feet				
6			116.7	14.3		46
8		Very stiff below 8½ feet				
10			112.2	18.3		33
12						
14						
16			108.2	20.3		34
18						
20						



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 20 Feet

Log of Boring B15

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-15

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
		Ground Surface				
0		***SILTY CLAY (CL)*** Soft; brown, moist, drills easily Stiff below 12 inches Very stiff below 2 feet				
2			97.1	12.8		29
4		Hard and light brown below 3½ feet				
6			121.1	16.4		48
8						
10		End of Borehole				
12						
14						
16						
18						
20						

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight | **Drill Date:** 12-9-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 10 Feet

Krazan and Associates

Log of Boring B16

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-16

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
0		Ground Surface				
0		***SILTY CLAY (CL)*** Soft; brown, moist, drills easily				
		Stiff below 12 inches				
		Very stiff below 2 feet				
2		Light brown below 2½ feet	96.7	17.2		24
4			116.7	18.0		39
6						
8						
10			103.1	24.7		38
12						
14						
		End of Borehole				
16						
18						
20						

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight | **Drill Date:** 12-9-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 15 Feet

Krazan and Associates

Sheet: 1 of 1

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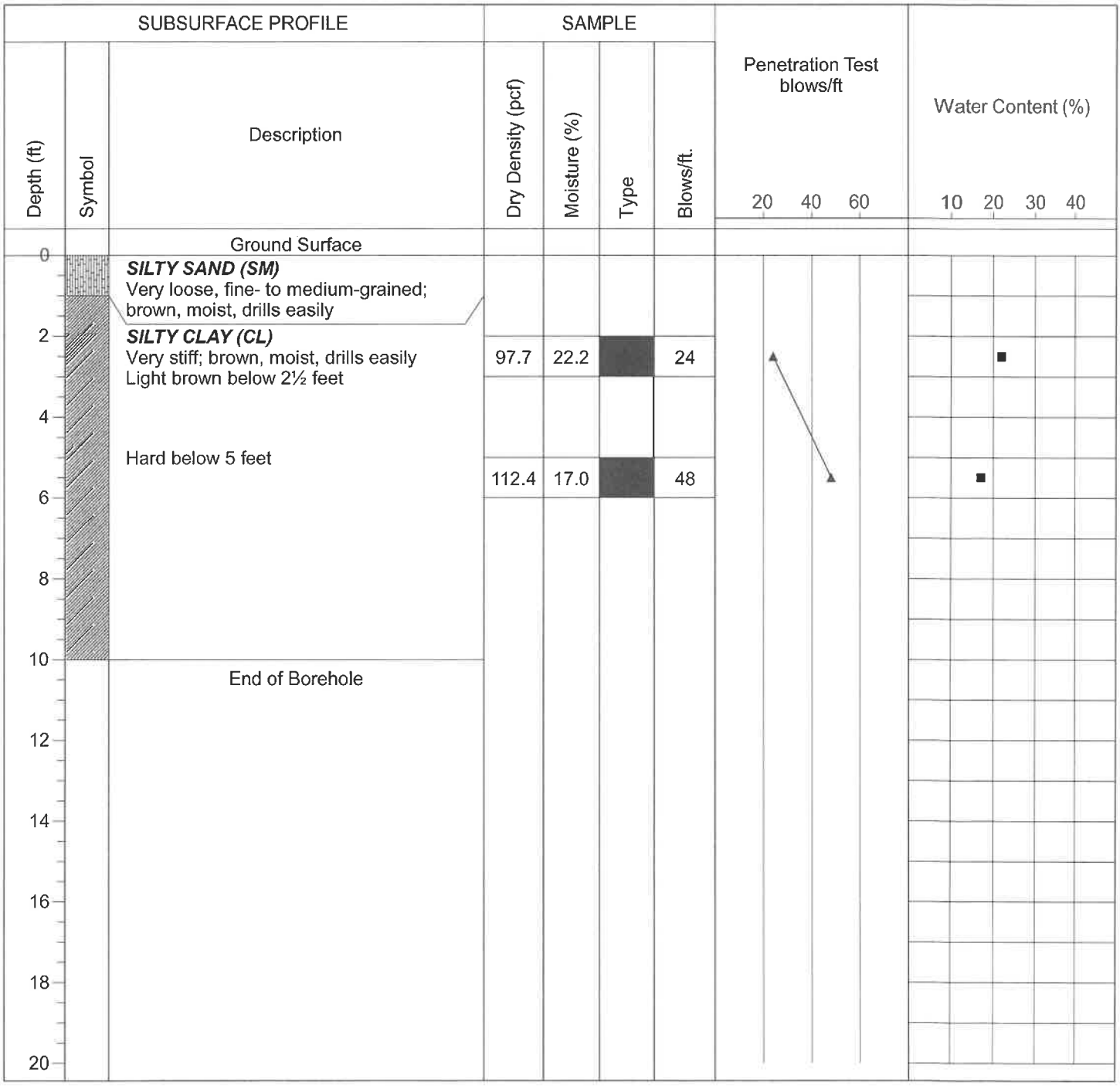
Log of Boring B17

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-17

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None



Drill Method: Solid Flight | **Drill Date:** 12-9-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 10 Feet

Krazan and Associates

Log of Boring B18

Project: Commerce 220 Distribution Center

Project No: 032-20054

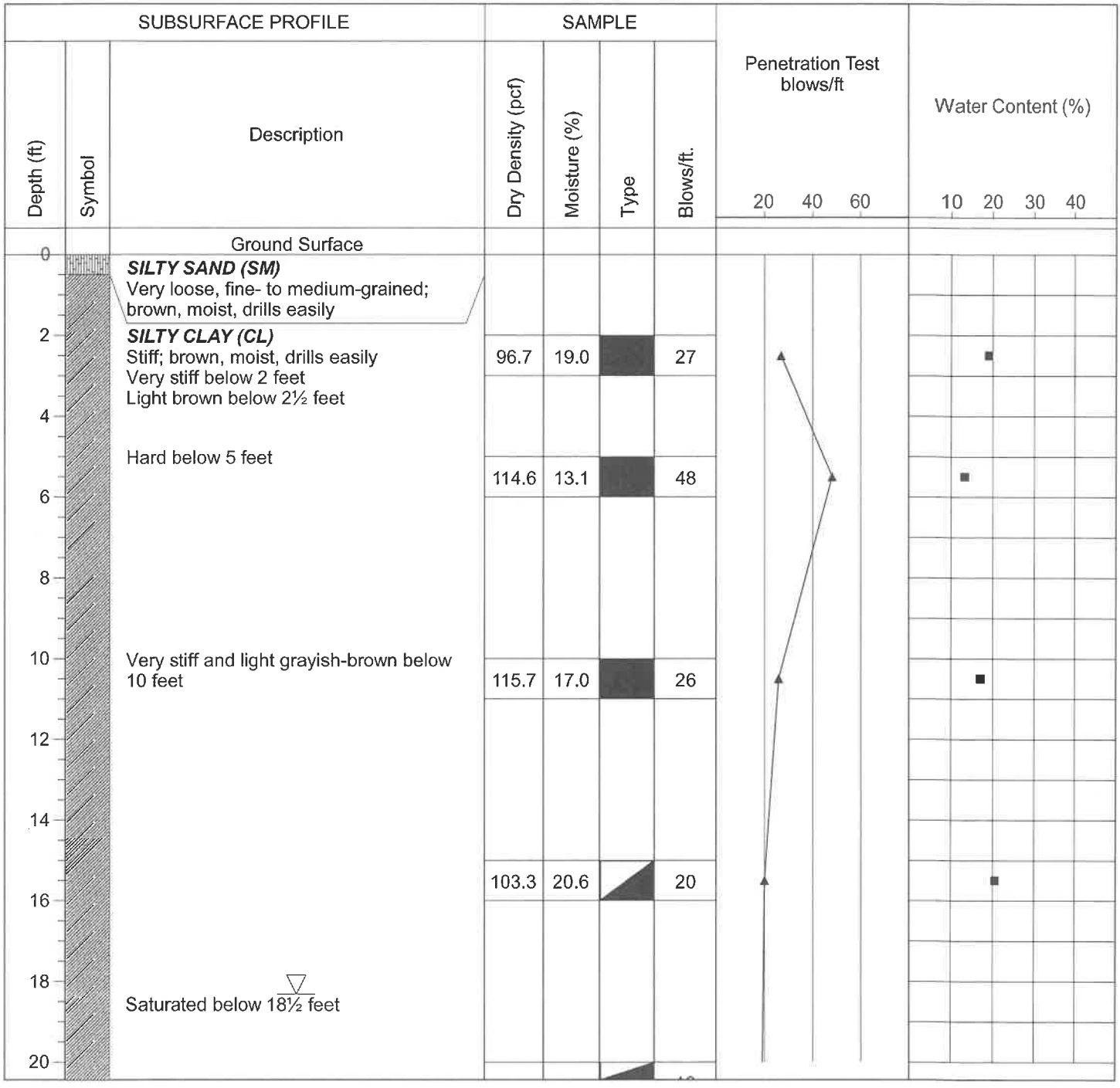
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-18

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 18½ Feet **At Completion:** 18½ Feet



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 25 Feet

Log of Boring B18

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-18

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 18½ Feet **At Completion:** 18½ Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft	Water Content (%)
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.	20 40 60	10 20 30 40
			106.5	19.0		19		
22								
24								
		End of Borehole						
26								
28								
30								
32								
34								
36								
38								
40								

Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 25 Feet

Log of Boring B19

Project: Commerce 220 Distribution Center

Project No: 032-20054

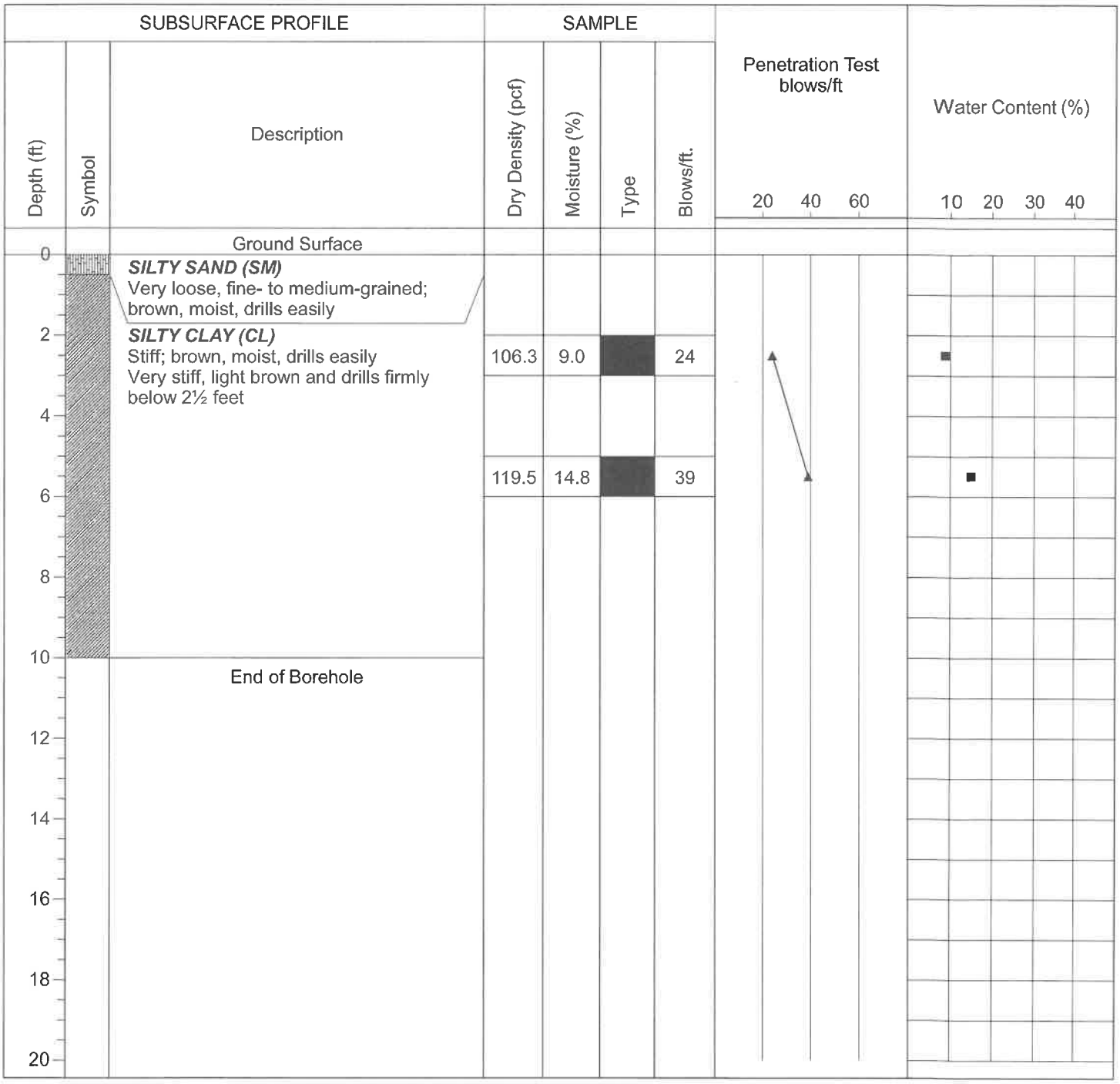
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-19

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** None **At Completion:** None



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 10 Feet

Sheet: 1 of 1

Log of Boring B20

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-20

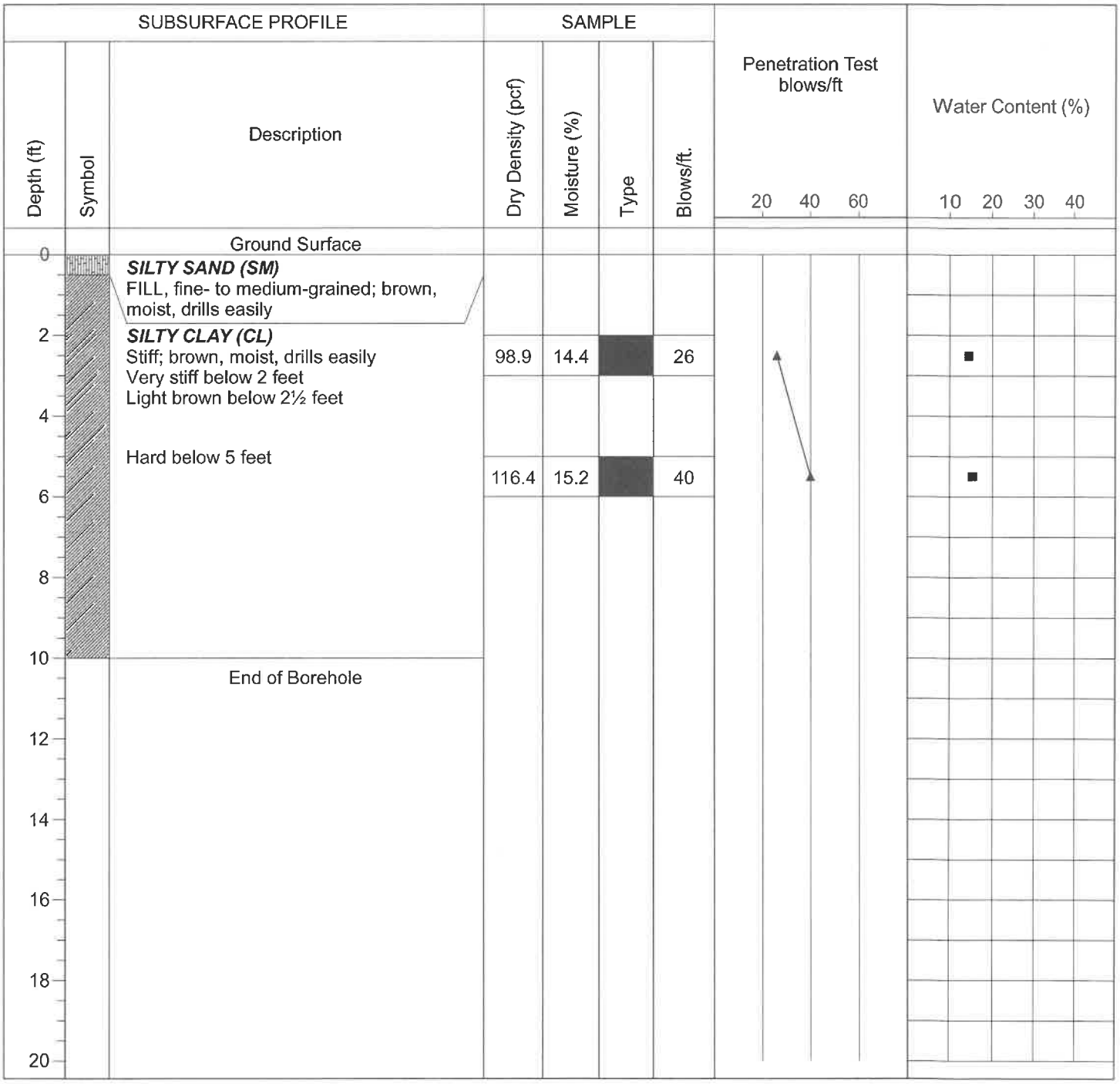
Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water>

Initial: None

At Completion: None



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 10 Feet

Sheet: 1 of 1

Log of Boring B21

Project: Commerce 220 Distribution Center

Project No: 032-20054

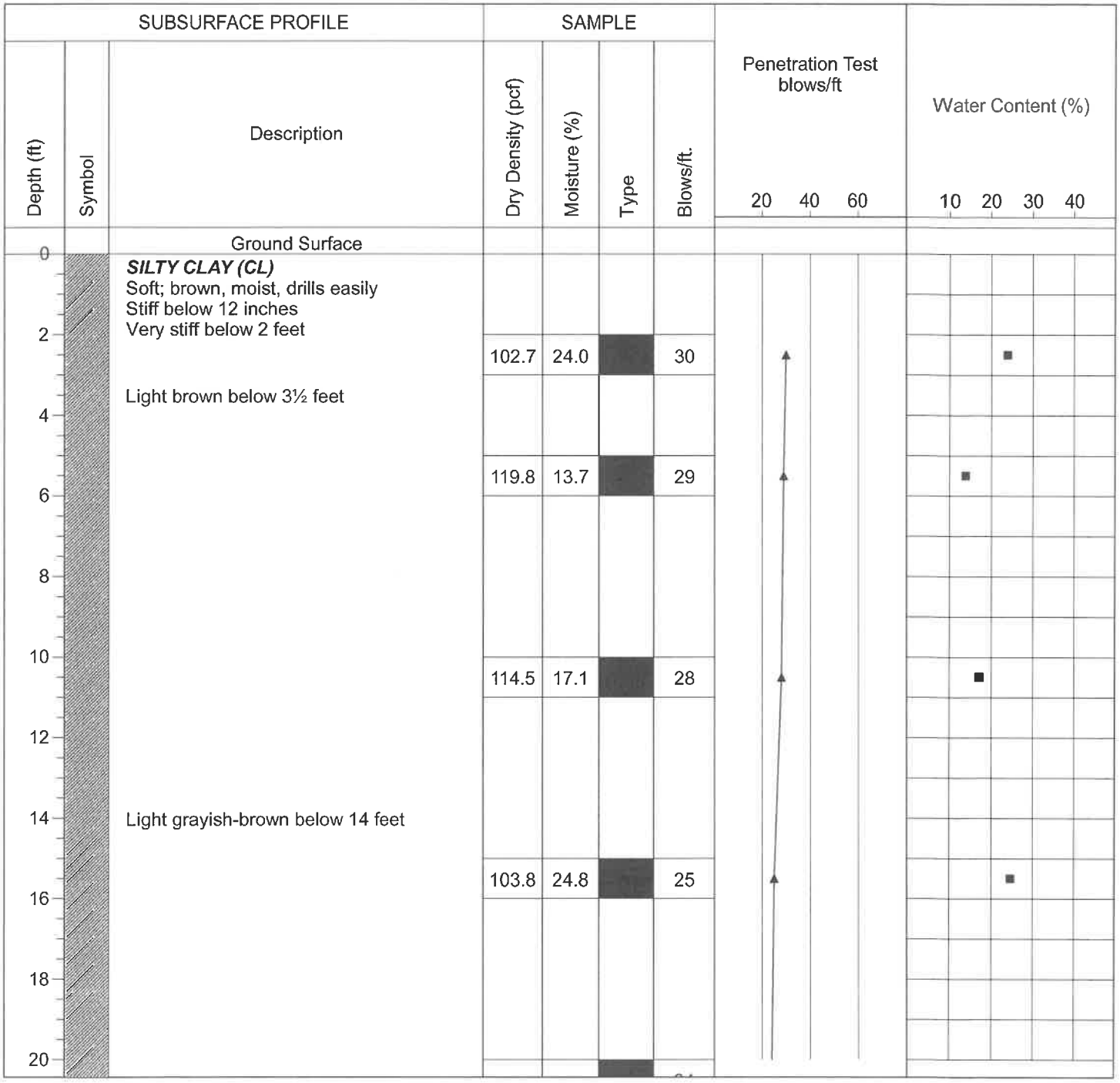
Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-21

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 22 Feet **At Completion:** 22 Feet



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 25 Feet

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Log of Boring B21

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-21

Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water> **Initial:** 22 Feet **At Completion:** 22 Feet

SUBSURFACE PROFILE			SAMPLE				Penetration Test blows/ft	Water Content (%)
Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.	20 40 60	10 20 30 40
22		Saturated below 22 feet	103.9	23.7		24		■
24								
		End of Borehole						
26								
28								
30								
32								
34								
36								
38								
40								

Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 25 Feet

Log of Boring B22

Project: Commerce 220 Distribution Center

Project No: 032-20054

Client: Industrial & Commercial Contractors, L.P.

Figure No.: A-22

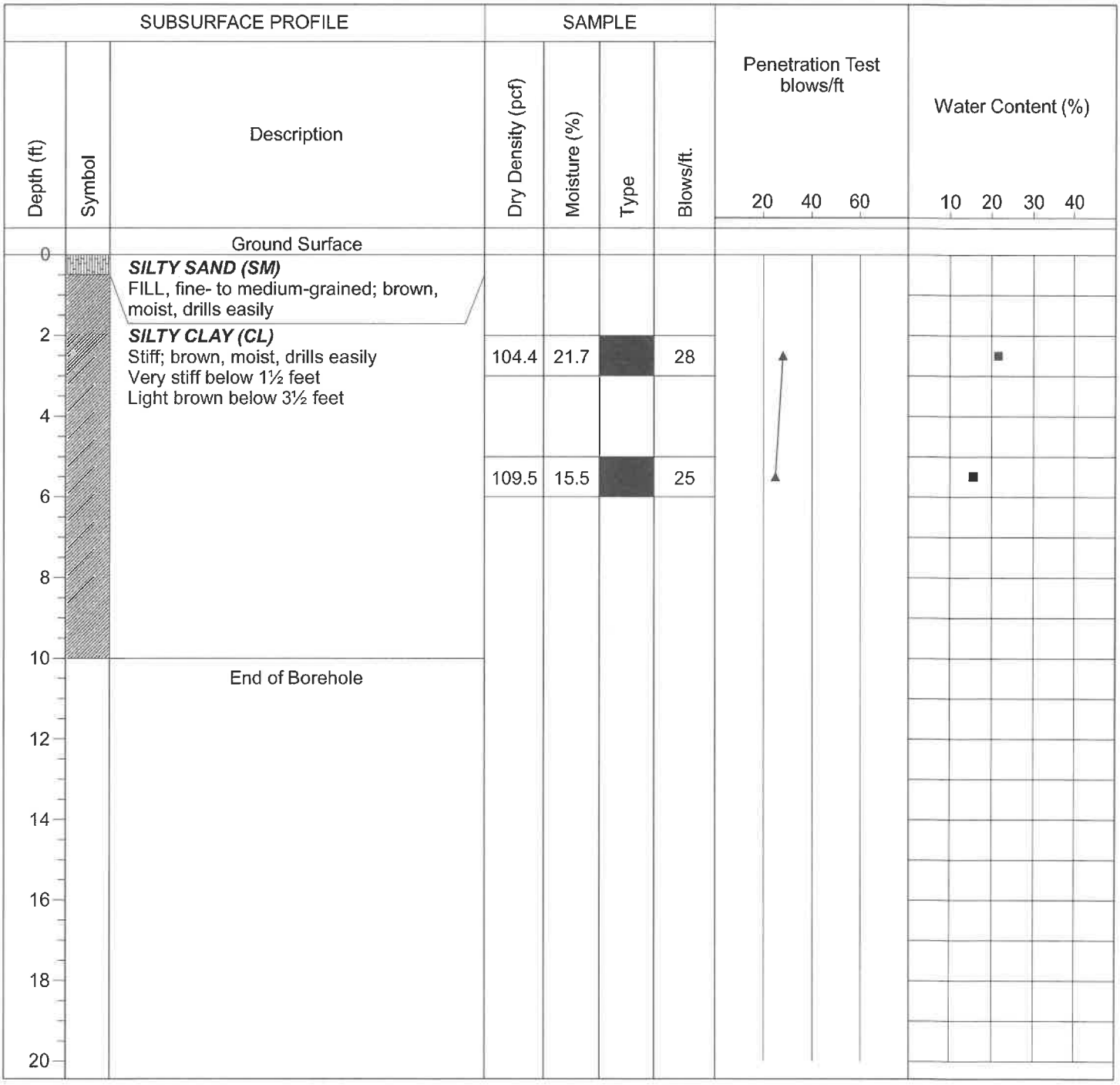
Location: 1055 Commerce Court, American Canyon, California

Logged By: R. Alexander

Depth to Water>

Initial: None

At Completion: None



Drill Method: Solid Flight

Drill Date: 12-9-20

Drill Rig: CME 45B

Krazan and Associates

Hole Size: 4½ Inches

Driller: Brent Snyder

Elevation: 10 Feet

Sheet: 1 of 1

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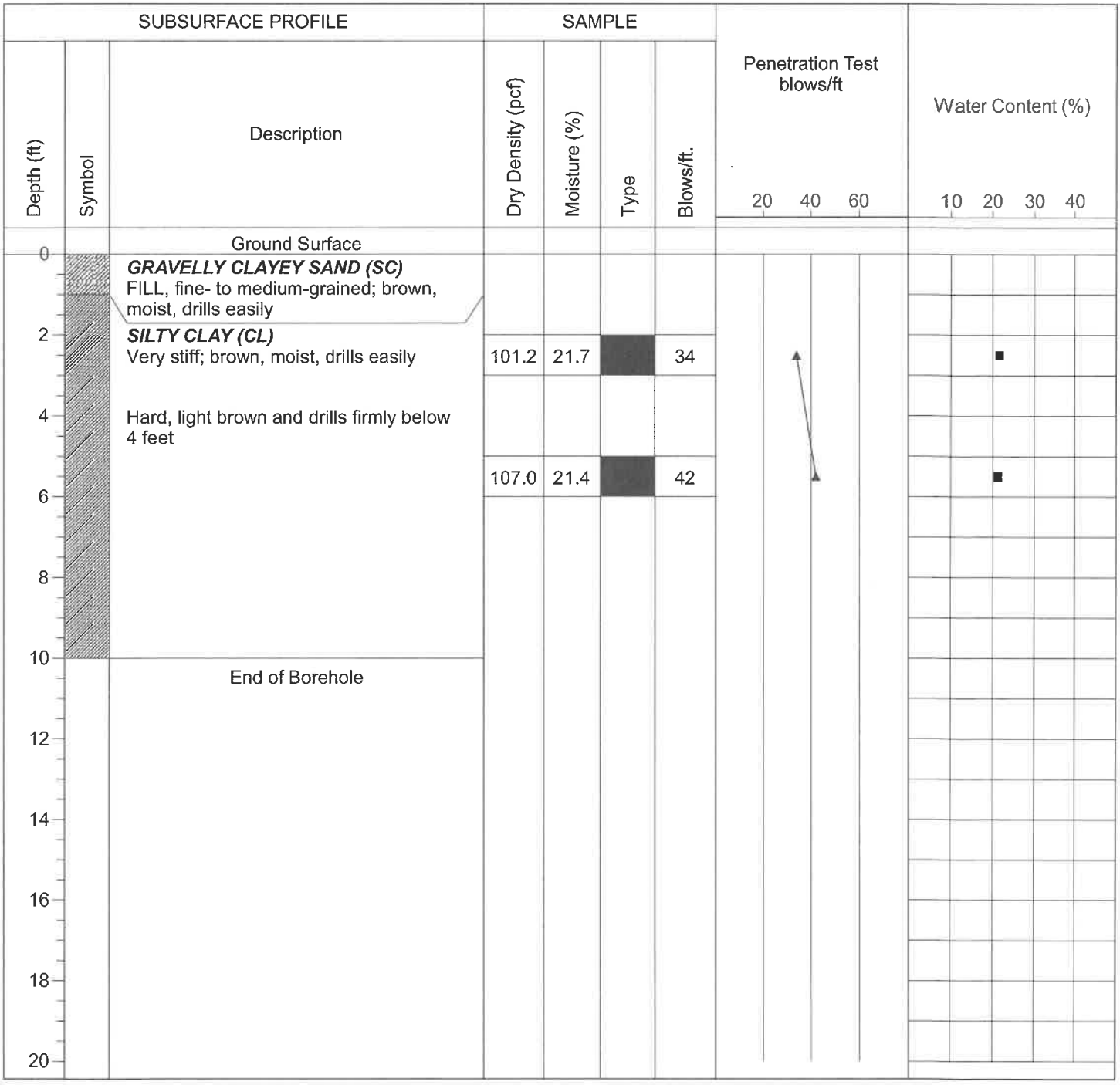
Log of Boring B23

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-23

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None



Drill Method: Solid Flight | **Drill Date:** 12-9-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 10 Feet

Krazan and Associates

Log of Boring B24

Project: Commerce 220 Distribution Center | **Project No:** 032-20054

Client: Industrial & Commercial Contractors, L.P. | **Figure No.:** A-24

Location: 1055 Commerce Court, American Canyon, California | **Logged By:** R. Alexander

Depth to Water> | **Initial:** None | **At Completion:** None

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.
		Ground Surface				
0		***GRAVELLY SAND (SP)*** FILL, fine- to medium-grained; light brown, moist, drills easily				
2		***SILTY CLAY (CL)*** Very stiff; brown, moist, drills easily	108.7	13.3		23
4		Hard and light brown below 3½ feet				
6			117.9	16.2		63
8						
10		End of Borehole				
12						
14						
16						
18						
20						

Penetration Test blows/ft: 20 40 60

Water Content (%): 10 20 30 40

Drill Method: Solid Flight | **Drill Date:** 12-9-20

Drill Rig: CME 45B | **Hole Size:** 4½ Inches

Driller: Brent Snyder | **Elevation:** 10 Feet

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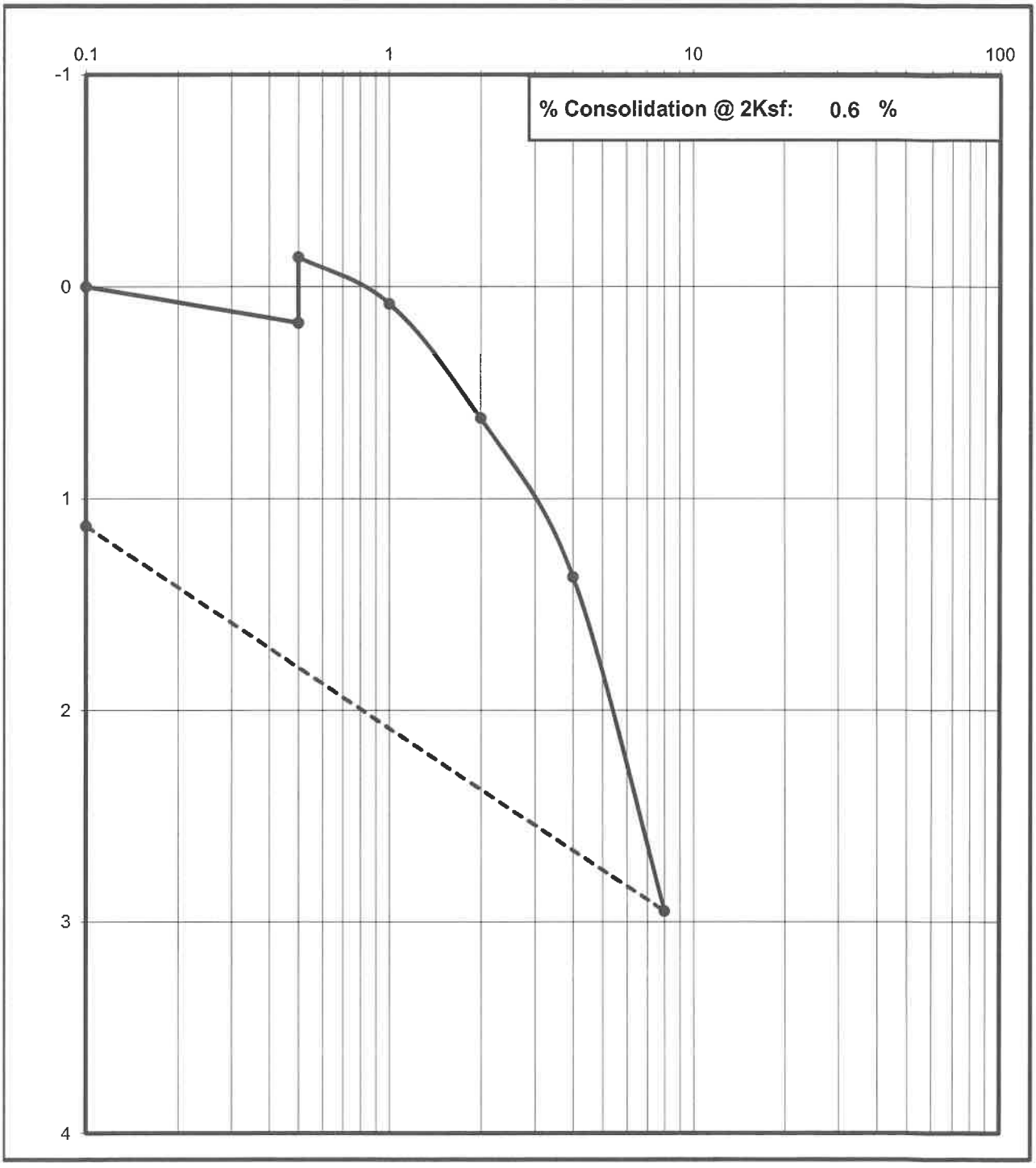
Sheet: 1 of 1

Consolidation Test

Project No	Boring No. & Depth	Date	Soil Classification
032-20054	B1 @ 5-6'	12/28/2020	CL



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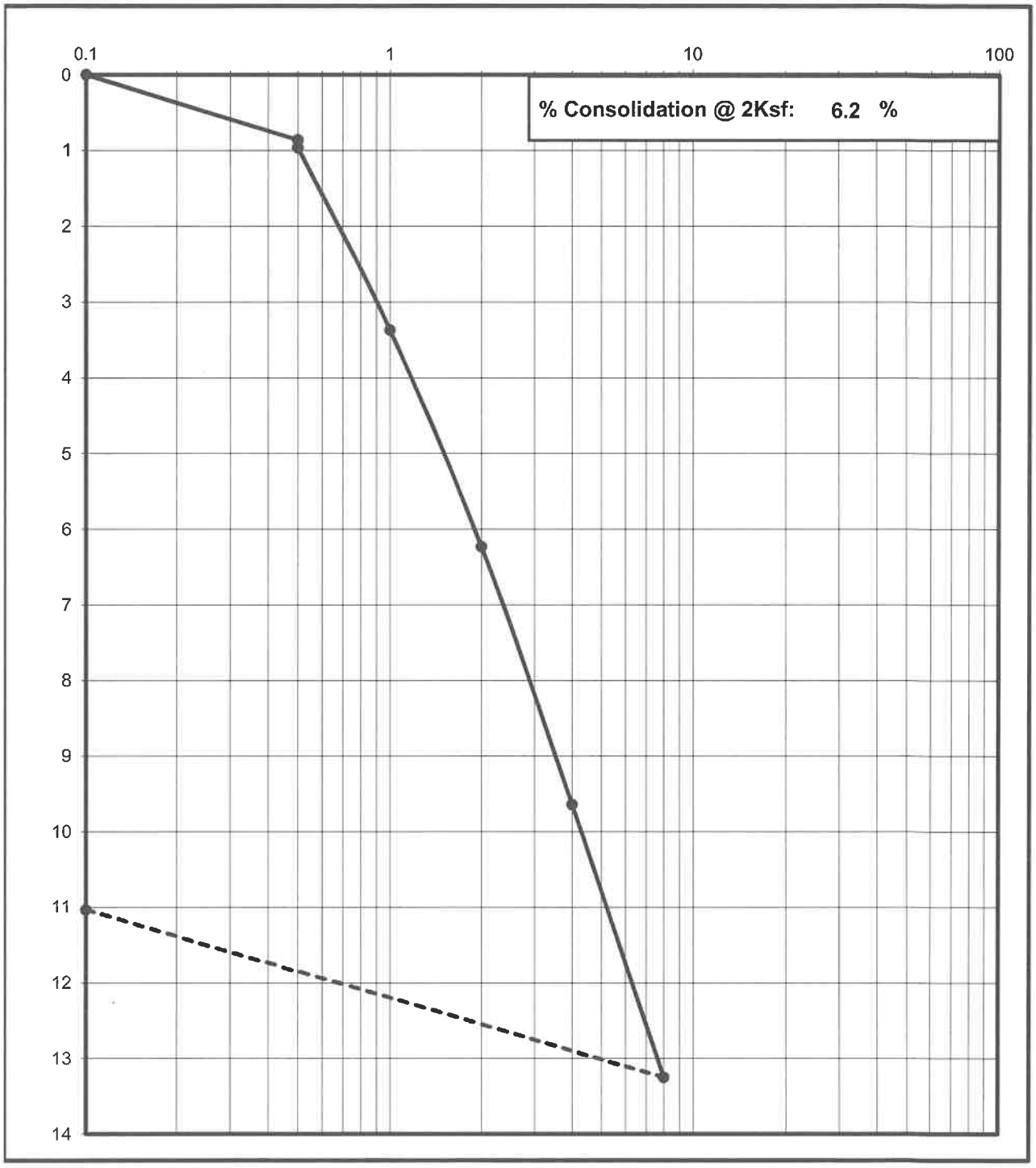
Consolidation Test

Project No	Boring No. & Depth	Date	Soil Classification
032-20054	B4 @ 2-3'	12/28/2020	CL



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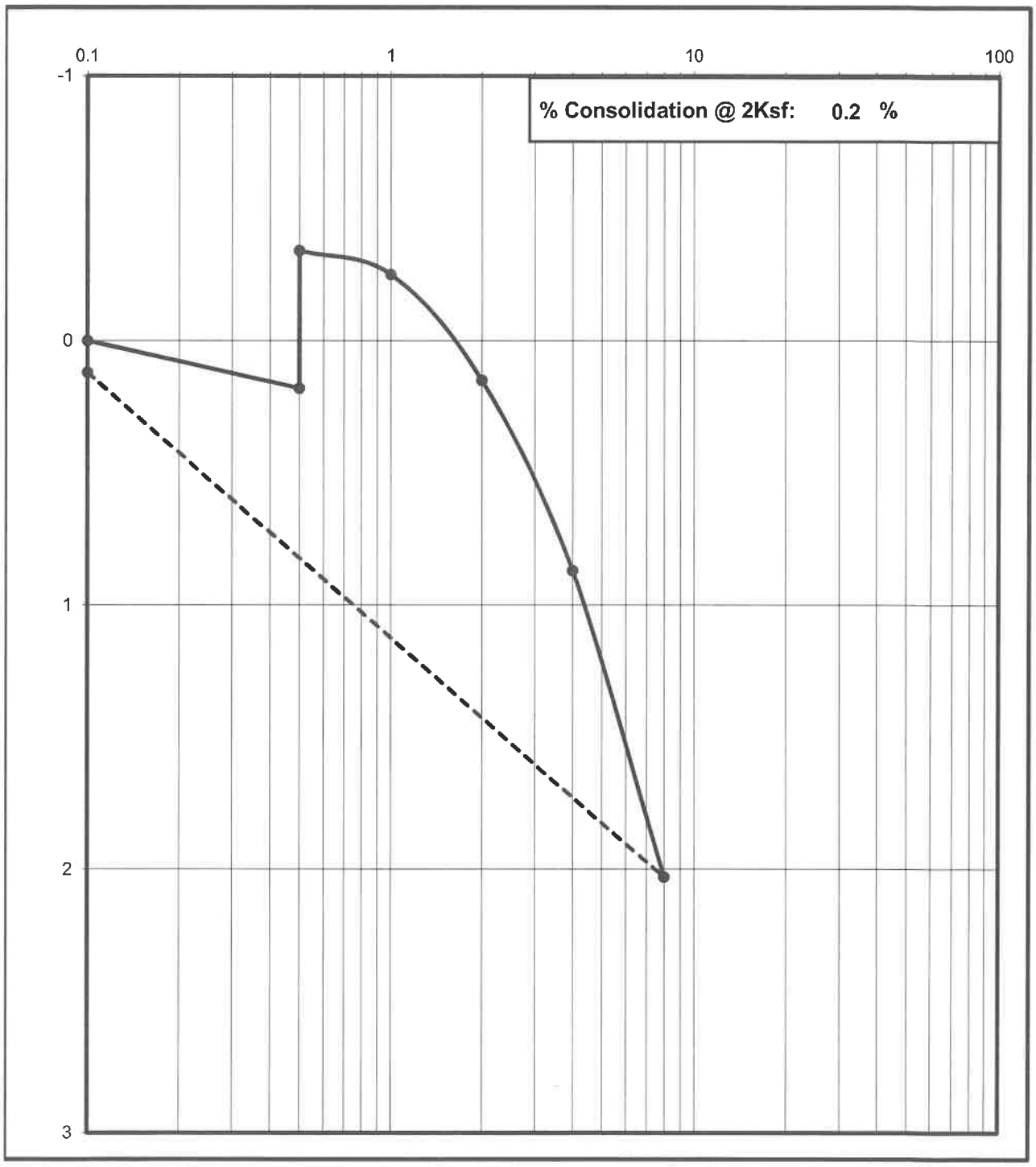
Consolidation Test

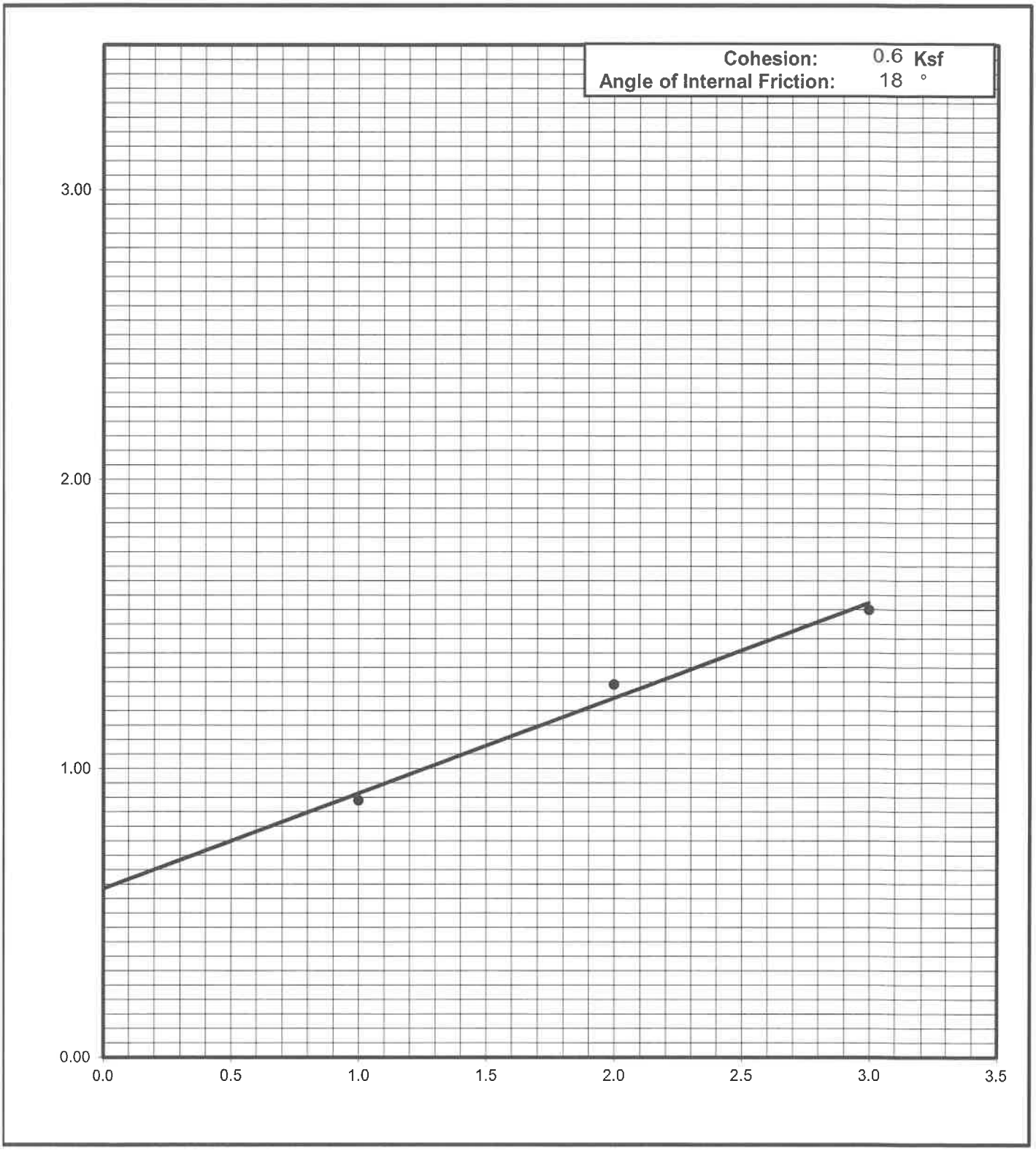
Project No	Boring No. & Depth	Date	Soil Classification
032-20054	B10 @ 2-3'	12/28/2020	CL



Krazan Testing Laboratory

Shear Strength Diagram (Direct Shear)
ASTM D - 3080 / AASHTO T - 236

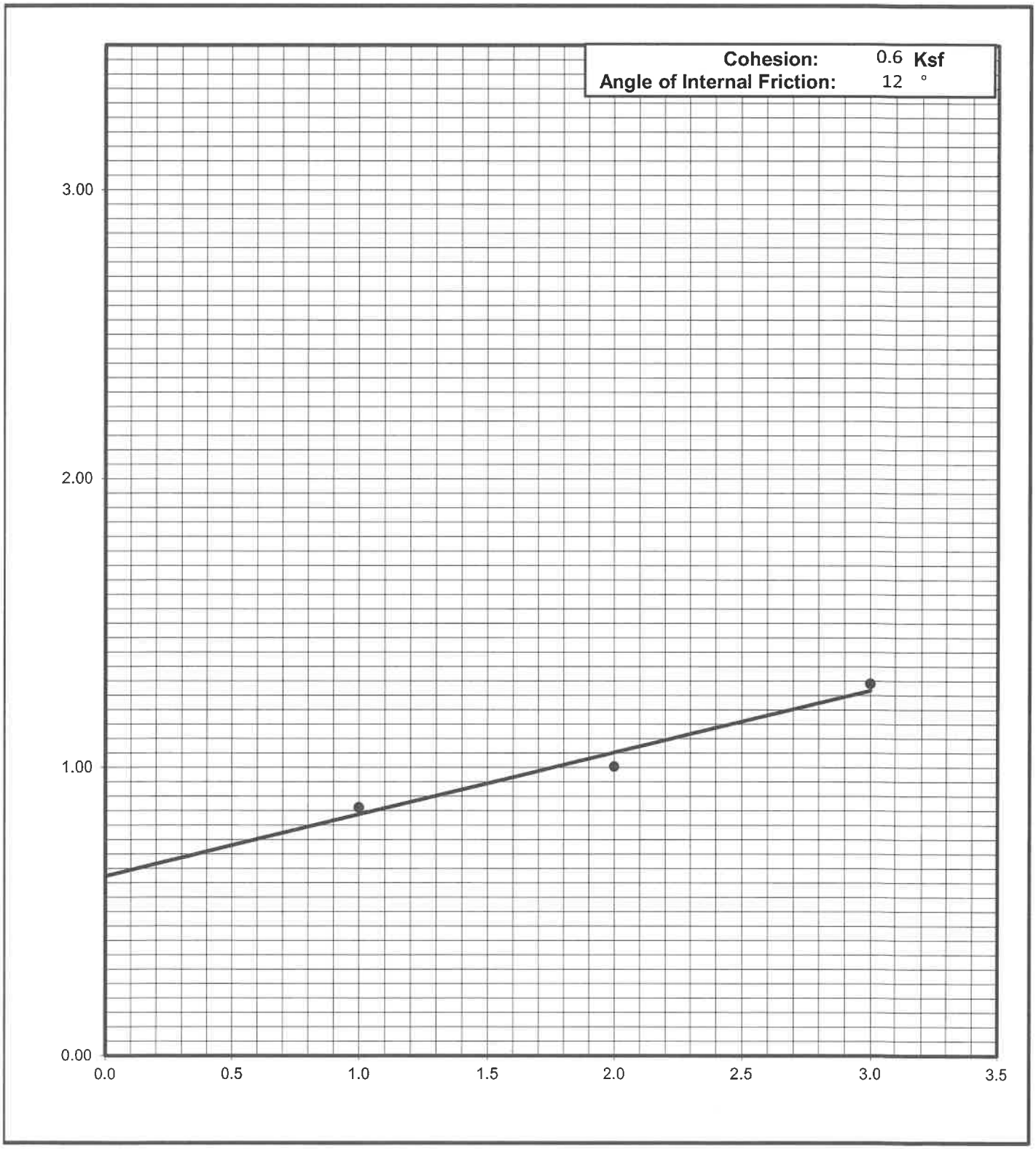
Project Number	Boring No. & Depth	Soil Type	Date
032-20054	B4 @ 5-6'	CL	12/28/2020



Krazan Testing Laboratory

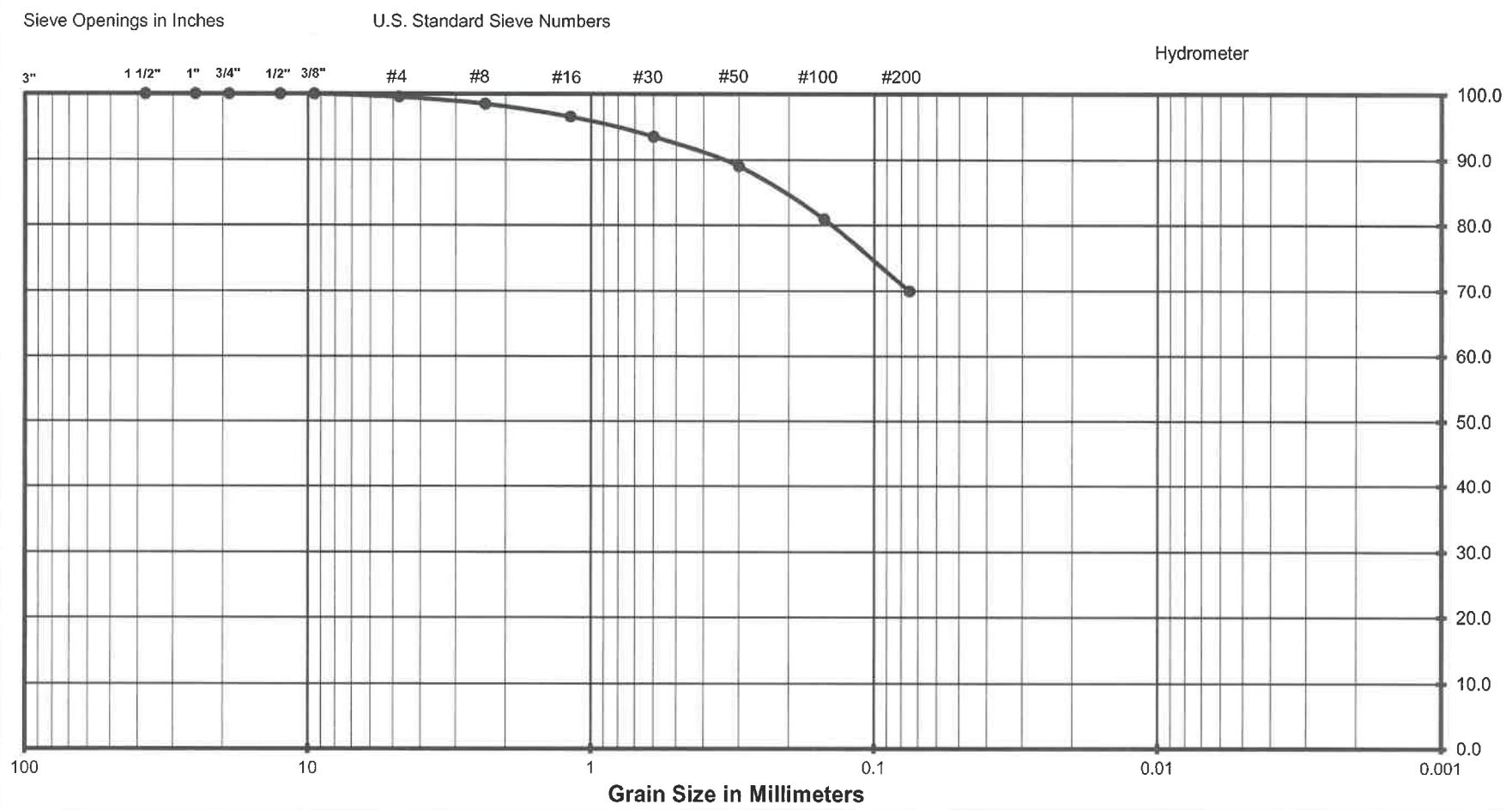
Shear Strength Diagram (Direct Shear)
ASTM D - 3080 / AASHTO T - 236

Project Number	Boring No. & Depth	Soil Type	Date
032-20054	B9 @ 2-3'	CL	12/28/2020



Krazan Testing Laboratory

Grain Size Analysis



(Unified Soils Classification)

Project Name	Commerce 220 Distribution Center
Project Number	032-20054
Soil Classification	CL
Sample Number	B4 @ 2-3'

Krazan Testing Laboratory

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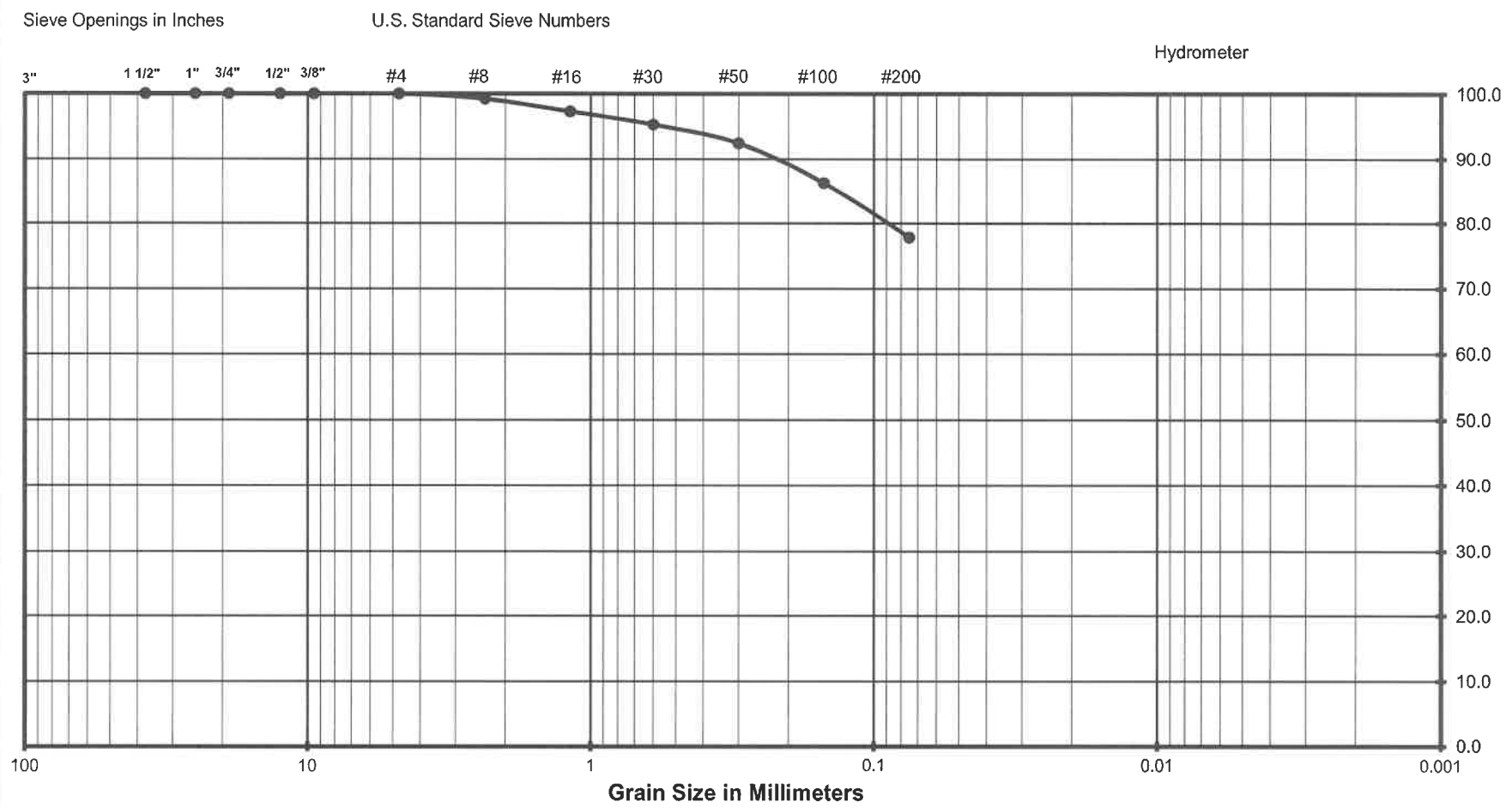
Grain Size Analysis



(Unified Soils Classification)

Project Name	Commerce 220 Distribution Center
Project Number	032-20054
Soil Classification	CL
Sample Number	B10 @ 2-3'

Krazan Testing Laboratory

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Expansion Index Test

ASTM D - 4829

Project Number	: 042-20054
Project Name	: Commerce 220 Distribution Center
Date	: 12/28/2020
Sample location/ Depth	: 2-3'
Sample Number	: X1
Soil Classification	: CL

Trial #	**1**	**2**	**3**
Weight of Soil & Mold, gms	751.3		
Weight of Mold, gms	367.8		
Weight of Soil, gms	383.5		
Wet Density, Lbs/cu.ft.	115.7		
Weight of Moisture Sample (Wet), gms	200.0		
Weight of Moisture Sample (Dry), gms	178.5		
Moisture Content, %	12.0		
Dry Density, Lbs/cu.ft.	103.2		
Specific Gravity of Soil	2.7		
Degree of Saturation, %	51.4		

Time	Inital	30 min	1 hr	6hrs	12 hrs	24 hrs
Dial Reading	0	--	--	--	--	0.0891

Expansion Index $_{measured}$ = 89.1

Expansion Index = 89

Expansion Potential Table	
Exp. Index	Potential Exp.
0 - 20	Very Low
21 - 50	Low
51 - 90	Medium
91 - 130	High
>130	Very High

Krazan Testing Laboratory 2132

Plasticity Index of Soils

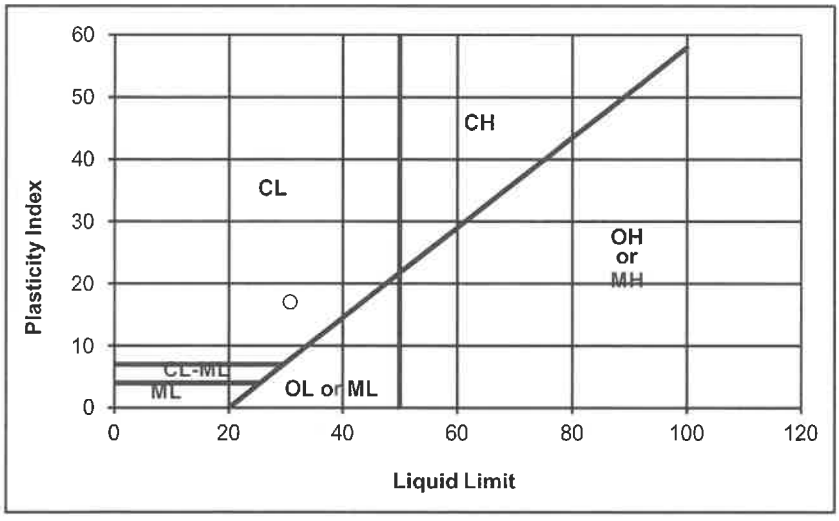
ASTM D4318/AASHTO T89 T90/CT 204

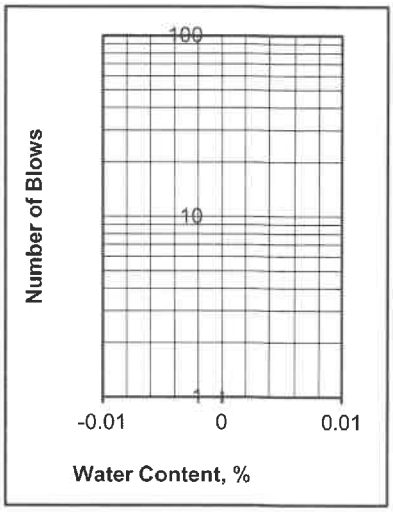
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020 Date Tested: 12/24/2020
Sampled By: RA Tested By: JM
Sample Number: Verified By: JG
Sample Location: B10 @ 5-6'
Sample Description: CL

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	33.04	27.66		27.62	28.90	
Weight of Dry Soil & Tare (g)	30.62	25.99		24.37	26.22	
Weight of Tare (g)	13.74	14.37		13.88	17.45	
Weight of water (g)	2.42	1.66		3.25	2.68	
Weight of Dry Soil (g)	16.88	11.62		10.49	8.77	
Water Content (% of dry wt.)	14.3%	14.3%		31.0%	30.6%	
Number of Blows				25	25	

Plastic Limit : 14 **Liquid Limit : 31**

Plasticity Index : 17
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

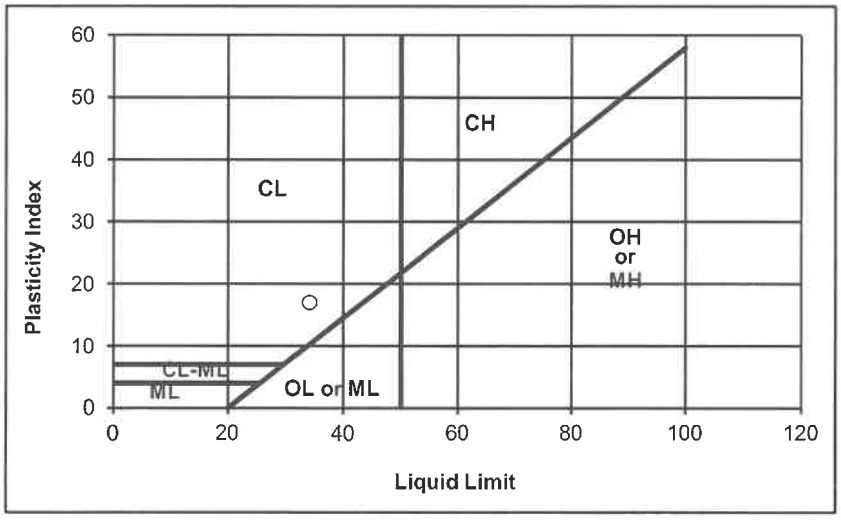
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020
Sampled By: RA
Sample Number:
Sample Location: B10 @ 10-11'
Sample Description: SC-CL

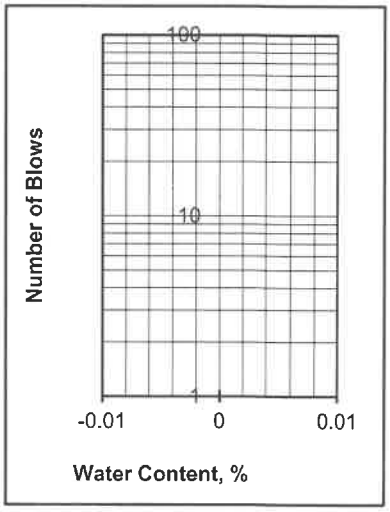
Date Tested: 12/24/2020
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	31.02	25.22		26.73	26.28	
Weight of Dry Soil & Tare (g)	28.48	23.51		23.31	23.09	
Weight of Tare (g)	13.28	13.12		13.23	13.79	
Weight of water (g)	2.54	1.71		3.42	3.20	
Weight of Dry Soil (g)	15.19	10.39		10.08	9.29	
Water Content (% of dry wt.)	16.7%	16.5%		33.9%	34.4%	
Number of Blows				25	25	

Plastic Limit : 17 **Liquid Limit : 34**

Plasticity Index : 17
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

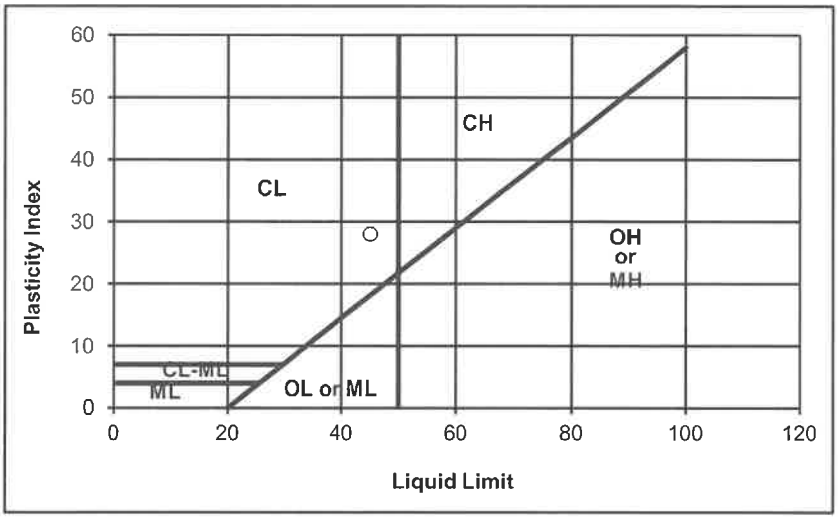
ASTM D4318/AASHTO T89 T90/CT 204

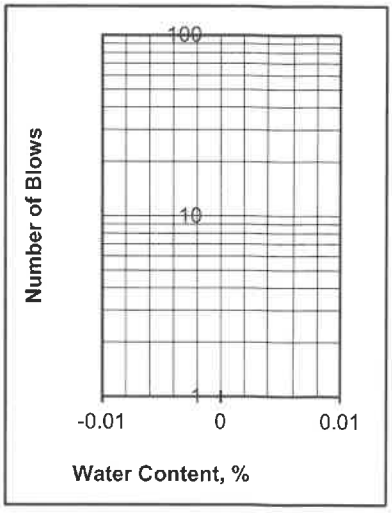
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020 Date Tested: 12/24/2020
Sampled By: RA Tested By: JM
Sample Number: Verified By: JG
Sample Location: B10 @ 15-16'
Sample Description: CL

Trial Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	32.30	25.89		25.61	24.81	
Weight of Dry Soil & Tare (g)	30.23	24.08		21.97	21.57	
Weight of Tare (g)	17.44	13.68		13.88	14.39	
Weight of water (g)	2.07	1.81		3.64	3.24	
Weight of Dry Soil (g)	12.78	10.40		8.09	7.18	
Water Content (% of dry wt.)	16.2%	17.4%		45.0%	45.1%	
Number of Blows				25	25	

Plastic Limit : 17 **Liquid Limit : 45**

Plasticity Index : 28
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

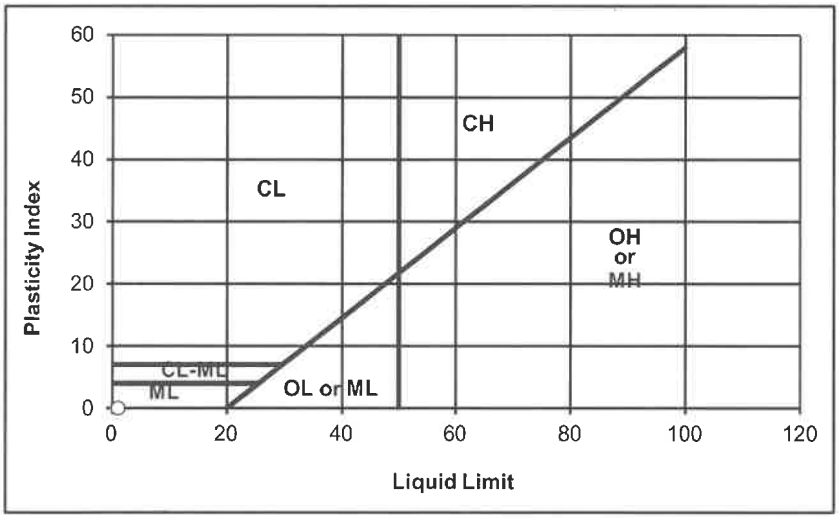
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020
Sampled By: RA
Sample Number:
Sample Location: B10 @ 20-21'
Sample Description: SM-ML

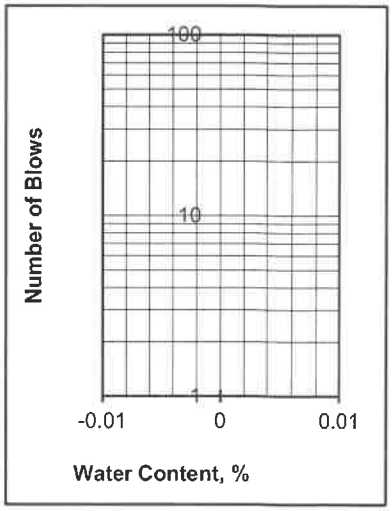
Date Tested: 12/24/2020
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)						
Weight of Dry Soil & Tare (g)						
Weight of Tare (g)						
Weight of water (g)						
Weight of Dry Soil (g)						
Water Content (% of dry wt.)						
Number of Blows						

Plastic Limit : N/D **Liquid Limit : N/D**

Plasticity Index : NON-PLASTIC
Unified Soil Classification : NON-PLASTIC **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

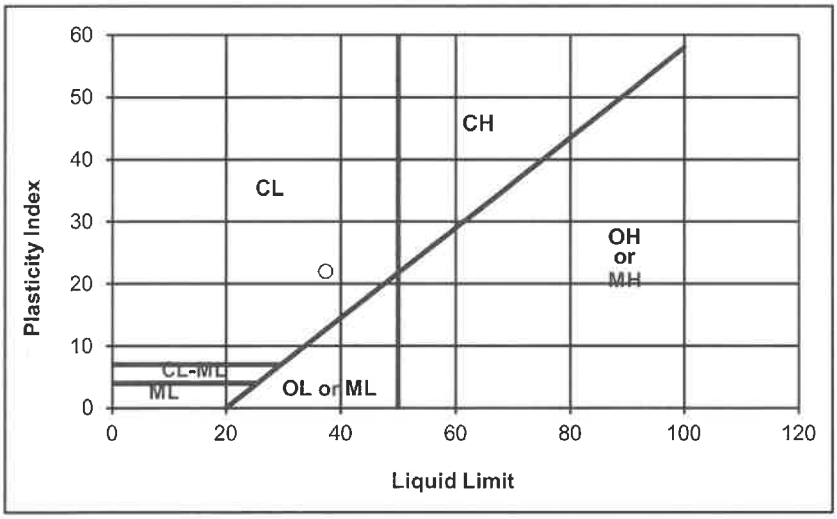
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020
Sampled By: RA
Sample Number:
Sample Location: B10 @ 25-26'
Sample Description: CL

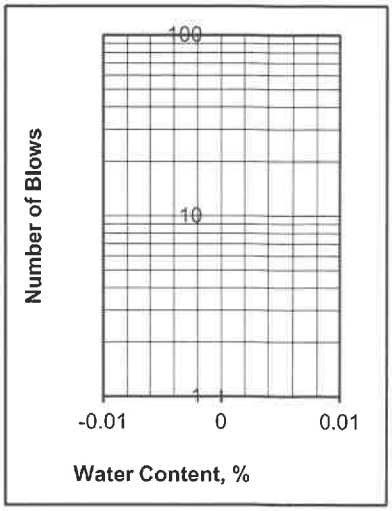
Date Tested: 12/24/2020
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	27.21	26.81		25.96	28.19	
Weight of Dry Soil & Tare (g)	25.53	25.50		22.83	24.72	
Weight of Tare (g)	14.07	16.78		14.25	15.66	
Weight of water (g)	1.67	1.31		3.13	3.47	
Weight of Dry Soil (g)	11.46	8.72		8.59	9.07	
Water Content (% of dry wt.)	14.6%	15.1%		36.5%	38.2%	
Number of Blows				25	25	

Plastic Limit : 15 **Liquid Limit : 37**

Plasticity Index : 22
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

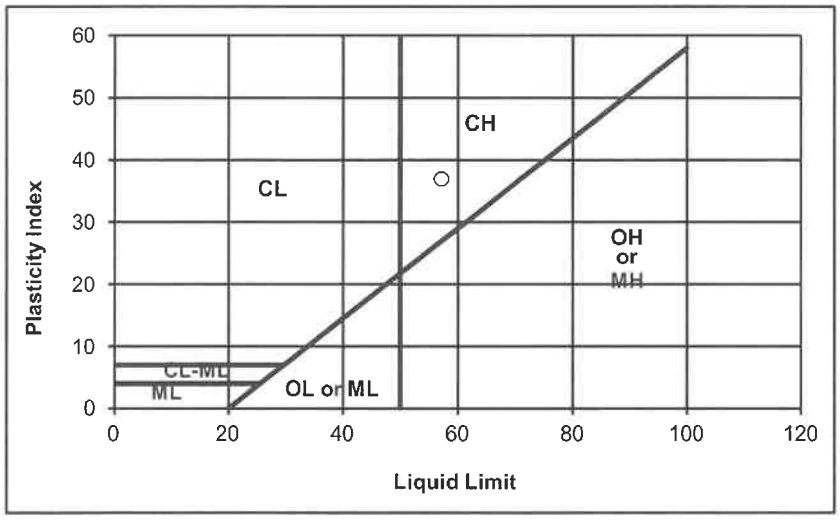
ASTM D4318/AASHTO T89 T90/CT 204

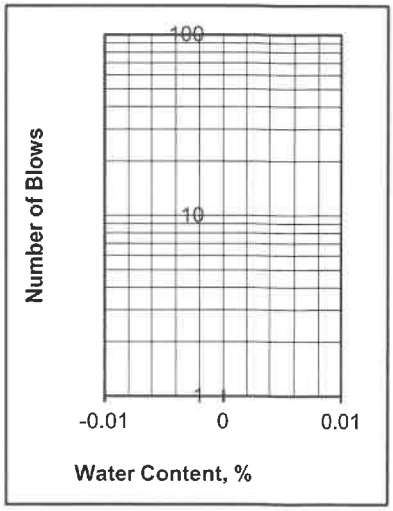
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020 Date Tested: 12/24/2020
Sampled By: RA Tested By: JM
Sample Number: Verified By: JG
Sample Location: B10 @ 30-31'
Sample Description: CH

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	28.52	35.11		25.09	24.94	
Weight of Dry Soil & Tare (g)	26.01	32.17		20.82	20.70	
Weight of Tare (g)	13.30	17.17		13.33	13.32	
Weight of water (g)	2.52	2.95		4.26	4.25	
Weight of Dry Soil (g)	12.71	14.99		7.49	7.38	
Water Content (% of dry wt.)	19.8%	19.6%		56.9%	57.5%	
Number of Blows				25	25	

Plastic Limit : 20 **Liquid Limit : 57**

Plasticity Index : 37
Unified Soil Classification : CH **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

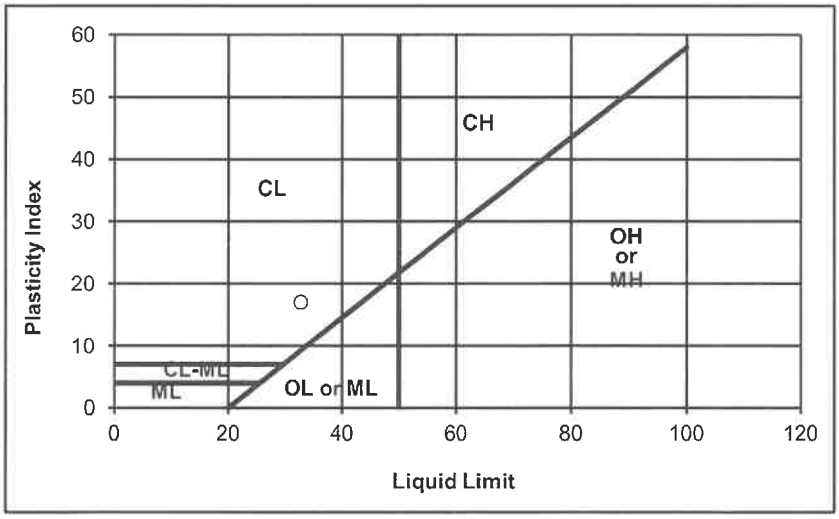
ASTM D4318/AASHTO T89 T90/CT 204

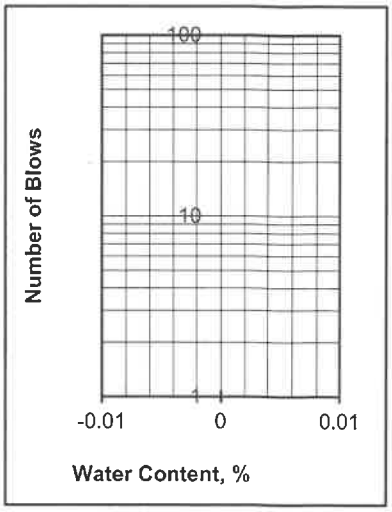
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020 Date Tested: 12/24/2020
Sampled By: RA Tested By: JM
Sample Number: Verified By: JG
Sample Location: B10 @ 35-36'
Sample Description: SC-CL

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	32.30	28.04		25.97	24.69	
Weight of Dry Soil & Tare (g)	30.04	26.01		22.96	22.01	
Weight of Tare (g)	15.65	12.98		13.87	13.79	
Weight of water (g)	2.26	2.03		3.01	2.67	
Weight of Dry Soil (g)	14.39	13.03		9.10	8.23	
Water Content (% of dry wt.)	15.7%	15.6%		33.1%	32.5%	
Number of Blows				25	25	

Plastic Limit : 16 **Liquid Limit : 33**

Plasticity Index : 17
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

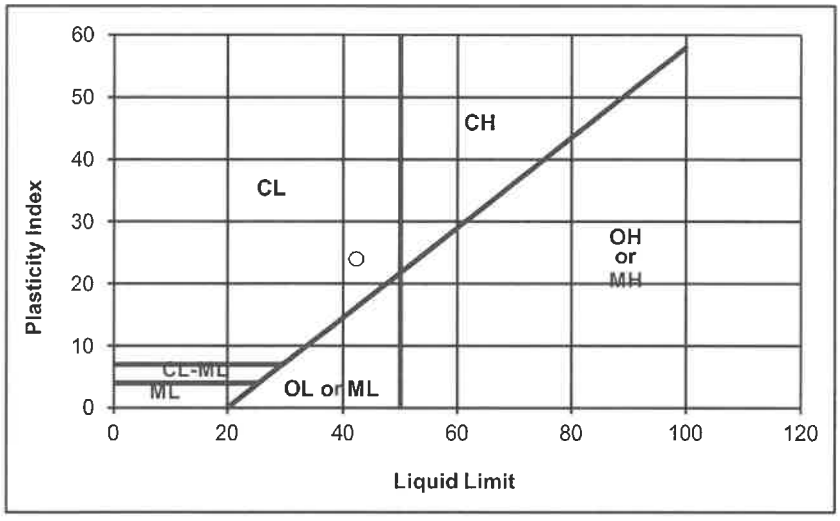
ASTM D4318/AASHTO T89 T90/CT 204

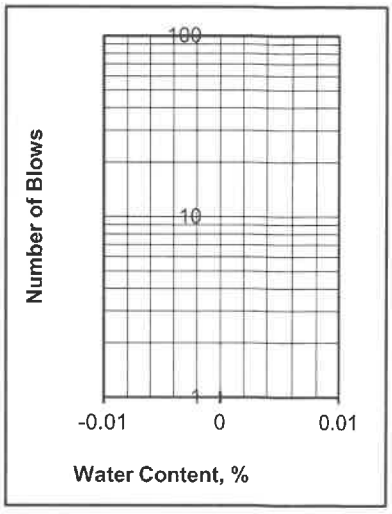
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020 Date Tested: 12/24/2020
Sampled By: RA Tested By: JM
Sample Number: Verified By: JG
Sample Location: B10 @ 40-41'
Sample Description: CL

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	29.13	31.20		26.02	29.38	
Weight of Dry Soil & Tare (g)	27.34	28.56		22.41	24.90	
Weight of Tare (g)	17.42	13.71		13.87	14.36	
Weight of water (g)	1.79	2.64		3.61	4.48	
Weight of Dry Soil (g)	9.92	14.85		8.54	10.54	
Water Content (% of dry wt.)	18.1%	17.8%		42.2%	42.5%	
Number of Blows				25	25	

Plastic Limit : 18 **Liquid Limit : 42**

Plasticity Index : 24
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

Unusual Conditions, Other Notes:

Plasticity Index of Soils

ASTM D4318/AASHTO T89 T90/CT 204

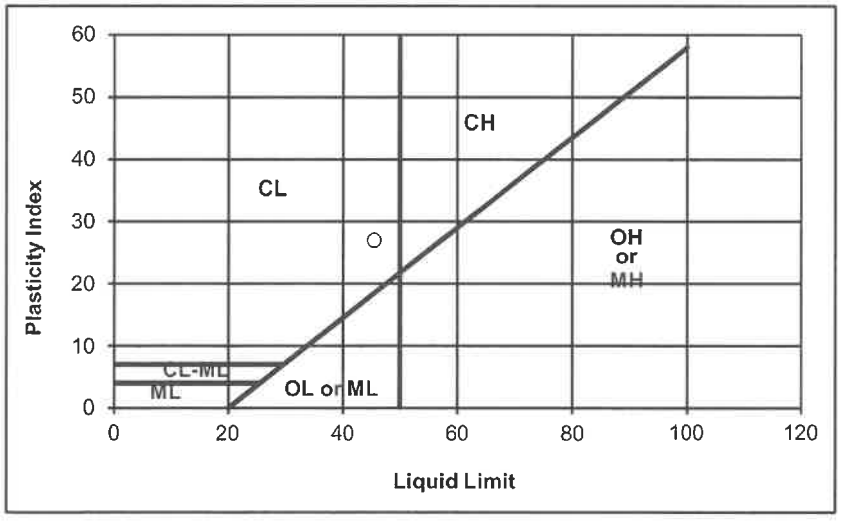
Project: **Commerce 220 Distribution Center**
Project Number: **032-20054**
Date Sampled: 12/9/2020
Sampled By: RA
Sample Number:
Sample Location: B10 @ 45-46'
Sample Description: CL

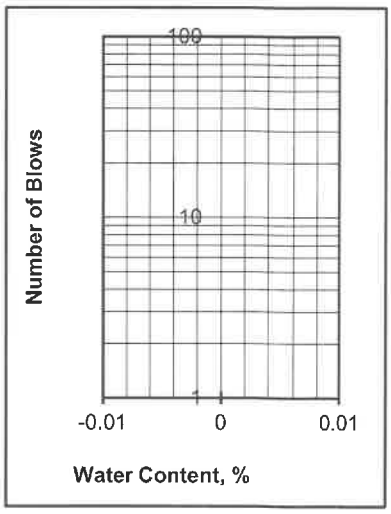
Date Tested: 12/24/2020
Tested By: JM
Verified By: JG

	Plastic Limit			Liquid Limit		
Trial Number	1	2	3	1	2	3
Weight of Wet Soil & Tare (g)	22.95	35.04		27.11	26.75	
Weight of Dry Soil & Tare (g)	21.45	32.15		23.03	22.82	
Weight of Tare (g)	13.87	16.80		14.03	14.22	
Weight of water (g)	1.50	2.89		4.08	3.94	
Weight of Dry Soil (g)	7.58	15.35		9.01	8.60	
Water Content (% of dry wt.)	19.8%	18.8%		45.3%	45.8%	
Number of Blows				25	25	

Plastic Limit : 19 **Liquid Limit : 46**

Plasticity Index : 27
Unified Soil Classification : CL **Requirement:**
Approx. % of Material Retained on # 40 Sieve:





Departures from Outlined Procedure:

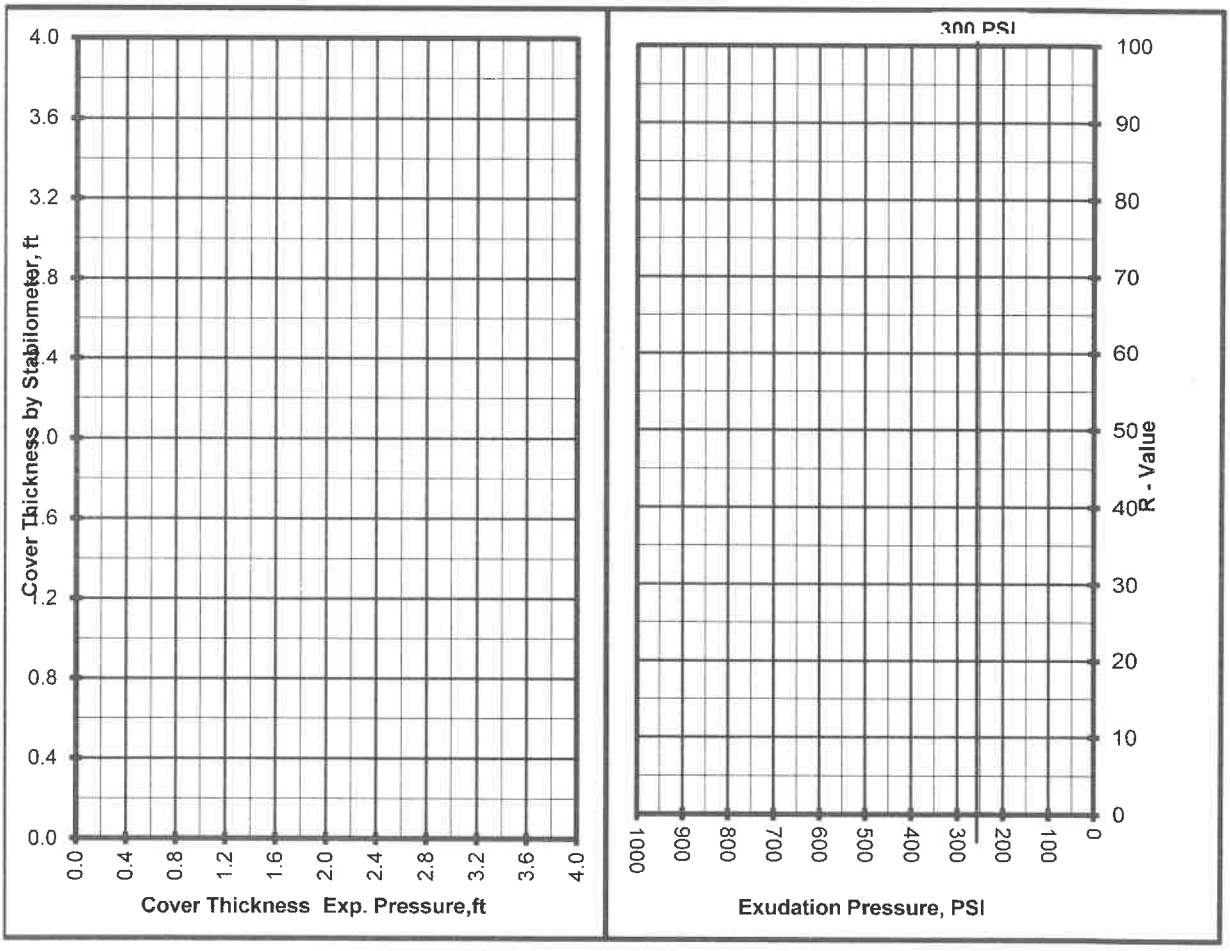
Unusual Conditions, Other Notes:

R - VALUE TEST
ASTM D - 2844 / CAL 301

Project Number	:	032-20054
Project Name	:	Commerce 220 Distribution Center
Date	:	12/17/2020
Sample Location/Curve Number	:	RV#1
Soil Classification	:	CL

TEST	A	B	C
Percent Moisture @ Compaction, %			
Dry Density, lbm/cu.ft.	R - Value less than 5 Sample Exuded from bottom of Mold During test		
Exudation Pressure, psi			
Expansion Pressure, (Dial Reading)			
Expansion Pressure, psf			
Resistance Value R			

R - Value at 300 PSI Exudation Pressure	**< 5**
R - Value by Expansion Pressure	

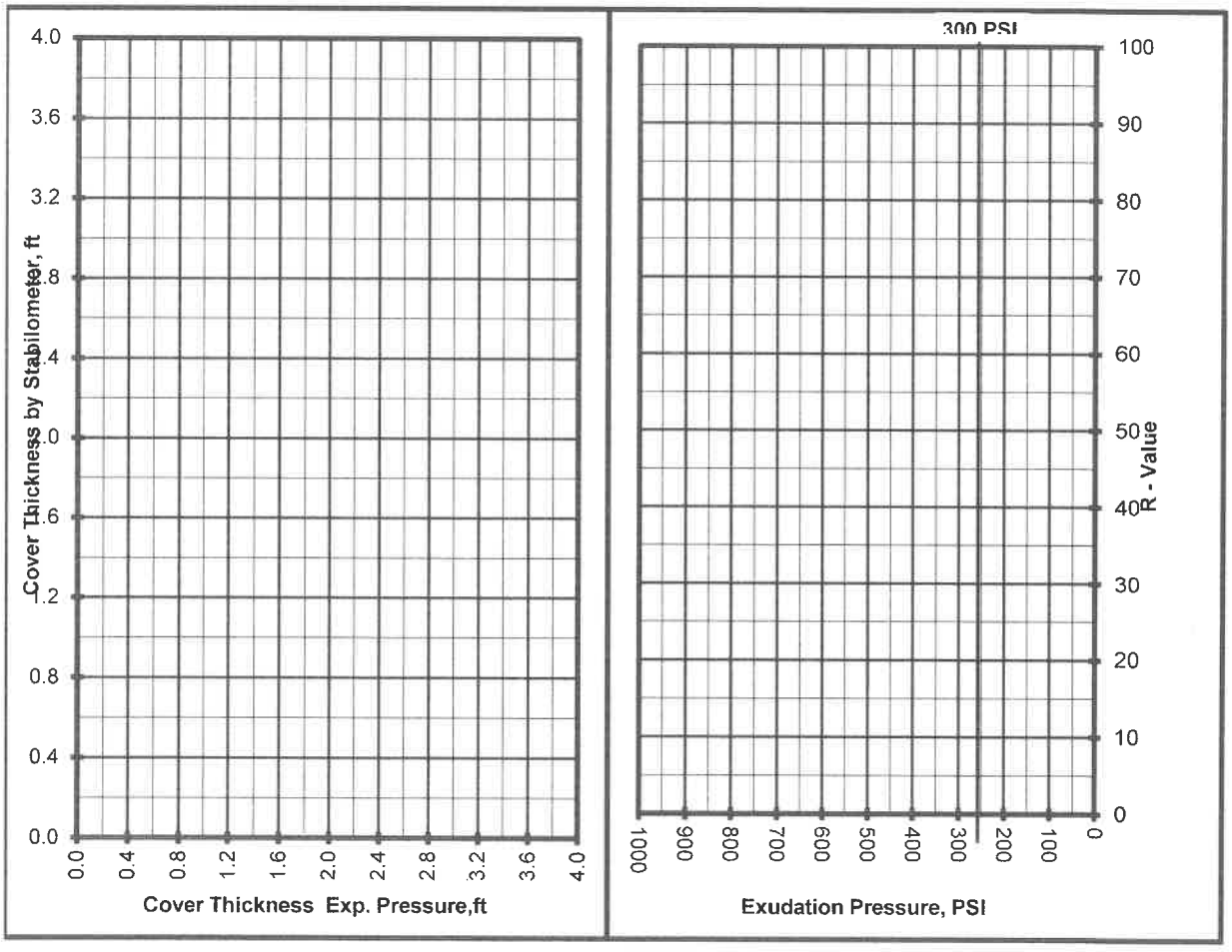


R - VALUE TEST
ASTM D - 2844 / CAL 301

Project Number	:	032-20054
Project Name	:	Commerce 220 Distribution Center
Date	:	12/17/2020
Sample Location/Curve Number	:	RV#2
Soil Classification	:	CL

TEST	A	B	C
Percent Moisture @ Compaction, %			
Dry Density, lbm/cu.ft.	R - Value less than 5 Sample Exuded from bottom of Mold During test		
Exudation Pressure, psi			
Expansion Pressure, (Dial Reading)			
Expansion Pressure, psf			
Resistance Value R			

R - Value at 300 PSI Exudation Pressure	**< 5**
R - Value by Expansion Pressure	

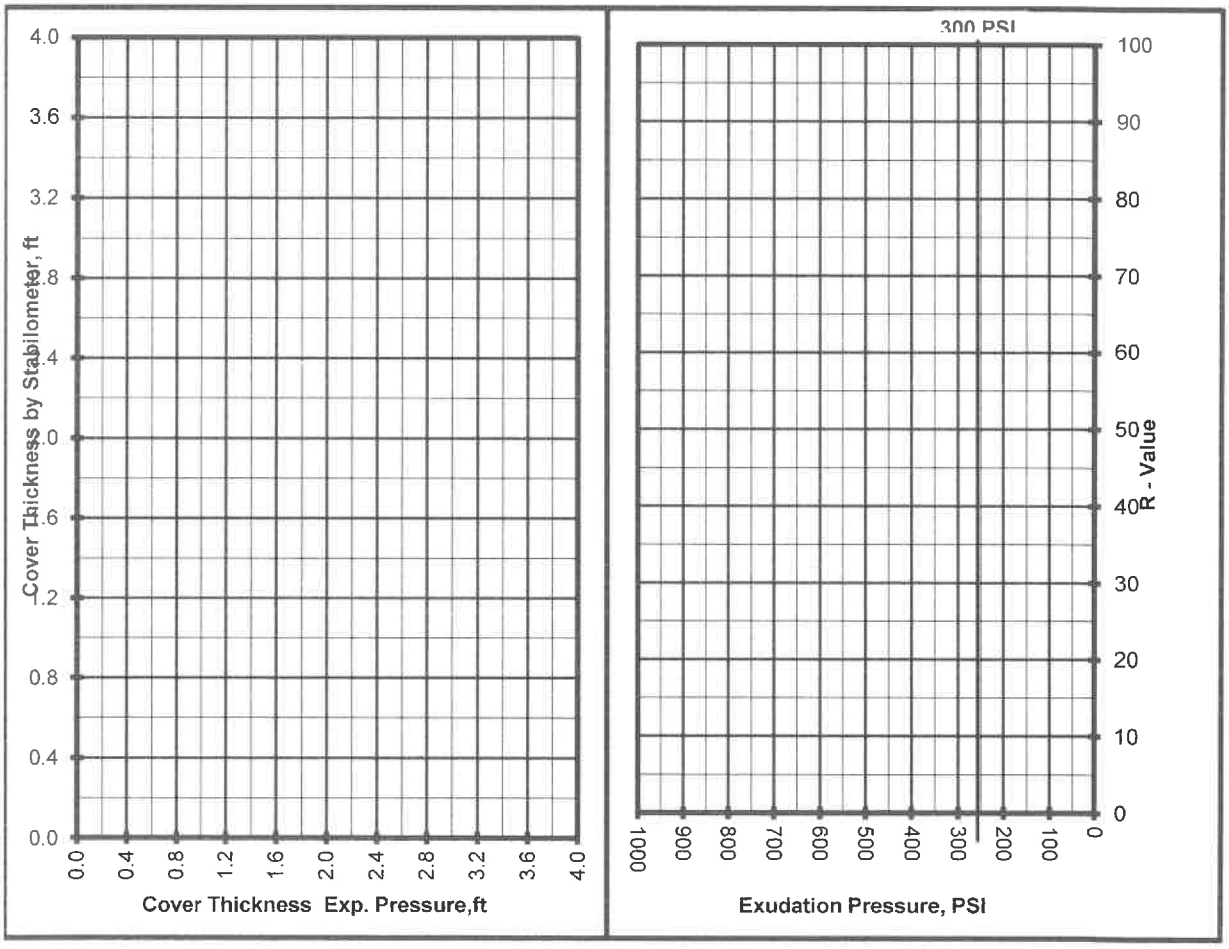


R - VALUE TEST
ASTM D - 2844 / CAL 301

Project Number	:	032-20054
Project Name	:	Commerce 220 Distribution Center
Date	:	12/17/2020
Sample Location/Curve Number	:	RV#3
Soil Classification	:	CL

TEST	A	B	C
Percent Moisture @ Compaction, %			
Dry Density, lbm/cu.ft.	R - Value less than 5 Sample Exuded from bottom of Mold During test		
Exudation Pressure, psi			
Expansion Pressure, (Dial Reading)			
Expansion Pressure, psf			
Resistance Value R			

R - Value at 300 PSI Exudation Pressure	**< 5**
R - Value by Expansion Pressure	



APPENDIX B

EARTHWORK SPECIFICATIONS

GENERAL

When the text of the report conflicts with the general specifications in this appendix, the recommendations in the report have precedence.

SCOPE OF WORK: These specifications and applicable plans pertain to and include all earthwork associated with the site rough grading, including but not limited to the furnishing of all labor, tools, and equipment necessary for site clearing and grubbing, stripping, preparation of foundation materials for receiving fill, excavation, processing, placement and compaction of fill and backfill materials to the lines and grades shown on the project grading plans, and disposal of excess materials.

PERFORMANCE: The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications. This work shall be inspected and tested by a representative of Krazan and Associates, Inc., hereinafter known as the Soils Engineer and/or Testing Agency. Attainment of design grades when achieved shall be certified by the project Civil Engineer. Both the Soils Engineer and the Civil Engineer are the Owner's representatives. If the Contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, he shall make the necessary readjustments until all work is deemed satisfactory as determined by both the Soils Engineer and the Civil Engineer. No deviation from these specifications shall be made except upon written approval of the Soils Engineer, Civil Engineer or project Architect.

No earthwork shall be performed without the physical presence or approval of the Soils Engineer. The Contractor shall notify the Soils Engineer at least 2 working days prior to the commencement of any aspect of the site earthwork.

The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineers harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of the Owner or the Engineers.

TECHNICAL REQUIREMENTS: All compacted materials shall be densified to a density not less than 90 percent relative compaction based on ASTM Test Method D1557 or CAL-216, as specified in the technical portion of the Soil Engineer's report. The location and frequency of field density tests shall be as determined by the Soils Engineer. The results of these tests and compliance with these specifications shall be the basis upon which satisfactory completion of work will be judged by the Soils Engineer.

SOILS AND FOUNDATION CONDITIONS: The Contractor is presumed to have visited the site and to have familiarized himself with existing site conditions and the contents of the data presented in the soil report.

The Contractor shall make his own interpretation of the data contained in said report, and the Contractor shall not be relieved of liability under the Contract documents for any loss sustained as a result of any variance between conditions indicated by or deduced from said report and the actual conditions encountered during the progress of the work.

DUST CONTROL: The work includes dust control as required for the alleviation or prevention of any dust nuisance on or about the site or the borrow area, or off-site if caused by the Contractor's operation either during the performance of the earthwork or resulting from the conditions in which the Contractor leaves the site. The Contractor shall assume all liability, including court costs of codefendants, for all claims related to dust or windblown materials attributable to his work.

SITE PREPARATION

Site preparation shall consist of site clearing and grubbing and the preparations of foundation materials for receiving fill.

CLEARING AND GRUBBING: The Contractor shall accept the site in this present condition and shall demolish and/or remove from the area of designated project earthwork all structures, both surface and subsurface, trees, brush, roots, debris, organic matter, and all other matter determined by the Soils Engineer to be deleterious or otherwise unsuitable. Such materials shall become the property of the Contractor and shall be removed from the site.

Tree root systems in proposed building areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots larger than 1 inch. Tree roots removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill of tree root excavations should not be permitted until all exposed surfaces have been inspected and the Soils Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

SUBGRADE PREPARATION: Surfaces to receive Engineered Fill, building or slab loads shall be prepared as outlined above, excavated/scarified to a depth of 12 inches, moisture-conditioned as necessary, and compacted to 90 percent relative compaction.

Loose soil areas, areas of uncertified fill, and/or areas of disturbed soils shall be moisture-conditioned as necessary and recompacted to 90 percent relative compaction. All ruts, hummocks, or other uneven surface features shall be removed by surface grading prior to placement of any fill materials. All areas which are to receive fill materials shall be approved by the Soils Engineer prior to the placement of any of the fill material.

EXCAVATION: All excavation shall be accomplished to the tolerance normally defined by the Civil Engineer as shown on the project grading plans. All over-excavation below the grades specified shall be backfilled at the Contractor's expense and shall be compacted in accordance with the applicable technical requirements.

FILL AND BACKFILL MATERIAL: No material shall be moved or compacted without the presence of the Soils Engineer. Material from the required site excavation may be utilized for construction site fills provided prior approval is given by the Soils Engineer. All materials utilized for constructing site fills shall be free from vegetation or other deleterious matter as determined by the Soils Engineer.

PLACEMENT, SPREADING AND COMPACTION: The placement and spreading of approved fill materials and the processing and compaction of approved fill and native materials shall be the responsibility of the Contractor. However, compaction of fill materials by flooding, ponding, or jetting shall not be permitted unless specifically approved by local code, as well as the Soils Engineer.

Both cut and fill areas shall be surface-compacted to the satisfaction of the Soils Engineer prior to final acceptance.

SEASONAL LIMITS: No fill material shall be placed, spread, or rolled while it is frozen or thawing or during unfavorable wet weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until the Soils Engineer indicates that the moisture content and density of previously placed fill are as specified.

APPENDIX C

PAVEMENT SPECIFICATIONS

1. DEFINITIONS - The term "pavement" shall include asphaltic concrete surfacing, untreated aggregate base, and aggregate subbase. The term "subgrade" is that portion of the area on which surfacing, base, or subbase is to be placed.

The term "Standard Specifications": hereinafter referred to is the 2018 Standard Specifications of the State of California, Department of Transportation, and the "Materials Manual" is the Materials Manual of Testing and Control Procedures, State of California, Department of Public Works, Division of Highways. The term "relative compaction" refers to the field density expressed as a percentage of the maximum laboratory density as defined in the applicable tests outlined in the Materials Manual.

2. SCOPE OF WORK - This portion of the work shall include all labor, materials, tools, and equipment necessary for, and reasonably incidental to the completion of the pavement shown on the plans and as herein specified, except work specifically noted as "Work Not Included."

3. PREPARATION OF THE SUBGRADE - The Contractor shall prepare the surface of the various subgrades receiving subsequent pavement courses to the lines, grades, and dimensions given on the plans. The upper 12 inches of the soil subgrade beneath the pavement section shall be compacted to a minimum relative compaction of 90 percent. The finished subgrades shall be tested and approved by the Soils Engineer prior to the placement of additional pavement courses.

4. UNTREATED AGGREGATE BASE - The aggregate base material shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate base material shall conform to the requirements of Section 26 of the Standard Specifications for Class 2 material, 1½ inches maximum size. The aggregate base material shall be spread and compacted in accordance with Section 26 of the Standard Specifications. The aggregate base material shall be spread in layers not exceeding 6 inches and each layer of aggregate material course shall be tested and approved by the Soils Engineer prior to the placement of successive layers. The aggregate base material shall be compacted to a minimum relative compaction of 95 percent.

5. AGGREGATE SUBBASE - The aggregate subbase shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate subbase material shall conform to the requirements of Section 25 of the Standard Specifications for Class 2 material. The aggregate subbase material shall be compacted to a minimum relative compaction of 95 percent, and it shall be spread and compacted in accordance with Section 25 of the Standard Specifications. Each layer of aggregate subbase shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

6. ASPHALTIC CONCRETE SURFACING - Asphaltic concrete surfacing shall consist of a mixture of mineral aggregate and paving grade asphalt, mixed at a central mixing plant and spread and compacted on a prepared base in conformity with the lines, grades and dimensions shown on the plans. The viscosity grade of the asphalt shall be PG 64-10. The mineral aggregate shall be Type B, ½ inch maximum size, medium grading and shall conform to the requirements set forth in Section 39. The drying, proportioning and mixing of the materials shall conform to Section 39.

The prime coat, spreading and compacting equipment and spreading and compacting mixture shall conform to the applicable chapters of Section 39, with the exception that no surface course shall be placed when the atmospheric temperature is below 50° F. The surfacing shall be rolled with a combination of steel wheel and pneumatic rollers, as described in Section 39-6. The surface course shall be placed with an approved self-propelled mechanical spreading and finishing machine.

7. FOG SEAL COAT - The fog seal (mixing type asphaltic emulsion) shall conform to and be applied in accordance with the requirements of Section 37.

Appendix F:
Phase I Environmental Site Assessment

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
SDG COMMERCE 220
1055 COMMERCE COURT
AMERICAN CANYON, CALIFORNIA

PREPARED FOR:

Stravinski Development Group
5950 Sherry Lane, Suite 480
Dallas, Texas 75225

and

First Carbon Solutions
250 Commerce, Suite 250
Irvine, California 92602

PREPARED BY:

CAMERON-COLE
AN ADEC INNOVATION

2336 Mariner Square Drive Suite 500
Alameda, California 95401

April 27, 2023

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1.0 SUMMARY

Cameron-Cole, LLC (Cameron-Cole) has completed a Phase I Environmental Site Assessment (ESA) for the 10.17-acre property located at 1055 Commerce Court, American Canyon, Napa County, California, hereinafter referred to as the "property", "subject property", or "SP". The assessment was performed in accordance with the Master Environmental Services Agreement between Cameron-Cole, LLC and First Carbon Solutions (FCS) dated January 20, 2023, and authorized by Ms. Mary Bean on January 23, 2023. The scope of services conforms to the scope and limitations of the American Society for Testing and Materials International (ASTM International) Standard Practice for Environmental Site Assessments, Designation: E1527-21. The purpose of this Phase I ESA is to identify, to the extent feasible pursuant to the ASTM International Standard E1527-21, recognized environmental conditions (RECs) in connection with the subject property.

According to records maintained by the Napa County Assessor's office, the subject property is associated with assessor parcel number (APN) 058-030-069. The subject property is an undeveloped 10.17-acre parcel located at 1055 Commerce Court, American Canyon, Napa County, California. The subject property is currently owned by the Stravinski Development Group.

The goal of this Phase I ESA is to identify the presence or likely presence of hazardous substances or petroleum products on the subject property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water on the property. The findings of this report are summarized below and may include known or suspected RECs, Controlled Recognized Environmental Conditions (CRECs), Historical Recognized Environmental Conditions (HRECs), Vapor Encroachment Conditions (VECs), or Business Environmental Risks (BERs) identified during the performance of this Phase I ESA.

There were no RECs, CRECs, HRECS, VECs, or BERs identified at the subject property at the time of this report.

2.0 INTRODUCTION

2.1 Purpose

Cameron-Cole performed a Phase I ESA for the 10.17-acre property located at 1055 Commerce Court, American Canyon, Napa County, California in accordance with the Master Environmental Services Agreement between Cameron-Cole, LLC and First Carbon Solutions (the User) on behalf of the Stravinski Development Group (the Owner). The assessment was conducted in general conformance with the ASTM International Standard E1527-21 Standard Practice for Environmental Site Assessments. This ESA was designed to identify, to the extent feasible, the presence or likely presence of RECs in connection with the property.

The purpose of this Phase I ESA is to allow the "User" to benefit from one of the defenses referenced in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability: the innocent landowner defense, the contiguous property owner defense, or bona fide prospective purchaser defense. These defenses are collectively referred to as the "landowner liability protections," or "LLPs". ASTM International Standard E1527-21 constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B). Cameron-Cole considers FCS to be the Client and "User" of this report.

The goal of this Phase I ESA is to identify RECs in connection with the subject property consistent with ASTM International Standard E1527-21. A REC is defined as:

> *1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; 2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or 3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.*

2.2 Detailed Scope of Services

This Phase I ESA was conducted in accordance with and the Master Environmental Services Agreement between Cameron-Cole, LLC and First Carbon Solutions and authorized by Ms. Mary Bean on January 23, 2023. The scope of services consists of completing a Phase I ESA in general accordance with ASTM International Standard E1527-21 and the Scope of Services specified in the Master Agreement.

2.3 Significant Assumptions

Historical resources, personal interviews, and federal and state agency files regarding site operations and past historical use have been considered when presenting Cameron-Cole's findings and opinions. Cameron-Cole considers all information provided by our environmental database subcontractor regarding regulatory status of facilities to be current, accurate, and complete. Although Cameron-Cole made no independent investigation as to the accuracy and completeness of other information derived from secondary sources, Cameron-Cole assumes such information is reliable and representative of site conditions.

2.4 Limitations and Exceptions of Assessment

2.4.1 Site-Specific Limitations

Subsurface investigations were not conducted as part of this assessment.

2.4.2 Data Gaps

A data gap is a lack of, or inability to, obtain information required by ASTM International Standard E1527-21 despite good faith efforts to gather such information. Data gaps may result from incompleteness in any of the activities required by ASTM International Standard E1527-21. According to the ASTM International Standard Practice E1527-21, data gaps are only significant if "other information and/or professional experience raise reasonable concerns involving the data gap." As of the date of this report, Cameron-Cole has not received documents pertaining to historic releases on the site from the County of Napa. In the opinion of Cameron-Cole, this gap does not represent a "significant" data gap as additional information was identified through on-line available sources and on-property observations.

2.4.3 General Limitations and Exceptions

The Phase I ESA is produced in accordance with customary principles and practices in the applicable fields of environmental science and engineering. Cameron-Cole is not responsible for conclusions, opinions, or recommendations made by others based upon the information presented herein.

Although industry standard practices are employed, Phase I ESAs are inherently limited, given that findings and conclusions are developed from limited site evaluation and research. In performing a Phase I ESA, Cameron-Cole can only rely upon those records regarding the subject property and surrounding properties which are available to the public and which can reasonably be obtained by Cameron-Cole. Cameron-Cole's opinions, conclusions and recommendations are therefore limited to those which can be derived from such available and reasonably obtainable records. It is often necessary for Cameron-Cole to rely on information prepared or obtained by others in order to complete the Phase I ESA. Cameron-Cole makes no warranty or representation as to the accuracy or completeness of information obtained from third parties. Additionally, changes may result with the passage of time with respect to characteristics of the subject property and those of surrounding properties. Cameron-Cole and its representatives do not warrant for or against future changes in operations or conditions, nor do they warrant for or against conditions present of a type or at a location not specifically addressed in the Phase I ESA.

Subject to the limitations stated herein, the opinions presented in Phase I ESAs are valid for a period of 180 days from the date of issuance.

Air, soil, and groundwater testing are not part of the Phase I ESA Report. This Phase I ESA is not intended to establish whether air, soil, or groundwater contamination, or waste disposal is present or not present on the subject property or on surrounding properties. Knowledge of actual environmental conditions on the subject property or on any surrounding properties can only be obtained from air, soil, and groundwater testing, the installation of groundwater monitoring wells, and possible additional testing, all of which are outside the scope of the Phase I ESA.

Reasonable efforts were made within the scope of the Phase I ESA to identify the presence of underground storage tanks (USTs), aboveground storage tanks (ASTs), and ancillary equipment on or near the subject property. Limitations to the Phase I ESA exist regarding USTs and ASTs, in as much as information was

obtained by Cameron-Cole solely through its review of unobstructed and readily accessible areas, database information, and interviews. Such methods (which are considered industry standard) do not preclude the actual presence of subsurface equipment (including USTs) or regulated materials that are hidden from view due to historical activity such as site paving, re-grading, construction, or debris pile storage. Similarly, it is possible that additional UST facilities not listed in regulatory database files may exist at the subject property or on properties adjacent to the subject property due to owner/operator registration negligence, filing errors with the state regulatory agency or other reasons over which Cameron-Cole has no control or ability to determine.

Conclusions in the Phase I ESA regarding potential environmental impacts of properties and facilities surrounding the subject property are based upon reasonably available information obtained from environmental databases and inferred groundwater flow direction.

No environmental assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of a Phase I ESA is solely intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the subject property, and this practice recognizes reasonable limits of time and cost. The Phase I ESA has been prepared for the exclusive use and benefit of FCS subject to the terms and conditions specified in the Master Environmental Services Agreement between Cameron-Cole, LLC. and FCS. The Phase I ESA is for the sole and exclusive use and benefit of FCS, our client. Cameron-Cole makes no warranty as to the Phase I ESA except as to FCS's exclusive use of the Phase I ESA. The Client bears the sole responsibility for ensuring that the Phase I ESA is distributed or disseminated to only those third parties to whom FCS is strictly obligated by contract, law, regulation, or ordinance to provide it. Cameron-Cole disclaims any and all liability to any person or entity other than FCS who uses or relies on the Phase I ESA in any way whatsoever without the express written consent of both FCS and Cameron-Cole.

Third-party reliance letters may be issued upon request and upon payment of the then current fee for such letters, and only if Cameron-Cole and FCS provide express written consent for any such reliance letters.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The subject property is located at 1055 Commerce Court, American Canyon, Napa County, California. A Site Vicinity Map is provided as Figure 1 and a Property Map is provided as Figure 2. According to records maintained by the Napa County Assessor's office, the subject property is associated with APN 058-030-69.

3.2 Site and Vicinity Characteristics

The subject property consists of one parcel with surface area totaling 10.17 acres. The subject property is undeveloped and is surrounded by a warehouse to the south and undeveloped land to the north and west. The adjoining property east is used as a rural residential and outdoor recreational paintball facility. The warehouse on the adjoining property south, 1005 Commerce Court, contains Valley Wine Warehouse, Boissett Collection, Wine Direct, and Western Wine Services.

3.3 Current Uses of the Property

The subject property is currently undeveloped land.

3.4 Descriptions of Structures, Roads, and Other Improvements to the Site

The property can be accessed from Commerce Court which adjoins the eastern property boundary. The majority of the subject property is undeveloped with natural vegetation. There are no structures currently on the subject property. Temporary structures were formerly located on the southeastern corner of the site (see historical review Section 5.7). The area has been cleared of vegetation and gravel pathways remain in the area. Additionally, two stormwater drains are located on the subject property along Commerce Court.

4.0 USER PROVIDED INFORMATION

For the User to qualify for one of the LLPs offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, Section 6 of ASTM International Standard E1527-21 requires the User to provide the environmental professional (EP) the following information:

- The existence of environmental cleanup liens;
- Activity and Use Limitations (AULs) recorded against the subject property;
- Specialized knowledge or experience of the User;
- Relationship of the purchase price to the fair market value of the property if it were not contaminated;
- Commonly known or reasonably ascertainable information about the subject property; and
- The degree of obviousness of the presence of contamination at the subject property.

A User Questionnaire was completed by Ms. Janna Waligorski Hudson, Senior Project Manager, FCS, on March 28, 2023 (Appendix B).

4.1 Title Records

A historical chain-of-title report and an environmental lien report were not provided by the User or obtained and reviewed by Cameron-Cole as part of the approved scope of services for this project. The property is owned by the Stravinski Development Group (SDG).

4.2 Environmental Liens or Activity and Use Limitations

Ms. Hudson indicated via a completed User Questionnaire that she was not aware of any environmental liens or AULs, such as engineering controls, land use restrictions, and institutional controls that have been filed or recorded on the subject property.

4.3 Specialized Knowledge

Ms. Hudson indicated she does not possess specialized knowledge or experience that is material to RECs in connection with the subject property.

4.4 Commonly Known or Reasonably Ascertainable Information

Ms. Hudson was asked to provide any commonly known or reasonably ascertainable information within the local community about the subject property that is material to RECs in connection with the subject property. She indicated that she was not aware of any information regarding the subject property.

Ms. Hudson stated on the questionnaire the Final Initial Study for the SDG Commerce 330 Warehouse project dated January 2019 included the subject property. She stated that the study referenced a Phase I ESA prepared by ATC and dated June 2018 which also included the subject property. Ms. Hudson provided the *Final Initial Study for the SDG Commerce 330 Warehouse Project,* Grassetti Environmental Consulting, January 2019 and the *Geotechnical Engineering Investigation, Proposed SDG Commerce 224 (Draft)*, Krazan & Associates, Inc., January 18, 2021. Ms. Hudson stated she did not have access to the Phase I ESA prepared by ATC in 2018.

4.5 Valuation Reduction for Environmental Issues

Ms. Hudson indicated she was not involved in the purchase of the property.

4.6 Owner, Property Manager, and Occupant Information

According to Ms. Hudson, there are no current occupants of the subject property.

4.7 Proceedings Involving the Property

Ms. Hudson indicated that she is unaware of any proceedings regarding the subject property.

4.8 Reason for Performing Phase I ESA

Ms. Hudson indicated via a User Questionnaire completed on March 28, 2023, that the reason for performing the Phase I ESA is to satisfy one of the requirements for the innocent landowner defense under CERCLA and to understand potential environmental conditions that could materially impact the operation of the business associated with the parcel of commercial real estate.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources and Other Ascertainable Records Sources

Envirosite provided Cameron-Cole with a comprehensive government agency information search in accordance with ASTM International Standard E1527-21. The regulatory search information and a legend of the database acronyms are presented as Appendix C, Regulatory Agency Search Report Maps depicting properties listed in the various databases searched by Envirosite are also provided. The table below provides a summary of the identified standard (ASTM required) federal, state, tribal, and local environmental database records reviewed along with each record's approximate minimum search distance (AMSD) from the subject property.

STANDARD ENVIRONMENTAL DATABASE RECORD SUMMARY

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (Miles)	<1/8 Mile	1/8-1/4 Mile	1/4-1/2 Mile	1/2-1 Mile	>1 Mile	TOTAL MAPPED
FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST								
ARCHIVED RCRA TSDF		0.500	0	0	0	--	--	0
RCRA_TSDF		0.500	0	0	0	--	--	0
FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS								
AST PBS		0.250	0	0	--	--	--	0
EPA UST		0.250	0	0	--	--	--	0
FEMA UST		0.250	0	0	--	--	--	0
HIST INDIAN UST R7		0.250	0	0	--	--	--	0
AST - CA		0.250	0	0	--	--	--	0
FID UST - CA		0.250	0	0	--	--	--	0
HIST AST - CA		0.250	0	0	--	--	--	0
HIST UST - CA		0.250	0	0	--	--	--	0
UST - CA		0.250	0	0	--	--	--	0
UST_NAPA COUNTY - CA		0.250	0	0	--	--	--	0
FEDERAL CERCLIS LIST								
CERCLIS NFRAP		0.500	0	0	1	--	--	1
CERCLIS-HIST		0.500	0	0	0	--	--	0
EPA SAA		0.500	0	0	0	--	--	0
FEDERAL FACILITY		1.000	0	0	0	0	--	0
SEMS_8R_ACTIVE SITES		0.500	0	0	0	--	--	0
SEMS_8R_ARCHIVED SITES		0.500	0	0	1	--	--	1
FEDERAL RCRA CORRACTS FACILITIES LIST								
CORRACTS		1.000	0	0	0	0	--	0
HIST CORRACTS 2		1.000	0	0	0	0	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (Miles)	<1/8 Mile	1/8-1/4 Mile	1/4-1/2 Mile	1/2-1 Mile	>1 Mile	TOTAL MAPPED
FEDERAL DELISTED NPL SITE LIST								
DELISTED NPL		1.000	0	0	0	0	--	0
DELISTED PROPOSED NPL		1.000	0	0	0	0	--	0
SEMS_DELETED NPL		1.000	0	0	0	0	--	0
FEDERAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITES LISTS								
EPA LF MOP		0.500	0	0	1	--	--	1
FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS								
EPA LUST		0.500	0	0	0	--	--	0
HIST INDIAN LUST R4		0.500	0	0	0	--	--	0
HIST INDIAN LUST R8		0.500	0	0	0	--	--	0
LUST REG 1 - CA		0.500	0	0	0	--	--	0
LUST REG 2 - CA		0.500	0	0	0	--	--	0
LUST REG 3 - CA		0.500	0	0	0	--	--	0
LUST REG 4 - CA		0.500	0	0	0	--	--	0
LUST REG 5 - CA		0.500	0	0	0	--	--	0
LUST REG 6 - CA		0.500	0	0	0	--	--	0
LUST REG 7 - CA		0.500	0	0	0	--	--	0
LUST REG 8 - CA		0.500	0	0	0	--	--	0
LUST REG 9 - CA		0.500	0	0	0	--	--	0
SLIC REG 1 - CA		0.500	0	0	0	--	--	0
SLIC REG 2 - CA		0.500	0	0	0	--	--	0
SLIC REG 3 - CA		0.500	0	0	0	--	--	0
SLIC REG 4 - CA		0.500	0	0	0	--	--	0
SLIC REG 5 - CA		0.500	0	0	0	--	--	0
SLIC REG 6 - CA		0.500	0	0	0	--	--	0
SLIC REG 7 - CA		0.500	0	0	0	--	--	0
SLIC REG 8 - CA		0.500	0	0	0	--	--	0
SLIC REG 9 - CA		0.500	0	0	0	--	--	0
FEDERAL ERNS LIST								
ERNS		SP	0	--	--	--	--	0
FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES								
FED E C		0.500	0	0	0	--	--	0
FED I C		0.500	0	0	0	--	--	0
RCRA IC_EC		0.250	0	0	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (Miles)	<1/8 Mile	1/8-1/4 Mile	1/4-1/2 Mile	1/2-1 Mile	>1 Mile	TOTAL MAPPED
FEDERAL RCRA GENERATORS LIST								
HIST RCRA_CESQG		0.250	0	0	--	--	--	0
HIST RCRA_LQG		0.250	0	0	--	--	--	0
HIST RCRA_NONGEN		0.250	0	0	--	--	--	0
HIST RCRA_SQG		0.250	0	0	--	--	--	0
RCRA_LQG		0.250	0	0	--	--	--	0
RCRA_NONGEN		0.250	0	1	--	--	--	1
RCRA_SQG		0.250	0	0	--	--	--	0
RCRA_VSQG		0.250	0	0	--	--	--	0
FEDERAL NPL SITE LIST								
NPL		1.000	0	0	0	0	--	0
NPL EPA R1 GIS		1.000	0	0	0	0	--	0
NPL EPA R3 GIS		1.000	0	0	0	0	--	0
NPL EPA R6 GIS		1.000	0	0	0	0	--	0
NPL EPA R8 GIS		1.000	0	0	0	0	--	0
NPL EPA R9 GIS		1.000	0	0	0	0	--	0
PART NPL		1.000	0	0	0	0	--	0
PROPOSED NPL		1.000	0	0	0	0	--	0
SEMS_FINAL NPL		1.000	0	0	0	0	--	0
SEMS_PROPOSED NPL		1.000	0	0	0	0	--	0
STATE- AND TRIBAL - EQUIVALENT CERCLIS								
ENVIROSTOR - CA		1.000	0	0	0	2	--	2
HIST TOXIC PITS - CA		1.000	0	0	0	0	--	0
OIL & GAS CLEANUP - CA		0.500	0	0	0	--	--	0
SWRCB CLEANUP - CA		0.500	0	0	0	--	--	0
SWRCB NON_CASE - CA		0.500	0	0	0	--	--	0
TOXIC PITS - CA		1.000	0	0	0	0	--	0
STATE AND TRIBAL – EQUIVALENT NPL								
HIST RESPONSE - CA		1.000	0	0	0	--	--	0
RESPONSE - CA		1.000	0	0	0	--	--	0
STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS								
HIST SWF/LF - CA		0.500	0	0	0	--	--	0
SWF/LF - CA		0.500	0	0	1	--	--	1

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (Miles)	<1/8 Mile	1/8-1/4 Mile	1/4-1/2 Mile	1/2-1 Mile	>1 Mile	TOTAL MAPPED
STATE RCRA GENERATORS LIST								
HWG - CA		0.250	0	1	--	--	--	1
STATE AND TRIBAL BROWNFIELD SITES								
TRIBAL BROWNFIELDS		0.500	0	0	0	--	--	0
STATE AND TRIBAL VOLUNTARY CLEANUP SITES								
VCP - CA		0.500	0	0	0	--	--	0
LOCAL BROWNFIELD LISTS								
BROWNFIELDS-ACRES		0.500	0	0	0	--	--	0
FED BROWNFIELDS		0.500	0	0	0	--	--	0
LOCAL LISTS OF LANDFILL / SOLID WASATE DISPOSAL SITES								
FED CDL		SP	0	--	--	--	--	0
US HIST CDL		SP	0	--	--	--	--	0
CDL - CA		SP	0	--	--	--	--	0
CS_NAPA COUNTY - CA		0.500	0	0	0	--	--	0
SCH - CA		0.250	0	0	--	--	--	0
RECORDS OF EMERGENCY RELEASE REPORTS								
HMIRS (DOT)		SP	0	--	--	--	--	0
CHMIRS – CA		SP	0	--	--	--	--	0
HIST CHMIRS – CA		SP	0	--	--	--	--	0
LOCAL LAND RECORDS								
LIENS 2		SP	0	--	--	--	--	0
DEED - CA		0.500	0	0	0	--	--	0
HIST LIENS - CA		SP	0	--	--	--	--	0
LIENS - CA		SP	0	--	--	--	--	0
LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES								
ODI		0.500	0	0	0	--	--	0
TRIBAL ODI		0.500	0	0	0	--	--	0
HAULERS - CA		0.500	0	0	0	--	--	0
SWRCY - CA		0.500	0	0	0	--	--	0

SP = Subject property

Cameron-Cole also conducted a search of other ascertainable records related to the subject property and surrounding properties, where applicable. The table below provides a summary of the other ascertainable records reviewed along with each record AMSD from the subject property:

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (Miles)	<1/8 Mile	1/8-1/4 Mile	1/4-1/2 Mile	1/2-1 Mile	>1 Mile	TOTAL MAPPED
AFS		SP	0	--	--	--	--	0
ALT FUELING		0.250	0	0	--	--	--	0
ARENAS		SP	0	--	--	--	--	0
ARENAS 2		SP	0	--	--	--	--	0
BRS		SP	0	--	--	--	--	0
CDC HAZDAT		1.000	0	0	0	0	--	0
CHURCHES		SP	0	--	--	--	--	0
COAL ASH DOE		0.500	0	0	0	--	--	0
COAL ASH EPA		0.500	0	0	0	--	--	0
COAL GAS		1.000	0	0	0	0	--	0
COLLEGES		SP	0	--	--	--	--	0
COLLEGES 2		SP	0	--	--	--	--	0
CONSENT (DECREES)		1.000	0	0	0	0	--	0
CORRECTIVE ACTIONS_2020		0.500	0	0	0	--	--	0
DAYCARE		SP	0	--	--	--	--	0
DEBRIS EPA LF		0.500	0	0	0	--	--	0
DEBRIS EPA SWRCY		0.500	0	0	0	--	--	0
DOD		1.000	0	0	0	0	--	0
DOT OPS		SP	0	--	--	--	--	0
ECHO		SP	0	--	--	--	--	0
ENOI		SP	0	--	--	--	--	0
EPA FUELS		SP	0	--	--	--	--	0
EPA OSC		SP	0	--	--	--	--	0
EPA WATCH		SP	0	--	--	--	--	0
FA HWF		SP	0	--	--	--	--	0
FEDLAND		1.000	0	0	0	0	--	0
FRS		SP	0	--	--	--	--	0
FTTS		SP	0	--	--	--	--	0
FTTS INSP		SP	0	--	--	--	--	0
FUDS		1.000	0	0	0	0	--	0
GOV MANSIONS		SP	0	--	--	--	--	0
HIST AFS		SP	0	--	--	--	--	0
HIST AFS 2		SP	0	--	--	--	--	0
HIST DOD		1.000	0	0	0	0	--	0
HIST LEAD_SMELTER		SP	0	--	--	--	--	0
HIST MLTS		SP	0	--	--	--	--	0
HIST PCB TRANS		SP	0	--	--	--	--	0
HIST PCS ENF		1.000	0	0	0	0	--	0
HIST PCS FACILITY		1.000	0	0	0	0	--	0
HIST SSTS		SP	0	--	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (Miles)	<1/8 Mile	1/8-1/4 Mile	1/4-1/2 Mile	1/2-1 Mile	>1 Mile	TOTAL MAPPED
HOSPITALS		SP	0	--	--	--	--	0
ICIS		SP	0	--	--	--	--	0
INACTIVE PCS		1.000	0	1	5	12	--	18
LUCIS		0.500	0	0	0	--	--	0
LUCIS 2		0.500	0	0	0	--	--	0
MANIFEST EPA		0.250	0	1	--	--	--	0
MINE OPERATIONS		0.250	0	0	--	--	--	0
MINES		0.250	0	0	--	--	--	0
MINES USGS		0.250	0	0	--	--	--	0
MLTS		SP	0	--	--	--	--	0
NPL AOC		1.000	0	0	0	0	--	0
NPL LIENS		SP	0	--	--	--	--	0
NURSING HOMES		SP	0	--	--	--	--	0
OSHA		SP	0	--	--	--	--	0
PADS		SP	0	--	--	--	--	0
PCB TRANSFORMER		SP	0	--	--	--	--	0
PCS ENF		1.000	0	1	1	3	--	5
PCS FACILITY		1.000	0	1	5	12	--	18
PFAS NPL		0.500	0	0	0	--	--	0
PFAS TRIS		0.500	0	0	0	--	--	0
PFAS UCMR3		0.500	0	0	0	--	--	0
PRISONS		SP	0	--	--	--	--	0
PRP		SP	0	--	--	--	--	0
RAATS		SP	0	--	--	--	--	0
RADINFO		SP	0	--	--	--	--	0
RMP		0.500	0	0	0	--	--	0
ROD		1.000	0	0	0	0	--	0
SCHOOLS PRIVATE		SP	0	--	--	--	--	0
SCHOOLS PUBLIC		SP	0	--	--	--	--	0
SCRD DRYCLEANERS		0.250	0	0	--	--	--	0
SEMS_SMELTER		SP	0	--	--	--	--	0
SSTS		SP	0	--	--	--	--	0
STORMWATER		SP	0	--	--	--	--	0
TOSCA-PLANT		SP	0	--	--	--	--	0
TRIS		SP	0	--	--	--	--	0
UMTRA		0.500	0	0	0	--	--	0
VAPOR		0.500	0	0	0	--	--	0
BOND EXPENDITURE PLAN - CA		1.000	0	0	0	0	--	0
CALEPA SITES – CA		0.250	1	2	--	--	--	3
CIWQS – CA		SP	0	--	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (Miles)	<1/8 Mile	1/8-1/4 Mile	1/4-1/2 Mile	1/2-1 Mile	>1 Mile	TOTAL MAPPED
CIWQS 2 – CA		SP	0	--	--	--	--	0
CORTESE – CA		0.500	0	0	0	--	--	0
DAYCARE – CA		SP	0	--	--	--	--	0
DRYCLEANERS – CA		SP	0	--	--	--	--	0
DRYCLEANER_BAY AREA - CA		0.250	0	0	--	--	--	0
EMI – CA		SP	0	--	--	--	--	0
FA - CA		SP	0	--	--	--	--	0
FA 2 - CA		SP	0	--	--	--	--	0
FIRE AREAS – CA		1.000	0	0	0	0	--	0
HAZNET - CA		0.250	0	1	--	--	--	1
HIGH FIRE -CA		1.000	0	0	0	0	--	0
HIST CORTESE – CA		0.500	0	0	0	--	--	0
HIST HAZNET - CA		0.250	0	0	--	--	--	0
HIST HWP - CA		1.000	0	0	0	0	--	0
HIST LDS - CA		0.500	0	0	0	--	--	0
HIST MCS - CA		1.000	0	0	0	0	--	0
HIST NFA - CA		0.500	0	0	0	--	--	0
HWM-COMMERCIAL FACILITIES - CA		0.250	0	0	--	--	--	0
HWP - CA		1.000	0	0	0	0	--	0
HWT - CA		0.250	0	0	--	--	--	0
LDS - CA		0.500	0	0	0	--	--	0
MCS - CA		1.000	0	0	0	0	--	0
MWMP - CA		0.250	0	0	--	--	--	0
MWMP 2 - CA		0.250	0	0	--	--	--	0
NFA - CA		0.500	0	0	0	--	--	0
NFE - CA		0.500	0	0	0	--	--	0
NPDES - CA		SP	0	--	--	--	--	0
PERCHLORATE 2 - CA		0.500	0	0	0	--	--	0
PFAS - CA		0.500	0	0	0	--	--	0
PFAS DOD - CA		0.500	0	0	0	--	--	0
PFAS GAMA - CA		0.500	0	0	0	--	--	0
PROPOSITION 65 - CA		1.000	0	0	0	0	--	0
RFR - CA		SP	0	--	--	--	--	0
SWAT - CA		SP	0	--	--	--	--	0
WDR - CA		SP	0	--	--	--	--	0
WDS - CA		SP	0	--	--	--	--	0
WILDLANDS – CA		1.000	0	0	0	0	--	0
WIP - CA	0.250	0	0	--	--	--	--	0
SEISMIC - CA	1.000	0	0	0	1	4	--	5

SP = Subject property

5.2 Standard Environmental Record and Other Ascertainable Records Review

The following discussion provides a review of results from the standard environmental records and other ascertainable records search with respect to the subject property as well as the adjacent or nearby properties. Per the discretion of the EP, some results may be omitted from this review if they are interpreted to be not of environmental significance based on threat of a material release, distance from the subject property, lower topographic elevations, and interpreted groundwater flow direction. The complete Envirosite report is included as Appendix C and contains all points of interest that were identified within the AMSD.

SUBJECT PROPERTY

The subject property was not identified in any of the standard or other ascertainable records databases searched.

Through the review of historical sources (2018 Phase I ESA by ATC), Cameron-Cole identified that the property at 2 Eucalyptus Drive was listed in the NPDES and the Napa County LUST databases. This property historically included the subject property until approximately 2012. In 1990, the property was inspected by Napa County officials. Two 10,000-gallon USTs, one 3,000-gallon UST, 55-gallon drums, and hazardous materials were observed in the eastern section of the property, which is currently the adjoining property east of the subject property. These items have since been removed from the adjoining property east. Through the review of the prior Phase I and Phase II ESAs (Section 5.7.8) conducted on the property, Cameron-Cole does not consider the historic listing of 2 Eucalyptus Drive in these databases to be an environmental threat to the subject property.

Adjacent and Nearby Off-Site Properties within the AMSD

The following provides a summary of relevant identified off-site points of interest with respect to interpreted groundwater flow direction which is inferred to flow west (see Sections 5.6.1 and 6.2.1).

South (cross-gradient)

The SDG Commerce 330 Warehouse site is located on the adjoining property south, 420 feet cross-gradient from the subject property, and is listed in the CALEPA SITES – CA, CIWQS – CA, NPDES – CA, and RFR - CA databases.

- The description provided for the site in the CALEPA SITES – CA database references “construction storm water.” No violations are listed for the site in the database.
- The CIWQS – CA database lists this site as the Commerce Blvd Pipeline Project. No violations are listed for the site in the database.
- The NPDES – CA database lists the site in the construction program and the status is listed as terminated. No violations are listed for the site in the database.
- The RFR – CA database lists the site as an active storm water construction site. No violations are listed for the site in the database.

This site does not appear to present an environmental threat to the subject property.

The Napa Junction Elementary School Project, located 1,229 feet southeast and cross-gradient from the subject property, is listed in the CALEPA SITES – CA, CIWQS – CA, CIWQS 2 – CA, and RFR - CA databases.

- The CALEPA SITES – CA database lists this site as a “Wetlands – Fill and Dredge Material”. Violations are not listed in the database.
- This site is listed in the CIWQS - CA database and no violations are listed for the site in the database.
- This site is listed in the CIWQS 2 - CA database and no violations are listed for the site in the database. The site is listed as a dredge/fill site.
- This site is listed in the RFR – CA database and no violations are listed for the site in the database. The site is listed as a dredge/fill site.

This site does not appear to present an environmental threat to the subject property.

The remaining sites located south of the subject property listed in the database search are located between ¼ and ½ mile south of the subject property. After review of the database listings, these sites do not appear to present an environmental threat to the subject property.

West (downgradient)

The American Canyon Wastewater Treatment Facility site is located at 151 Mezzetta Court, 1,021 feet down gradient from the subject property, and is listed in the CALEPA SITES – CA, CHMIRS – CA, CIWQS – CA, CIWQS 2 – CA, DOCKET, ECHO, EMI – CA, FRS, HAZNET – CA, HWG – CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES – CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA databases.

- The CALEPA SITES- CA database lists this site with the descriptions “US EPA Air Emissions Inventory System”, “Waste Discharge Requirements”, “Forestry & Silviculture”, and “Chemical Storage Facilities.” The site is a sewage treatment facility. Violations were not listed in this database for the site.
- The CHMIRS – CA database description states that “valves were left open on the affluent pond which resulted in the release of approximately 10,000 gal of raw sewage which was released into a tributary of the Napa River. Release is contained but unrecoverable.” The incident date was February 10, 2014.
- This site is listed in the CIWQS – CA database as the American Canyon Water Recycling Program site. Violations were not listed in this database for the site.
- This site is listed in the CIWQS 2 – CA again as the American Canyon Water Reclamation Facility. Violations were not listed in this database for the site.
- The DOCKET database lists the site with the Enforcement Action Case Number, CA-200018545.
- This site is listed in the ECHO database. The database indicates that the no violations are identified.

- This site is listed in the EMI - CA database. The database indicates that the site is in the San Francisco Bay Area Air Basin.
- This site is listed in the FRS database and no violations are listed for the site in the database.
- This site is listed in the HAZNET - CA database and no violations are listed for the site in the database.
- This site is listed in the HWG - CA database and no violations are listed for the site in the database.
- This site is listed in the ICIS database and no violations are listed for the site in the database.
- This site is listed in the INACTIVE PCS database. The site has a NPDES Individual Permit. The permit status is expired. No violations are listed for the site in the database.
- This site is listed in the MANIFEST EPA database and no violations are listed for the site in the database.
- This site is listed in the NPDES - CA database and no violations are listed for the site in the database.
- This site is listed in the PCS ENF database. The ENF type is listed as a State Clean Water Act Penalty.
- This site is listed in the PCS FACILITY database. The site has a NPDES Individual Permit. The permit status is effective. No violations are listed for the site in the database.
- This site is listed in the RCRA_NONGEN database and no violations are listed for the site in the database.
- This site is listed in the RFR - CA database and no violations are listed for the site in the database.

Based on a review of the available database details, the downgradient direction, and distance to the subject property, this site does not appear to present an environmental threat to the subject property.

North (cross-gradient)

No properties were identified in the database searches within ¼ mile north of the subject property. The facilities listed within ¼ and ½ mile north of the subject property do not appear to present an environmental threat to the subject property.

East (upgradient)

No properties were identified in the database searches within ½ mile east of the subject property. The facilities listed within ½ and 1 mile east of the subject property do not appear to present an environmental threat to the subject property.

5.3 Vapor Encroachment Condition Summary

Cameron-Cole conducted a review of available environmental records and conditions observed on the subject property and adjoining parcels to evaluate the potential for a VEC to exist on the subject property. Cameron-

Cole did not identify on-property or off-property land/business uses conducive to a VEC impact to the subject property.

5.4 Unmappable Sites

The Envirosite Report (Appendix C) includes a summary of identified points of intertest that may be in the general area of the subject property; yet do not have adequate location addresses or latitude/longitude coordinates to pinpoint their exact location in relation to the subject property. No unmappable sites were reported in the database search.

5.5 Additional Environmental Record Sources

5.5.1 County Property Assessor/Appraiser

According to records maintained by the Napa County Assessor's office, the subject property is identified by APN 058-030-069. These records do not identify buildings associated with the subject property.

5.5.2 Fire/Police officials

Cameron-Cole contacted the American Canyon Fire Protection District on March 24, 2023, requesting records pertaining to fires or responses to incidents, spills, or releases of hazardous substances or petroleum products at, or in the immediate vicinity of the property. Martha Banuelos responded on behalf of the American Canyon Fire Protection District and stated that, "The Fire District does not maintain environmental records on properties."

5.5.3 Other Record Sources

Cameron-Cole contacted the County of Napa Environmental Health Division on March 24, 2023, requesting records regarding environmental violations, releases, or hazardous material or petroleum product storage, storage tanks, or other environmental concerns associated with the subject property. A public records request was submitted to the County of Napa Public Records Department. No response has been received as of the date of this report.

5.6 Physical Setting Sources

5.6.1 Topography

Figure 1 is a Site Vicinity Map which includes information from the 2021 USGS 7.5 Minute Series, Cuttings Warf quadrangle. The map was reviewed to establish the physical setting of the subject site and surrounding area. The site lies approximately 19 feet above mean sea level and generally slopes to the west.

5.6.2 Soils/Geology

The Envirosite report provides a summary of the United States Department of Agriculture (USDA) Soil Survey of the subject property's general area. According to the Envirosite Report, the Clear Lake and Haire series are the primary soil types in the area. The Clear Lake series is a poorly drained clay with high corrosion potential. The Haire series is a moderately well drained clay loam with high corrosion potential. According to California GeoTracker, geology beneath the site is identified as Pleistocene-aged, older alluvium, lake, playa and terrace deposits.

5.6.3 Hydrology

Based on topographic maps, and considering regional flow patterns, the groundwater flow in the vicinity of the site is inferred to be to the west. It must be noted that groundwater flow direction can be influenced by factors such as surface topography, underground structures, seasonal fluctuation, soil and bedrock geology,

and production wells which were not considered in this interpretation.

5.7 Historical Use Information

Available historical resources were consulted to develop a history of the previous uses of the property to help identify the likelihood of past uses having led to RECs in connection with the property. Copies of the aerial photographs, historical topographic maps, Fire Insurance Maps, and City Directory Report are provided in Appendix D.

5.7.1 Aerial Photographs

Envirosite provided aerial photographs which depict the subject property for the years 1937, 1948, 1957, 1958, 1965, 1966, 1968, 1970, 1971, 1973, 1975, 1982, 1983, 1985, 1988, 1989, 1993, 1996, 1998, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020. These photographs are included in Appendix D.

Date: 1937

Scale: 1" = 500'

Subject Property: The subject property appears to be used agriculturally.

Adjoining North: The property appears to be undeveloped land with a grove of trees.

Adjoining East: The property appears to be used agriculturally.

Adjoining South: The property appears to be to be used agriculturally.

Adjoining West: The property appears to be to be used agriculturally.

Surrounding Area: The surrounding area is mixed undeveloped and agricultural land.

Date: 1948 through 1958

Scale: 1" = 500'

Subject Property: The subject property appears to be undeveloped land with a grove of trees.

Adjoining North: The property appears to be undeveloped land with a grove of trees.

Adjoining East: The property appears to be undeveloped land with a grove of trees.

Adjoining South: The property appears to be undeveloped land with a grove of trees.

Adjoining West: The property appears to be undeveloped land with a grove of trees.

Surrounding Area: The surrounding area is mainly undeveloped land.

Date: 1965

Scale: 1" = 500'

Subject Property: The subject property appears to be undeveloped land with a grove of trees.

Adjoining North: The property is partially cleared and partially with trees.

Adjoining East: The property appears to have been cleared of trees but remains undeveloped.

Adjoining South: The property appears to be used undeveloped land with a grove of trees.

Adjoining West: The property appears to be used undeveloped land with a grove of trees.

Surrounding Area: The surrounding area is mixed undeveloped and agricultural land.

Date: 1966 through 1998

Scale: 1” = 500’ and 1” =1000’

Subject Property: The subject property appears to be undeveloped land with a grove of trees.

Adjoining North: The property appears to be undeveloped land with a grove of trees.

Adjoining East: The property appears to be undeveloped land with a grove of trees.

Adjoining South: The property appears to be undeveloped land with a grove of trees.

Adjoining West: The property appears to be undeveloped land with a grove of trees.

Surrounding Area: The surrounding area appears to be undeveloped. The pond along North Slough currently on the nearby property to the southwest first appears on the 1975 aerial photograph.

Date: 2005 through 2018

Scale: 1” = 500’ and 1” =1000’

Subject Property: The subject property appears to be undeveloped land and cleared of trees in 2012.

Adjoining North: The property appears to be undeveloped land with a grove of trees. A small building is located on the property in 2005 and the property is cleared of trees in 2012.

Adjoining East: The property appears to be undeveloped land with trees.

Adjoining South: The property appears to be undeveloped land and cleared of trees in 2012.

Adjoining West: The property appears to be undeveloped land.

Surrounding Area: The American Canyon Wastewater Treatment Plant to the northwest of the subject property appears in 2005. Additionally, buildings to the north and south of the subject property appear as well as additional paved roads.

Date: 2020

Scale: 1” = 500’

Subject Property: The subject property appears to be undeveloped land. Small temporary structures are located on the southeast corner of the property and appear to be associated with staging for construction of the southern adjacent property. Grading activity appears along the southern border of the subject property and may be the result of the southern adjacent property development.

Adjoining North: The property appears to be undeveloped land.

Adjoining East: The property appears to be undeveloped land with trees.

Adjoining South: The current warehouse building appears on the property.

Adjoining West: The property appears to be undeveloped land.

Surrounding Area: The surrounding area appears to be mixed residential, industrial, and undeveloped.

5.7.2 Fire Insurance Maps (Sanborn Maps)

The Fire Insurance Maps Report provided by Envirosite indicated that coverage does not exist for the subject property and vicinity.

5.7.3 Recorded Land Title Records

A historical chain-of-title report was not provided by the User of the report and was not obtained by Cameron-Cole as part of the approved scope of services for this project.

5.7.4 Historical USGS Topographic Maps

Envirosite provided historical topographic maps which depict the subject property for the years 1919, 1942, 1949, 1951, 1949 (revised 1968), 1949 (revised 1981), 2012, 2015, 2018, and 2021. These historical topographic maps are included in Appendix D.

Date: 1916 and 1942, Mare Island Quadrangle

Scale: 1:62500

Subject Property: The subject property appears to be undeveloped land.

Adjoining North: The property appears to be undeveloped land.

Adjoining East: The property appears to be undeveloped land.

Adjoining South: The property appears to be undeveloped land.

Adjoining West: The property appears to be undeveloped land.

Surrounding Area: The surrounding area appears to be undeveloped.

Date: 1949 through 2021, Cuttings Wharf Quadrangle

Scale: 1:2400

Subject Property: The subject property appears to be undeveloped land.

Adjoining North: The property appears to be undeveloped land. A small building is located on the property on the 1951 topographic map.

Adjoining East: The property appears to be undeveloped land.

Adjoining South: The property appears to be undeveloped land.

Adjoining West: The property appears to be undeveloped land.

Surrounding Area: The surrounding area appears to be undeveloped.

5.7.5 Local Street Directories

Historical street directories for the subject property and surrounding property addresses were provided by Envirosite. A copy of the City Directory Report is provided in Appendix D.

Subject Property

No results were noted for the subject property address, 1055 Commerce Court, in directories dated 1993 through 2018.

Adjacent Properties

The address 2 Eucalyptus Drive includes the adjoining property east and historically included the subject property and the adjoining properties north and south until approximately 2012. The address is listed as George and Patricia Couch in 2010, 2013, 2015, 2016, and 2018 and as a paintball business in 2002, 2006, and 2011. No results were noted for the remaining adjoining property addresses in directories dated 1993

through 2018.

5.7.6 Building Department Records

Historical use of the subject property was researched using other standard historical sources. Therefore, Building Department records were not reviewed as part of this assessment.

5.7.7 Zoning/Land Use Records

Historical use of the subject property was researched using other standard historical sources. Therefore, historical Zoning/Land Use records were not reviewed as part of this assessment.

5.7.8 Prior Assessment Reports

Phase I Environmental Site Assessment, Couch Property, October 2004

Cameron-Cole reviewed the *Phase I Environmental Site Assessment, Couch Property* prepared by Environmental Science Associates and dated October 2004. The assessment was conducted on an approximate 106-acre property with the address 2 Eucalyptus Drive. The subject property is in the western section of this larger property.

The assessment identified six RECs including, the undocumented and illegal storage of hazardous materials and waste on the property which were identified by Napa County during an inspection in 1990. At the time of the assessment, it appeared that the 10,000-gallon former underground storage tanks, drums and other containers containing hazardous materials had been removed. However, gas cylinders and a 3,000-gallon underground storage tank remained on the northeastern portion of the property and were considered a REC. The possibility of methamphetamine labs operating on the property, the possibility of soil containing oil deposited on the northeastern portion of the property including a wood cutting area, two water wells located on the property, and outhouses located on the property were also considered RECs.

The RECs identified during this assessment appear to have been associated with the northeastern portion of the 106-acre property and were not located with the subject property.

Phase II Soil Investigation, Couch Property, July 2005

Cameron-Cole reviewed the *Phase II Soil Investigation, Couch Property* prepared by Kleinfelder and dated July 2005. The investigation consisted of nine hollow-stem auger borings, four hand auger boring, and two test pits TP-1 and TP-2 located on the 106-acre property. The file reviewed did not include the figures, tables, and appendices to support the letter report. However, the 2018 Phase I ESA performed by ATC included a figure which depicts borings B-4 and B-9 through B-12 installed during this investigation on the adjoining properties north and south, and no borings located on the subject property.

A total of 34 soil samples were submitted for laboratory analysis and groundwater was not encountered in any of the borings. The laboratory analysis did not reveal “a significant release” in any of the samples. Concentrations of total petroleum hydrocarbons (TPH) including diesel (TPH-d), motor oil (TPH-mo), and gasoline (TPH-g), benzene, toluene, ethylbenzene and xylene (BTEX), methyl tert-butyl ether (MTBE), polycyclic aromatic hydrocarbons (PAH), pesticides, and E. Coli were either below laboratory detection limits or detected below the reported Environmental Screening Levels (ESLs) as defined by the San Francisco Bay Water Board (February 2005) in all samples analyzed. Metals and total coliform were detected above ESLs. However, Kleinfelder concluded that the results did not appear to reflect a significant release.

Phase I Environmental Site Assessment, 2 Eucalyptus Drive, March 2006

Cameron-Cole reviewed the *Phase I Environmental Site Assessment, 2 Eucalyptus Drive* prepared by Innovated & Creative Environmental Solutions (ICES) and dated March 16, 2006. This assessment was completed on the 106-acre property that includes the subject property.

The assessment resulted in three recommendations. ICES recommended that soil samples be collected in the western portion of the property to assess the potential presence of organochlorine pesticides, arsenic, lead, and mercury associated with the eucalyptus grove. This area appears to include the subject property. ICES also recommended soil samples be collected in the wood cutting area, located in the southeastern portion of the property, and from the northeastern portion of the property. These areas do not include the subject property. A Phase II addressing these recommendations was not identified during this investigation.

Phase I Environmental Site Assessment, 2 Eucalyptus Drive, December 2009

Cameron-Cole reviewed the *Phase I Environmental Site Assessment, 2 Eucalyptus Drive* prepared by Kleinfelder and dated December 2009. This assessment also addressed the 106-acre property within which the subject property was located.

The assessment identified two RECs for the site. Kleinfelder stated that there was evidence that "residual petroleum hydrocarbons, solvents, and certain metals may have been released in shallow soil" in the eastern and western portions of the property. The western portion includes the subject property. Kleinfelder also stated that, "….it is possible that the paint within the paintballs may have contained lead and was released to soil." The area of the site that was used for paintball activities includes the subject property.

Kleinfelder recommended that the three wells on the eastern portion of the property be sampled and abandoned. They recommended that a soil and groundwater investigation be conducted on the site. Additionally, Kleinfelder recommended that the surface water in the creek located to the west of the site be sampled, the septic tank located in the eastern portion should be abandoned, and an asbestos survey should be conducted.

Limited Site Investigation, 2 Eucalyptus Drive, April 2010

Cameron-Cole reviewed the *Limited Site Investigation, 2 Eucalyptus Drive* prepared by ICES and dated April 19, 2010. A total of eight soil samples from eight separate locations (TP-1 through TP-8) were collected during the investigation. The investigation appeared to address the Paintball Jungle (West) and the Hurst Firewood Area. The Hurst Firewood Area was located on the property located southeast of the subject property. The test pits TP-1 through TP-4 were located on the western portion of the site, Paintball Jungle (West), and it appears from the figure provided that TP-2 and TP-3 were located on the subject property.

One soil sample was collected from each test pit. The samples were analyzed for TPHg, TPHd, and TPHmo by EPA method 8015B, volatile organic compounds (VOCs) by EPA method 8260B, and CAM 17 metals by EPA method 6020A. The concentrations were compared to the residential ESLs. TPHg, TPHd, TPHmo and VOCs were not detected above laboratory detection limits or above the residential ESLs with the exception of TPHd in TP-2 (160 mg/kg). The residential ESL was reported to be 83 mg/kg. ICES stated that since TP-2 was located in the eucalyptus grove, the elevated concentration identified in the sample may have been the result of the natural oil compounds in eucalyptus trees.

Arsenic (8.8 mg/kg) and vanadium (46 mg/kg and 63 mg/kg) were identified at concentrations above the stated residential RSLs (0.39 mg/kg and 16 mg/kg, respectively) in TP-2 and TP-3. However, ICES stated that the concentrations identified were within background levels for area soils. Lead was not identified in the

samples collected from TP-2 and TP-3 above the stated residential RSLs.

ICES stated that, “Based on the findings of this and previous investigations, it appears that the surficial soil within the Site has generally not been impacted by previous activities.”

Phase I Environmental Site Assessment, SDG Commerce 330 Distribution Center, June 2018

Cameron-Cole reviewed the *Phase I Environmental Site Assessment of SDG Commerce 330 Distribution Center* prepared by ATC Group Services, LLC and dated June 6, 2018. The SDG Commerce 330 Distribution Center property included the subject property and the adjoining properties north and south and was associated with the single APN 058-030-065. The property was approximately 35.85 acres of undeveloped land. The findings and conclusions of the assessment identified one REC, one HREC, and one de minimis condition as quoted from the text below.

> *Note 1) A Phase I ESA was conducted by Environmental Science Associates in 2004. The site reconnaissance of the Couch Property identified small quantities of hazardous wastes and some soil staining. It appeared that the hazardous materials noted by the County in 1990 had been removed by the property owners, except for the gas cylinders and 3,000 gallon former underground storage tank. It is unknown where the County had observed the drums containing hazardous materials, the 10,000-gallon former underground storage tanks (USTs), and the other containers of hazardous materials. However, areas that had recently been disturbed and areas with a lack of vegetation were noted during the site reconnaissance. It appears that some of the hazardous materials, drums and the 10,000-gallon tanks may have been removed by the property owners. Based on the fact that the locations of the former USTs noted above is unknown and the lack of sampling including groundwater sampling, ATC considers the potential impacts from the USTs to be a recognized environmental condition.*
>
> *Note 2) A Phase II Soil Investigation by Kleinfelder dated July 25, 2005. The investigation was conducted in response to several recognized environmental conditions which were noted in the report by Environmental Science Associates. The investigation was conducted in March through May 2005 and consisted of nine Hollow-stem auger borings, four hand auger, borings, and two test pits. A total of 34 soil samples were submitted for analysis. Groundwater was not sampled or analyzed during this investigation. Analytical tables were referenced in the report but no tables were included in the copy of the report obtained by ATC. Although this investigation was conducted on the approximately 106-acre Couch Property, only borings B-4 through B-12 (Appendix B) were advanced on the 35.85-acre property which is the subject of this report. The concentration of Chromium in B-12 at 15 feet below ground surface (bgs) was noted at the 130 milligrams per kilogram (mg/kg) which was noted above the screening levels used. However, concentrations of chromium in two samples collected at shallower levels from the same boring were noted below this level and, therefore, Kleinfelder determined the elevated concentration of chromium at 15 feet bgs was not due to a significant release. It should be noted that although the concentration of chromium noted above in boring B-12 at 130 mg/kg is above the 2005 ESLs, the concentration is below the current version of the February 2016 ESLs. As such the noted levels of chromium is considered an historical recognized environmental concern.*
>
> *Note 3) Based on Kleinfelder’s Phase I investigation completed in 2009, the Concentrated Area was reported previously occupied by a trailer a methamphetamine lab in 2000. EPA guidelines note that soil sampling in areas of methamphetamine labs may be warranted if the ground is visibly stained or otherwise affected (e.g., odors burn piles, dead vegetation, or remnants of reaction waste). ATC did*

not observe evidence of dead vegetation or discarded waste on the day of the site reconnaissance (refer to Section 6.0). Thus, ATC considers the previous methamphetamine lab site to be a de minimis condition to the property.

Limited Phase II Subsurface Investigation, 35.85 Acre Parcel, APN 058-030-065, March 2019

Cameron-Cole reviewed the *Limited Phase II Subsurface Investigation, 35.85 Acre Parcel, APN 058-030-065,* prepared by ATC Group Services, LLC and dated March 25, 2019. The Phase II investigation addressed the REC identified during the Phase I ESA dated June 6, 2018, outlined in Note 1 above. On November 6, 2018, ATC advanced two borings along the western border of the adjoining property north. ATC encountered difficulty in the field preventing them from completing boring SB-1. At SB-2, soil samples were field screened with a photo ionization detector (PID) and samples were collected for laboratory analysis from 10, 20, and 38 feet bgs. SB-3 was advanced with a hydropunch sampler for the purpose of collecting a groundwater sample. Groundwater was not encountered at 40 ft bgs in either boring.

The soil samples were analyzed for TPH by EPA method 8015, VOCs by EPA Method 8260, and CAM 17 by EPA Methods. The Phase II compared the laboratory results to the Tier 1 ESLs from the San Francisco Bay Regional Water Quality Control Board (RWQCB) dated February 2016. TPH and VOCs were not detected above laboratory detection limits in any of the soil samples analyzed. Arsenic was detected at a maximum concentration of 11 milligrams per kilogram (mg/kg), which is above the ESL. However, the Phase II stated that this concentration is at the established background concentration for arsenic in California soils. The remaining metals were either not detected above laboratory detection limits or below the ESL.

The Phase II states that, “Since this investigation indicates that it would appear to be unlikely that impacts from the Couch property could impact the subject property, the recognized environmental condition noted in the Phase I ESA by ATC dated June 6, 2018, is no longer considered to exist. Further investigation of potential impacts from the Couch property on the subject property is not recommended at this time.”

Final Initial Study for the SDG Commerce 330 Warehouse Project, January 2019

Cameron-Cole reviewed the *Final Initial Study for the SDG Commerce 330 Warehouse Project*, prepared by Grassetti Environmental Consulting and dated January 2019. The project site addressed in the report includes the subject property and the adjoining properties north and south. No environmental concerns were identified through this review.

Geotechnical Engineering Investigation, Proposed SDG Commerce 224, January 2021 (Draft)

Cameron-Cole reviewed the draft *Geotechnical Engineering Investigation, Proposed SDG Commerce 224,* prepared by Krazan & Associates, Inc. and dated January 18, 2021. The report addressed the subject property located at 1055 Commerce Court, American Canyon, California. The report was “conducted to evaluate the soil and groundwater conditions at the site, to make geotechnical engineering recommendations.” During the investigation, groundwater was encountered in the borings at depth varying from 18.5 to 22.5 ft bgs. Laboratory analysis of soils or groundwater for hazardous substances or petroleum products was not conducted.

5.8 Historical Use Information on Adjoining Properties

The following is a summary of adjoining property historical uses based on a review of the historical records reviewed in Section 5.6.

North: The adjoining property to the north appears to have been undeveloped containing a

eucalyptus grove from at least 1937 until approximately 2012. The property was used for paintball activities from at least 1992 until approximately 2012. A small building appears on the northwest corner of the property in 2005.

East: The adjoining property to the east appears to have been undeveloped containing a eucalyptus grove from at least 1937. The property was used for paintball activities from at least 1992 to present day. Historically, temporary residences and animal pens were located on the property. The northeast portion of the property, northeast of the subject property, is residential. The property historically contained undocumented and illegal storage of hazardous materials and waste which were identified by Napa County during an inspection in 1990. Additionally, two 10,000-gallon USTs, a 3,000-gallon UST, drums and other containers containing hazardous materials were in the northeast portion of the property. These items have since been removed.

South: The adjoining property to the south appears to have been undeveloped containing a eucalyptus grove from at least 1937 until approximately 2012. The property was used for paintball activities from at least 1992 until approximately 2012. The current warehouse building was constructed on the property in approximately 2020.

West: The adjoining property to the west appears to have been undeveloped containing a eucalyptus grove from at least 1937 to the present. The property contains the North Slough.

In accordance with ASTM International E1527-21, 8.3.1, the objective of compiling and analyzing historical property information and developing a history of the previous uses of the subject property, adjoining properties, and surrounding area is to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the subject property. All obvious uses of the subject property must be identified from the present, back to the subject property's first developed use, or back to 1940, whichever is earlier. The report must describe all identified uses, justify the earliest date identified for the subject property's first developed use, and explain the reason for any gaps in the history of use. This task requires reviewing as many of the standard historical resources in 8.3.4.1 through 8.3.4.8 as are necessary and both reasonably ascertainable and likely to be useful. Data failure occurs when all the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objective has not been met. Data failure is not uncommon in trying to identify historical uses at 5-year intervals back to first use or 1940 (whichever is earlier). If the data failure represents a significant data gap to the Environmental Professional (EP), ASTM International Standard E1527-21 requires documentation of the impact of the data gap on the ability of the EP to identify RECs. No significant historical use information data gaps were encountered.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

The methodology used by the Cameron-Cole representative during the March 13, 2023, site reconnaissance consisted of visual observations of readily accessible areas of the subject property to determine the presence or absence of hazardous substance or petroleum product storage areas or spills as indicated by stressed vegetation, soil staining, storage tanks, drums, etc.

6.2 General Site Setting

The subject property is approximately 10.17 acres located at 1055 Commerce Court with the Napa County Assessor's office associated APN 058-030-069. The subject property currently consists of undeveloped land with natural vegetation. The property is currently not being used and it remains undeveloped with no structures or occupants. Evidence of the southeast corner of the property previously used as a staging area during the development of the adjoining property south was observed during the site visit. The area was cleared of vegetation, gravel pathways exist, and footprint areas where temporary offices were located and miscellaneous trash and refuse associated with storage of building materials including rock piles were observed. An observed elongated soil mound was observed along the southern border of the subject property. The owner's representative of the subject property, Mr. John Wojtas of SDG, stated that this soil was placed there during the development of the adjoining property south.

6.2.1 Geologic, Hydrogeologic, and Topographic Conditions

Based on topographic maps, and considering regional flow patterns, the groundwater flow in the vicinity of the site is inferred to be generally to the west. It must be noted that groundwater flow direction can be influenced by factors such as surface topography, underground structures, seasonal fluctuation, soil and bedrock geology, and production wells which were not considered in this interpretation.

6.2.2 General Description of Structures

There were no noted structures on the subject property during site reconnaissance. Evidence of temporary structures previously located on the southeast corner of the site was observed. The area had been cleared of vegetation and gravel pathways remained in the area.

6.2.3 Roads

Commerce Court borders the subject property to the east.

6.2.4 Potable Water Supply

A potable water source was not observed during the site visit. The owner of the property, SDG, indicates potable water in the area is supplied by the City of American Canyon.

6.2.5 Sewage Disposal System

There were two stormwater drains located on the subject property at the time of site reconnaissance. The owner of the property, SDG, indicates sewage services in the area is provided by the City of American Canyon.

6.3 Subject Property Observations

6.3.1 Hazardous Substances and Petroleum Products in Connection with Identified Uses

No hazardous substances or petroleum products were observed on the subject property during the March 13, 2023, site reconnaissance.

6.3.2 Storage Tanks

There were no storage tanks located on the subject property during the site reconnaissance.

6.3.3 Odors

Noticeable odors were not identified at the subject property at the time of the site reconnaissance.

6.3.4 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.3.5 Drums

Cameron-Cole did not observed drums on the subject property by during the site reconnaissance.

6.3.6 Pits, Ponds, or Lagoons

There were no pits, ponds, or lagoons noted onsite during the site reconnaissance.

6.3.7 Stained Soil or Pavement

A very minimal oil sheen was observed on a puddle of water in the western portion of the site. The sheen was determined to be de minimis and is likely attributed to naturally occurring oils from the historic eucalyptus groves on and adjacent to the subject property.

6.3.8 Stressed Vegetation

Stressed vegetation was not observed during the site reconnaissance.

6.3.9 Solid Waste

A *de minimis* amount of household waste was noted during site reconnaissance. No hazardous waste was observed during the site reconnaissance. Several rock piles were present throughout the subject property. A large mound of soil was observed on the southern edge of the site. The owner representative of the subject property, Mr. John Wojtas, stated that the soil observed on the property was excess soil placed there during the development of the adjoining property south.

6.3.10 Wastewater

Cameron-Cole did not observe any wastewater on site.

6.3.11 Wells

No groundwater wells were observed during the site reconnaissance.

6.3.12 Septic Systems

Septic systems were not observed at the time of site reconnaissance.

7.0 INTERVIEWS

7.1 Site Owner/Occupants

A questionnaire was provided to the owner representative, Mr. John Wojtas. Mr. Wojtas indicated that there was a previous ESA and a Geotechnical report conducted on the property. Cameron-Cole obtained the prior reports from the City of American Canyon website and FCS.

7.2 Past Owners, Operators, Occupants

Past owners, operators, or occupants were not interviewed for this ESA.

7.3 User

Ms. Janna Waligorski Hudson, Senior Project Management, First Carbon Solutions, completed the User Questionnaire. A summary of the responses is provided in Section 4.0, and a copy of the questionnaire is provided in Appendix B.

7.4 State and/or Local Government officials

Cameron-Cole contacted the American Canyon Fire Protection District on March 24, 2023, requesting records pertaining to fires or responses to incidents, spills, or releases of hazardous substances or petroleum products at, or in the immediate vicinity of the property. Martha Banuelos responded on behalf of the American Canyon Fire Protection District and stated that, “The Fire District does not maintain environmental records on properties.”

Cameron-Cole contacted the County of Napa Environmental Health Division on March 24, 2023, requesting records regarding environmental violations, releases, or hazardous material or petroleum product storage, storage tanks, or other environmental concerns associated with the subject property. A public records request was submitted to the County of Napa Public Records Department. No response has been received as of the date of this report.

8.0 FINDINGS AND CONCLUSIONS

The goal of this Phase I ESA is to identify the presence or likely presence of hazardous substances or petroleum products on the subject property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water on the property. The findings of this report are summarized below and may include known or suspected RECs, CRECs, HRECs, VECs, BERs identified during the performance of this Phase I ESA.

- Through the review of historical aerial photographs, it is possible that the subject property has historically been used for agricultural purposes. Cameron-Cole notes that application of pesticides, herbicides, or fertilizers are commonly associated with properties developed for agricultural purposes. Proper application of these materials is not considered a release under the ASTM International E1527-21 Standard Practice. Therefore, the potential presence of these substances on the property would not be considered a REC, unless evidence of improper application, a spill or release, or a material threat of a spill or release were identified during the Phase I assessment. No evidence of improper application, releases, or potential releases of agricultural chemicals were noted in the report. The possible historic use of the subject property for agricultural purposes is not considered a recognized environmental condition for the subject property.

- The subject property contained a eucalyptus tree grove from at least 1937 through approximately 2012. The property was used for paintball activities from approximately 1992 until approximately 2012.

  During the *Limited Site Investigation, 2 Eucalyptus Drive* prepared by ICES and dated April 19, 2010, two test pits were installed on the subject property, TP-2 and TP-3. One soil sample was collected from each test pit at 6-9 ft. bgs. TPHd was detected in TP-2 (160 mg/kg) above the reported residential ESL (83 mg/kg). ICES stated that since TP-2 was located in the eucalyptus grove, the elevated concentration identified in the sample may have been the result of the natural oil compounds in eucalyptus trees. Arsenic (8.8 mg/kg) and vanadium (46 mg/kg and 63 mg/kg) were also identified at concentrations above the stated residential RSLs in TP-2 and TP-3. However, ICES stated that the concentrations identified were within background levels for area soils.

  The current Tier 1 ESL (2019) for TPHd is 230 mg/kg and the 2019 Tier 1 ESLs for arsenic and vanadium are 0.067 mg/kg and 18 mg/kg, respectively. Therefore, the concentration of TPHd identified in 2010 is below the current Tier 1 ESL. Although the concentrations of arsenic and vanadium remain above the current Tier 1 ESL, the concentrations are within background levels for California soils. Evidence was not identified during this assessment that the petroleum products or hazardous substances have been used or stored on the subject property. The concentrations of TPHd, arsenic, and vanadium identified during the 2010 Limited Site Investigation in soils on the subject property are not considered recognized environmental conditions for the subject property.

There were no RECs, CRECs, HRECS, VECs, or BERs identified at the subject property at the time of this report.

9.0 DEVIATIONS

There were no contractual excluded elements or deviations from the ASTM International Standard E1527-21.

10.0 REFERENCES

Environmental Science Associates, *Phase I Environmental Site Assessment, Couch Property,* October 2004.

Kleinfelder, *Phase II Soil Investigation, Couch Property,* July 25, 2005.

Innovated & Creative Environmental Solutions, *Phase I Environmental Site Assessment, 2 Eucalyptus Drive,* March 16, 2006.

Kleinfelder, *Phase I Environmental Site Assessment, 2 Eucalyptus Drive,* December 22, 2009.

Innovated & Creative Environmental Solutions, *Limited Site Investigation, 2 Eucalyptus Drive,* April 19, 2010.

ATC Group Services, LLC, *Phase I Environmental Site Assessment of SDG Commerce 330 Distribution Center*, June 6, 2018.

ATC Group Services, LLC, *Limited Phase II Subsurface Investigation, 35.85 Acre Parcel, APN 058-030-065, American Canyon, California*, March 25, 2019.

Grassetti Environmental Consulting, *Final Initial Study for the SDG Commerce 330 Warehouse Project*, January 2019.

Krazan & Associates, Inc., *Geotechnical Engineering Investigation, Proposed SDG Commerce 224 (Draft),* January 18, 2021.

American Society of Testing and Materials International (ASTM International) Standard Practice Designation E1527-21.

Aerial Photographs

Envirosite – 1937, 1948, 1957,1958, 1965, 1966, 1968, 1970, 1971, 1973, 1975, 1982, 1983, 1985, 1988, 1989, 1993, 1996, 1998, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020. Report generated March 15, 2023.

USGS Topographic Maps

Envirosite 1916, 1942, 1949, 1951, 1949 (Revised 1968), 1949 (Revised 1981), 2012, 2015, 2018, and 2021 7.5 and 15 USGS Topographic Maps of Mare Island and Cuttings Wharf, California. Report generated March 10, 2023

Standard Environmental Records Search – Completed by Envirosite for SDG Commerce 220, 1055 Commerce Court, American Canyon, California. Report generated March 10, 2023.

Fire Insurance Map Search – Completed by Envirosite for SDG Commerce 220, 1055 Commerce Court, American Canyon, California. Report generated March 13, 2023.

City Directory Abstract – Completed by Envirosite for SDG Commerce 220, 1055 Commerce Court, American Canyon, California. Report generated March 13, 2023.

Parcel Information – Appraiser's Report obtained from the Napa County Assessor Clerk and Recorders Office.

Interviews:

User – Ms. Janna Waligorski Hudson, Senior Project Manager, FCS, interview conducted via User Questionnaire completed on March 28, 2023.

Owner – Mr. John Wojtas, authorized agent with Stravinski Development Group, interview conducted via Owner Questionnaire completed on March 22, 2023.

Local official – American Canyon Fire Protection District records request submitted on March 24, 2023.

Local official – County of Napa Environmental Health Division records request submitted on March 24, 2023.

11.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

The following Cameron-Cole personnel were involved with the site inspection, records search, regulatory review, and drafting of the Phase I Environmental Site Assessment Report for the property located at 1055 Commerce Court, American Canyon, Napa County, California.

Prepared by:

Angela Mattemill
Environmental Scientist



This is to certify that I have reviewed and approve the contents of the Phase I Environmental Site Assessment Report for the property located at 1055 Commerce Court, American Canyon, California. Certification of the environmental professional are provided in Section 14, and professional qualifications are provided in Appendix G.

Reviewed by:

Robert Fagerness, PE
Senior Engineer



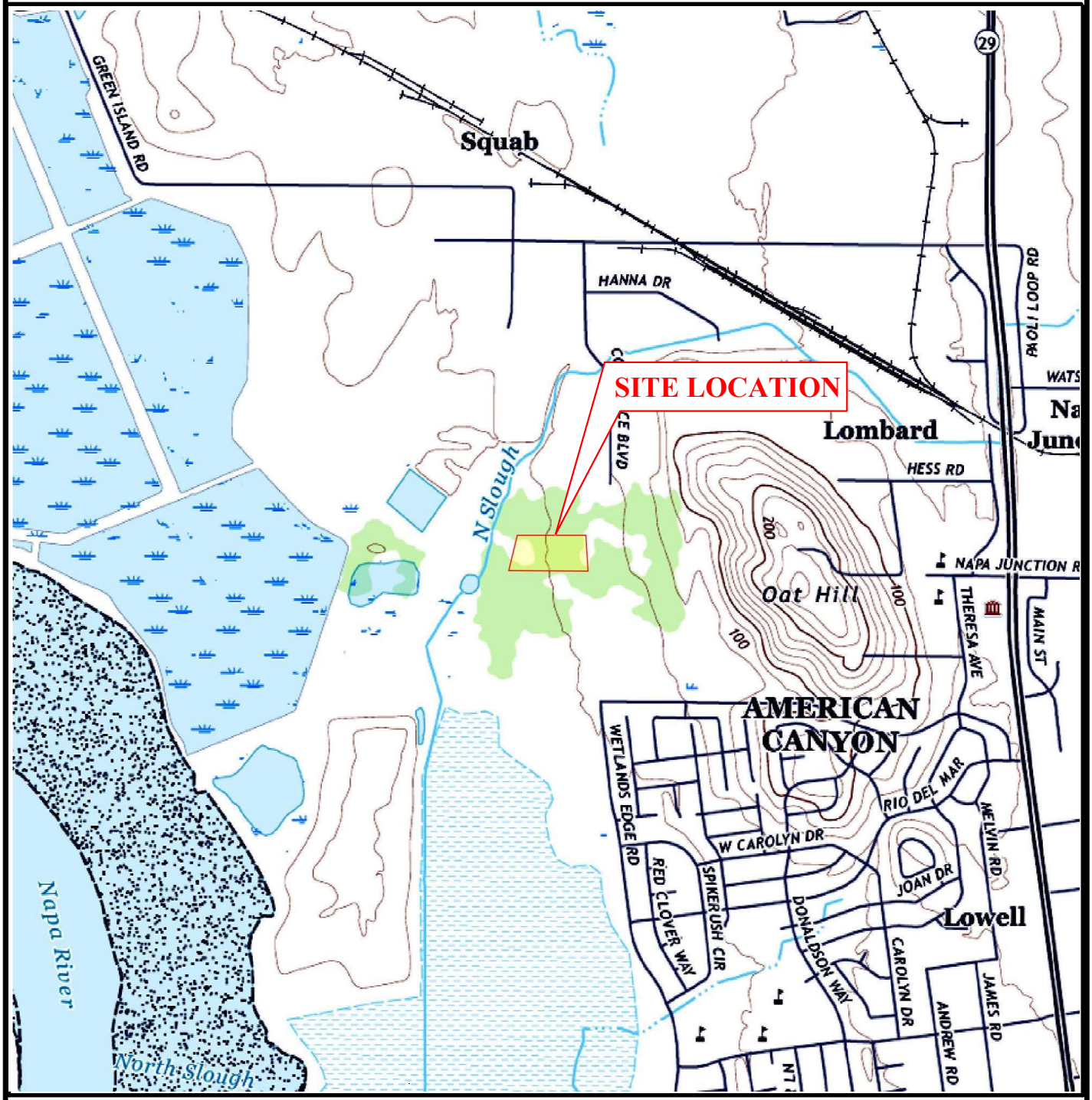
12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312, and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Robert Fagerness, PE
Senior Engineer



FIGURES



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ALAMEDA, CALIFORNIA 94501
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http://www.cameron-cole.com

USGS TOPOGRAPHIC MAP

SUBJECT QUAD:
CUTTINGS_WHARF

SCALE: 1" = 24000'

MAP YEAR: 2021

FIGURE 1

SITE VICINITY MAP

SDG COMMERCE 220
1055 COMMERCE COURT
AMERICAN CANYON, CALIFORNIA

FLIGHT YEAR:
2020

N
W E
S

Scale: 1" = 500'



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N

SCALE: 1" = 200'

FIGURE 2

PROPERTY MAP

SDG COMMERCE 220
1055 COMMERCE COURT!
AMERICAN CANYON, CALIFORNI

APPENDICES

APPENDIX A

Photographs



Photo 1: View into the site from south east corner along Commerce Ct. Seen in picture is survey mark that was already present to display the corner of the property.



Photo 2: Southern edge of site that borders the current developed parcel, photo taken from southeast corner of property.



Photo 3: Taken from northeast corner of site, looking west. Already in place survey mark denoting the northeast corner of site can be seen.



Photo 4: Taken from northeast corner of site, looking south along Commerce Ct. Already in place survey mark denoting northeast corner can be seen.



Photo 5: Taken from Northwestern corner of site, photographer standing next to already in place survey mark denoting northwestern corner. Taken facing directly west.



Photo 6: Facing south toward adjacent developed parcel, taken from northwest corner of site. Already in place survey mark denoting northeastern corner can be seen.

	
Photo 7: Facing north along western border of site. Taken from southwest corner.	Photo 8: Facing West along southern border, adjacent developed parcel can be seen. Photo taken from southwest corner.
	
Photo 9: Taken from northeast corner looking across majority of the site.	Photo 10: Large seemingly unnatural mound present near southern edge of site. No visually apparent source.
	
Photo 11: Facing west from on top of mound seen in photo 10.	Photo 12: Facing east from on top of mound seen in photo 10.

	
Photo 13: Makeshift gate/pathway that connect the western edge of site and adjacent property.	Photo 14: Minor oil sheen present in water puddle near western edge of site. No source visually observable.
	
Photo 15: Gravel lined path near southeastern corner of site that was previously the location of several temporary structures.	Photo 16: Pile of rocks near former location of temporary structures.
	
Photo 17: Pile of rocks near former location of temporary structures.	Photo 18: Pile of rocks near southwestern corner.

	
Photo 19: Storm drain outlet near southeastern corner.	Photo 20: Storm drain outlet near northeastern corner.
	
Photo 21: Electrical access hole inset about 30 feet from southeastern corner of site.	

APPENDIX B

User Questionnaire

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PHASE I ESA USER'S QUESTIONNAIRE

In order to qualify for protection from land owner liability under CERCLA as an *innocent landowner, bona fide prospective purchaser,* or *contiguous property owner*, ASTM standard practice E1527-21 and the federal AAI rule (40 CFR 312) require that the User of the Phase I ESA report provide certain information (if available) to the Environmental Professional completing the assessment. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Information that is not or cannot be provided to the Environmental Professional may be identified as a "data gap" in the Phase I ESA report.

Property Information.

Cameron-Cole/Client Project #: 02-5639 Property Name: SDG Commerce 220

Property Address: 1055 Commerce Court

City: American Canyon State: CA Zip: 94503

Property Owner Name: Stravinski Development Group

Please answer the following questions as completely as possible. Attach additional pages as needed.

1. **Reason for Completion.** Is the reason for performing the Phase I to satisfy one of the requirements for the innocent landowner defense under CERCLA AND/OR to understand potential environmental conditions that could materially impact the operation of the business associated with the parcel of commercial real estate?

   X_____ Yes _____ No

   Other (indicate if required for property transaction, sale, purchase, exchange, lending requirement, etc). _____
   To support analysis of the project under CEQA

2. **Environmental Cleanup Liens.** Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   _____ Yes ____X_____ No

   If yes, describe or attach details of the lien_____
   _____

3. **Activity and Land Use Limitations.** Are you aware of any activity and use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded as applicable to the property as a result of environmental contamination, investigation, cleanup, or related matters?

   _____ Yes __X_____ No

   If yes, describe or attach details of the limitations_____
   _____

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PHASE I ESA USER'S QUESTIONNAIRE

4. **Specialized Knowledge or Experience**. As the User of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property, such that you would have specialized knowledge about chemicals and processes used by this type of business?

   _____ Yes ___X_____ No

   If yes, describe or attach details of your specialized knowledge or experience_____
   _____

5. **Relationship of Purchase Price to Fair Market Value of Property**. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, do you have any reason to believe that the reduced purchase price may be related to contamination known or believed to be present at the property?

   _____ Yes, I have reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property?

   _____ No, I have no reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property?

   _____X____ Not applicable. User is not involved in a purchase of the property.

6. **Commonly Known or Reasonably Ascertainable Information**. Are you aware of commonly known or reasonably ascertainable information about the property that would help the Environmental Professional to identify conditions indicative of releases or threatened releases of hazardous substances or petroleum products? For example:

   Do you know the past uses of the property?
   _____ Yes (describe) _____
   _____
   __X_____ No

   Do you know of chemicals, hazardous substances or petroleum products that are present or once were present at the property?
   _____ Yes (describe) _____
   _____
   ___X_____ No

   Do you know of spills or other releases of chemicals, hazardous substances or petroleum products that have taken place at the property?
   _____ Yes (describe) _____
   _____
   ____X____ No

   Do you know of any environmental cleanups that have taken place at the property?
   _____ Yes (describe) _____
   _____
   ____X____ No

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PHASE I ESA USER'S QUESTIONNAIRE

7. **The Degree of Obviousness of Contamination.** E1527-21 and the federal AAI rule (40 CFR 312.31) require that the Phase I ESA consider the degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation. Based on your knowledge and experience related to the property, are there any *obvious* indictors that point to the presence or likely presence of contamination at the property?

   _____ Yes (describe) _____
   _____
   ___X_____ No

8. **Availability of Previous Environmental Reports.** Are you aware of previous environmental site assessment reports, other environmental reports, documents, correspondence, etc. concerning the property and its environmental condition?

   ____X____ Yes (please identify and provide copies, if available) _____
   January 2019 Final Initial Study for the SDG Commerce 330 Warehouse Project appears to consider the subject site. It references a Phase I ESA conducted by ATC in June 2018. I do not have access to the 2018 Phase I ESA document. The 2019 Final Initial Study indicates that the 2018 Phase I ESA summarized previous ESA's conducted on the larger 106-acre Couch Property, of which the subject property was a part of.
   _____
   _____ No

9. **Proceedings Involving the Property.** Are you aware of any proceedings involving the property? For example:

   Are you aware of any pending, threatened or past litigation relevant to hazardous substances or petroleum products in, on or from the property?
   _____ Yes (describe) _____
   _____
   ___X_____ No

   Are you aware of any pending, threatened or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property?
   _____ Yes (describe) _____
   _____
   _____X___ No

   Any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?
   _____ Yes (describe) _____
   _____
   ___X_____ No

Signature: _____

Name (printed): ____Janna Waligorski Hudson
_____

Title: _____Senior Project Manager
_____

Date: ___3/28/23_____

APPENDIX C

Government Records Report

Government Records Report | 2023

With Platinum Review

Order Number: 84481

Report Generated: 03/10/2023

Project Name: SDG Commerce 220

Project Number: 02-10800-05639

SDG Commerce 220
1055 Commerce Ct
American Canyon, CA 94503

with Envirosite Atlas

Contact us at:
(866) 211-2028
envirositecorp.com

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Envirosite Corporation has conducted a search of all reasonably ascertainable records in accordance with EPA's AAI (40 CFR Part 312) requirements and the ASTM E-1527-21 Environmental Site Assessments standard.

SUBJECT PROPERTY INFORMATION:

ADDRESS:

SDG Commerce 220
1055 Commerce Ct
American Canyon, CA 94503

COORDINATES:

Latitude (North):	38.185594 - 38°11'8.1"
Longitude (West):	-122.273824 - -122°16'25.8"
Universal Transverse Mercator:	Zone 10N
UTM X (Meters):	563595.70
UTM Y (Meters):	4226656.54
State Plane Coordinates:	0402 - California Zone 2 (US Survey Feet)
X Coordinate (Feet):	6482957.025 E
Y Coordinate (Feet):	1829528.733 N

ELEVATION:

Elevation:	19 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH SUBJECT PROPERTY:

Subject Property Map: 38122-B3 Cuttings Wharf, CA
Most Recent Revision: 2018

MAP ID	SITE NAME	ADDRESS	DATABASE(S)	RELATIVE ELEVATION	DIRECTION / DISTANCE
1	SDG Commerce 330 Warehouse | C...	COMMERCE BOULEVARD NOR...	CALEPA SITES - CA, CIWQS - CA, NPDES - CA, ...	Lower	SSE / 0.079 mi., 420 ft.
2	AMERICAN CANYON WWTF | CITY OF...	151 MEZZETTA COURT | 151 ...	CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA,...	Lower	W / 0.193 mi., 1021 ft.
3	NAPA JUNCTION ELEMENTARY SCHOO...	N R	CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA...	Higher	SE / 0.233 mi., 1229 ft.
4	BARRY CALLEBAUT | BARRY CALLEB...	1175 COMMERCE BLVD STE ...	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NNE / 0.272 mi., 1438...
5	THE HESS COLLECTION WINERY AM ...	1166 COMMERCE BLVD | 1166...	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NE / 0.280 mi., 1478 ft.
6	AMERICAN CANYON SANITARY LANDF...	END OF EUCALYPTUS DRIVE |...	CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 -...	Lower	SSW / 0.311 mi., 1642...
7	AMERICAN CANYON SAN LDFL	END OF EUCALYPTUS DR	CERCLIS NFRAP, SEMS_8R_ARCHIVED SITES	Lower	SW / 0.370 mi., 1957 ft.
8	THE COCA COLA COMPANY | AMCAN ...	1201 COMMERCE BLVD	BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS ...	Higher	N / 0.383 mi., 2025 ft.
9	GL MEZZETTA | CRYSTAL GEYSER W...	105 MEZZETTA CT | 105 MEZ...	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NNW / 0.442 mi., 2335...
10	West Napa fault	38.18859, -122.263829	SEISMIC - CA	N/R	NE / 0.446 mi., 2354 ft.
11	WALLABY YOGURT COMPANY LLC	110 MEZZETTA COURT | 110 ...	CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - ...	Higher	N / 0.467 mi., 2467 ft.
12	West Napa fault	38.183678, -122.258995	SEISMIC - CA	N/R	ENE / 0.502 mi., 2651 ft.
13	West Napa fault	38.194753, -122.270446	SEISMIC - CA	N/R	NNE / 0.605 mi., 3195...
14	SONOMA WINE CO. | PURPLE WINE ...	205 JIM OSWALT WAY | 205 ...	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NNW / 0.645 mi., 3408...
15	NAPA VALLEY CAST STONE | BREF2...	1111 GREEN ISLAND RD	CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - ...	Higher	N / 0.689 mi., 3641 ft.
A16	POLYVINYL CHEMICAL INDUSTRIES,...	501 GREEN ISLAND ROAD	CS_NAPA COUNTY - CA, ENVIROSTOR - CA, HI...	Higher	NE / 0.693 mi., 3659 ft.
A17	ENVIROCARE INTERNATIONAL INC. ...	507 GREEN ISLAND RD	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NE / 0.703 mi., 3714 ft.
A18	CROWN HILL STONE SUPPLY, LLC |...	650 GREEN ISLAND ROAD	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NE / 0.721 mi., 3805 ft.
19	MIOCENE LLC | MIOCENE WINE LLC...	100 NAPA JUNCTION RD	CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA...	Higher	E / 0.728 mi., 3844 ft.
A20	KREYSLER ASSOC | DAVID OSON | ...	501 GREEN ISLAND RD	AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, E...	Higher	NE / 0.731 mi., 3860 ft.
21	West Napa fault	38.179287, -122.254982	SEISMIC - CA	N/R	E / 0.734 mi., 3873 ft.
22	West Napa fault	38.166447, -122.251449	SEISMIC - CA	N/R	ESE / 0.815 mi., 4306 ft.
B23	CALIFORNIA AUTO DISMANTLING IN...	1578 GREEN ISLAND RD | 15...	CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - ...	Higher	NW / 0.841 mi., 4443 ft.
B24	COPARTS | SUNRISE AUTO INC | F...	1578 GREEN ISLAND RD	CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY...	Higher	NW / 0.846 mi., 4469 ft.
B25	ENG BROS WOOD PROD | COPART | ...	1660 GREEN ISLAND RD	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NW / 0.867 mi., 4580 ft.
26	Freon Free	120 KLAMATH COURT | 120 K...	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, I...	Higher	ENE / 0.888 mi., 4690 ft.
27	BAKER AUTO WRECKING | BAKER AU...	1678 GREEN ISLAND RD	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NW / 0.911 mi., 4812 ft.
28	SUTTER HOME WINERY INC DISTRIB...	303 GREEN ISLAND ROAD	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	NE / 0.915 mi., 4833 ft.
29	RINGGOLD DISTILLERY | CULLIGAN...	108 DODD CT | 110 DODD CT...	CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, H...	Higher	ENE / 0.967 mi., 5106 ft.

SUBJECT PROPERTY SEARCH RESULTS:

The subject property was not listed in any of the databases searched by Envirosite Corporation.

SEARCH RESULTS:

FEDERAL CERCLIS LIST

CERCLIS NFRAP: The CERCLIS sites with No Further Remedial Action Planned from the CERCLIS program database. The Environmental Protection Agency decommissioned the CERCLIS data in 2014. The last update was November 12, 2013. **1 SITE FOUND WITHIN .5 MILE**

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
7	*AMERICAN CANYON SAN LDFL*	*END OF EUCALYPTUS DR*	*SW / 0.370 mi., 1957 ft.*	*116*
	- ID: CAD980637136	Status: NFRAP-Site does not qualify for the NPL based on existing information	Date: 1987-10-01	

SEMS_8R_ARCHIVED SITES: The Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. **1 SITE FOUND WITHIN .5 MILE**

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
7	*AMERICAN CANYON SAN LDFL*	*END OF EUCALYPTUS DR*	*SW / 0.370 mi., 1957 ft.*	*116*
	- ID: 0901876	Status: NFRAP-Site does not qualify for the NPL based on existing information	Date: N/A	

FEDERAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

EPA LF MOP: Sites in the EPA Landfill Methane Outreach Program **1 SITE FOUND WITHIN .5 MILE**

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
6	*AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF*	*END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF*	*SSW / 0.311 mi., 1642 ft.*	*106*
	- ID: 44	Status: Closed	Date: N/A	

FEDERAL RCRA GENERATORS LIST

RCRA_NONGEN: Resource Conservation and Recovery Act listing of licensed non-generators **1 SITE FOUND WITHIN .25 MILE**

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
2	*AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM*	*151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604*	*W / 0.193 mi., 1021 ft.*	*24*
	- ID: CAL000448491	Status: No Violation/Inspections	Date: N/A	

STATE- AND TRIBAL - EQUIVALENT CERCLIS

ENVIROSTOR - CA: Department of Toxic Substances Controls **2 SITES FOUND WITHIN 1 MILE**

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
A16	*POLYVINYL CHEMICAL INDUSTRIES, INC | PCI-NAPA*	*501 GREEN ISLAND ROAD*	*NE / 0.693 mi., 3659 ft.*	*254*
	- ID: 28510002	Status: No Action Required	Date: Cleanup Date 2008-06-05	
B24	*COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE*	*1578 GREEN ISLAND RD*	*NW / 0.846 mi., 4469 ft.*	*364*
	- ID: 28500004	Status: Refer: RWQCB	Date: Cleanup Date 2001-01-10	

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

SWF/LF - CA: Solid Waste Information System's facility listing of solid waste facilities and landfills **1 SITE FOUND WITHIN .5 MILE**

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
6	*AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF*	*END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF*	*SSW / 0.311 mi., 1642 ft.*	*106*
	- ID: SWIS Number 28-AA-0001	Status: Permitted	Date: Permit Date N/R	
	- ID: N/R	Status: Operational Status Closed	Date: N/R	

STATE RCRA GENERATORS LIST

HWG - CA: Hazardous waste generator listing **1 SITE FOUND WITHIN .25 MILE**

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
2	*AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM*	*151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604*	*W / 0.193 mi., 1021 ft.*	*24*

OTHER ASCERTAINABLE RECORDS

INACTIVE PCS: Inactive Permitted facilities to discharge wastewater **18 SITES FOUND WITHIN 1 MILE**

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
4	*BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION*	*1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D*	*NNE / 0.272 mi., 1438 ft.*	*73*
5	*THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON*	*1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd.*	*NE / 0.280 mi., 1478 ft.*	*97*
8	*THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN*	*1201 COMMERCE BLVD*	*N / 0.383 mi., 2025 ft.*	*119*

OTHER ASCERTAINABLE RECORDS *(cont.)*

INACTIVE PCS: Inactive Permitted facilities to discharge wastewater **18 SITES FOUND WITHIN 1 MILE**

EQUAL/HIGHER ELEVATION *(cont.)*

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
9	GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION	105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100	NNW / 0.442 mi., 2335 ft.	169
11	WALLABY YOGURT COMPANY LLC	110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B	N / 0.467 mi., 2467 ft.	184
14	SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC	205 JIM OSWALT WAY | 205 JIM OSWALD WAY B	NNW / 0.645 mi., 3408 ft.	208
15	NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK	1111 GREEN ISLAND RD	N / 0.689 mi., 3641 ft.	217
A17	ENVIROCARE INTERNATIONAL INC. | ENVIROCARE	507 GREEN ISLAND RD	NE / 0.703 mi., 3714 ft.	257
A18	CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK	650 GREEN ISLAND ROAD	NE / 0.721 mi., 3805 ft.	272
19	MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC	100 NAPA JUNCTION RD	E / 0.728 mi., 3844 ft.	283
A20	KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES	501 GREEN ISLAND RD	NE / 0.731 mi., 3860 ft.	303
B23	CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS	1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD	NW / 0.841 mi., 4443 ft.	345
B25	ENG BROS WOOD PROD | COPART | COPART AUCTION YARD	1660 GREEN ISLAND RD	NW / 0.867 mi., 4580 ft.	375
26	Freon Free	120 KLAMATH COURT | 120 KLAMATH COURT SUITE A	ENE / 0.888 mi., 4690 ft.	390
27	BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking	1678 GREEN ISLAND RD	NW / 0.911 mi., 4812 ft.	401
28	SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER	303 GREEN ISLAND ROAD	NE / 0.915 mi., 4833 ft.	418
29	RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA	108 DODD CT | 110 DODD CT | 118 DODD CT	ENE / 0.967 mi., 5106 ft.	439

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
2	AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM	151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604	W / 0.193 mi., 1021 ft.	24

OTHER ASCERTAINABLE RECORDS *(cont.)*

MANIFEST EPA: EPA Hazardous Waste Electronic Manifest System (e-Manifest) **1 SITE FOUND WITHIN .25 MILE**

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
2	*AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM*	*151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604*	*W / 0.193 mi., 1021 ft.*	*24*

PCS ENF: Permitted facilities to discharge wastewater (Federal equivalent to NPDES) **5 SITES FOUND WITHIN 1 MILE**

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
4	*BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION*	*1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D*	*NNE / 0.272 mi., 1438 ft.*	*73*
15	*NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK*	*1111 GREEN ISLAND RD*	*N / 0.689 mi., 3641 ft.*	*217*
A20	*KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES*	*501 GREEN ISLAND RD*	*NE / 0.731 mi., 3860 ft.*	*303*
26	*Freon Free*	*120 KLAMATH COURT | 120 KLAMATH COURT SUITE A*	*ENE / 0.888 mi., 4690 ft.*	*390*

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
2	*AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM*	*151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604*	*W / 0.193 mi., 1021 ft.*	*24*

PCS FACILITY: Permitted facilities to discharge wastewater (Federal equivalent to NPDES) **18 SITES FOUND WITHIN 1 MILE**

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
4	*BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION*	*1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D*	*NNE / 0.272 mi., 1438 ft.*	*73*
5	*THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON*	*1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd.*	*NE / 0.280 mi., 1478 ft.*	*97*
8	*THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN*	*1201 COMMERCE BLVD*	*N / 0.383 mi., 2025 ft.*	*119*
9	*GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION*	*105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100*	*NNW / 0.442 mi., 2335 ft.*	*169*
11	*WALLABY YOGURT COMPANY LLC*	*110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B*	*N / 0.467 mi., 2467 ft.*	*184*
14	*SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC*	*205 JIM OSWALT WAY | 205 JIM OSWALD WAY B*	*NNW / 0.645 mi., 3408 ft.*	*208*
15	*NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK*	*1111 GREEN ISLAND RD*	*N / 0.689 mi., 3641 ft.*	*217*

OTHER ASCERTAINABLE RECORDS *(cont.)*

PCS FACILITY: Permitted facilities to discharge wastewater (Federal equivalent to NPDES) **18 SITES FOUND WITHIN 1 MILE**

EQUAL/HIGHER ELEVATION *(cont.)*

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
A17	ENVIROCARE INTERNATIONAL INC. | ENVIROCARE	507 GREEN ISLAND RD	NE / 0.703 mi., 3714 ft.	257
A18	CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK	650 GREEN ISLAND ROAD	NE / 0.721 mi., 3805 ft.	272
19	MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC	100 NAPA JUNCTION RD	E / 0.728 mi., 3844 ft.	283
A20	KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES	501 GREEN ISLAND RD	NE / 0.731 mi., 3860 ft.	303
B23	CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS	1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD	NW / 0.841 mi., 4443 ft.	345
B25	ENG BROS WOOD PROD | COPART | COPART AUCTION YARD	1660 GREEN ISLAND RD	NW / 0.867 mi., 4580 ft.	375
26	Freon Free	120 KLAMATH COURT | 120 KLAMATH COURT SUITE A	ENE / 0.888 mi., 4690 ft.	390
27	BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking	1678 GREEN ISLAND RD	NW / 0.911 mi., 4812 ft.	401
28	SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER	303 GREEN ISLAND ROAD	NE / 0.915 mi., 4833 ft.	418
29	RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA	108 DODD CT | 110 DODD CT | 118 DODD CT	ENE / 0.967 mi., 5106 ft.	439

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
2	AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM	151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604	W / 0.193 mi., 1021 ft.	24

CALEPA SITES - CA: CalEPA Regulated Sites from the Certified Unified Program Agencies (CUPA). **3 SITES FOUND WITHIN .25 MILE**

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
3	NAPA JUNCTION ELEMENTARY SCHOOL PROJECT	N/R	SE / 0.233 mi., 1229 ft.	71

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
1	SDG Commerce 330 Warehouse | COMMERCE BLVD PIPELINE PROJ	COMMERCE BOULEVARD NORTH OF EUCALYPTUS DRIVE	SSE / 0.079 mi., 420 ft.	22
2	AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM	151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604	W / 0.193 mi., 1021 ft.	24

OTHER ASCERTAINABLE RECORDS *(cont.)*

HAZNET - CA: Listing of hazardous waste manifests from when hazardous waste is transported from generators to permitted recycling treatment storage or disposal facilities by registered hazardous waste transporters **1 SITE FOUND WITHIN .25 MILE**

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
2	*AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM*	*151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604*	*W / 0.193 mi., 1021 ft.*	*24*

OTHER

SEISMIC - CA: Earthquake Zones of Required Investigation. Shows the location of both Seismic Hazard Zones and Earthquake Fault Zones **5 SITES FOUND WITHIN 1 MILE**

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
10	West Napa fault	38.18859, -122.263829	NE / 0.446 mi., 2354 ft.	*183*
12	West Napa fault	38.183678, -122.258995	ENE / 0.502 mi., 2651 ft.	*207*
13	West Napa fault	38.194753, -122.270446	NNE / 0.605 mi., 3195 ft.	*208*
21	West Napa fault	38.179287, -122.254982	E / 0.734 mi., 3873 ft.	*344*
22	West Napa fault	38.166447, -122.251449	ESE / 0.815 mi., 4306 ft.	*344*

No unmappable sites reported.

DATABASE(S) WITH NO MAPPED SITES:

FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST

ARCHIVED RCRA TSDF	Archived Resource Conservation and Recovery Act: Treatment Storage and Disposal Facilities
RCRA_TSDF	Resource Conservation and Recovery Act: Treatment Storage and Disposal Facilities

FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS

AST PBS	ASTs at Bulk Petroleum Terminals
EPA UST	EPA UST Finder database
FEMA UST	FEMA Underground Storage Tanks
HIST INDIAN UST R7	Historical Underground Storage Tanks on Indian Land in EPA Region 7
AST - CA	Aboveground storage tanks
FID UST - CA	Facility Inventory Database
HIST AST - CA	Historical Aboveground Storage Tanks
HIST UST - CA	Historical Underground Storage Tanks
UST - CA	Underground Storage Tanks
UST_NAPA COUNTY - CA	Underground storage tank sites located in Napa county.

FEDERAL CERCLIS LIST

CERCLIS-HIST	Comprehensive Environmental Response Compensation and Liability Act
EPA SAA	EPA Superfund Alternative Approach
FEDERAL FACILITY	Federal Facility sites
SEMS_8R_ACTIVE SITES	Sites on SEMS Active Site Inventory

FEDERAL RCRA CORRACTS FACILITIES LIST

CORRACTS	Hazardous Waste Corrective Action
HIST CORRACTS 2	Historical Hazardous Waste Corrective Action

FEDERAL DELISTED NPL SITE LIST

DELISTED NPL	Delisted National Priority List
DELISTED PROPOSED NPL	Delisted proposed National Priority List
SEMS_DELETED NPL	Sites Deleted from National Priorities List

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS

EPA LUST	EPA LUST
HIST INDIAN LUST R4	Historical Leaking Underground Storage Tanks on Indian Land in EPA Region 4
HIST INDIAN LUST R8	Historical Leaking Underground Storage Tanks on Indian Land in EPA Region 8
LUST REG 1 - CA	Region 1 Leaking Underground Storage Tanks
LUST REG 2 - CA	Region 2 Leaking Underground Storage Tanks
LUST REG 3 - CA	Region 3 Leaking Underground Storage Tanks
LUST REG 4 - CA	Region 4 Leaking Underground Storage Tanks
LUST REG 5 - CA	Region 5 Leaking Underground Storage Tanks
LUST REG 6 - CA	Region 6 Leaking Underground Storage Tanks
LUST REG 7 - CA	Region 7 Leaking Underground Storage Tanks
LUST REG 8 - CA	Region 8 Leaking Underground Storage Tanks
LUST REG 9 - CA	Region 9 Leaking Underground Storage Tanks
SLIC REG 1 - CA	Spills Leaks Investigation & Cleanup Program
SLIC REG 2 - CA	Spills Leaks Investigation & Cleanup Program
SLIC REG 3 - CA	Spills Leaks Investigation & Cleanup Program
SLIC REG 4 - CA	Spills Leaks Investigation & Cleanup Program
SLIC REG 5 - CA	Spills Leaks Investigation & Cleanup Program
SLIC REG 6 - CA	Spills Leaks Investigation & Cleanup Program
SLIC REG 7 - CA	Spills Leaks Investigation & Cleanup Program
SLIC REG 8 - CA	Spills Leaks Investigation & Cleanup Program
SLIC REG 9 - CA	Spills Leaks Investigation & Cleanup Program

FEDERAL ERNS LIST

ERNS	Emergency Response Notification System

FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

FED E C	Engineering Controls
FED I C	Institutional Controls
RCRA IC_EC	RCRA sites with Institutional and Engineering Controls

FEDERAL RCRA GENERATORS LIST

HIST RCRA_CESQG	Historical Resource Conservation and Recovery Act_Conditionally Exempt Small Quantity Generators
HIST RCRA_LQG	Historical Resource Conservation and Recovery Act_ Large Quantity Generators
HIST RCRA_NONGEN	Historical Resource Conservation and Recovery Act_Non Generators
HIST RCRA_SQG	Historical Resource Conservation and Recovery Act_Small Quantity Generators
RCRA_LQG	Resource Conservation and Recovery Act_ Large Quantity Generators
RCRA_SQG	Resource Conservation and Recovery Act_Small Quantity Generators
RCRA_VSQG	Resource Conservation and Recovery Act_Very Small Quantity Generator

FEDERAL NPL SITE LIST

NPL	National Priority List
NPL EPA R1 GIS	GIS for EPA Region 1 NPL
NPL EPA R3 GIS	GIS for EPA Region 3 NPL
NPL EPA R6 GIS	GIS for EPA Region 6 NPL
NPL EPA R8 GIS	GIS for EPA Region 8 NPL
NPL EPA R9 GIS	GIS for EPA Region 9 NPL
PART NPL	Part National Priority List
PROPOSED NPL	Proposed National Priority List
SEMS_FINAL NPL	Sites included on the Final National Priorities List
SEMS_PROPOSED NPL	Sites Proposed to be Added to the National Priorities List

STATE- AND TRIBAL - EQUIVALENT CERCLIS

HIST TOXIC PITS - CA	Historical Toxic Pits Cleanup Act
OIL & GAS CLEANUP - CA	SWRCB Oil & Gas Cleanup Sites

STATE- AND TRIBAL - EQUIVALENT CERCLIS *(cont.)*

SWRCB CLEANUP - CA	SWRCB Cleanup Program
SWRCB NON_CASE - CA	SWRCB Non-Case Sites
TOXIC PITS - CA	Toxic Pits Cleanup Act

STATE- AND TRIBAL - EQUIVALENT NPL

HIST RESPONSE - CA	Historical State Response Sites
RESPONSE - CA	State Response Sites

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

HIST SWF/LF - CA	Historical Solid Waste Information System

STATE AND TRIBAL BROWNFIELD SITES

TRIBAL BROWNFIELDS	Tribal Brownfields

STATE AND TRIBAL VOLUNTARY CLEANUP SITES

VCP - CA	Voluntary Cleanup Program sites

LOCAL BROWNFIELD LISTS

BROWNFIELDS-ACRES	EPA ACRES Brownfields
FED BROWNFIELDS	Federal Brownfields

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES

FED CDL	DOJ Clandestine Drug Labs
US HIST CDL	Historical Clandestine Drug Labs
CDL - CA	Meth and Clandestine Drug Labs
CS_NAPA COUNTY - CA	Contaminated Sites
SCH - CA	School Property Evaluation Program

RECORDS OF EMERGENCY RELEASE REPORTS

HMIRS (DOT)	Hazardous Materials Information Reporting Systems
CHMIRS - CA	California Hazardous Material Incident Report System
HIST CHMIRS - CA	California Hazardous Material Incident Report System

LOCAL LAND RECORDS

LIENS 2	CERCLA Lien Information
DEED - CA	Deeds
HIST LIENS - CA	Historical Liens
LIENS - CA	Liens

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

ODI	Open Dump Inventory
TRIBAL ODI	Indian Open Dump Inventory Sites
HAULERS - CA	Tire Haulers
SWRCY - CA	Recyclers

OTHER ASCERTAINABLE RECORDS

AFS	Air Facility Systems
ALT FUELING	Alternative Fueling Stations
ARENAS	ARENAS
ARENAS 2	ARENAS (additional)
BRS	Biennial Reporting Systems
CDC HAZDAT	Hazardous Substance Release and Health Effects Information
CHURCHES	CHURCHES
COAL ASH DOE	Coal Ash: Department of Energy
COAL ASH EPA	Coal Ash: Environmental Protection Agency
COAL GAS	Coal Gas Plants
COLLEGES	COLLEGES
COLLEGES 2	COLLEGES 2
CONSENT (DECREES)	Superfund Consent Decree
CORRECTIVE ACTIONS_2020	Wastes - Hazardous Waste - Corrective Action

OTHER ASCERTAINABLE RECORDS *(cont.)*

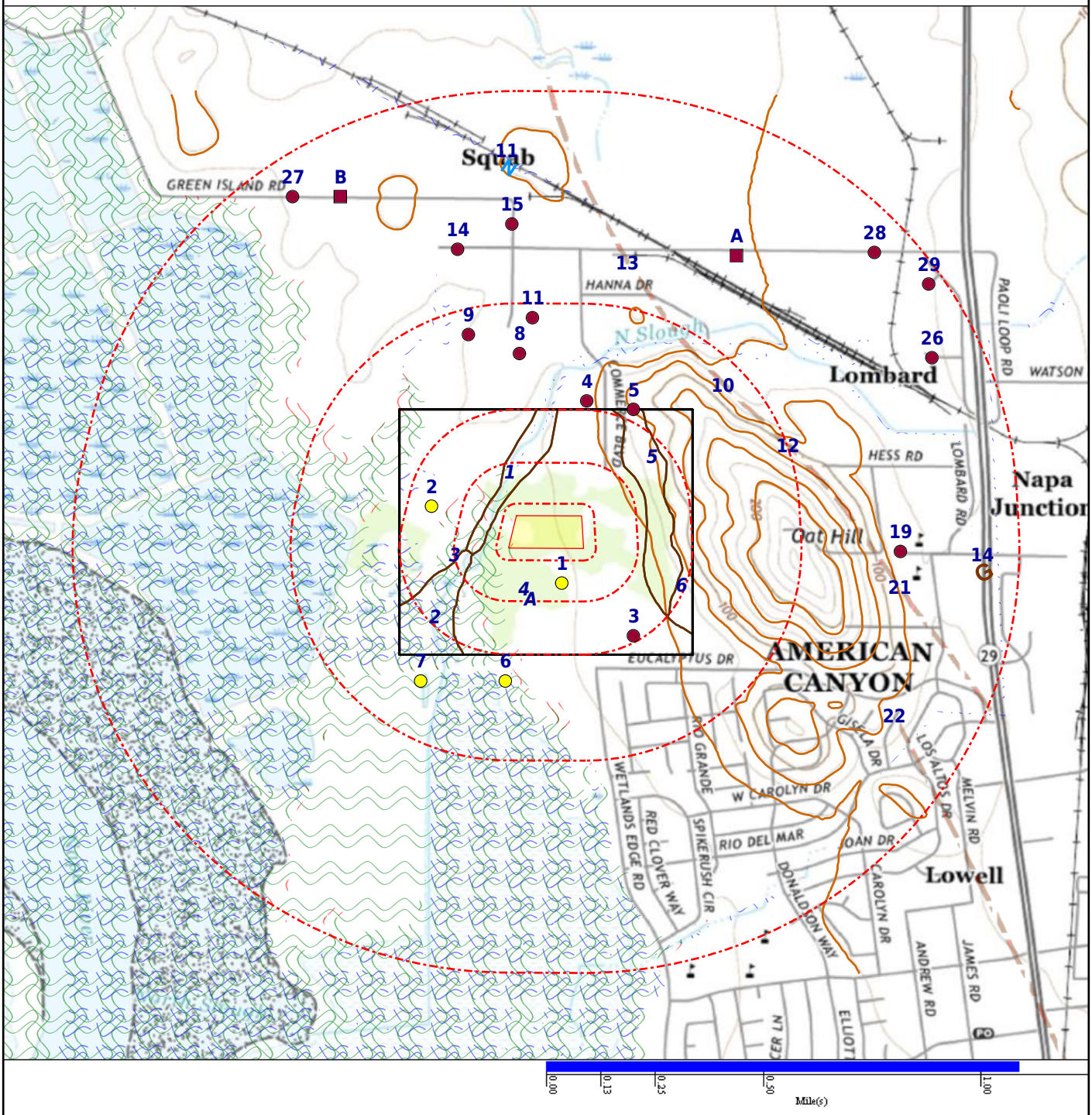
DAYCARE	DAYCARE
DEBRIS EPA LF	EPA Disaster Debris Landfill Sites
DEBRIS EPA SWRCY	EPA Disaster Debris Recovery Sites
DOD	Department of Defense
DOT OPS	Department of Transportation Office of Pipeline Safety
ECHO	EPA Enforcement and Compliance History Online
ENOI	Electronic Notice of Intent
EPA FUELS	EPA Fuels Registration, Reporting, and Compliance List
EPA OSC	EPA On-Site Coordinator
EPA WATCH	EPA Watch List
FA HWF	Financial Assurance for Hazardous Waste Facilities
FEDLAND	Federal Lands
FRS	Facility Index Systems
FTTS	FIFRA/TSCA Tracking System
FTTS INSP	FIFRA/TSCA Tracking System: Inspections
FUDS	Formerly Used Defense Sites
GOV MANSIONS	Governors Mansions
HIST AFS	Historical Air Facility Systems
HIST AFS 2	Historical Air Facility Systems
HIST DOD	Department of Defense historical sites
HIST LEAD_SMELTER	Historical Lead Smelter Sites
HIST MLTS	Historical Material Licensing Tracking Systems
HIST PCB TRANS	Historical Polychlorinated Biphenyl (PCB) Facilities
HIST PCS ENF	Historical Enforced Permit Compliance Facilities
HIST PCS FACILITY	Historical Permit Compliance Facilities
HIST SSTS	Historical Section 7 Tracking Systems
HOSPITALS	HOSPITALS
ICIS	Integrated Compliance Information System
LUCIS	Land Use Control Information Systems
LUCIS 2	Land Use Control Information Systems 2
MINE OPERATIONS	Mines list from USGS
MINES	Mines
MINES USGS	Mines list from USGS
MLTS	Material Licensing Tracking Systems
NPL AOC	Areas related to NPL remediation sites
NPL LIENS	National Priority List Liens
NURSING HOMES	NURSING HOMES
OSHA	Occupational Safety & Health Administration
PADS	PCB Activity Database Systems
PCB TRANSFORMER	Polychlorinated Biphenyl (PCB) Waste
PFAS NPL	PFAS NPL Sites
PFAS TRIS	PFAS TRIS Sites
PFAS UCMR3	PFAS UCMR Samples
PRISONS	PRISONS
PRP	Potentially Responsible Parties
RAATS	RCRA Administrative Action Tracking Systems
RADINFO	Radiation Information Systems
RMP	Risk Management Plans
ROD	Record of Decision
SCHOOLS PRIVATE	SCHOOLS PRIVATE
SCHOOLS PUBLIC	SCHOOLS PUBLIC
SCRD DRYCLEANERS	SCRD Drycleaners
SEMS_SMELTER	Sites on SEMS Potential Smelter Activity
SSTS	Section 7 Tracking Systems
STORMWATER	Storm Water Permits
TOSCA-PLANT	Toxic Substance Control Act: Plants
TRIS	Toxic Release Inventory Systems
UMTRA	Uranium Mill Tailing Sites

OTHER ASCERTAINABLE RECORDS *(cont.)*

VAPOR	EPA Vapor Intrusion
BOND EXPENDITURE PLAN - CA	Bond Expenditure Plan
CIWQS - CA	California Integrated Water Quality System
CIWQS 2 - CA	California Integrated Water Quality System
CORTESE - CA	The Hazardous Waste and Substances Sites List
DAYCARE - CA	Daycares
DRYCLEANERS - CA	Drycleaners
DRYCLEANERS_BAY AREA - CA	Bay Area Drycleaners
EMI - CA	Emissions Inventory Data
FA - CA	Financial Assurance
FA 2 - CA	Financial Assurance for Solid Waste Facilities
FIRE AREAS - CA	Fire Perimeters
HIGH FIRE - CA	Fire Hazard Severity Zones
HIST CORTESE - CA	The Historical Hazardous Waste and Substances Sites List
HIST HAZNET - CA	Historical Hazardous Waste Manifests
HIST HWP - CA	Historical EnviroStor Permitted Facilities
HIST LDS - CA	Historical Land Disposal Sites
HIST MCS - CA	Historical Military Cleanup Sites
HIST NFA - CA	Historical No Further Action Sites
HWM COMMERCIAL FACILITIES - CA	Hazardous Waste Management Commercial Facilities
HWP - CA	EnviroStor Permitted Facilities
HWT - CA	Hazardous Waste Transporters
LDS - CA	Land Disposal Sites
MCS - CA	Military Cleanup Sites
MWMP - CA	Medical Waste Management Program
MWMP 2 - CA	Medical Waste Management Program
NFA - CA	No Further Action Sites
NFE - CA	Unconfirmed contaminated properties
NPDES - CA	State Wastewater and NPDES Permits
PERCHLORATE 2 - CA	Perchlorate contaminted sites
PFAS - CA	PFAS Site Listing
PFAS DOD - CA	PFAS Site Listing
PFAS GAMA - CA	PFAS GAMA Well Sampling
PROPOSITION 65 - CA	Proposition 65 Records
RFR - CA	Regulated Facility Report
SWAT - CA	SWAT Reports Summary Data
WDR - CA	Waste Discharge Requirement Sites
WDS - CA	Waste Discharge System
WILDLANDS - CA	Preserves List
WIP - CA	Well Investigation Program

SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: March 10, 2023



- Subject Property
- Department of Defense (No Data)
- FEMA FloodZone 100
- Historical DOD (No Data)
- Equal/Higher Elevation
- DFIRM Floodzone 100
- FEMA FloodZone 500 (No Data)
- National Priority List (No Data)
- Lower Elevation
- DFIRM Floodzone 500
- Fire Areas (No Data)
- NWI
- CDC HAZDAT (No Data)
- Federal Lands (No Data)
- Fire Hazard Zone (No Data)
- Seismic

SUBJECT NAME: SDG Commerce 220
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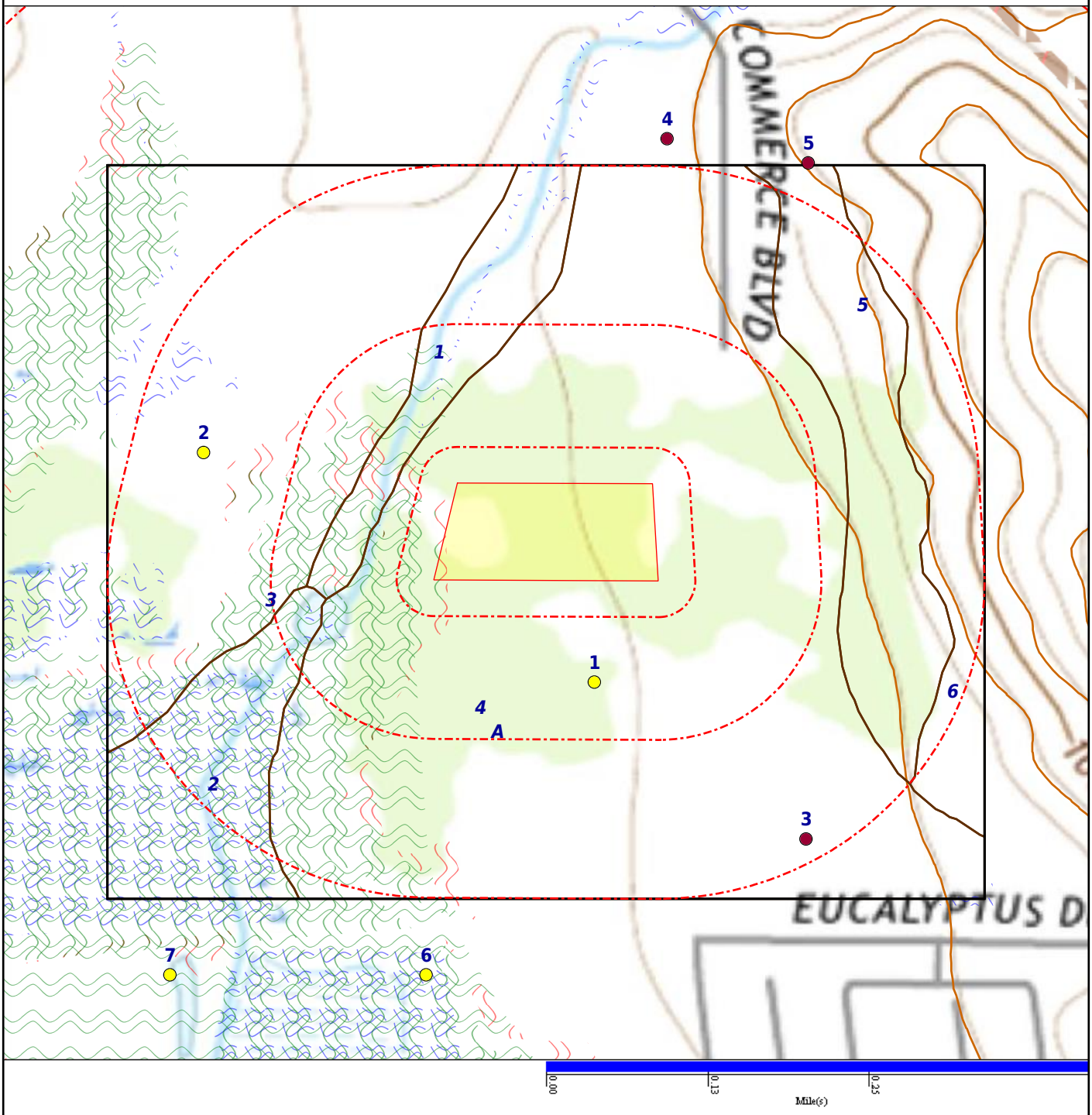

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST								
ARCHIVED RCRA TSDF		0.500	0	0	0	--	--	0
RCRA_TSDF		0.500	0	0	0	--	--	0
FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS								
AST PBS		0.250	0	0	--	--	--	0
EPA UST		0.250	0	0	--	--	--	0
FEMA UST		0.250	0	0	--	--	--	0
HIST INDIAN UST R7		0.250	0	0	--	--	--	0
AST - CA		0.250	0	0	--	--	--	0
FID UST - CA		0.250	0	0	--	--	--	0
HIST AST - CA		0.250	0	0	--	--	--	0
HIST UST - CA		0.250	0	0	--	--	--	0
UST - CA		0.250	0	0	--	--	--	0
UST_NAPA COUNTY - CA		0.250	0	0	--	--	--	0
FEDERAL CERCLIS LIST								
CERCLIS NFRAP		0.500	0	0	1	--	--	1
CERCLIS-HIST		0.500	0	0	0	--	--	0
EPA SAA		0.500	0	0	0	--	--	0
FEDERAL FACILITY		1.000	0	0	0	0	--	0
SEMS_8R_ACTIVE SITES		0.500	0	0	0	--	--	0
SEMS_8R_ARCHIVED SITES		0.500	0	0	1	--	--	1
FEDERAL RCRA CORRACTS FACILITIES LIST								
CORRACTS		1.000	0	0	0	0	--	0
HIST CORRACTS 2		1.000	0	0	0	0	--	0
FEDERAL DELISTED NPL SITE LIST								
DELISTED NPL		1.000	0	0	0	0	--	0
DELISTED PROPOSED NPL		1.000	0	0	0	0	--	0
SEMS_DELETED NPL		1.000	0	0	0	0	--	0
FEDERAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS								
EPA LF MOP		0.500	0	0	1	--	--	1
FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS								
EPA LUST		0.500	0	0	0	--	--	0
HIST INDIAN LUST R4		0.500	0	0	0	--	--	0
HIST INDIAN LUST R8		0.500	0	0	0	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS *(cont.)*								
LUST REG 1 - CA		0.500	0	0	0	--	--	0
LUST REG 2 - CA		0.500	0	0	0	--	--	0
LUST REG 3 - CA		0.500	0	0	0	--	--	0
LUST REG 4 - CA		0.500	0	0	0	--	--	0
LUST REG 5 - CA		0.500	0	0	0	--	--	0
LUST REG 6 - CA		0.500	0	0	0	--	--	0
LUST REG 7 - CA		0.500	0	0	0	--	--	0
LUST REG 8 - CA		0.500	0	0	0	--	--	0
LUST REG 9 - CA		0.500	0	0	0	--	--	0
SLIC REG 1 - CA		0.500	0	0	0	--	--	0
SLIC REG 2 - CA		0.500	0	0	0	--	--	0
SLIC REG 3 - CA		0.500	0	0	0	--	--	0
SLIC REG 4 - CA		0.500	0	0	0	--	--	0
SLIC REG 5 - CA		0.500	0	0	0	--	--	0
SLIC REG 6 - CA		0.500	0	0	0	--	--	0
SLIC REG 7 - CA		0.500	0	0	0	--	--	0
SLIC REG 8 - CA		0.500	0	0	0	--	--	0
SLIC REG 9 - CA		0.500	0	0	0	--	--	0
FEDERAL ERNS LIST								
ERNS		SP	0	--	--	--	--	0
FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES								
FED E C		0.500	0	0	0	--	--	0
FED I C		0.500	0	0	0	--	--	0
RCRA IC_EC		0.250	0	0	--	--	--	0
FEDERAL RCRA GENERATORS LIST								
HIST RCRA_CESQG		0.250	0	0	--	--	--	0
HIST RCRA_LQG		0.250	0	0	--	--	--	0
HIST RCRA_NONGEN		0.250	0	0	--	--	--	0
HIST RCRA_SQG		0.250	0	0	--	--	--	0
RCRA_LQG		0.250	0	0	--	--	--	0
RCRA_NONGEN		0.250	0	1	--	--	--	1
RCRA_SQG		0.250	0	0	--	--	--	0
RCRA_VSQG		0.250	0	0	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
FEDERAL NPL SITE LIST								
NPL		1.000	0	0	0	0	--	0
NPL EPA R1 GIS		1.000	0	0	0	0	--	0
NPL EPA R3 GIS		1.000	0	0	0	0	--	0
NPL EPA R6 GIS		1.000	0	0	0	0	--	0
NPL EPA R8 GIS		1.000	0	0	0	0	--	0
NPL EPA R9 GIS		1.000	0	0	0	0	--	0
PART NPL		1.000	0	0	0	0	--	0
PROPOSED NPL		1.000	0	0	0	0	--	0
SEMS_FINAL NPL		1.000	0	0	0	0	--	0
SEMS_PROPOSED NPL		1.000	0	0	0	0	--	0
STATE- AND TRIBAL - EQUIVALENT CERCLIS								
ENVIROSTOR - CA		1.000	0	0	0	2	--	2
HIST TOXIC PITS - CA		1.000	0	0	0	0	--	0
OIL & GAS CLEANUP - CA		0.500	0	0	0	--	--	0
SWRCB CLEANUP - CA		0.500	0	0	0	--	--	0
SWRCB NON_CASE - CA		0.500	0	0	0	--	--	0
TOXIC PITS - CA		1.000	0	0	0	0	--	0
STATE- AND TRIBAL - EQUIVALENT NPL								
HIST RESPONSE - CA		1.000	0	0	0	0	--	0
RESPONSE - CA		1.000	0	0	0	0	--	0
STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS								
HIST SWF/LF - CA		0.500	0	0	0	--	--	0
SWF/LF - CA		0.500	0	0	1	--	--	1
STATE RCRA GENERATORS LIST								
HWG - CA		0.250	0	1	--	--	--	1
STATE AND TRIBAL BROWNFIELD SITES								
TRIBAL BROWNFIELDS		0.500	0	0	0	--	--	0
STATE AND TRIBAL VOLUNTARY CLEANUP SITES								
VCP - CA		0.500	0	0	0	--	--	0
LOCAL BROWNFIELD LISTS								
BROWNFIELDS-ACRES		0.500	0	0	0	--	--	0
FED BROWNFIELDS		0.500	0	0	0	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES								
FED CDL		SP	0	--	--	--	--	0
US HIST CDL		SP	0	--	--	--	--	0
CDL - CA		SP	0	--	--	--	--	0
CS_NAPA COUNTY - CA		0.500	0	0	0	--	--	0
SCH - CA		0.250	0	0	--	--	--	0
RECORDS OF EMERGENCY RELEASE REPORTS								
HMIRS (DOT)		SP	0	--	--	--	--	0
CHMIRS - CA		SP	0	--	--	--	--	0
HIST CHMIRS - CA		SP	0	--	--	--	--	0
LOCAL LAND RECORDS								
LIENS 2		SP	0	--	--	--	--	0
DEED - CA		0.500	0	0	0	--	--	0
HIST LIENS - CA		SP	0	--	--	--	--	0
LIENS - CA		SP	0	--	--	--	--	0
LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES								
ODI		0.500	0	0	0	--	--	0
TRIBAL ODI		0.500	0	0	0	--	--	0
HAULERS - CA		0.500	0	0	0	--	--	0
SWRCY - CA		0.500	0	0	0	--	--	0
OTHER ASCERTAINABLE RECORDS								
AFS		SP	0	--	--	--	--	0
ALT FUELING		0.250	0	0	--	--	--	0
ARENAS		SP	0	--	--	--	--	0
ARENAS 2		SP	0	--	--	--	--	0
BRS		SP	0	--	--	--	--	0
CDC HAZDAT		1.000	0	0	0	0	--	0
CHURCHES		SP	0	--	--	--	--	0
COAL ASH DOE		0.500	0	0	0	--	--	0
COAL ASH EPA		0.500	0	0	0	--	--	0
COAL GAS		1.000	0	0	0	0	--	0
COLLEGES		SP	0	--	--	--	--	0
COLLEGES 2		SP	0	--	--	--	--	0
CONSENT (DECREES)		1.000	0	0	0	0	--	0
CORRECTIVE ACTIONS_2020		0.500	0	0	0	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
OTHER ASCERTAINABLE RECORDS *(cont.)*								
DAYCARE		SP	0	--	--	--	--	0
DEBRIS EPA LF		0.500	0	0	0	--	--	0
DEBRIS EPA SWRCY		0.500	0	0	0	--	--	0
DOD		1.000	0	0	0	0	--	0
DOT OPS		SP	0	--	--	--	--	0
ECHO		SP	0	--	--	--	--	0
ENOI		SP	0	--	--	--	--	0
EPA FUELS		SP	0	--	--	--	--	0
EPA OSC		SP	0	--	--	--	--	0
EPA WATCH		SP	0	--	--	--	--	0
FA HWF		SP	0	--	--	--	--	0
FEDLAND		1.000	0	0	0	0	--	0
FRS		SP	0	--	--	--	--	0
FTTS		SP	0	--	--	--	--	0
FTTS INSP		SP	0	--	--	--	--	0
FUDS		1.000	0	0	0	0	--	0
GOV MANSIONS		SP	0	--	--	--	--	0
HIST AFS		SP	0	--	--	--	--	0
HIST AFS 2		SP	0	--	--	--	--	0
HIST DOD		1.000	0	0	0	0	--	0
HIST LEAD_SMELTER		SP	0	--	--	--	--	0
HIST MLTS		SP	0	--	--	--	--	0
HIST PCB TRANS		SP	0	--	--	--	--	0
HIST PCS ENF		1.000	0	0	0	0	--	0
HIST PCS FACILITY		1.000	0	0	0	0	--	0
HIST SSTS		SP	0	--	--	--	--	0
HOSPITALS		SP	0	--	--	--	--	0
ICIS		SP	0	--	--	--	--	0
INACTIVE PCS		1.000	0	1	5	12	--	18
LUCIS		0.500	0	0	0	--	--	0
LUCIS 2		0.500	0	0	0	--	--	0
MANIFEST EPA		0.250	0	1	--	--	--	1
MINE OPERATIONS		0.250	0	0	--	--	--	0
MINES		0.250	0	0	--	--	--	0
MINES USGS		0.250	0	0	--	--	--	0
MLTS		SP	0	--	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
OTHER ASCERTAINABLE RECORDS *(cont.)*								
NPL AOC		1.000	0	0	0	0	--	0
NPL LIENS		SP	0	--	--	--	--	0
NURSING HOMES		SP	0	--	--	--	--	0
OSHA		SP	0	--	--	--	--	0
PADS		SP	0	--	--	--	--	0
PCB TRANSFORMER		SP	0	--	--	--	--	0
PCS ENF		1.000	0	1	1	3	--	5
PCS FACILITY		1.000	0	1	5	12	--	18
PFAS NPL		0.500	0	0	0	--	--	0
PFAS TRIS		0.500	0	0	0	--	--	0
PFAS UCMR3		0.500	0	0	0	--	--	0
PRISONS		SP	0	--	--	--	--	0
PRP		SP	0	--	--	--	--	0
RAATS		SP	0	--	--	--	--	0
RADINFO		SP	0	--	--	--	--	0
RMP		0.500	0	0	0	--	--	0
ROD		1.000	0	0	0	0	--	0
SCHOOLS PRIVATE		SP	0	--	--	--	--	0
SCHOOLS PUBLIC		SP	0	--	--	--	--	0
SCRD DRYCLEANERS		0.250	0	0	--	--	--	0
SEMS_SMELTER		SP	0	--	--	--	--	0
SSTS		SP	0	--	--	--	--	0
STORMWATER		SP	0	--	--	--	--	0
TOSCA-PLANT		SP	0	--	--	--	--	0
TRIS		SP	0	--	--	--	--	0
UMTRA		0.500	0	0	0	--	--	0
VAPOR		0.500	0	0	0	--	--	0
BOND EXPENDITURE PLAN - CA		1.000	0	0	0	0	--	0
CALEPA SITES - CA		0.250	1	2	--	--	--	3
CIWQS - CA		SP	0	--	--	--	--	0
CIWQS 2 - CA		SP	0	--	--	--	--	0
CORTESE - CA		0.500	0	0	0	--	--	0
DAYCARE - CA		SP	0	--	--	--	--	0
DRYCLEANERS - CA		SP	0	--	--	--	--	0
DRYCLEANERS_BAY AREA - CA		0.250	0	0	--	--	--	0
EMI - CA		SP	0	--	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
OTHER ASCERTAINABLE RECORDS *(cont.)*								
FA - CA		SP	0	--	--	--	--	0
FA 2 - CA		SP	0	--	--	--	--	0
FIRE AREAS - CA		1.000	0	0	0	0	--	0
HAZNET - CA		0.250	0	1	--	--	--	1
HIGH FIRE - CA		1.000	0	0	0	0	--	0
HIST CORTESE - CA		0.500	0	0	0	--	--	0
HIST HAZNET - CA		0.250	0	0	--	--	--	0
HIST HWP - CA		1.000	0	0	0	0	--	0
HIST LDS - CA		0.500	0	0	0	--	--	0
HIST MCS - CA		1.000	0	0	0	0	--	0
HIST NFA - CA		0.500	0	0	0	--	--	0
HWM COMMERCIAL FACILITIES - CA		0.250	0	0	--	--	--	0
HWP - CA		1.000	0	0	0	0	--	0
HWT - CA		0.250	0	0	--	--	--	0
LDS - CA		0.500	0	0	0	--	--	0
MCS - CA		1.000	0	0	0	0	--	0
MWMP - CA		0.250	0	0	--	--	--	0
MWMP 2 - CA		0.250	0	0	--	--	--	0
NFA - CA		0.500	0	0	0	--	--	0
NFE - CA		0.500	0	0	0	--	--	0
NPDES - CA		SP	0	--	--	--	--	0
PERCHLORATE 2 - CA		0.500	0	0	0	--	--	0
PFAS - CA		0.500	0	0	0	--	--	0
PFAS DOD - CA		0.500	0	0	0	--	--	0
PFAS GAMA - CA		0.500	0	0	0	--	--	0
PROPOSITION 65 - CA		1.000	0	0	0	0	--	0
RFR - CA		SP	0	--	--	--	--	0
SWAT - CA		SP	0	--	--	--	--	0
WDR - CA		SP	0	--	--	--	--	0
WDS - CA		SP	0	--	--	--	--	0
WILDLANDS - CA		1.000	0	0	0	0	--	0
WIP - CA		0.250	0	0	--	--	--	0
OTHER								
SEISMIC - CA		1.000	0	0	1	4	--	5

Map Id: 1
Direction: SSE
Distance: 0.079 mi., 420 ft.
Elevation: 19 ft.
Relative: Lower

Site Name : SDG Commerce 330 Warehouse | COMMERCE BLVD PIPELINE PROJ COMMERCE BOULEVARD NORTH OF EUCALYPTUS DRIVE AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, NPDES - CA, RFR - CA]

Envirosite ID: 1107796
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	SDG Commerce 330 Warehouse
Facility Address :	COMMERCE BOULEVARD NORTH OF EUCALYPTUS DRIVE, AMERICAN CANYON, 94503
Site ID :	542093
EI ID :	869597
EI Description :	Construction Storm Water
Latitude :	38.183900
Longitude :	-122.273200
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-08-26

CIWQS - CA

Facility Name :	COMMERCE BLVD PIPELINE PROJ
Facility Address :	COMMERCE BLVD NORTH OF EUCALYPTUS DR, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S218126
Agency Name :	AMERICAN CANYON CITY
Last Date in Agency List :	2022-12-28
Facility Name :	SDG COMMERCE 330 WAREHOUSE
Facility Address :	COMMERCE BOULEVARD NORTH OF EUCALYPTUS DRIVE, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S869597
Agency Name :	SDG COMMERCE 330 LLC
Last Date in Agency List :	2022-12-28

NPDES - CA

Facility Name :	SDG Commerce 330 Warehouse
Facility Address :	Commerce Boulevard North of Eucalyptus Drive, American Canyon, 94503
County :	Napa
Effective Date :	2019-01-24
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	2020-12-12
Order Number :	2009-0009-DWQ
NPDES Number :	CAS000002
WDID :	2 28C385821
RM Status :	Terminated

Map Id: 1
Direction: SSE
Distance: 0.079 mi., 420 ft.
Elevation: 19 ft.
Relative: Lower

Site Name : SDG Commerce 330 Warehouse | COMMERCE BLVD PIPELINE PROJ COMMERCE BOULEVARD NORTH OF EUCALYPTUS DRIVE AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, NPDES - CA, RFR - CA] ***(cont.)***

Envirosite ID: 1107796
EPA ID: N/R

NPDES - CA ***(cont.)***

Reg Meas ID :	503987
Reg Meas Type :	Enrollee
Program :	Construction
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	SDG Commerce 330 LLC
Discharger Address :	413 West Yosemite Avenue, Madera, California 93637
Last Date in Agency List :	2023-02-15

RFR - CA

Facility Name :	SDG Commerce 330 Warehouse
Facility Address :	Commerce Boulevard North of Eucalyptus Drive, American Canyon, CA 94503
County :	Napa
Effective Date :	2019-01-24
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000002
Order Number :	2009-0009-DWQ
WDID :	2 28C385821
SIC/NAICS :	N/R
Program :	CONSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water construction
Place/Project Type :	Construction - Industrial
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	SDG Commerce 330 LLC
Agency Address :	413 West Yosemite Avenue Suite 105, Madera, CA 93637
Latitude :	38.1839
Longitude :	-122.2732
Last Date in Agency List :	2020-10-08

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA]

Envirosite ID: 52317882
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	AMERICAN CANYON WASTE WATER TREATMENT FACILITY
Facility Address :	151 MEZZETTA CT, AMERICAN CANYON, 94503
Site ID :	450967
EI ID :	110001162866
EI Description :	US EPA Air Emission Inventory System (EIS)
Latitude :	38.189780
Longitude :	-122.275790
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	AMERICAN CANYON WATER RECYCLING PROGRAM
Facility Address :	151 MEZZETTA COURT, AMERICAN CANYON, 94503
Site ID :	261887
EI ID :	764886
EI Description :	Waste Discharge Requirements
Latitude :	38.188830
Longitude :	-122.278200
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Site ID :	261887
EI ID :	764886
EI Description :	Forestry & Silviculture
Latitude :	38.188830
Longitude :	-122.278200
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	WASTEWATER TREATMENT PLANT
Facility Address :	151 MEZZETTA CT, AMERICAN CANYON, 94503
Site ID :	356558
EI ID :	10640053
EI Description :	Chemical Storage Facilities
Latitude :	38.186450
Longitude :	-122.278656
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

CHMIRS - CA

Facility Address :	151 Messetta Ct, American Canyon, 94503
County :	Napa County
Notified Date :	2014-02-10 15:33:00
Spill Representative :	City of American Canyon
Control Number :	14-0804
Substance 1 :	Sewage
Quantity 1 :	10,000
Measure 1 :	Gal(s)
Type 1 :	SEWAGE
Pipeline 1 :	No
Vessel 1 (300 Tons) :	No
Substance 2 :	N/R
Quantity 2 :	N/R
Measure 2 :	N/R
Type 2 :	N/R
Pipeline 2 :	No
Vessel 2 (300 Tons) :	No
Substance 3 :	N/R
Quantity 3 :	N/R
Measure 3 :	N/R
Type 3 :	N/R
Pipeline 3 :	No
Vessel 3 (300 Tons) :	No
Description :	RP states that valves were left open on the affluent pond which resulted in the release of approx 10,000 gal of raw sewage which was released into a tributary of the Napa River. Release is contained but unrecoverable.
Contained :	Yes
Water? :	Yes
Water Way :	Napa River
Drinking Water Impacted :	N/R
Known Impact :	N/R
Incident Date :	2014-02-10
Time :	14:00:00
Spill Site :	Treatment/Sewage Facility
Site :	Napa River
Cause :	Human Error
Other Causes :	N/R
Injuries (Y/N) :	No
Injuries Number :	N/R
Fatal (Y/N) :	No
Fatal Number :	N/R
Evacs (Y/N) :	No

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

CHMIRS - CA ***(cont.)***

Evacs Number :	N/R
Cleanup :	Unrecoverable
Admin Agency :	Napa County Department Environmental Management
Last Date in Agency List :	2017-04-04

CIWQS - CA

Facility Name :	AMERICAN CANYON WATER RECYCLING PROGRAM
Facility Address :	151 MEZZETTA COURT, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	764886
Agency Name :	AMERICAN CANYON CITY PWD
Last Date in Agency List :	2022-12-28
Place ID :	764886
Agency Name :	NOT AVAILABLE
Last Date in Agency List :	2022-12-28

CIWQS 2 - CA

Facility Name :	American Canyon Water Reclamation Facility (WRF) (formerly WWTP)
Facility Address :	151 Mezzetta Court, American Canyon, 94503
County :	Napa
Facility ID :	205477
WDID :	2 283021001
Facility Type :	Municipal/Domestic
Region :	2
Place Type :	Utility
Place Subtype :	Wastewater Treatment Facility
Ageny Name :	American Canyon City PWD
Agency Type :	City Agency
Number of Agencies :	1
Status Date :	2011-04-12
Status :	Draft
Status Enrollee :	N
Individual/General :	I
Fee Code :	19 - Non Billable by Administrative Determination
Staff Assigned :	N/R
Number of Staff Assigned :	N/R
Supervisor :	N/R
Number of Supervisor :	N/R
Number of Amendments :	0

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

CIWQS 2 - CA ***(cont.)***

Number of Reg Measures :	2
Baseline Flow :	N/R
Population (MS4)/Acres :	N/R
Reclamation :	N/R
CAFO Type :	N/R
CAFO Subtype :	N/R
CAFO Population :	N/R
Onsite :	N/R
Quality Assurance :	N/R
RCRA Flag :	N
Total MMP Violations Number :	0
Total Number of Violations :	0
Total Number of Inspections :	0
Date of Most Recent Completed Inspection:	N/R
Date of Most Recent Received Report :	N/R
Total Number of Final (A+H) Enforcement Actions:	2
Most Recent Effective Date of Enf Action (A+H):	2012-08-07
Program :	NPDESWW
Program Category :	NPDESWW
Number of Programs :	1
Complexity :	N/R
Pretreatment :	N/R
Facility Waste Type :	N/R
Reg Measure ID :	378604
Reg Measure Type :	Co-Permitee
Reg Measure Title :	Order No. R2-2007-0077 Mercury Watershed Permit for American Canyon City
Reg Measure Description :	Amends the mercury requirements.
SIC 1 :	4952 - Sewerage Systems
SIC 2 :	-
SIC 3 :	-
Latitude :	38.18883
Longitude :	-122.2782
Last Date in Agency List :	2023-01-11
Facility ID :	205477
WDID :	2 283021001
Facility Type :	Municipal/Domestic
Region :	2
Place Type :	Utility
Place Subtype :	Wastewater Treatment Facility
Ageny Name :	American Canyon City PWD
Agency Type :	City Agency

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

CIWQS 2 - CA ***(cont.)***

Number of Agencies :	1
Status Date :	2022-09-20
Status :	Active
Status Enrollee :	N
Individual/General :	I
Fee Code :	66 - NPDES Based on Flow
Staff Assigned :	N/R
Number of Staff Assigned :	N/R
Supervisor :	N/R
Number of Supervisor :	N/R
Number of Amendments :	0
Number of Reg Measures :	9
Baseline Flow :	2.5
Population (MS4)/Acres :	N/R
Reclamation :	1 - Producer
CAFO Type :	N/R
CAFO Subtype :	N/R
CAFO Population :	N/R
Onsite :	N/R
Quality Assurance :	N/R
RCRA Flag :	N
Total MMP Violations Number :	35
Total Number of Violations :	49
Total Number of Inspections :	14
Date of Most Recent Completed Inspection:	2022-04-07
Date of Most Recent Received Report :	2022-12-29
Total Number of Final (A+H) Enforcement Actions:	3
Most Recent Effective Date of Enf Action (A+H):	2022-10-25
Program :	NPDMUNILRG
Program Category :	NPDESWW
Number of Programs :	1
Complexity :	A
Pretreatment :	N - POTW does not have EPA approved pretreatment prog.
Facility Waste Type :	Domestic wastewater
Reg Measure ID :	448119
Reg Measure Type :	NPDES Permits
Reg Measure Title :	NPDES R2-2022-0019 for American Canyon City PWD
Reg Measure Description :	Reissuance of NPDES Permit No. CA0038768 for the American Canyon Water Reclamation Facility, American Canyon, Napa County.
SIC 1 :	4952 - Sewerage Systems
SIC 2 :	-
SIC 3 :	-

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

CIWQS 2 - CA ***(cont.)***

Latitude :	38.18883
Longitude :	-122.2782
Last Date in Agency List :	2023-01-11
Facility Name :	American Canyon Water Recycling Program
Facility Address :	151 Mezzetta Court, American Canyon, 94503
County :	Napa
Facility ID :	764886
WDID :	2 283021003
Facility Type :	Municipal/Domestic
Region :	2
Place Type :	Utility
Place Subtype :	Wastewater Treatment Facility
Ageny Name :	American Canyon City PWD
Agency Type :	City Agency
Number of Agencies :	1
Status Date :	2022-02-03
Status :	Active
Status Enrollee :	N
Individual/General :	I
Fee Code :	58 - Non15 Based on (TTWQ)/CPLX)
Staff Assigned :	N/R
Number of Staff Assigned :	N/R
Supervisor :	N/R
Number of Supervisor :	N/R
Number of Amendments :	0
Number of Reg Measures :	3
Baseline Flow :	N/R
Population (MS4)/Acres :	N/R
Reclamation :	N/R
CAFO Type :	N/R
CAFO Subtype :	N/R
CAFO Population :	N/R
Onsite :	N/R
Quality Assurance :	N/R
RCRA Flag :	N/R
Total MMP Violations Number :	0
Total Number of Violations :	0
Total Number of Inspections :	0
Date of Most Recent Completed Inspection:	N/R
Date of Most Recent Received Report :	N/R
Total Number of Final (A+H) Enforcement Actions:	0

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

CIWQS 2 - CA ***(cont.)***

Most Recent Effective Date of Enf Action (A+H):	N/R
Program :	REC
Program Category :	WDR
Number of Programs :	1
Complexity :	C
Pretreatment :	N/R
Facility Waste Type :	Recycled/reclaimed water
Reg Measure ID :	445251
Reg Measure Type :	Enrollee - WRR
Reg Measure Title :	Enrollee - WRR under General WDR for the Use of Recycled Water for American Canyon City PWD
Reg Measure Description :	Transitioned enrollment of City of American Canyon's recycled water program from SF Bay Regional General WRR 96-011 to the statewide WRR for Recycled Water Use Order 2016-0068-DDW on April 8, 2020. Title 22 Engineering Report date 06-23-2005, DDW approval date 07-05-2005. Disinfected tertiary, membrane bioreactor filtration, chlorine disinfection.
SIC 1 :	4952 - Sewerage Systems
SIC 2 :	-
SIC 3 :	-
Latitude :	38.18883
Longitude :	-122.2782
Last Date in Agency List :	2023-01-11

DOCKET

Facility Name :	AMERICAN CANYON WWTF
Facility Address :	151 MEZZETTA COURT, AMERICAN CANYON, CA 94503

Site Activity Details

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Enforcement Action Case Number :	CA-200018545
Activity ID :	1800024909
Enforcement Action Name :	AMERICAN CANYON WWTF
Last Date in Agency List :	2017-06-05

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Final Ordr Iss/Final Order Enter Date:	N/R
Complaint/Proposed Order Actual Date:	N/R
Final Order Issued Actual Date :	N/R
Final Order Name :	N/R

Complaint Summary

Respondent/Defendant Name :	N/R
Named in Complaint :	N/R
Named in Final Order :	N/R
SEP Category :	N/R
SEP Description :	N/R
Regional Docket Number :	N/R

Standard Industrial Classification (SIC) Summary

Registry ID :	110001162866
Primary SIC :	4952 - SEWERAGE SYSTEMS
Primary NAICS :	N/R
Settlement FRS ICIS Facility :	N/R - N/R
Pollutants (SRS) :	N/R
Admin EA Closed Actual Date :	2008-07-24
Enforcement Action Name :	AMERICAN CANYON WWTP - Expedited Payment Letter
Enforcement Action Resolution :	N/R
Violation Types :	N/R
Case Law Sections :	CWA OTHER - Violations not covered elsewhere

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Violation Penalties and Compliance Summary

Compliance Action Cost :	N/R
EPA Penalty Assessed Amount :	N/R
Cost Recovery Required :	N/R
Cost of SEP :	N/R
Cost of Complying Actions :	N/R

Site Activity Details

Enforcement Action Case Number :	CA-2008-1041
Activity ID :	1400040694
Enforcement Action Name :	AMERICAN CANYON WWTF
Last Date in Agency List :	2017-06-05
Final Ordr Iss/Final Order Enter Date:	2008-07-24
Complaint/Proposed Order Actual Date:	N/R
Final Order Issued Actual Date :	2008-07-24
Final Order Name :	AMERICAN CANYON WWTP - ACL

Complaint Summary

Respondent/Defendant Name :	AMERICAN CANYON CITY
Named in Complaint :	Y
Named in Final Order :	Y
SEP Category :	N/R
SEP Description :	N/R
Regional Docket Number :	SWB-2008-2-0001

Standard Industrial Classification (SIC) Summary

Registry ID :	110001162866
Primary SIC :	4952 - SEWERAGE SYSTEMS
Primary NAICS :	N/R
Settlement FRS ICIS Facility :	1200003216 - AMERICAN CANYON WWTF

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Pollutants (SRS) : N/R

Admin EA Closed Actual Date : N/R
Enforcement Action Name : N/R
Enforcement Action Resolution : N/R

Violation Types : N/R

Case Law Sections : CWA OTHER - Violations not covered elsewhere

Violation Penalties and Compliance Summary
Compliance Action Cost : 0
EPA Penalty Assessed Amount : 0
Cost Recovery Required : N/R
Cost of SEP : 0
Cost of Complying Actions : N/R

Site Activity Details
Enforcement Action Case Number : CA-2012-1057
Activity ID : 3000045639
Enforcement Action Name : AMERICAN CANYON WWTF
Last Date in Agency List : 2017-06-05

Final Ordr Iss/Final Order Enter Date: 2012-08-07
Complaint/Proposed Order Actual Date: N/R
Final Order Issued Actual Date : 2012-08-07
Final Order Name : American Canyon WWTF - EPL

Complaint Summary
Respondent/Defendant Name : City of American Canyon
Named in Complaint : Y
Named in Final Order : Y

SEP Category : N/R
SEP Description : N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Regional Docket Number : R2-2012-0049

Standard Industrial Classification (SIC) Summary
Registry ID : 110001162866
Primary SIC : 4952 - SEWERAGE SYSTEMS
Primary NAICS : N/R

Settlement FRS ICIS Facility : 1200003216 - AMERICAN CANYON WWTF

Pollutants (SRS) : N/R

Admin EA Closed Actual Date : N/R
Enforcement Action Name : N/R
Enforcement Action Resolution : N/R

Violation Types : N/R

Case Law Sections : CWA OTHER - Violations not covered elsewhere

Violation Penalties and Compliance Summary
Compliance Action Cost : 0
EPA Penalty Assessed Amount : 0
Cost Recovery Required : N/R
Cost of SEP : 0
Cost of Complying Actions : N/R

Site Activity Details
Enforcement Action Case Number : CA-N00003567
Activity ID : 1200080364
Enforcement Action Name : AMERICAN CANYON WWTF
Last Date in Agency List : 2017-06-05

Final Ordr Iss/Final Order Enter Date: N/R
Complaint/Proposed Order Actual Date: N/R
Final Order Issued Actual Date : N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Final Order Name : AMERICAN CANYON WWT&RF (Permit CA0038768) Cwa Penalty Ao

Complaint Summary
Respondent/Defendant Name : N/R
Named in Complaint : N/R
Named in Final Order : N/R

SEP Category : N/R
SEP Description : N/R

Regional Docket Number : R2-2006-0080

Standard Industrial Classification (SIC) Summary
Registry ID : 110001162866
Primary SIC : 4952 - SEWERAGE SYSTEMS
Primary NAICS : N/R

Settlement FRS ICIS Facility : 1200003216 - AMERICAN CANYON WWTF

Pollutants (SRS) : N/R

Admin EA Closed Actual Date : N/R
Enforcement Action Name : N/R
Enforcement Action Resolution : N/R

Violation Types : N/R

Case Law Sections : CWA CWA - Clean Water Act

Violation Penalties and Compliance Summary
Compliance Action Cost : 0
EPA Penalty Assessed Amount : 0
Cost Recovery Required : N/R
Cost of SEP : 0

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Cost of Complying Actions : N/R

Site Activity Details
Enforcement Action Case Number : CA-N00004039
Activity ID : 1200080363
Enforcement Action Name : AMERICAN CANYON WWTF
Last Date in Agency List : 2017-06-05

Final Ordr Iss/Final Order Enter Date: N/R
Complaint/Proposed Order Actual Date: N/R
Final Order Issued Actual Date : N/R
Final Order Name : AMERICAN CANYON WWT&RF (Permit CA0038768) Cwa Penalty Ao

Complaint Summary
Respondent/Defendant Name : N/R
Named in Complaint : N/R
Named in Final Order : N/R

SEP Category : N/R
SEP Description : N/R

Regional Docket Number : R2-2006-0080

Standard Industrial Classification (SIC) Summary
Registry ID : 110001162866
Primary SIC : 4952 - SEWERAGE SYSTEMS
Primary NAICS : N/R

Settlement FRS ICIS Facility : 1200003216 - AMERICAN CANYON WWTF

Pollutants (SRS) : N/R

Admin EA Closed Actual Date : N/R
Enforcement Action Name : N/R
Enforcement Action Resolution : N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Violation Types : N/R

Case Law Sections : CWA CWA - Clean Water Act

Violation Penalties and Compliance Summary
- Compliance Action Cost : 0
- EPA Penalty Assessed Amount : 0
- Cost Recovery Required : N/R
- Cost of SEP : 0
- Cost of Complying Actions : N/R

Site Activity Details
- Enforcement Action Case Number : CA-N00004550
- Activity ID : 1200080361
- Enforcement Action Name : AMERICAN CANYON WWTF
- Last Date in Agency List : 2017-06-05

- Final Ordr Iss/Final Order Enter Date: N/R
- Complaint/Proposed Order Actual Date: N/R
- Final Order Issued Actual Date : N/R
- Final Order Name : N/R

Complaint Summary
- Respondent/Defendant Name : N/R
- Named in Complaint : N/R
- Named in Final Order : N/R

- SEP Category : N/R
- SEP Description : N/R

Regional Docket Number : N/R

Standard Industrial Classification (SIC) Summary
- Registry ID : 110001162866
- Primary SIC : 4952 - SEWERAGE SYSTEMS

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Primary NAICS :	N/R
Settlement FRS ICIS Facility :	N/R - N/R
Pollutants (SRS) :	N/R
Admin EA Closed Actual Date :	2005-11-04
Enforcement Action Name :	AMERICAN CANYON WWT&RF (Permit CA0038768) Viol. Notice To Regultd Entity
Enforcement Action Resolution :	N/R
Violation Types :	N/R
Case Law Sections :	CWA CWA - Clean Water Act

Violation Penalties and Compliance Summary

Compliance Action Cost :	N/R
EPA Penalty Assessed Amount :	N/R
Cost Recovery Required :	N/R
Cost of SEP :	N/R
Cost of Complying Actions :	N/R

Site Activity Details

Enforcement Action Case Number :	CA-N00004551
Activity ID :	1200080360
Enforcement Action Name :	AMERICAN CANYON WWTF
Last Date in Agency List :	2017-06-05
Final Ordr Iss/Final Order Enter Date:	N/R
Complaint/Proposed Order Actual Date:	N/R
Final Order Issued Actual Date :	N/R
Final Order Name :	N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Complaint Summary

Respondent/Defendant Name :	N/R
Named in Complaint :	N/R
Named in Final Order :	N/R
SEP Category :	N/R
SEP Description :	N/R
Regional Docket Number :	N/R

Standard Industrial Classification (SIC) Summary

Registry ID :	110001162866
Primary SIC :	4952 - SEWERAGE SYSTEMS
Primary NAICS :	N/R
Settlement FRS ICIS Facility :	N/R - N/R
Pollutants (SRS) :	N/R
Admin EA Closed Actual Date :	2007-02-28
Enforcement Action Name :	AMERICAN CANYON WWT&RF (Permit CA0038768) Viol. Notice To Regultd Entity
Enforcement Action Resolution :	N/R
Violation Types :	N/R
Case Law Sections :	CWA CWA - Clean Water Act

Violation Penalties and Compliance Summary

Compliance Action Cost :	N/R
EPA Penalty Assessed Amount :	N/R
Cost Recovery Required :	N/R
Cost of SEP :	N/R
Cost of Complying Actions :	N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Facility Name :	AMERICAN CANYON WWTF
Facility Address :	151 MEZZETTA COURT, SOLANO COUNTY, CA 94503

Site Activity Details

Enforcement Action Case Number :	CA-200018545
Activity ID :	1800024909
Enforcement Action Name :	AMERICAN CANYON WWTF
Last Date in Agency List :	2018-12-17
Final Ordr Iss/Final Order Enter Date:	N/R
Complaint/Proposed Order Actual Date:	N/R
Final Order Issued Actual Date :	N/R
Final Order Name :	N/R

Complaint Summary

Respondent/Defendant Name :	N/R
Named in Complaint :	N/R
Named in Final Order :	N/R
SEP Category :	N/R
SEP Description :	N/R
Regional Docket Number :	N/R

Standard Industrial Classification (SIC) Summary

Registry ID :	110001162866
Primary SIC :	4952 - SEWERAGE SYSTEMS
Primary NAICS :	N/R
Settlement FRS ICIS Facility :	N/R - N/R
Pollutants (SRS) :	N/R
Admin EA Closed Actual Date :	2008-07-24
Enforcement Action Name :	AMERICAN CANYON WWTP - Expedited Payment Letter

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Enforcement Action Resolution : N/R

Violation Types : N/R

Case Law Sections : CWA OTHER - Violations not covered elsewhere

Violation Penalties and Compliance Summary
Compliance Action Cost : N/R
EPA Penalty Assessed Amount : N/R
Cost Recovery Required : N/R
Cost of SEP : N/R
Cost of Complying Actions : N/R

Site Activity Details
Enforcement Action Case Number : CA-2008-1041
Activity ID : 1400040694
Enforcement Action Name : AMERICAN CANYON WWTF
Last Date in Agency List : 2019-02-25

Final Ordr Iss/Final Order Enter Date: 2008-07-24
Complaint/Proposed Order Actual Date: N/R
Final Order Issued Actual Date : 2008-07-24
Final Order Name : AMERICAN CANYON WWTP - ACL

Complaint Summary
Respondent/Defendant Name : AMERICAN CANYON CITY
Named in Complaint : Y
Named in Final Order : Y

SEP Category : N/R
SEP Description : N/R

Regional Docket Number : SWB-2008-2-0001

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Standard Industrial Classification (SIC) Summary

Registry ID :	110001162866
Primary SIC :	4952 - SEWERAGE SYSTEMS
Primary NAICS :	N/R
Settlement FRS ICIS Facility :	1200003216 - AMERICAN CANYON WWTF
Pollutants (SRS) :	N/R
Admin EA Closed Actual Date :	N/R
Enforcement Action Name :	N/R
Enforcement Action Resolution :	N/R
Violation Types :	N/R
Case Law Sections :	CWA OTHER - Violations not covered elsewhere

Violation Penalties and Compliance Summary

Compliance Action Cost :	0
EPA Penalty Assessed Amount :	0
Cost Recovery Required :	N/R
Cost of SEP :	0
Cost of Complying Actions :	N/R

Site Activity Details

Enforcement Action Case Number :	CA-2012-1057
Activity ID :	3000045639
Enforcement Action Name :	AMERICAN CANYON WWTF
Last Date in Agency List :	2019-02-25
Final Ordr Iss/Final Order Enter Date:	2012-08-07
Complaint/Proposed Order Actual Date:	N/R
Final Order Issued Actual Date :	2012-08-07
Final Order Name :	American Canyon WWTF - EPL

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

DOCKET ***(cont.)***

Complaint Summary

Respondent/Defendant Name :	City of American Canyon
Named in Complaint :	Y
Named in Final Order :	Y
SEP Category :	N/R
SEP Description :	N/R
Regional Docket Number :	R2-2012-0049

Standard Industrial Classification (SIC) Summary

Registry ID :	110001162866
Primary SIC :	4952 - SEWERAGE SYSTEMS
Primary NAICS :	N/R
Settlement FRS ICIS Facility :	1200003216 - AMERICAN CANYON WWTF
Pollutants (SRS) :	N/R
Admin EA Closed Actual Date :	N/R
Enforcement Action Name :	N/R
Enforcement Action Resolution :	N/R
Violation Types :	N/R
Case Law Sections :	CWA OTHER - Violations not covered elsewhere

Violation Penalties and Compliance Summary

Compliance Action Cost :	0
EPA Penalty Assessed Amount :	0
Cost Recovery Required :	N/R
Cost of SEP :	0
Cost of Complying Actions :	N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

ECHO

Facility Name :	AMERICAN CANYON WASTE WATER TREATMENT FACILITY
Facility Address :	151 MEZZETTA CT, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	2022-04-07
Registry ID :	110001162866
FIPS Code :	06055
EPA Region :	09
Inspection Count :	2
Last Inspection Days :	241
Informal Count :	0
Last Informal Action Date :	2007-02-28
Formal Action Count :	1
Last Formal Action Date :	2022-10-25
Total Penalties :	1500
Penalty Count :	1
Last Penalty Date :	2022-10-25
Last Penalty Amount :	1500
QTRS IN NC :	1
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	__V_____
Collection Method :	INTERPOLATION-PHOTO
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	50
Derived Tribes :	N/R
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NYN
NPDES IDs :	CA0038768 CAL038768
CWA Permit Types :	Major, Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	4952
CWA Inspection Count :	2
CWA Last Inspection Days :	3775
CWA Informal Count :	N/R
CWA Formal Action Count :	1
CWA Last Formal Action Date :	2022-10-25
CWA Penalties :	1500
CWA Last Penalty Date :	10/25/2022
CWA Last Penalty Amount :	1500

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

ECHO ***(cont.)***

CWA Quarters IN NC :	1
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	___V_____
CWA 13 Quarters Effluent Exceedances:	1
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	4952
Facility NAICS :	221320 - Sewage Treatment Facilities, 56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	2012-08-02
Facility Last Inspection State Date :	2022-04-07
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	2022-10-25
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	2007-02-28
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	Y
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.1879
Longitude :	-122.2782
Last Date in Agency List :	2023-01-16
Facility Name :	AMERICAN CANYON WWTF
Facility Address :	151 MEZZETTA COURT, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110066754943

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

ECHO ***(cont.)***

FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 16.6 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NNN
NPDES IDs :	CAL038768
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

ECHO ***(cont.)***

Facility SIC :	N/R
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.1898
Longitude :	-122.27728
Last Date in Agency List :	2019-12-02

Facility Name :	CITY OF AMERICAN CANYON WRF
Facility Address :	151 MEZZETTA CT, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	N/R
Registry ID :	N/R
FIPS Code :	N/R
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

ECHO ***(cont.)***

Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

ECHO ***(cont.)***

Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	N/R
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2019-09-23

EMI - CA

Facility Name :	CITY OF AMERICAN CANYON
Facility Address :	151 MEZZETTA COURT, AMERICAN CANYON, 94503
County :	Napa
Facility ID :	12231
Air Basin Code :	San Francisco Bay Area
District :	BAY AREA AQMD
County ID :	NAP
SIC Code :	4952
CHAPIS :	N/R
CERR Code :	N/R
Last Date in Agency List :	2022-11-29

Additional Details

Year :	2018
Total Organic Gases (Tons/Year) :	.004058851
Reactive Organic Gases (Tons/Year) :	.0029347664469
Carbon Monoxide (Tons/Year) :	.000147598
Nitrogen Oxides (Tons/Year) :	.001381808
Sulfur Oxides (Tons/Year) :	.000001088
Particulate Matter (Tons/Year) :	.000028313
Fine Particulate Matter (Tons/Year) :	.00002718

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

FRS

Facility Name :	AMERICAN CANYON WASTE WATER TREATMENT FACILITY
Facility Address :	151 MEZZETTA CT, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110001162866
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Source Description :

RCRAInfo is EPA’s comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : CA-ENVIROVIEW - 261887
CA-ENVIROVIEW - 91576
EIS - 1177211
ICIS - CA0038768
ICIS - CAL038768
RCRAINFO - CAL000448491

Facility Name : CITY OF AMERICAN CANYON
Facility Address : 151 MEZZETTA COURT, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110040984218
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2014-03-25

Source Description

Source Description :

The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.

FRS Environmental Interest
Source and System ID : EIS - 1177211

Facility Name : WATER TREATMENT PLANT
Facility Address : 151 MEZZETTA CT, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110066819081
FRS Facility URL : Click here for hyperlink provided by the agency.

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

FRS ***(cont.)***

Last Date in Agency List : 2023-02-13

Source Description

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest

Source and System ID : CA-ENVIROVIEW - 356557

HAZNET - CA

Facility Name : CITY OF AMERICAN CANYON WRF
Facility Address : 151 MEZZETTA CT, AMERICAN CANYON, CA 94503
County : NAPA

Site Details

Generator EPA ID : CAL000448491
Active : Active
Category : STATE
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 4381 BROADWAY, SUITE 201, AMERICAN CANYON, CA 945030000
Latitude : 38.18979900
Longitude : -122.27727600
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

HWG - CA

Facility Name : CITY OF AMERICAN CANYON WRF
Facility Address : 151 MEZZETTA CT, AMERICAN CANYON, CA 94503
County : NAPA

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

HWG - CA ***(cont.)***

EPA ID :	CAL000448491
Status :	Active
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	151 MEZZETTA CT, AMERICAN CANYON, CA 94503
Owner Name :	CITY OF AMERICAN CANYON
Owner Address :	4381 BROADWAY, AMERICAN CANYON, CA 945039680
Operator Name :	PAM PHILLIPS
Operator Address :	151 MEZZETTA CT, AMERICAN CANYON, CA 94503
Latitude :	38.191263
Longitude :	-122.275371

ICIS

Facility Name :	AMERICAN CANYON WRF
Facility Address :	151 MEZZETTA COURT, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CA0038768
ICIS Facility Interest ID :	1200003216
Facility UIN :	110001162866
Facility Type Code :	Municipal or Water District
Impaired Waters :	N/R
Latitude :	38.186667
Longitude :	-122.274194
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	4952
SIC Description :	Sewerage Systems

Facility Name :	AMERICAN CANYON WWTF
Facility Address :	151 MEZZETTA COURT, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAL038768
ICIS Facility Interest ID :	3600262309
Facility UIN :	110001162866
Facility Type Code :	N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

ICIS ***(cont.)***

Impaired Waters :	303(D) Listed
Latitude :	38.1898
Longitude :	-122.27728
Last Date in Agency List :	2022-12-28
Facility Name :	AMERICAN CANYON WWTF
Facility Address :	151 MEZZETTA COURT &RF, 9604, SOLANO COUNTY, CA 94503

Site Details

NPDES ID :	CA0038768
ICIS Facility Interest ID :	1200003216
Facility UIN :	110001162866
Facility Type Code :	Municipal or Water District
Impaired Waters :	N/R
Latitude :	38.186667
Longitude :	-122.274194
Last Date in Agency List :	2022-09-22

Facility SIC

SIC Code :	4952
SIC Description :	Sewerage Systems

INACTIVE PCS

Issue Date :	2017-04-12
Original Issue Date :	2000-01-19
Effective Date :	2017-06-01
Expiration Date :	2022-05-31
Retirement Date :	2022-07-31
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	State
Activity ID :	3601013471
External Permit Number :	CA0038768
Facility Type Indicator :	POTW
Permit Type :	NPDES Individual Permit
Major Minor Status :	M
Permit Status :	Expired
Total Design Flow Number :	2.5
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	North Slough

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

INACTIVE PCS ***(cont.)***

Permit Name :	American Canyon, City of
Permit Comp Status :	N/R
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	N/R
EDMR Authorization :	Y
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Issue Date :	2011-07-13
Original Issue Date :	2000-01-19
Effective Date :	2011-09-01
Expiration Date :	2016-08-31
Retirement Date :	2017-05-31
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	State
Activity ID :	2600037623
External Permit Number :	CA0038768
Facility Type Indicator :	POTW
Permit Type :	NPDES Individual Permit
Major Minor Status :	M
Permit Status :	Expired
Total Design Flow Number :	2.5
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	North Slough
Permit Name :	American Canyon, City of
Permit Comp Status :	N/R
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	Y
EDMR Authorization :	Y
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Issue Date :	2000-01-19
Original Issue Date :	2000-01-19
Effective Date :	2000-01-19
Expiration Date :	2005-01-19
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	State
Activity ID :	1200019344

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

INACTIVE PCS ***(cont.)***

External Permit Number :	CA0038768
Facility Type Indicator :	POTW
Permit Type :	NPDES Individual Permit
Major Minor Status :	M
Permit Status :	Expired
Total Design Flow Number :	2.5
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	NAPA RIVER/SAN PABLO BAY
Permit Name :	AMERCIAN CANYON, CITY OF
Permit Comp Status :	N
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	Y
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Issue Date :	2016-01-01
Original Issue Date :	2016-01-01
Effective Date :	2016-01-01
Expiration Date :	2020-12-31
Retirement Date :	2020-12-31
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	U.S.EPA
Activity ID :	3600889354
External Permit Number :	CAL038768
Facility Type Indicator :	NON-POTW
Permit Type :	Associated Permit Record
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	American Canyon WWTF
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

INACTIVE PCS ***(cont.)***

Issue Date :	2006-06-14
Original Issue Date :	2000-01-19
Effective Date :	2006-07-01
Expiration Date :	2011-06-30
Retirement Date :	2011-08-31
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	State
Activity ID :	1200019343
External Permit Number :	CA0038768
Facility Type Indicator :	POTW
Permit Type :	NPDES Individual Permit
Major Minor Status :	M
Permit Status :	Administratively Continued
Total Design Flow Number :	2.5
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	NAPA RIVER/SAN PABLO BAY
Permit Name :	AMERICAN CANYON, CITY OF
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	Y
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-09-23

MANIFEST EPA

Manifest Details

Manifest Number :	020060645JJK
Shipped Date :	2019-10-03
Updated Date :	2020-12-07
Received Date :	2019-10-09
Status :	Corrected
Generator ID :	CAL000448491
Generator Name :	CITY OF AMERICAN CANYON WRF
Generator Address :	151 MEZZETTA CT, AMERICAN CANYON, CA 94503
Generator Mailing :	4381 BROADWAY STE 201, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC
Destination Mailing :	PO BOX 578, BEATTY, NV 89003
Destination Address :	HWY 95 11 MI S OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	NA3077
DOT Information :	NA3077, HAZARDOUS WASTE, SOLID, N.O.S., 9, PG III
Non Waste Description :	N/R
Quantity :	35 Pounds
Quantity Tons, Acute, Non-Acute :	0.0175, 0, 0.0175
Quantity Kg, Acute, Non-Acute :	0, 15.873026
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	Y
Federal Code :	D009
State Code :	CA - 181

Waste Line Number :	2
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	USED OIL FILTERS CONTAMINATED WITH AMMONIA AND DEBRIS
Quantity :	6 Pounds
Quantity Tons, Acute, Non-Acute :	0.003, 0, 0.003
Quantity Kg, Acute, Non-Acute :	0, 2.72109
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 181

Waste Line Number :	3
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	OILY DEBRIS
Quantity :	60 Pounds
Quantity Tons, Acute, Non-Acute :	0.03, 0, 0.03
Quantity Kg, Acute, Non-Acute :	0, 27.2109
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 223

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

NPDES - CA

Facility Name :	American Canyon Water Reclamation Facility (WRF) (formerly WWTP)
Facility Address :	151 Mezzetta Court, American Canyon, 94503
County :	Napa
Effective Date :	2013-01-01
Adoption Date :	2012-12-12
Expiration Date :	2017-12-31
Termination Date :	N/R
Order Number :	R2-2017-0041
NPDES Number :	CA0038849
WDID :	2 283021001
RM Status :	Active
Reg Meas ID :	389069
Reg Meas Type :	Co-Permitee
Program :	NPDMUNILRG
Facility Place ID :	205477
Region Code :	2
Discharger ID :	3134
Discharger :	American Canyon City PWD
Discharger Address :	4381 Broadway Street Suite 201, American Canyon, CA 94503
Last Date in Agency List :	2023-02-15

Effective Date :	2017-06-01
Adoption Date :	2017-04-12
Expiration Date :	2022-07-31
Termination Date :	2022-07-31
Order Number :	R2-2017-0008
NPDES Number :	CA0038768
WDID :	2 283021001
RM Status :	Historical
Reg Meas ID :	412756
Reg Meas Type :	NPDES Permits
Program :	NPDMUNILRG
Facility Place ID :	205477
Region Code :	2
Discharger ID :	3134
Discharger :	American Canyon City PWD
Discharger Address :	4381 Broadway Street Suite 201, American Canyon, CA 94503
Last Date in Agency List :	2023-02-15

Effective Date :	2019-07-01
Adoption Date :	2019-03-08
Expiration Date :	2024-06-30
Termination Date :	N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

NPDES - CA ***(cont.)***

Order Number :	R2-2019-0017
NPDES Number :	CA0038873
WDID :	2 283021001
RM Status :	Active
Reg Meas ID :	430607
Reg Meas Type :	Co-Permitee
Program :	NPDMUNILRG
Facility Place ID :	205477
Region Code :	2
Discharger ID :	3134
Discharger :	American Canyon City PWD
Discharger Address :	4381 Broadway Street Suite 201, American Canyon, CA 94503
Last Date in Agency List :	2023-02-15

Effective Date :	2022-08-01
Adoption Date :	2022-06-08
Expiration Date :	2027-07-31
Termination Date :	N/R
Order Number :	R2-2022-0019
NPDES Number :	CA0038768
WDID :	2 283021001
RM Status :	Active
Reg Meas ID :	448119
Reg Meas Type :	NPDES Permits
Program :	NPDMUNILRG
Facility Place ID :	205477
Region Code :	2
Discharger ID :	3134
Discharger :	American Canyon City PWD
Discharger Address :	4381 Broadway Street Suite 201, American Canyon, CA 94503
Last Date in Agency List :	2023-02-15

PCS ENF

Site Details

NPDES ID :	CA0038768
Last Date in Agency List :	2022-12-28

Formal Enforcement Actions

Settlement Entered Date :	2022-10-25
ENF Identifier :	CA-CFEA448310
Activity ID :	3603427331
Activity Type :	Administrative, Formal
ENF Type :	State CWA Penalty AO

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

PCS ENF ***(cont.)***

Agency : State
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : 3000

Settlement Entered Date : 2012-08-07
ENF Identifier : CA-2012-1057
Activity ID : 3000045639
Activity Type : Administrative, Formal
ENF Type : State CWA Penalty AO
Agency : State
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : 6000

Settlement Entered Date : 2008-07-24
ENF Identifier : CA-2008-1041
Activity ID : 1400040694
Activity Type : Administrative, Formal
ENF Type : State CWA Penalty AO
Agency : State
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : N/R

Settlement Entered Date : N/R
ENF Identifier : CA-N00003567
Activity ID : 1200080364
Activity Type : Administrative, Formal
ENF Type : State CWA Penalty AO
Agency : State
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : N/R

Settlement Entered Date : N/R
ENF Identifier : CA-N00004039
Activity ID : 1200080363
Activity Type : Administrative, Formal
ENF Type : State CWA Penalty AO
Agency : State
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

PCS ENF ***(cont.)***

Informal Enforcement Actions

Achieved Date :	2008-07-24
Registry ID :	110001162866
ENF Identifier :	CA-200018545
Activity ID :	1800024909
Activity Type :	Administrative - Informal
ENF Type :	Letter to Regulated Entity
Agency :	State

Achieved Date :	2007-02-28
Registry ID :	110001162866
ENF Identifier :	CA-N00004551
Activity ID :	1200080360
Activity Type :	Administrative - Informal
ENF Type :	Notice of Violation
Agency :	State

Achieved Date :	2005-11-04
Registry ID :	110001162866
ENF Identifier :	CA-N00004550
Activity ID :	1200080361
Activity Type :	Administrative - Informal
ENF Type :	Notice of Violation
Agency :	State

Site Details

NPDES ID :	CA0038768
Last Date in Agency List :	2020-02-11

Formal Enforcement Actions

Settlement Entered Date :	2012-08-07
ENF Identifier :	CA-2012-1057
Activity ID :	3000045639
Activity Type :	Administrative, Formal
ENF Type :	State CWA Penalty AO
Agency :	State
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	6000

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

PCS ENF ***(cont.)***

Settlement Entered Date :	2008-07-24
ENF Identifier :	CA-2008-1041
Activity ID :	1400040694
Activity Type :	Administrative, Formal
ENF Type :	State CWA Penalty AO
Agency :	State
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Settlement Entered Date :	N/R
ENF Identifier :	CA-N00003567
Activity ID :	1200080364
Activity Type :	Administrative, Formal
ENF Type :	State CWA Penalty AO
Agency :	State
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Settlement Entered Date :	N/R
ENF Identifier :	CA-N00004039
Activity ID :	1200080363
Activity Type :	Administrative, Formal
ENF Type :	State CWA Penalty AO
Agency :	State
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	2005-11-04
Registry ID :	110001162866
ENF Identifier :	CA-N00004550
Activity ID :	1200080361
Activity Type :	Administrative - Informal
ENF Type :	Notice of Violation
Agency :	State

Achieved Date :	2007-02-28
Registry ID :	110001162866
ENF Identifier :	CA-N00004551
Activity ID :	1200080360
Activity Type :	Administrative - Informal
ENF Type :	Notice of Violation

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

PCS ENF ***(cont.)***

Agency : State

Site Details
NPDES ID : CA0038768
Last Date in Agency List : 2022-09-22

Formal Enforcement Actions
Settlement Entered Date : 2012-08-07
ENF Identifier : CA-2012-1057
Activity ID : 3000045639
Activity Type : Administrative, Formal
ENF Type : State CWA Penalty AO
Agency : State
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : 6000

Settlement Entered Date : 2008-07-24
ENF Identifier : CA-2008-1041
Activity ID : 1400040694
Activity Type : Administrative, Formal
ENF Type : State CWA Penalty AO
Agency : State
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : N/R

Settlement Entered Date : N/R
ENF Identifier : CA-N00003567
Activity ID : 1200080364
Activity Type : Administrative, Formal
ENF Type : State CWA Penalty AO
Agency : State
Fed Penalty Assessed Amount : N/R
State Local Penalty Amount : N/R

Settlement Entered Date : N/R
ENF Identifier : CA-N00004039
Activity ID : 1200080363
Activity Type : Administrative, Formal
ENF Type : State CWA Penalty AO
Agency : State

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

PCS ENF ***(cont.)***

Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	2008-07-24
Registry ID :	110001162866
ENF Identifier :	CA-200018545
Activity ID :	1800024909
Activity Type :	Administrative - Informal
ENF Type :	Letter to Regulated Entity
Agency :	State

Achieved Date :	2007-02-28
Registry ID :	110001162866
ENF Identifier :	CA-N00004551
Activity ID :	1200080360
Activity Type :	Administrative - Informal
ENF Type :	Notice of Violation
Agency :	State

Achieved Date :	2005-11-04
Registry ID :	110001162866
ENF Identifier :	CA-N00004550
Activity ID :	1200080361
Activity Type :	Administrative - Informal
ENF Type :	Notice of Violation
Agency :	State

PCS FACILITY

Issue Date :	2021-06-08
Original Issue Date :	2000-01-19
Effective Date :	2022-08-01
Expiration Date :	2027-07-31
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	State
Activity ID :	3603385354
External Permit Number :	N/R
Facility Type Indicator :	POTW
Permit Type :	NPDES Individual Permit
Major Minor Status :	M

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

PCS FACILITY ***(cont.)***

Permit Status :	Effective
Total Design Flow Number :	2.5
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	North Slough
Permit Name :	American Canyon, City of
Permit Comp Status :	N/R
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	N/R
EDMR Authorization :	Y
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Issue Date :	2006-06-14
Original Issue Date :	2000-01-19
Effective Date :	2006-07-01
Expiration Date :	2011-06-30
Retirement Date :	2011-08-31
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	State
Activity ID :	1200019343
External Permit Number :	N/R
Facility Type Indicator :	POTW
Permit Type :	NPDES Individual Permit
Major Minor Status :	M
Permit Status :	Administratively Continued
Total Design Flow Number :	2.5
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	NAPA RIVER/SAN PABLO BAY
Permit Name :	AMERICAN CANYON, CITY OF
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	Y
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Issue Date :	2021-01-01
Original Issue Date :	2016-01-01
Effective Date :	2021-01-01
Expiration Date :	2025-12-31

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

PCS FACILITY ***(cont.)***

Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	U.S.EPA
Activity ID :	3602726615
External Permit Number :	N/R
Facility Type Indicator :	NON-POTW
Permit Type :	Associated Permit Record
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	American Canyon WWTF
Permit Comp Status :	N/R
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Issue Date :	2006-06-14
Original Issue Date :	2000-01-19
Effective Date :	2006-07-01
Expiration Date :	2011-06-30
Retirement Date :	2011-08-31
Termination Date :	N/R
Issuing Agency :	N/R
Agency Type :	State
Activity ID :	1200019343
External Permit Number :	N/R
Facility Type Indicator :	POTW
Permit Type :	NPDES Individual Permit
Major Minor Status :	M
Permit Status :	Administratively Continued
Total Design Flow Number :	2.5
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	NAPA RIVER/SAN PABLO BAY
Permit Name :	AMERICAN CANYON, CITY OF
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	N/R
TMDL Interface :	Y

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

PCS FACILITY ***(cont.)***

EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-09-23

RCRA_NONGEN

Facility Name :	CITY OF AMERICAN CANYON WRF
Facility Address :	151 MEZZETTA CT, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2019-08-28
EPA ID :	CAL000448491
Mailing Address :	4381 BROADWAY STE 201, AMERICAN CANYON, CA 94503
Contact :	STACEY AMBROSE
Contact Address :	4381 BROADWAY STE 201, AMERICAN CANYON, CA 94503
Contact Country :	N/R
Contact Telephone :	707-647-4542
Contact Email :	SAMBROSE@CITYOFAMERICANCANYON.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	CITY OF AMERICAN CANYON
Owner/Operator Address :	4381 BROADWAY STE 201, AMERICAN CANYON, CA 94503
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-647-4542
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R
Owner/Operator Name :	STACEY AMBROSE
Owner/Operator Address :	4381 BROADWAY STE 201, AMERICAN CANYON, CA 94503
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-647-4542
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RFR - CA

Facility Name :	American Canyon Water Reclamation Facility (WRF) (formerly WWTP)
Facility Address :	151 Mezzetta Court, American Canyon, CA 94503
County :	Napa
Effective Date :	2022-08-01
Adoption Date :	2022-06-08
Termination Date :	N/R
Expiration/Review Date :	2027-07-31
NPDES Number :	CA0038768
Order Number :	R2-2022-0019
WDID :	2 283021001
SIC/NAICS :	4952
Program :	NPDMUNILRG
Regulatory Measure Status :	Active
Regulatory Measure Type :	NPDES Permit

Map Id: 2
Direction: W
Distance: 0.193 mi., 1021 ft.
Elevation: 16 ft.
Relative: Lower

Site Name : AMERICAN CANYON WWTF | CITY OF AMERICAN CANYON WRF | AMERICAN CANYON WATER RECYCLING PROGRAM 151 MEZZETTA COURT | 151 MEZZETTA CT | 151 MEZZETTA COURT &RF, 9604 AMERICAN CANYON | SOLANO COUNTY | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CHMIRS - CA, CIWQS - CA, CIWQS 2 - CA, DOCKET, ECHO, EMI - CA, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA] ***(cont.)***

Envirosite ID: 52317882
EPA ID: N/R

RFR - CA ***(cont.)***

Place/Project Type :	Wastewater Treatment Facility
Region :	2
Design Flow :	2.5
Major/Minor :	Major
Complexity :	A
TTWQ :	1
Number of Enforcement Actions within Five Years:	1
Number of Violations within Five Years:	1
Agency :	American Canyon City PWD
Agency Address :	4381 Broadway Street Suite 201, American Canyon, CA 94503
Latitude :	38.18883
Longitude :	-122.2782
Last Date in Agency List :	2022-11-23
Facility Name :	American Canyon Water Recycling Program
Facility Address :	151 Mezzetta Court, American Canyon, CA 94503
County :	Napa
Effective Date :	2020-04-08
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	2026-08-05
NPDES Number :	N/R
Order Number :	2016-0068-DDW
WDID :	2 283021003
SIC/NAICS :	4952
Program :	REC
Regulatory Measure Status :	Active
Regulatory Measure Type :	Enrollee - WRR
Place/Project Type :	Wastewater Treatment Facility
Region :	2
Design Flow :	N/R
Major/Minor :	Major
Complexity :	C
TTWQ :	3
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	American Canyon City PWD
Agency Address :	4381 Broadway Street Suite 201, American Canyon, CA 94503
Latitude :	38.18883
Longitude :	-122.2782
Last Date in Agency List :	2022-11-23

Map Id: 3
Direction: SE
Distance: 0.233 mi., 1229 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : NAPA JUNCTION ELEMENTARY SCHOOL PROJECT
N/R
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, RFR - CA]

Envirosite ID: 10105111
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	NAPA JUNCTION ELEMENTARY SCHOOL PROJECT
Facility Address :	AMERICAN CANYON, 94503
Site ID :	547934
EI ID :	854504
EI Description :	Wetlands - Fill and Dredge Material
Latitude :	38.182110
Longitude :	-122.270210
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	NAPA JUNCTION ELEMENTARY SCHOOL PROJECT
Facility Address :	AMERICAN CANYON, CA 94503-1388
County :	NAPA
Place ID :	854504
Agency Name :	NAPA VALLEY UNIFIED SCHOOL DISTRICT
Last Date in Agency List :	2022-12-28

CIWQS 2 - CA

Facility Name :	Napa Junction Elementary School Project
Facility Address :	American Canyon, 94503
County :	Napa
Facility ID :	854504
WDID :	2 CW427849
Facility Type :	Unknown
Region :	2
Place Type :	All Other
Place Subtype :	Dredge/Fill Site
Ageny Name :	Napa Valley Unified School District
Agency Type :	Community Organization
Number of Agencies :	1
Status Date :	2019-06-10
Status :	Active
Status Enrollee :	N
Individual/General :	I
Fee Code :	87 - Dredge & Fill - Low Impact Discharges
Staff Assigned :	N/R
Number of Staff Assigned :	N/R
Supervisor :	N/R
Number of Supervisor :	N/R
Number of Amendments :	0
Number of Reg Measures :	1
Baseline Flow :	N/R
Population (MS4)/Acres :	N/R
Reclamation :	N/R
CAFO Type :	N/R

Map Id: 3
Direction: SE
Distance: 0.233 mi., 1229 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : NAPA JUNCTION ELEMENTARY SCHOOL PROJECT
N/R
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, RFR - CA] ***(cont.)***

Envirosite ID: 10105111
EPA ID: N/R

CIWQS 2 - CA ***(cont.)***

CAFO Subtype :	N/R
CAFO Population :	N/R
Onsite :	N/R
Quality Assurance :	N/R
RCRA Flag :	N/R
Total MMP Violations Number :	0
Total Number of Violations :	0
Total Number of Inspections :	0
Date of Most Recent Completed Inspection:	N/R
Date of Most Recent Received Report :	2022-01-04
Total Number of Final (A+H) Enforcement Actions:	0
Most Recent Effective Date of Enf Action (A+H):	N/R
Program :	CERFILLEXC
Program Category :	CER
Number of Programs :	1
Complexity :	N/R
Pretreatment :	N/R
Facility Waste Type :	N/R
Reg Measure ID :	427849
Reg Measure Type :	Enrollee - 401 Certification
Reg Measure Title :	Enrollee - 401 Certification for Napa Valley Unified School District
Reg Measure Description :	Construct an elementary school.
SIC 1 :	-
SIC 2 :	-
SIC 3 :	-
Latitude :	38.18211
Longitude :	-122.27021
Last Date in Agency List :	2023-01-11

RFR - CA

Facility Name :	Napa Junction Elementary School Project
Facility Address :	American Canyon, CA 94503
County :	Napa
Effective Date :	2019-06-03
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	2024-06-03
NPDES Number :	N/R
Order Number :	2004-0004-DWQ
WDID :	2 CW427849
SIC/NAICS :	N/R
Program :	CERFILLEXC
Regulatory Measure Status :	Active
Regulatory Measure Type :	Enrollee - 401 Certification
Place/Project Type :	Dredge/Fill Site
Region :	2
Design Flow :	N/R
Major/Minor :	N/R

Map Id: 3
Direction: SE
Distance: 0.233 mi., 1229 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : NAPA JUNCTION ELEMENTARY SCHOOL PROJECT
N/R
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, RFR - CA] ***(cont.)***

Envirosite ID: 10105111
EPA ID: N/R

RFR - CA ***(cont.)***

Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Napa Valley Unified School District
Agency Address :	1616 Lincoln Avenue, Napa, CA 94558
Latitude :	38.18211
Longitude :	-122.27021
Last Date in Agency List :	2022-11-23

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER]

Envirosite ID: 52317884
EPA ID: CAC002596435

CALEPA SITES - CA

Facility Name :	BARRY CALLEBAUT
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, 94503
Site ID :	579239
EI ID :	873391
EI Description :	Industrial Facility Storm Water
Latitude :	38.190200
Longitude :	-122.272110
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	BARRY CALLEBAUT USA, LLC
Facility Address :	1175 COMMERCE BLVD D, AMERICAN CANYON, 94503

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

CALEPA SITES - CA ***(cont.)***

Site ID :	97409
EI ID :	10170427
EI Description :	Hazardous Waste Generator
Latitude :	38.190170
Longitude :	-122.272640
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Site ID :	97409
EI ID :	10170427
EI Description :	Chemical Storage Facilities
Latitude :	38.190170
Longitude :	-122.272640
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	BARRY CALLEBAUT
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA

Place ID :	S873391
Agency Name :	BARRY CALLEBAUT
Last Date in Agency List :	2022-12-28

Facility Name :	BARRY CALLEBAUT AMERICAN CANYON
Facility Address :	1175 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Place ID :	S853905
Agency Name :	BARRY CALLEBAUT USA LLC
Last Date in Agency List :	2022-12-28

Facility Name :	COMMERCE BLVD 201
Facility Address :	1175 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Place ID :	S218125
Agency Name :	SDG COMMERCE 201 LLC

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

CIWQS - CA ***(cont.)***

Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	BARRY CALLEBAUT
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	N/R
Last Inspection Date :	2019-06-07
Registry ID :	N/R
FIPS Code :	N/R
EPA Region :	09
Inspection Count :	1
Last Inspection Days :	247
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	N/R
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	CAZ509762
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2066
CWA Inspection Count :	1
CWA Last Inspection Days :	247
CWA Informal Count :	N/R

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

ECHO ***(cont.)***

CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2066
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	2019-06-07
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	N/R
Latitude :	38.1902
Longitude :	-122.27211
Last Date in Agency List :	2020-02-10

Facility Name :	BARRY CALLEBAUT USA LLC
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

ECHO ***(cont.)***

Last Inspection Date :	N/R
Registry ID :	N/R
FIPS Code :	N/R
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

ECHO ***(cont.)***

CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	N
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2021-10-15

Facility Name :	BARRY CALLEBAUT USANA LLC
Facility Address :	1175 COMMERCE BLVD D, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	2019-06-07
Registry ID :	110066221494
FIPS Code :	06055
EPA Region :	09
Inspection Count :	1
Last Inspection Days :	1276
Informal Count :	1
Last Informal Action Date :	2020-07-21

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

ECHO ***(cont.)***

Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	7
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	___VVVVVVV__
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 16.7 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051081
MYRTK Universe :	NNN
NPDES IDs :	CAZ509762
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2066
CWA Inspection Count :	1
CWA Last Inspection Days :	1275
CWA Informal Count :	1
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	7
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	___VVVVVVV__
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2066
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	2019-06-07
Facility Last Formal Act EPA Date :	N/R

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

ECHO ***(cont.)***

Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	2020-07-21
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19017
Longitude :	-122.27264
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	BARRY CALLEBAUT USA LLC
Facility Address :	1175 COMMERCE BLVD, #D, AMERICAN CANYON, CA 94503
County :	N/R

Site Details

Registry ID :	110070309504
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2019-08-12

Source Description

Source Description :	N/R

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : N/R - N/R

Facility Name : BARRY CALLEBAUT USANA LLC
Facility Address : 1175 COMMERCE BLVD D, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110066221494
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description : The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.
OSHA-OIS

Source Description :

RCRAInfo is EPA’s comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : CA-ENVIROVIEW - 97409
ICIS - CAZ509762
OSHA-OIS - 315831420
OSHA-OIS - 342782323
RCRAINFO - CAL000350300

HAZNET - CA

Facility Name : BARRY CALLEBAUT
Facility Address : 1175 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAC002596435
Active : Inactive
Category : STATE
Facility Types : N/R
Type : TEMPORARY
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Latitude : 38.19125160
Longitude : -122.27160849
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Facility Name : BARRY CALLEBAUT
Facility Address : 1175 COMMERCE BLVD STE C-7, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAL000308891
Active : Inactive
Category : STATE
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Latitude : 38.19125160

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

HAZNET - CA ***(cont.)***

Longitude :	-122.27160849
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :
2014: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.25 tons to UTD981552177
2011: 121 - Alkaline solution (pH >= 12.5) with metals, 0.96 tons to NVT330010000
2011: 343 - Unspecified organic liquid mixture, 0.2 tons to CAT000613893
2011: 214 - Unspecified solvent mixture, 1 tons to TXD077603371

Facility Name :	BARRY CALLEBAUT USA LLC
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000350300
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Latitude :	38.19056400
Longitude :	-122.27208750
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :
2017: 352 - Other organic solids, 0.15 tons to CAD059494310
2016: 214 - Unspecified solvent mixture, 0.05 tons to CAD059494310
2016: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.15 tons to UTD981552177
2015: 214 - Unspecified solvent mixture, 0.5 tons to CAD059494310

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

HAZNET - CA ***(cont.)***

Facility Name :	GOLDEN STATE VINTNERS
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000289026
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	PO BOX 39, CUTLER, CA 936150000
Latitude :	38.19125160
Longitude :	-122.27160849
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Facility Name :	GOLDEN STATE VINTNERS CORPORATION
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000255389
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
Latitude :	38.19125160
Longitude :	-122.27160849
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HIST CHMIRS - CA

Facility Address :	1175 Commerce Blvd, American Canyon
County :	Napa County

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

HIST CHMIRS - CA ***(cont.)***

Notified Date :	2001-12-28 10:50:35
Control Number :	01-7489
Substance 1 :	sewage;;;
Quantity 1 :	1240
Measure 1 :	N/R
Type 1 :	N/R
Pipeline 1 :	N/R
Vessel 1 (300 Tons) :	N/R
Substance 2 :	N/R
Quantity 2 :	N/R
Measure 2 :	N/R
Type 2 :	N/R
Pipeline 2 :	N/R
Vessel 2 (300 Tons) :	N/R
Substance 3 :	N/R
Quantity 3 :	N/R
Measure 3 :	N/R
Type 3 :	N/R
Pipeline 3 :	N/R
Vessel 3 (300 Tons) :	N/R
Description :	Per caller, during an excavation project a sewer main was broken.
Contained :	Yes
Water? :	No
Water Way :	N/R
Incident Date :	2001-12-27
Time :	N/R
Spill Site :	Road
Site :	N/R
Cause :	N/R
Other Causes :	N/R
Injuries (Y/N) :	N/R
Injuries Number :	0
Fatal (Y/N) :	N/R
Fatal Number :	0
Evacs (Y/N) :	N/R
Evacs Number :	0
Cleanup :	Responsible Party
Admin Agency :	Napa County Dept. Environmental Mgmt

HWG - CA

Facility Name :	BARRY CALLEBAUT
Facility Address :	1175 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

HWG - CA ***(cont.)***

EPA ID :	CAC002596435
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Owner Name :	BARRY CALLEBAUT
Owner Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Operator Name :	OSCAR CAMACHO
Operator Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Latitude :	38.192902
Longitude :	-122.272417
Facility Name :	BARRY CALLEBAUT
Facility Address :	1175 COMMERCE BLVD STE C-7, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000308891
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Owner Name :	BARRY CALLEBAUT
Owner Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Operator Name :	BARRY HUMPHRIES
Operator Address :	1175 COMMERCE BLVD SUITE C, AMERICAN CANYON, CA 94503
Latitude :	38.191315
Longitude :	-122.271607
Facility Name :	BARRY CALLEBAUT USA LLC
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000350300
Status :	Active
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 945039626
Owner Name :	BARRY CALLEBAUT USA HOLDING INC
Owner Address :	600 W CHICAGO AVE STE 860, CHICAGO, IL 606542822

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

HWG - CA ***(cont.)***

Operator Name :	MIGUEL ORTEGA
Operator Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
Latitude :	38.191315
Longitude :	-122.271607

Facility Name :	GOLDEN STATE VINTNERS
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAL000289026
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	PO BOX 39, CUTLER, CA 936150000
Owner Name :	THE WINE GROUP LLC
Owner Address :	4596 S TRACY BLVD, TRACY, CA 95377
Operator Name :	MIKE BLOM
Operator Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
Latitude :	38.192902
Longitude :	-122.272417

Facility Name :	GOLDEN STATE VINTNERS CORPORATION
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAL000255389
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
Owner Name :	GOLDEN STATE VINTNERS CORPORATION
Owner Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
Operator Name :	JON POWELL/ROBERT WALLACE BOTTLING
Operator Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
Latitude :	38.192902
Longitude :	-122.272417

ICIS

Facility Name :	BARRY CALLEBAUT

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

ICIS ***(cont.)***

Facility Address : 1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAW509762
ICIS Facility Interest ID :	3601087247
Facility UIN :	110066221494
Facility Type Code :	N/R
Impaired Waters :	N/R
Latitude :	38.19017
Longitude :	-122.27264
Last Date in Agency List :	2019-12-01

NPDES ID :	CAZ509762
ICIS Facility Interest ID :	3601165766
Facility UIN :	110066221494
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	38.1902
Longitude :	-122.27211
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	2066
SIC Description :	Chocolate And Cocoa Products

INACTIVE PCS

Issue Date :	2020-02-05
Original Issue Date :	2020-02-05
Effective Date :	2020-02-05
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3602106040
External Permit Number :	CAZ509762
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

INACTIVE PCS ***(cont.)***

Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Barry Callebaut
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Manifest Number :	008024139SKS
Shipped Date :	2021-07-26
Updated Date :	2021-09-26
Received Date :	2021-09-03
Status :	Signed
Generator ID :	CAL000350300
Generator Name :	Barry Callebaut
Generator Address :	1175 Commerce Blvd Ste D, AMERICAN CANYON, CA 94503
Generator Mailing :	1175 Commerce Blvd Ste D, American Canyon, CA 94503
Generator Contact :	Barry Callebaut
Destination ID :	CAD059494310
Destination Name :	Clean Harbors San Jose LLC
Destination Mailing :	1021 Berryessa Road, San Jose, CA 95133
Destination Address :	1021 Berryessa Road, San Jose, CA 95133
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
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Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

MANIFEST EPA ***(cont.)***

Non Waste Description :	NONE, NONE, NON RCRA HAZARDOUS WASTE LIQUIDS ,), N/ (OIL W/ LESS THAN 10% WATER), N/A, NONE
Quantity :	2000 Pounds
Quantity Tons, Acute, Non-Acute :	1, 0, 1
Quantity Kg, Acute, Non-Acute :	0, 907.03
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 221

Manifest Details

Manifest Number :	008024140SKS
Shipped Date :	2021-07-26
Updated Date :	2021-09-21
Received Date :	2021-08-25
Status :	Signed
Generator ID :	CAL000350300
Generator Name :	Barry Callebaut
Generator Address :	1175 Commerce Blvd Ste D, AMERICAN CANYON, CA 94503
Generator Mailing :	1175 Commerce Blvd Ste D, American Canyon, CA 94503
Generator Contact :	Barry Callebaut
Destination ID :	UTD991301748
Destination Name :	Clean Harbors Grassy Mountain LLC
Destination Mailing :	PO Box 22750, Salt Lake City, UT 84122
Destination Address :	3 Miles East 7 Miles North of Knolls Exit 41 off I-80, Grantsville, UT 84029
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NONE, NON-RCRA HAZARDOUS WASTE, SOLIDS, N/A, NONE, (ABSORBENTS CONTAMINATED WITH OIL)

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

MANIFEST EPA ***(cont.)***

Quantity :	400 Pounds
Quantity Tons, Acute, Non-Acute :	0.2, 0, 0.2
Quantity Kg, Acute, Non-Acute :	0, 181.406
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 352

Manifest Details

Manifest Number :	007300013SKS
Shipped Date :	2020-01-23
Updated Date :	2020-03-02
Received Date :	2020-02-10
Status :	Signed
Generator ID :	CAL000350300
Generator Name :	Barry Callebaut
Generator Address :	1175 Commerce Blvd Ste D, AMERICAN CANYON, CA 94503
Generator Mailing :	1175 Commerce Blvd Ste D, American Canyon, CA 94503
Generator Contact :	Barry Callebaut
Destination ID :	CAD059494310
Destination Name :	Clean Harbors San Jose LLC
Destination Mailing :	1021 Berryessa Road, San Jose, CA 95133
Destination Address :	1021 Berryessa Road, San Jose, CA 95133
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NONE, NON RCRA HAZARDOUS WASTE SOLIDS, (DIRT , SAND, SOIL, ABSORBENT AND OIL), N/A, NONE
Quantity :	150 Pounds
Quantity Tons, Acute, Non-Acute :	0.075, 0, 0.075
Quantity Kg, Acute, Non-Acute :	0, 68.02725

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

MANIFEST EPA ***(cont.)***

Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 352

Manifest Details

Manifest Number :	007300014SKS
Shipped Date :	2020-01-23
Updated Date :	2020-03-13
Received Date :	2020-02-13
Status :	Signed
Generator ID :	CAL000350300
Generator Name :	Barry Callebaut
Generator Address :	1175 Commerce Blvd Ste D, AMERICAN CANYON, CA 94503
Generator Mailing :	1175 Commerce Blvd Ste D, American Canyon, CA 94503
Generator Contact :	Barry Callebaut
Destination ID :	CAD980675276
Destination Name :	Clean Harbors Buttonwillow LLC
Destination Mailing :	PO Box 787, Buttonwillow, CA 93206
Destination Address :	PO Box 787, Buttonwillow, CA 93206
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN3266
DOT Information :	UN3266, WASTE UN3266, WASTE CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.,), 8, PG I (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), 8, PG II
Non Waste Description :	N/R
Quantity :	400 Pounds
Quantity Tons, Acute, Non-Acute :	0.2, 0, 0.2
Quantity Kg, Acute, Non-Acute :	0, 181.406
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	Y

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

MANIFEST EPA ***(cont.)***

Federal Code :	D002, D006, D007, D008
State Code :	CA - 121

NPDES - CA

Facility Name :	Barry Callebaut
Facility Address :	1175 Commerce Blvd Ste D, American Canyon, 94503
County :	Napa
Effective Date :	2020-02-05
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I028519
RM Status :	Active
Reg Meas ID :	509762
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Barry Callebaut
Discharger Address :	1175 Commerce Blvd Ste D, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

PCS ENF

Site Details

NPDES ID :	CAZ509762
Last Date in Agency List :	2022-12-28

Formal Enforcement Actions

Settlement Entered Date :	N/R
ENF Identifier :	N/R
Activity ID :	N/R
Activity Type :	N/R
ENF Type :	N/R
Agency :	N/R
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

PCS ENF ***(cont.)***

Informal Enforcement Actions

Achieved Date :	2020-07-21
Registry ID :	110066221494
ENF Identifier :	CA-ZIEA438059
Activity ID :	3602308241
Activity Type :	Administrative - Informal
ENF Type :	Notice of Noncompliance Issued
Agency :	State

PCS FACILITY

Issue Date :	2020-02-05
Original Issue Date :	2020-02-05
Effective Date :	2020-02-05
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3602106040
External Permit Number :	CAZ509762
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Barry Callebaut
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_NONGEN

Facility Name :	BARRY CALLEBAUT USA LLC
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

RCRA_NONGEN ***(cont.)***

Date Form Received by Agency :	2021-06-15
EPA ID :	CAL000350300
Mailing Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
Contact :	MIGUEL ORTEGA
Contact Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503
Contact Country :	US
Contact Telephone :	707-666-5735
Contact Email :	MIGUEL_ORTEGA@BARRY-CALLEBAUT.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	BARRY CALLEBAUT USA HOLDING INC
Owner/Operator Address :	600 W CHICAGO AVE STE 860, CHICAGO, IL 60654
Owner/Operator Country :	US
Owner/Operator Telephone :	321-496-7300
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

RCRA_NONGEN ***(cont.)***

Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RFR - CA

Facility Name :	Barry Callebaut
Facility Address :	1175 Commerce Blvd Ste D, American Canyon, CA 94503
County :	Napa
Effective Date :	2020-02-05
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I028519
SIC/NAICS :	2066
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Chocolate and Cocoa Products
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	1
Number of Violations within Five Years:	1
Agency :	Barry Callebaut
Agency Address :	1175 Commerce Blvd Ste D, American Canyon , CA 94503
Latitude :	38.1902
Longitude :	-122.27211
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	BARRY CALLEBAUT
Facility Address :	1175 COMMERCE BLVD STE D, AMERICAN CANYON, CA 94503

Map Id: 4
Direction: NNE
Distance: 0.272 mi., 1438 ft.
Elevation: 37 ft.
Relative: Higher

Site Name : BARRY CALLEBAUT | BARRY CALLEBAUT USA, LLC | GOLDEN STATE VINTNERS CORPORATION
1175 COMMERCE BLVD STE D | 1175 COMMERCE BLVD | 1175 COMMERCE BLVD D
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317884
EPA ID: CAC002596435

STORMWATER ***(cont.)***

NPDES ID :	CAZ509762
Permittee Name :	Barry Callebaut
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2020-02-05
Effective Date :	2020-02-05
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	2066
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	7
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19017
Longitude :	-122.27264
Last Date in Agency List :	2022-12-13

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON
1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd.
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER]

Envirosite ID: 52317883
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	HESS COLLECTION - AMERICAN CANYON
Facility Address :	1166 COMMERCE BLVD, AMERICAN CANYON, 94503

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON 1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd. AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317883
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

Site ID :	36234
EI ID :	10187991
EI Description :	Chemical Storage Facilities
Latitude :	38.190716
Longitude :	-122.270332
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	THE HESS COLLECTION WINERY AM CAN
Facility Address :	1166 COMMERCE BLVD, AMERICAN CANYON, 94503
Site ID :	544209
EI ID :	822830
EI Description :	Industrial Facility Storm Water
Latitude :	38.190720
Longitude :	-122.270330
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	THE HESS COLLECTION WINERY AM CAN
Facility Address :	1166 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S822830
Agency Name :	THE HESS COLLECTION WINERY
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	THE HESS COLLECTION WINERY AM CAN
Facility Address :	1166 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	N/R
Last Inspection Date :	N/R
Registry ID :	110070092462
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON 1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd. AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317883
EPA ID: N/R

ECHO ***(cont.)***

Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 16.7 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051081
MYRTK Universe :	NNN
NPDES IDs :	CAZ437151
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2084
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2084
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON 1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd. AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317883
EPA ID: N/R

ECHO ***(cont.)***

Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19072
Longitude :	-122.27033
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	HESS COLLECTION - AMERICAN CANYON
Facility Address :	1166 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110055874549
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON 1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd. AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317883
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest

Source and System ID :	CA-CERS - 10187991 CA-ENVIROVIEW - 122395 CA-ENVIROVIEW - 36234
Facility Name :	THE HESS COLLECTION WINERY AM CAN
Facility Address :	1166 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	N/R

Site Details

Registry ID :	110070092462
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest

Source and System ID :	ICIS - CAZ437151

HIST CHMIRS - CA

Facility Address :	1166 Commerce Blvd. near Green Island Rd., American Canyon
County :	Napa County
Notified Date :	2004-12-01 11:58:27
Control Number :	04-6248
Substance 1 :	Sewage
Quantity 1 :	2
Measure 1 :	N/R
Type 1 :	N/R
Pipeline 1 :	N/R
Vessel 1 (300 Tons) :	N/R
Substance 2 :	N/R
Quantity 2 :	N/R

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON 1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd. AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317883
EPA ID: N/R

HIST CHMIRS - CA ***(cont.)***

Measure 2 :	N/R
Type 2 :	N/R
Pipeline 2 :	N/R
Vessel 2 (300 Tons) :	N/R
Substance 3 :	N/R
Quantity 3 :	N/R
Measure 3 :	N/R
Type 3 :	N/R
Pipeline 3 :	N/R
Vessel 3 (300 Tons) :	N/R
Description :	Substance is coming out of a cleanout for a sewer system. It has been overflowing since Wednesday of last week, estimating approx 2 gallons per day. Storm Drain is less than 500' from a creek. Location is the parking lot of a huge warehouse associated with wine.
Contained :	No
Water? :	N/R
Water Way :	Storm Drain
Incident Date :	2004-12-01
Time :	N/R
Spill Site :	Other
Site :	N/R
Cause :	N/R
Other Causes :	N/R
Injuries (Y/N) :	N/R
Injuries Number :	0
Fatal (Y/N) :	N/R
Fatal Number :	0
Evacs (Y/N) :	N/R
Evacs Number :	0
Cleanup :	Unknown
Admin Agency :	Napa County Dept. Environmental Mgmt

ICIS

Facility Name :	THE HESS COLLECTION WINERY AM CAN
Facility Address :	1166 COMMERCE BLVD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ437151
ICIS Facility Interest ID :	3600730014
Facility UIN :	110070092462
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	38.19072
Longitude :	-122.27033
Last Date in Agency List :	2022-12-28

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON 1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd. AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317883
EPA ID: N/R

ICIS ***(cont.)***

Facility SIC

SIC Code :	2084
SIC Description :	Wines, Brandy, And Brandy Spirits

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601109386
External Permit Number :	CAZ437151
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	The Hess Collection Winery
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

NPDES - CA

Facility Name :	The Hess Collection Winery Am Can
Facility Address :	1166 Commerce Blvd, American Canyon, 94503
County :	Napa
Effective Date :	2013-04-25
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I024227
RM Status :	Active
Reg Meas ID :	437151
Reg Meas Type :	Enrollee

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON 1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd. AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317883
EPA ID: N/R

NPDES - CA ***(cont.)***

Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	The Hess Collection Winery
Discharger Address :	1166 Commerce Blvd, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601109386
External Permit Number :	CAZ437151
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	The Hess Collection Winery
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RFR - CA

Facility Name :	The Hess Collection Winery Am Can
Facility Address :	1166 Commerce Blvd, American Canyon, CA 94503
County :	Napa
Effective Date :	2013-04-25
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ

Map Id: 5
Direction: NE
Distance: 0.280 mi., 1478 ft.
Elevation: 83 ft.
Relative: Higher

Site Name : THE HESS COLLECTION WINERY AM CAN | HESS COLLECTION - AMERICAN CANYON 1166 COMMERCE BLVD | 1166 Commerce Blvd. near Green Island Rd. AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HIST CHMIRS - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317883
EPA ID: N/R

RFR - CA ***(cont.)***

WDID :	2 28I024227
SIC/NAICS :	2084
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Wines, Brandy, and Brandy Spirits
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	The Hess Collection Winery
Agency Address :	1166 Commerce Blvd, American Canyon, CA 94503
Latitude :	38.19072
Longitude :	-122.27033
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	THE HESS COLLECTION WINERY AM CAN
Facility Address :	1166 COMMERCE BLVD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ437151
Permittee Name :	The Hess Collection Winery
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	2084
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19072
Longitude :	-122.27033
Last Date in Agency List :	2022-12-13

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA]

Envirosite ID: 231048
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	AMERICAN CANYON SANITARY LANDFILL
Facility Address :	WESTERN TERMINUS OF EUCALYPTUS DRIVE, NAPA
Site ID :	506663
EI ID :	28-AA-0001
EI Description :	Solid Waste and Recycle Sites
Latitude :	38.180600
Longitude :	-122.276000
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-04-07

ECHO

Facility Name :	AMERICAN CANYON LANDFILL
Facility Address :	END OF EUCALYPTUS DRIVE, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110043799547
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	N/R
Programs IN SNC :	0
Current Compliance Status :	N/R
Three-Year Compliance Status :	N/R
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 16 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020801
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051061
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

ECHO ***(cont.)***

CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	562212 - Solid Waste Landfill
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	Y
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	Y
Latitude :	38.1809
Longitude :	-122.281
Last Date in Agency List :	2021-10-15

Facility Name :	AMERICAN CANYON SANI LANDFILL

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

ECHO ***(cont.)***

Facility Address :	WEST AMERICAN CANYON ROAD FOOT OF, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110013850555
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	1991-01-16
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	N/R
Three-Year Compliance Status :	N/R
Collection Method :	INTERPOLATION-MAP
Reference Point :	FACILITY CENTROID
Accuracy Meters :	300
Derived Tribes :	Lytton Rancheria of California - 16 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020801
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051064
MYRTK Universe :	NNN
NPDES IDs :	CAU000124
CWA Permit Types :	Minor
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	1991-01-16
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Not Applicable
CWA Current SNC Flag :	N

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

ECHO ***(cont.)***

CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	1991-01-16
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	Y
Latitude :	38.18056
Longitude :	-122.27556
Last Date in Agency List :	2023-01-16

EPA LF MOP

Facility Name :	American Canyon SLF
Facility Address :	End of Eucalyptus Drive, American Canyon, CA 94503
County :	Napa
Landfill ID :	44
GHGRP ID :	1004465
Year Landfill Opened :	1966
Landfill Closure Year :	1995
Current Landfill Status :	Closed
Ownership Type :	Public
Landfill Owner Organization(s) :	Napa-Vallejo Waste Management Authority
Waste in Place Year :	1995
Waste in Place (tons) :	4,830,026
LFG Collection System In Place? :	Yes

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

EPA LF MOP ***(cont.)***

LFG Collected (mmscfd) :	0.367
LFG Flared (mmscfd) :	0.367
Project ID :	180760-0
Current Project Status :	Shutdown
Project Name :	Project #2
Project Start Date :	2008-06-01
Project Shutdown Date :	2009-01-01
Project Type Category :	Electricity
LFG Energy Project Type :	Microturbine
RNG Delivery Method :	N/R
Actual MW Generation :	0.21
Rated MW Capacity :	0.21
LFG Flow to Project (mmscfd) :	0.19
Current Year Emission Reductions (MMTCO2e/yr) - Direct:	N/R
Current Year Emission Reductions (MMTCO2e/yr) - Avoided:	N/R
Landfill Design Capacity (tons) :	N/R
Annual Waste Acceptance Rate (tons per year):	N/R
Annual Waste Acceptance Year :	N/R
LFG Collected Year :	N/R
LFG Flared Year :	N/R
Projected Direct Reductions (MMTCO2e/yr) - MW:	N/R
Projected Avoided Reductions (MMTCO2e/yr) - MW:	N/R
Does LF Recirculate Leachate? :	N/R
Leachate Recirc Frequency (Past 10 Yrs):	N/R
Permitted as RD & D LF? :	N/R
LF Required by NSPS/EG to Combust LFG:	N/R
Latitude :	38.18056
Longitude :	-122.27556
Last Date in Agency List :	2022-12-20

Landfill ID :	44
GHGRP ID :	1004465
Year Landfill Opened :	1966
Landfill Closure Year :	1995
Current Landfill Status :	Closed
Ownership Type :	Public
Landfill Owner Organization(s) :	Napa-Vallejo Waste Management Authority
Waste in Place Year :	1995
Waste in Place (tons) :	4,830,026
LFG Collection System In Place? :	Yes
LFG Collected (mmscfd) :	0.367
LFG Flared (mmscfd) :	0.367
Project ID :	100-1

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

EPA LF MOP ***(cont.)***

Current Project Status :	Shutdown
Project Name :	Project #1, De-Expansion #1
Project Start Date :	2010-01-01
Project Shutdown Date :	2013-05-01
Project Type Category :	Electricity
LFG Energy Project Type :	Reciprocating Engine
RNG Delivery Method :	N/R
Actual MW Generation :	0.8
Rated MW Capacity :	0.8
LFG Flow to Project (mmscfd) :	N/R
Current Year Emission Reductions (MMTCO2e/yr) - Direct:	N/R
Current Year Emission Reductions (MMTCO2e/yr) - Avoided:	N/R
Landfill Design Capacity (tons) :	N/R
Annual Waste Acceptance Rate (tons per year):	N/R
Annual Waste Acceptance Year :	N/R
LFG Collected Year :	N/R
LFG Flared Year :	N/R
Projected Direct Reductions (MMTCO2e/yr) - MW:	N/R
Projected Avoided Reductions (MMTCO2e/yr) - MW:	N/R
Does LF Recirculate Leachate? :	N/R
Leachate Recirc Frequency (Past 10 Yrs):	N/R
Permitted as RD & D LF? :	N/R
LF Required by NSPS/EG to Combust LFG:	N/R
Latitude :	38.18056
Longitude :	-122.27556
Last Date in Agency List :	2022-12-20

Landfill ID :	44
GHGRP ID :	1004465
Year Landfill Opened :	1966
Landfill Closure Year :	1995
Current Landfill Status :	Closed
Ownership Type :	Public
Landfill Owner Organization(s) :	Napa-Vallejo Waste Management Authority
Waste in Place Year :	1995
Waste in Place (tons) :	4,830,026
LFG Collection System In Place? :	Yes
LFG Collected (mmscfd) :	0.367
LFG Flared (mmscfd) :	0.367
Project ID :	100-0
Current Project Status :	Shutdown
Project Name :	Project #1
Project Start Date :	1985-01-01

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

EPA LF MOP ***(cont.)***

Project Shutdown Date :	2009-12-31
Project Type Category :	Electricity
LFG Energy Project Type :	Reciprocating Engine
RNG Delivery Method :	N/R
Actual MW Generation :	1.6
Rated MW Capacity :	1.6
LFG Flow to Project (mmscfd) :	0.8
Current Year Emission Reductions (MMTCO2e/yr) - Direct:	N/R
Current Year Emission Reductions (MMTCO2e/yr) - Avoided:	N/R
Landfill Design Capacity (tons) :	N/R
Annual Waste Acceptance Rate (tons per year):	N/R
Annual Waste Acceptance Year :	N/R
LFG Collected Year :	N/R
LFG Flared Year :	N/R
Projected Direct Reductions (MMTCO2e/yr) - MW:	N/R
Projected Avoided Reductions (MMTCO2e/yr) - MW:	N/R
Does LF Recirculate Leachate? :	N/R
Leachate Recirc Frequency (Past 10 Yrs):	N/R
Permitted as RD & D LF? :	N/R
LF Required by NSPS/EG to Combust LFG:	N/R
Latitude :	38.18056
Longitude :	-122.27556
Last Date in Agency List :	2022-12-20

FA 2 - CA

Facility Name :	American Canyon Sanitary Landfill
Facility Address :	Western Terminus Of Eucalyptus Drive, Napa, 94589
County :	Napa
SWIS Number :	28-AA-0001
Site Name :	American Canyon Sanitary Landfill
Reviewed :	2019-07-17
Last Date in Agency List :	2022-08-02

Log Details

Log Type :	Closure
Coverage :	0
Adequate Mechanism :	Yes
Mechanism(s) :	N/R
Disbursements :	0

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

FA 2 - CA ***(cont.)***

Inflation Estimate :	0
Inflation Estimate Date :	N/R
Plan Cost Estimate :	0
Plan Cost Date :	2019-03-01

Log Type :	Corrective Action
Coverage :	1030170
Adequate Mechanism :	Yes
Mechanism(s) :	Pledge of Revenue
Disbursements :	0
Inflation Estimate :	1030170
Inflation Estimate Date :	2019-06-01
Plan Cost Estimate :	640630
Plan Cost Date :	2019-03-01

Log Type :	Postclosure
Coverage :	625408
Adequate Mechanism :	Yes
Mechanism(s) :	Pledge of Revenue
Disbursements :	0
Inflation Estimate :	10631933
Inflation Estimate Date :	2019-06-01
Plan Cost Estimate :	551445
Plan Cost Date :	2019-03-01

FRS

Facility Name :	AMERICAN CANYON LANDFILL
Facility Address :	END OF EUCALYPTUS DRIVE, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110043799547
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-12-17

Source Description

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

FRS ***(cont.)***

Source Description :

(E-GGRT, accessible through an EPA web page, is used to submit annual reports in support of the EPA rule for mandatory reporting of greenhouse gases (GHG) by large GHG emissions sources. Implementation of 40 CFR part 98 is referred to as the greenhouse gas reporting program (GHGRP). This comprehensive, nationwide emissions data will provide a better understanding of the sources of GHGs and will guide development of the policies and programs to reduce emissions. The publically available data will allow reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future.

FRS Environmental Interest

Source and System ID :	E-GGRT - 1004465
Facility Name :	AMERICAN CANYON SANI LANDFILL
Facility Address :	WEST AMERICAN CANYON ROAD FOOT OF, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110013850555
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest

Source and System ID :	ICIS - CAU000124
Facility Name :	AMERICAN CANYON SLF
Facility Address :	END OF EUCALYPTUS DRIVE, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

FRS ***(cont.)***

Site Details

Registry ID :	110063276084
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The U.S. Environmental Protection Agency's Landfill Methane Outreach Program (LMOP) is a voluntary assistance program that helps to reduce methane emissions from landfills by encouraging the recovery and beneficial use of landfill gas (LFG) as a renewable energy resource.

FRS Environmental Interest

Source and System ID :	LMOP - 44

SWF/LF - CA

Facility Name :	American Canyon Sanitary Landfill
Facility Address :	Western Terminus Of Eucalyptus Drive, Napa
County :	Napa

Site Details

Permit Date :	N/R
Permit Status :	Permitted
Swis Number :	28-AA-0001
Land Use :	N/R
Operator :	N/R
Operator Address :	N/R
Operator Phone :	N/R
Latitude :	38.18056
Longitude :	-122.27556
Last Date in Agency List :	2023-02-27

Owner Summary

Owner :	Napa-Vallejo Waste Management Authority
Owner Address :	N/R
Owner Phone :	(707) 253-4545

Map Id: 6
Direction: SSW
Distance: 0.311 mi., 1642 ft.
Elevation: 8 ft.
Relative: Lower

Site Name : AMERICAN CANYON SANITARY LANDFILL | AMERICAN CANYON LANDFILL | AMERICAN CANYON SLF
END OF EUCALYPTUS DRIVE | WESTERN TERMINUS OF EUCALYPTUS DRIVE | WEST AMERICAN CANYON ROAD FOOT OF AMERICAN CANYON | Napa | American Canyon, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LF MOP, FA 2 - CA, FRS, SWF/LF - CA] ***(cont.)***

Envirosite ID: 231048
EPA ID: N/R

SWF/LF - CA ***(cont.)***

Unit Information

Closure Date :	N/R
Closure Type :	N/R
Unit Number :	N/R
Regulatory Status :	Permitted
Operational Status :	Closed
Category :	Disposal
Activity :	Solid Waste Facility
Inspection Frequency :	Quarterly
Accepted Waste :	N/R
Program Type :	N/R
Throughput :	1350
Throughput Units :	Tons per day
Capacity :	4900000
Capacity Units :	Cubic Yards
Acreage :	122
Disposal Acreage :	97
Remaining Capacity :	N/R
WDR Number :	N/R

Map Id: 7
Direction: SW
Distance: 0.370 mi., 1957 ft.
Elevation: 4 ft.
Relative: Lower

Site Name : AMERICAN CANYON SAN LDFL
END OF EUCALYPTUS DR
NAPA JUNCTION, CA 94590

Database(s) : [CERCLIS NFRAP, SEMS_8R_ARCHIVED SITES]

Envirosite ID: 222277
EPA ID: CAD980637136

CERCLIS NFRAP

Facility Name :	AMERICAN CANYON SAN LDFL
Facility Address :	END OF EUCALYPTUS DR, NAPA JUNCTION, CA 94590
County :	SOLANO
Site ID :	0901876
Epa ID :	CAD980637136
Short Name :	AMERICAN CANYON SAN LDFL
Congressional District :	02
IFMS ID :	N/R
SMSA Number :	8720
USGC Hydro Unit :	18050002
Federal Facility :	N
DMNSN Number :	N/R
Site Orphan Flag :	N

Map Id: 7
Direction: SW
Distance: 0.370 mi., 1957 ft.
Elevation: 4 ft.
Relative: Lower

Site Name : AMERICAN CANYON SAN LDFL
END OF EUCALYPTUS DR
NAPA JUNCTION, CA 94590

Database(s) : [CERCLIS NFRAP, SEMS_8R_ARCHIVED SITES] ***(cont.)***

Envirosite ID: 222277
EPA ID: CAD980637136

CERCLIS NFRAP ***(cont.)***

RCRA ID :	N/R
USGS Quadrangle :	N/R
Site Init by Prog :	N/R
NFRAP Flag :	NFA
Parent ID :	N/R
RST Code :	N/R
EPA Region :	09
Classification :	N/R
Site Settings Code :	N/R
NPL Status :	Not on the NPL
DMNSN Unit Code :	N/R
RBRAC Code :	N/R
RResp Fed Agency Code :	N/R
Non NPL Status :	NFRAP-Site does not qualify for the NPL based on existing information
Non NPL Status Date :	1987-10-01
Site Fips Code :	06095
CC Concurrence Date :	N/R
CC Concurrence FY :	N/R
Alias EPA ID :	N/R
Site FUDS Flag :	N/R

CERCLIS Site Contact Name(s)

Contact ID :	13003854
Contact Title :	Site Assessment Manager (SAM)
Contact ID :	13003858
Contact Title :	Site Assessment Manager (SAM)
Contact ID :	13004003
Contact Title :	Site Assessment Manager (SAM)
Alias Comments :	N/R
Site Description :	N/R

CERCLIS Assessment History

Action Code :	001
Action :	ARCHIVE SITE
Date Started :	N/R
Date Completed :	1987-10-01
Priority Level :	1
Operational Unit :	00
Primary Responsibility :	EPA In-House
Planning Status :	N/R
Urgency Indicator :	N/R
Action Anomaly :	N/R
Action Code :	001
Action :	PRELIMINARY ASSESSMENT

Map Id: 7
Direction: SW
Distance: 0.370 mi., 1957 ft.
Elevation: 4 ft.
Relative: Lower

Site Name : AMERICAN CANYON SAN LDFL
END OF EUCALYPTUS DR
NAPA JUNCTION, CA 94590

Database(s) : [CERCLIS NFRAP, SEMS_8R_ARCHIVED SITES] ***(cont.)***

Envirosite ID: 222277
EPA ID: CAD980637136

CERCLIS NFRAP ***(cont.)***

Date Started :	N/R
Date Completed :	1987-10-01
Priority Level :	1
Operational Unit :	00
Primary Responsibility :	EPA Fund-Financed
Planning Status :	N/R
Urgency Indicator :	N/R
Action Anomaly :	N/R

Action Code :	001
Action :	DISCOVERY
Date Started :	N/R
Date Completed :	1981-06-01
Priority Level :	1
Operational Unit :	00
Primary Responsibility :	EPA Fund-Financed
Planning Status :	N/R
Urgency Indicator :	N/R
Action Anomaly :	N/R

SEMS_8R_ARCHIVED SITES

Facility Name :	AMERICAN CANYON SAN LDFL
Facility Address :	END OF EUCALYPTUS DR, NAPA JUNCTION, CA 94590
County :	SOLANO

Site Details

Site ID :	0901876
EPA ID :	CAD980637136
Region :	09
Congressional District :	02
Federal Facility :	N
Federal Facility Docket :	N
NPL Status :	Not on the NPL
Non NPL Status :	NFRAP-Site does not qualify for the NPL based on existing information
FIPS Code :	06095
Superfund Alternative Agreement :	N
Last Date in Agency List :	2023-01-20

Additional Information

Start Date :	1981-06-01
Finish Date :	1981-06-01
OU :	00
Action Code :	DS
Action Name :	DISCVRY
Sequence :	1
Quality :	N/R
Current Action Lead :	EPA Perf

Map Id: 7
Direction: SW
Distance: 0.370 mi., 1957 ft.
Elevation: 4 ft.
Relative: Lower

Site Name : AMERICAN CANYON SAN LDFL
END OF EUCALYPTUS DR
NAPA JUNCTION, CA 94590

Database(s) : [CERCLIS NFRAP, SEMS_8R_ARCHIVED SITES] ***(cont.)***

Envirosite ID: 222277
EPA ID: CAD980637136

SEMS_8R_ARCHIVED SITES ***(cont.)***

Start Date :	N/R
Finish Date :	1987-10-01
OU :	00
Action Code :	VS
Action Name :	ARCH SITE
Sequence :	1
Quality :	N/R
Current Action Lead :	EPA Perf In-Hse

Start Date :	N/R
Finish Date :	1987-10-01
OU :	00
Action Code :	PA
Action Name :	PA
Sequence :	1
Quality :	N
Current Action Lead :	EPA Perf

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER]

Envirosite ID: 52317885
EPA ID: N/R

BRS

Facility Name :	AMCAN BEVERAGES INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Date Form Received by Agency :	2020-02-07
EPA ID :	CAR000271809
Mailing Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Contact :	JERROD CLARK
Contact Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Contact Country :	US

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

BRS ***(cont.)***

Contact Telephone :	707-556-1230
Contact Email :	JERCLARK@COCA-COLA.COM
EPA Region :	09
Land Type :	Private
Source Type :	Annual/Biennial Report updated with Notification
Classification :	Large Quantity Generator

Description :

Handlers that generate 1,000 kg or more of hazardous waste during any calendar month; or generate more than 1 kg of acutely hazardous waste during any calendar month; or generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1 kg of acutely hazardous waste at any time; or generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	THE COCA-COLA COMPANY
Owner/Operator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Owner/Operator Country :	US
Owner/Operator Telephone :	N/R
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Operator
Owner/Operator Start Date :	2004-01-01
Owner/Operator End Date :	N/R

Owner/Operator Name :	THE COCA-COLA COMPANY
Owner/Operator Address :	1734, ATLANTA, GA 30313
Owner/Operator Country :	US
Owner/Operator Telephone :	N/R
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Owner
Owner/Operator Start Date :	2004-01-01
Owner/Operator End Date :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

BRS ***(cont.)***

Waste Activity Monitoring

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Report Cycle :	2019
Hazardous Waste Page Number :	1
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., (ETHYL ALCOHOL, WATER), 3, II
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G11 - Discarding off-specification, out-of-date, and/or unused chemicals or products
Form Code :	W219 - Other organic liquid (specify in comments)
Management Method :	H061 - Fuel blending prior to energy recovery at another site (waste generated either on-site or received from off-site)
Generation Tons :	4.7275
Managed Tons :	0
Shipped Tons :	4.7275
Received Tons :	0
Receiver ID :	CAD008302903
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	D001
Waste Code Group :	D001 - IGNITABLE WASTE
Waste Generation Type :	N/R

Report Cycle :	2019
Hazardous Waste Page Number :	10
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID (ASCORBIC ACID, SODIUM BENZOATE)
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G11 - Discarding off-specification, out-of-date, and/or unused chemicals or products

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

BRS ***(cont.)***

Form Code :	W219 - Other organic liquid (specify in comments)
Management Method :	H141 - The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	0.4575
Managed Tons :	0
Shipped Tons :	0.4575
Received Tons :	0
Receiver ID :	CAD008302903
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R
Waste Code Group :	N/R
Waste Generation Type :	N/R
Report Cycle :	2019
Hazardous Waste Page Number :	11
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID (CITRIC ACID, POTASSIUM SORBATE)
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G11 - Discarding off-specification, out-of-date, and/or unused chemicals or products
Form Code :	W219 - Other organic liquid (specify in comments)
Management Method :	H141 - The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	0.46
Managed Tons :	0
Shipped Tons :	0.46
Received Tons :	0
Receiver ID :	CAD008302903
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

BRS ***(cont.)***

Waste Code Group :	N/R
Waste Generation Type :	N/R
Report Cycle :	2019
Hazardous Waste Page Number :	12
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID (PROPYLENE GLYCOL, ETHYL ALCOHOL)
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G11 - Discarding off-specification, out-of-date, and/or unused chemicals or products
Form Code :	W219 - Other organic liquid (specify in comments)
Management Method :	H061 - Fuel blending prior to energy recovery at another site (waste generated either on-site or received from off-site)
Generation Tons :	0.125
Managed Tons :	0
Shipped Tons :	0.125
Received Tons :	0
Receiver ID :	CAD008302903
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R
Waste Code Group :	N/R
Waste Generation Type :	N/R
Report Cycle :	2019
Hazardous Waste Page Number :	13
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID (SODIUM BENZOATE, WATER)
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G11 - Discarding off-specification, out-of-date, and/or unused chemicals or products
Form Code :	W219 - Other organic liquid (specify in comments)

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

BRS ***(cont.)***

Management Method :	H141 - The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	0.0425
Managed Tons :	0
Shipped Tons :	0.0425
Received Tons :	0
Receiver ID :	CAD008302903
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R
Waste Code Group :	N/R
Waste Generation Type :	N/R
Report Cycle :	2019
Hazardous Waste Page Number :	14
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID, (ALKYLAMIDE HYDROLYSATES)
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G11 - Discarding off-specification, out-of-date, and/or unused chemicals or products
Form Code :	W219 - Other organic liquid (specify in comments)
Management Method :	H141 - The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	0.2
Managed Tons :	0
Shipped Tons :	0.2
Received Tons :	0
Receiver ID :	CAD008302903
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R
Waste Code Group :	N/R
Waste Generation Type :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

BRS ***(cont.)***

Report Cycle :	2019
Hazardous Waste Page Number :	14
Hazardous Waste Sub-Page Number :	2
BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID, (ALKYLAMIDE HYDROLYSATES)
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G11 - Discarding off-specification, out-of-date, and/or unused chemicals or products
Form Code :	W219 - Other organic liquid (specify in comments)
Management Method :	H141 - The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	0.2
Managed Tons :	0
Shipped Tons :	0.2
Received Tons :	0
Receiver ID :	CAT080014079
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R
Waste Code Group :	N/R
Waste Generation Type :	N/R

Report Cycle :	2019
Hazardous Waste Page Number :	15
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID, (CLEANING SOLUTION)
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G02 - Stripping and acid or caustic cleaning (using caustics to remove coatings or layers from parts or assemblies)
Form Code :	W219 - Other organic liquid (specify in comments)
Management Method :	H141 - The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	1.2

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

BRS ***(cont.)***

Managed Tons :	0
Shipped Tons :	1.2
Received Tons :	0
Receiver ID :	CAT080014079
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R
Waste Code Group :	N/R
Waste Generation Type :	N/R
Report Cycle :	2019
Hazardous Waste Page Number :	16
Hazardous Waste Sub-Page Number :	1
BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID, (ETHYLENEDIAMINE-TETRAACETIC ACID (EDTA))
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G11 - Discarding off-specification, out-of-date, and/or unused chemicals or products
Form Code :	W219 - Other organic liquid (specify in comments)
Management Method :	H141 - The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	0.2
Managed Tons :	0
Shipped Tons :	0.2
Received Tons :	0
Receiver ID :	CAD008302903
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R
Waste Code Group :	N/R
Waste Generation Type :	N/R
Report Cycle :	2019
Hazardous Waste Page Number :	17
Hazardous Waste Sub-Page Number :	1

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

BRS ***(cont.)***

BR Form :	GM
Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID, (OIL, LUBRICATING, PROPYLENE GLYCOL)
Primary NAICS :	312111 - Soft Drink Manufacturing
Source Code :	G16 - Oil changes and filter or battery replacement (automotive, machinery, etc)
Form Code :	W206 - Waste oil managed as hazardous waste
Management Method :	H141 - The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.
Generation Tons :	0.1125
Managed Tons :	0
Shipped Tons :	0.1125
Received Tons :	0
Receiver ID :	CAD008302903
Receiver State :	CA
Shipper ID :	CAR000271809
Shipper State :	CA
Waste Minimization :	X - No waste minimization efforts were implemented for this waste
Waste Code List :	N/R
Waste Code Group :	N/R
Waste Generation Type :	N/R

CALEPA SITES - CA

Facility Name :	Bloom Energy-The Coca-Cola Company (COK 0100)
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, 94503
Site ID :	570384
EI ID :	10859287
EI Description :	Chemical Storage Facilities
Latitude :	38.190830
Longitude :	-122.274540
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-02-13
Facility Name :	THE COCA-COLA COMPANY
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, 94503

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

Site ID :	403706
EI ID :	250662
EI Description :	Industrial Facility Storm Water
Latitude :	38.190860
Longitude :	-122.274630
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Site ID :	403706
EI ID :	10170323
EI Description :	Hazardous Waste Generator
Latitude :	38.190860
Longitude :	-122.274630
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Site ID :	403706
EI ID :	10170323
EI Description :	RCRA LQ HW Generator
Latitude :	38.190860
Longitude :	-122.274630
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Site ID :	403706
EI ID :	10170323
EI Description :	Chemical Storage Facilities
Latitude :	38.190860
Longitude :	-122.274630
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Facility Name :	THE COCA COLA COMPANY, INC
Facility Address :	1201 COMMERCE BOULEVARD, AMERICAN CANYON, 94503-9611

Site ID :	498454
EI ID :	110021274949
EI Description :	US EPA Air Emission Inventory System (EIS)
Latitude :	38.191860
Longitude :	-122.272230
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

CIWQS - CA

Facility Name :	POKKA USA INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA
County :	NAPA
Place ID :	248809
Agency Name :	POKKA USA INC
Last Date in Agency List :	2022-12-28
Facility Name :	THE COCA COLA COMPANY
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S250662
Agency Name :	THE COCA COLA COMPANY
Last Date in Agency List :	2022-12-28

CIWQS 2 - CA

Facility Name :	Pokka USA Inc
Facility Address :	1201 Commerce Blvd, American Canyon
County :	Napa
Facility ID :	248809
WDID :	N/R
Facility Type :	Industrial
Region :	2
Place Type :	Facility
Place Subtype :	N/R
Ageny Name :	N/R
Agency Type :	N/R
Number of Agencies :	N/R
Status Date :	N/R
Status :	N/R
Status Enrollee :	N/R
Individual/General :	N/R
Fee Code :	N/R
Staff Assigned :	N/R
Number of Staff Assigned :	N/R
Supervisor :	N/R
Number of Supervisor :	N/R
Number of Amendments :	0
Number of Reg Measures :	N/R
Baseline Flow :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

CIWQS 2 - CA ***(cont.)***

Population (MS4)/Acres :	N/R
Reclamation :	N/R
CAFO Type :	N/R
CAFO Subtype :	N/R
CAFO Population :	N/R
Onsite :	N/R
Quality Assurance :	N/R
RCRA Flag :	N/R
Total MMP Violations Number :	0
Total Number of Violations :	2
Total Number of Inspections :	0
Date of Most Recent Completed Inspection:	N/R
Date of Most Recent Received Report :	N/R
Total Number of Final (A+H) Enforcement Actions:	1
Most Recent Effective Date of Enf Action (A+H):	2002-07-26
Program :	UNREGS
Program Category :	UNREGS
Number of Programs :	N/R
Complexity :	N/R
Pretreatment :	N/R
Facility Waste Type :	N/R
Reg Measure ID :	N/R
Reg Measure Type :	N/R
Reg Measure Title :	N/R
Reg Measure Description :	N/R
SIC 1 :	-
SIC 2 :	-
SIC 3 :	-
Latitude :	N/R
Longitude :	N/R
Last Date in Agency List :	2023-01-11

ECHO

Facility Name :	AMCAM BEVERAGES INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110070119200
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNY
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	312111 - Soft Drink Manufacturing
Facility Last Inspection EPA Date :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	N/R
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2020-02-10

Facility Name :	AMCAN BEVERAGES INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	N/R
Registry ID :	110070119200
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	GDT-ADDRESS MATCHING (GEOCODING)
Reference Point :	ENTRANCE POINT OF A FACILITY OR STATION
Accuracy Meters :	150
Derived Tribes :	Lytton Rancheria of California - 16.8 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NNY
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	312111 - Soft Drink Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.191525
Longitude :	-122.27183
Last Date in Agency List :	2023-01-16

Facility Name :	THE COCA-COLA COMPANY - AMCAN
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	N/R
Registry ID :	110070447100
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	312111 - Soft Drink Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

Active Flag :	Y
NAA Flag :	N/R
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2020-02-10
Facility Name :	THE COCA COLA COMPANY, INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110021274949
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	THE GEOGRAPHIC COORDINATE DETERMINATION METHOD BASED ON ADDRESS MATCHING
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	153
Derived Tribes :	Lytton Rancheria of California - 16.7 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NNN
NPDES IDs :	CAZ182518
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2086

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2086
Facility NAICS :	312111 - Soft Drink Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19083
Longitude :	-122.27454
Last Date in Agency List :	2023-01-16

Facility Name :	THE COCA COLA COMPANY, INC
Facility Address :	1201 COMMERCE BOULEVARD, AMERICAN CANYON, CA 94503

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110021274949
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 16.8 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NNN
NPDES IDs :	CAZ182518
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2086
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

ECHO ***(cont.)***

CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2086
Facility NAICS :	312111 - Soft Drink Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19186
Longitude :	-122.27223
Last Date in Agency List :	2020-02-10

EMI - CA

Facility Name :	THE COCA COLA COMPANY
Facility Address :	1201 COMMERCE BOULEVARD, AMERICAN CANYON, 94503
County :	Napa
Facility ID :	12557
Air Basin Code :	San Francisco Bay Area
District :	BAY AREA AQMD
County ID :	NAP
SIC Code :	2086
CHAPIS :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

EMI - CA ***(cont.)***

CERR Code :	N/R
Last Date in Agency List :	2022-11-29

Additional Details

Year :	2018
Total Organic Gases (Tons/Year) :	.973810029
Reactive Organic Gases (Tons/Year) :	.4628257831238
Carbon Monoxide (Tons/Year) :	3.687473883
Nitrogen Oxides (Tons/Year) :	9.723792377
Sulfur Oxides (Tons/Year) :	3.423334109
Particulate Matter (Tons/Year) :	.241195604
Fine Particulate Matter (Tons/Year) :	.241120268

FRS

Facility Name :	AMCAN BEVERAGES INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110070119200
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

All generators and treatment, storage, and disposal (TSD) facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years. The data collected is used to create the National Biennial Resource Conservation and Recovery Act (RCRA) Hazardous Waste Report. This data is processed within the RCRA Information (RCRAInfo) database.

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

FRS ***(cont.)***

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest
Source and System ID : RCRAINFO - CAR000271809

Facility Name : CORTEZ INC
Facility Address : 1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County : NAPA COUNTY

Site Details
Registry ID : 110070307271
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description : OSHA-OIS

FRS Environmental Interest
Source and System ID : OSHA-OIS - 342345337

Facility Name : CORTEZ INC.
Facility Address : 1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County : N/R

Site Details
Registry ID : 110070307271
FRS Facility URL : Click here for hyperlink provided by the agency.

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

FRS ***(cont.)***

Last Date in Agency List : 2020-08-31

Source Description
Source Description : OSHA-OIS

FRS Environmental Interest
Source and System ID : OSHA-OIS - 342345337

Facility Name : THE COCA-COLA COMPANY - AMCAN
Facility Address : 1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
County : NAPA

Site Details
Registry ID : 110070447100
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2020-08-31

Source Description

Source Description :

All generators and treatment, storage, and disposal (TSD) facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years. The data collected is used to create the National Biennial Resource Conservation and Recovery Act (RCRA) Hazardous Waste Report. This data is processed within the RCRA Information (RCRAInfo) database.

Source Description :

RCRAInfo is EPA’s comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest

Source and System ID :	RCRAINFO - CAL000173892
Facility Name :	THE COCA COLA COMPANY, INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110021274949
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :	All generators and treatment, storage, and disposal (TSD) facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years. The data collected is used to create the National Biennial Resource Conservation and Recovery Act (RCRA) Hazardous Waste Report. This data is processed within the RCRA Information (RCRAInfo) database. The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI). The Energy Information Administration (EIA) is an independent agency within U.S. Department of Energy that develops surveys, collects energy data, and analyzes and models energy issues. The EIA-860 database supports the annual electric generator report and contains electric utility and non-utility (including independent power producers, combined heat and power producers, and other industrials) generator-specific plant data, including county and state location and ownership information.
Source Description :	The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

FRS ***(cont.)***

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.
OSHA-OIS

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	CA-ENVIROVIEW - 160675 EIA-860 - 57807 EIS - 1177611 ICIS - CAZ182518 OSHA-OIS - 315830760 OSHA-OIS - 342922556 RCRAINFO - CAL000173892
Facility Name :	THE COCA COLA COMPANY, INC
Facility Address :	1201 COMMERCE BOULEVARD, AMERICAN CANYON, CA 94503-9611
County :	NAPA

Site Details

Registry ID :	110021274949
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2020-08-31

Source Description

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

FRS ***(cont.)***

Source Description : The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).
The Energy Information Administration (EIA) is an independent agency within U.S. Department of Energy that develops surveys, collects energy data, and analyzes and models energy issues. The EIA-860 database supports the annual electric generator report and contains electric utility and non-utility (including independent power producers, combined heat and power producers, and other industrials) generator-specific plant data, including county and state location and ownership information.

Source Description : The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.
OSHA-OIS

FRS Environmental Interest
Source and System ID : CA-ENVIROVIEW - 160675
EIA-860 - 57807
EIS - 1177611
ICIS - CAZ182518
OSHA-OIS - 315830760
OSHA-OIS - 342922556

HAZNET - CA

Facility Name : AMCAN BEVERAGES INC
Facility Address : 1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County : NAPA

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HAZNET - CA ***(cont.)***

Site Details

Generator EPA ID :	CAR000271809
Active :	Active
Category :	FEDERAL
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Latitude :	38.19070800
Longitude :	-122.27489100
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :

2019: 331 - Off-specification, aged or surplus organics, 0.81250 tons to CAD008302903
2019: 791 - Liquids with pH <= 2, 0.07500 tons to CAD008302903
2019: 331 - Off-specification, aged or surplus organics, 4.63250 tons to CAD008302903
2019: 181 - Other inorganic solid waste, 0.07500 tons to CAD008302903
2019: 223 - Unspecified oil-containing waste, 0.73500 tons to CAD008302903
2019: 352 - Other organic solids, 0.00750 tons to CAT080014079
2019: 331 - Off-specification, aged or surplus organics, 2.66500 tons to CAT080014079
2019: 141 - Off-specification, aged or surplus inorganics, 0.00500 tons to CAD008302903
2019: 791 - Liquids with pH <= 2, 0.07500 tons to CAT080014079
2019: 181 - Other inorganic solid waste, 0.16750 tons to CAT080014079
2019: 221 - Waste oil and mixed oil, 2.20000 tons to CAD008302903
2018: 141 - Off-specification, aged or surplus inorganics, 0.03750 tons to CAD008302903
2018: 223 - Unspecified oil-containing waste, 0.07500 tons to CAD008302903
2018: 331 - Off-specification, aged or surplus organics, 8.76750 tons to CAD008302903
2018: 513 - Empty containers less than 30 gallons, 0.01800 tons to CAT080014079
2018: 791 - Liquids with pH <= 2, 0.11250 tons to CAD008302903
2018: 791 - Liquids with pH <= 2, 0.14500 tons to CAT080014079
2018: 551 - Laboratory waste chemicals, 0.00800 tons to CAD008302903
2018: 331 - Off-specification, aged or surplus organics, 1.95750 tons to CAD008302903
2018: 214 - Unspecified solvent mixture, 0.00150 tons to CAT080014079

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HAZNET - CA ***(cont.)***

2018: 331 - Off-specification, aged or surplus organics, 0.31650 tons to CAT080014079
2018: 512 - Other empty containers 30 gallons or more, 0.03750 tons to CAT080014079
2018: 221 - Waste oil and mixed oil, 0.46750 tons to CAD008302903
2017: 352 - Other organic solids, 0.0125 tons to CAD008302903
2017: 331 - Off-specification, aged or surplus organics, 0.225 tons to CAD008302903
2017: 181 - Other inorganic solid waste, 0.01 tons to CAD008302903

Facility Name : NALCO COMPANY
Facility Address : 1201 COMMERCE BLVD, AMERICAN CYN, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAC002757152
Active : Inactive
Category : STATE
Facility Types : N/R
Type : TEMPORARY
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : PO BOX 7495, BROOMFIELD, CO 800210025
Latitude : 38.19193523
Longitude : -122.27235350
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Facility Name : NALCO COMPANY
Facility Address : 1201 COMMERCE BLVD., AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAC002794198
Active : Inactive
Category : STATE
Facility Types : N/R
Type : TEMPORARY
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : PO BOX 7495, BROOMFIELD, CO 800210025

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HAZNET - CA ***(cont.)***

Latitude :	38.19193523
Longitude :	-122.27235350
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08
Facility Name :	POKKA USA INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000272287
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 945039611
Latitude :	38.19193523
Longitude :	-122.27235350
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08
Facility Name :	THE COCA-COLA COMPANY - AMCAN
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000173892
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Latitude :	38.19193523
Longitude :	-122.27235350
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HAZNET - CA ***(cont.)***

Waste Generator Details

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

State Waste :

2017: 221 - Waste oil and mixed oil, 0.8 tons to CAD008302903
2017: 331 - Off-specification, aged or surplus organics, 0.08 tons to CAD008302903
2017: 223 - Unspecified oil-containing waste, 0.1 tons to CAD008302903
2017: 791 - Liquids with pH <= 2, 0.07 tons to CAT080014079
2017: 331 - Off-specification, aged or surplus organics, 4.58 tons to CAD008302903
2016: 135 - Unspecified aqueous solution, 0.175 tons to CAT080014079
2016: 331 - Off-specification, aged or surplus organics, 1.05 tons to CAT080014079
2016: 352 - Other organic solids, 0.0105 tons to CAT080014079
2016: 221 - Waste oil and mixed oil, 0.2 tons to CAD008302903
2016: 181 - Other inorganic solid waste, 0.1 tons to CAT080014079
2016: 512 - Other empty containers 30 gallons or more, 0.02 tons to CAT080014079
2016: 551 - Laboratory waste chemicals, 0.075 tons to CAD008302903
2016: 331 - Off-specification, aged or surplus organics, 0.2 tons to CAD008302903
2016: 141 - Off-specification, aged or surplus inorganics, 0.0575 tons to CAD008302903
2016: 122 - Alkaline solution without metals pH >= 12.5, 0.2 tons to CAD008302903
2016: 331 - Off-specification, aged or surplus organics, 3.9725 tons to CAD008302903
2016: 791 - Liquids with pH <= 2, 0.0675 tons to CAT080014079
2015: 331 - Off-specification, aged or surplus organics, 0.905 tons to CAD008302903
2015: 223 - Unspecified oil-containing waste, 0.1425 tons to CAD008302903
2015: 221 - Waste oil and mixed oil, 0.1475 tons to CAD008302903
2015: 214 - Unspecified solvent mixture, 0.0015 tons to CAT080014079
2015: 512 - Other empty containers 30 gallons or more, 0.025 tons to CAT080014079
2015: 791 - Liquids with pH <= 2, 0.051 tons to CAT080014079
2014: 214 - Unspecified solvent mixture, 0.01 tons to CAD008302903
2014: 141 - Off-specification, aged or surplus inorganics, 0.015 tons to CAD008302903
2014: 791 - Liquids with pH <= 2, 0.0425 tons to CAT080014079
2014: 331 - Off-specification, aged or surplus organics, 0.925 tons to CAT080014079

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HAZNET - CA ***(cont.)***

2014: 792 - Liquids with pH <= 2 with metals, 0.025 tons to CAT080014079
2014: 512 - Other empty containers 30 gallons or more, 0.1925 tons to CAT080014079
2014: 135 - Unspecified aqueous solution, 0.08 tons to CAD008302903

HIST CHMIRS - CA

Facility Address :	1201 Commerce Blvd., American Canyon, 94503
County :	Napa County
Notified Date :	2001-12-05 11:17:59
Control Number :	01-7055
Substance 1 :	Activated sludge;;;
Quantity 1 :	0
Measure 1 :	N/R
Type 1 :	N/R
Pipeline 1 :	N/R
Vessel 1 (300 Tons) :	N/R
Substance 2 :	N/R
Quantity 2 :	N/R
Measure 2 :	N/R
Type 2 :	N/R
Pipeline 2 :	N/R
Vessel 2 (300 Tons) :	N/R
Substance 3 :	N/R
Quantity 3 :	N/R
Measure 3 :	N/R
Type 3 :	N/R
Pipeline 3 :	N/R
Vessel 3 (300 Tons) :	N/R
Description :	Caller observed responsible party performing clean up of this release. The sludge flowed into a near by storm drain which feeds to a small unnamed creek on Mazetta St. Caller advises he does not believe this creek is a source for drinking water.
Contained :	No
Water? :	Yes
Water Way :	Storm drain
Incident Date :	2001-12-05
Time :	N/R
Spill Site :	Industrial Plant
Site :	N/R
Cause :	N/R
Other Causes :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HIST CHMIRS - CA ***(cont.)***

Injuries (Y/N) :	N/R
Injuries Number :	0
Fatal (Y/N) :	N/R
Fatal Number :	0
Evacs (Y/N) :	N/R
Evacs Number :	0
Cleanup :	Responsible Party
Admin Agency :	Napa County Dept. Environmental Mgmt

Notified Date :	2001-07-03 12:01:35
Control Number :	01-3815
Substance 1 :	Fruit Juice digested solids;;;
Quantity 1 :	0
Measure 1 :	N/R
Type 1 :	N/R
Pipeline 1 :	N/R
Vessel 1 (300 Tons) :	N/R
Substance 2 :	N/R
Quantity 2 :	N/R
Measure 2 :	N/R
Type 2 :	N/R
Pipeline 2 :	N/R
Vessel 2 (300 Tons) :	N/R
Substance 3 :	N/R
Quantity 3 :	N/R
Measure 3 :	N/R
Type 3 :	N/R
Pipeline 3 :	N/R
Vessel 3 (300 Tons) :	N/R
Description :	Sledge digester foamed over.
Contained :	Yes
Water? :	Yes
Water Way :	Iragation Ditch
Incident Date :	2001-07-01
Time :	N/R
Spill Site :	Merchant/Business
Site :	N/R
Cause :	N/R
Other Causes :	N/R
Injuries (Y/N) :	N/R
Injuries Number :	0
Fatal (Y/N) :	N/R
Fatal Number :	0
Evacs (Y/N) :	N/R
Evacs Number :	0
Cleanup :	Unknown

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HIST CHMIRS - CA ***(cont.)***

Admin Agency : N/R

HIST HAZNET - CA

Facility Name : NALCO COMPANY
Facility Address : 1201 COMMERCE BLVD, AMERICAN CANYON, 94503

ID Number : CAC002757152
Last Date in Agency List : 2014-11-17

Facility Name : NALCO COMPANY
Facility Address : 1201 COMMERCE BLVD, AMERICAN CYN

ID Number : CAC002757152
Last Date in Agency List : 2014-08-20

HWG - CA

Facility Name : AMCAN BEVERAGES INC
Facility Address : 1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County : NAPA

EPA ID : CAR000271809
Status : Active
Category : FEDERAL
Type : PERMANENT
Facility Type : N/R
Mailing Address : 1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Owner Name : THE COCA-COLA COMPANY
Owner Address : 1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Operator Name : DEBI EMERY
Operator Address : 1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Latitude : 38.190548
Longitude : -122.274923

Facility Name : NALCO COMPANY
Facility Address : 1201 COMMERCE BLVD, AMERICAN CYN, CA 94503
County : NAPA

EPA ID : CAC002757152
Status : Inactive

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HWG - CA ***(cont.)***

Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	PO BOX 7495, BROOMFIELD, CO 800210025
Owner Name :	COCA COLA
Owner Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Operator Name :	DAN MOTISI
Operator Address :	10850 DOVER ST STE 900, WESTMINSTER, CO 800212654
Latitude :	38.191935
Longitude :	-122.272354

Facility Name :	NALCO COMPANY
Facility Address :	1201 COMMERCE BLVD., AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAC002794198
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	PO BOX 7495, BROOMFIELD, CO 800210025
Owner Name :	NALCO COMPANY
Owner Address :	1601 W. DIEHL RD., NAPERVILLE, IL 60563
Operator Name :	DAN MOTISI
Operator Address :	PO BOX 7495, BROOMFIELD, CO 800210025
Latitude :	38.191935
Longitude :	-122.272354

Facility Name :	POKKA USA INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAL000272287
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 945039611
Owner Name :	COCA COLA CO
Owner Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 945039611
Operator Name :	GREG SEVEY
Operator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 945039611
Latitude :	38.195282

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

HWG - CA ***(cont.)***

Longitude :	-122.272459
Facility Name :	THE COCA-COLA COMPANY - AMCAN
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000173892
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Owner Name :	THE COCA-COLA COMPANY
Owner Address :	PO BOX 1734, ATLANTA, GA 30313
Operator Name :	ALEX HAIK
Operator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Latitude :	38.192066
Longitude :	-122.272398

ICIS

Facility Name :	THE COCA COLA COMPANY
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ182518
ICIS Facility Interest ID :	3600722590
Facility UIN :	110021274949
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	38.19086
Longitude :	-122.27463
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	2086
SIC Description :	Bottled And Canned Soft Drinks

INACTIVE PCS

Issue Date :	2015-07-01

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

INACTIVE PCS ***(cont.)***

Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101936
External Permit Number :	CAZ182518
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	The Coca Cola Company
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Manifest Number :	002072852VES
Shipped Date :	2022-10-07
Updated Date :	2022-10-21
Received Date :	2022-10-19
Status :	Signed
Generator ID :	CAR000271809
Generator Name :	THE COCA COLA COMPANY
Generator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Generator Mailing :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Generator Contact :	N/R
Destination ID :	CAD008302903
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS,
Destination Mailing :	107 L.L.C. 1704 W. FIRST STREET, AZUSA, CA 91702

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Destination Address :	1704 L.L.C. 1704 W. FIRST STREET, AZUSA, CA 91702
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1993
DOT Information :	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (ETHYL ALCOHOL, WATER), 3, II
Non Waste Description :	N/R
Quantity :	1800 Pounds
Quantity Tons, Acute, Non-Acute :	0.9, 0, 0.9
Quantity Kg, Acute, Non-Acute :	0, 816.327
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	Y
Federal Code :	D001
State Code :	CA - 331

Manifest Details

Manifest Number :	002008139VES
Shipped Date :	2022-06-03
Updated Date :	2022-07-08
Received Date :	2022-06-17
Status :	Signed
Generator ID :	CAR000271809
Generator Name :	THE COCA COLA COMPANY
Generator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Generator Mailing :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Generator Contact :	N/R
Destination ID :	CAD008302903
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS,
Destination Mailing :	107 L.L.C. 1704 W. FIRST STREET, AZUSA, CA 91702
Destination Address :	1704 L.L.C. 1704 W. FIRST STREET, AZUSA, CA 91702
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Last Date in Agency List : 2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1993
DOT Information :	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (ETHYL ALCOHOL, WATER), 3, II
Non Waste Description :	N/R
Quantity :	720 Pounds
Quantity Tons, Acute, Non-Acute :	0.36, 0, 0.36
Quantity Kg, Acute, Non-Acute :	0, 326.53082
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	Y
Federal Code :	D001
State Code :	CA - 331

Manifest Details

Manifest Number :	002008140VES
Shipped Date :	2022-06-03
Updated Date :	2022-06-20
Received Date :	2022-06-09
Status :	Signed
Generator ID :	CAR000271809
Generator Name :	THE COCA COLA COMPANY
Generator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Generator Mailing :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Generator Contact :	N/R
Destination ID :	CAT080014079
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS,
Destination Mailing :	1125 L.L.C. 1125 HENSLEY STREET, RICHMOND, CA 94801
Destination Address :	1125 L.L.C. 1125 HENSLEY STREET, RICHMOND, CA 94801
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID, (CITRIC ACID, WATER), RQ
Quantity :	40 Pounds
Quantity Tons, Acute, Non-Acute :	0.02, 0, 0.02
Quantity Kg, Acute, Non-Acute :	0, 18.1406
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 331

Waste Line Number :	2
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA HAZARDOUS WASTE SOLID, (METHANOL, 2-BUTANONE)
Quantity :	450 Pounds
Quantity Tons, Acute, Non-Acute :	0.225, 0, 0.225
Quantity Kg, Acute, Non-Acute :	0, 204.08176
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 331

Manifest Details

Manifest Number :	008510671SKS
Shipped Date :	2022-05-16
Updated Date :	2022-07-21
Received Date :	2022-06-07
Status :	Signed
Generator ID :	CAR000271809
Generator Name :	Coca Cola
Generator Address :	1201 Commerce Blvd, AMERICAN CANYON, CA 94503
Generator Mailing :	1201 Commerce Blvd, American Canyon, CA 94503
Generator Contact :	Coca Cola
Destination ID :	CA0000084517
Destination Name :	Safety-Kleen Systems, Inc.
Destination Mailing :	6000 88th Street, Sacramento, CA 95828
Destination Address :	6000 88th Street, Sacramento, CA 95828
Destination Contact :	N/R
Submission Type :	DataImage5Copy

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	(AQUEOUS PARTS WASHER SOLUTION) NONE, NON-RCRA HAZARDOUS WASTE, LIQUIDS, N/A, NONE
Quantity :	75 Gallons
Quantity Tons, Acute, Non-Acute :	0.31276062, 0, 0.31276062
Quantity Kg, Acute, Non-Acute :	0, 283.6833
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 134

Manifest Details

Manifest Number :	002077697VES
Shipped Date :	2022-04-19
Updated Date :	2022-06-27
Received Date :	2022-05-02
Status :	Corrected
Generator ID :	CAR000271809
Generator Name :	THE COCA COLA COMPANY
Generator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Generator Mailing :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Generator Contact :	N/R
Destination ID :	CAD008302903
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS,
Destination Mailing :	107 L.L.C. 1704 W. FIRST STREET, AZUSA, CA 91702
Destination Address :	1704 L.L.C. 1704 W. FIRST STREET, AZUSA, CA 91702
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1993
DOT Information :	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (ETHYL ALCOHOL, WATER), 3, II
Non Waste Description :	N/R
Quantity :	1167 Pounds
Quantity Tons, Acute, Non-Acute :	0.5835, 0, 0.5835
Quantity Kg, Acute, Non-Acute :	0, 529.2521
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	Y
Federal Code :	D001
State Code :	CA - 331

Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN1824
DOT Information :	UN1824, WASTE SODIUM HYDROXIDE SOLUTION, (SODIUM HYDROXIDE, WATER), 8, III
Non Waste Description :	N/R
Quantity :	400 Pounds
Quantity Tons, Acute, Non-Acute :	0.2, 0, 0.2
Quantity Kg, Acute, Non-Acute :	0, 181.406
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 122

Waste Line Number :	3
Is DOT Hazardous :	Y
DOT ID Number :	NA3077
DOT Information :	NA3077, HAZARDOUS WASTE, SOLID, n.o.s., (DEBRIS WITH ETHANOL, ISOPROPANOL), 9, III
Non Waste Description :	N/R
Quantity :	62 Pounds
Quantity Tons, Acute, Non-Acute :	0.031, 0, 0.031
Quantity Kg, Acute, Non-Acute :	0, 28.117931
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D035, F003, F005
State Code :	CA - 352

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Line Number :	4
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID, (OIL)
Quantity :	450 Pounds
Quantity Tons, Acute, Non-Acute :	0.225, 0, 0.225
Quantity Kg, Acute, Non-Acute :	0, 204.08176
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 223

Waste Line Number :	5
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID, (GLYCEROL ESTER OF LAURIC ACID, CITRIC ACID)
Quantity :	330 Pounds
Quantity Tons, Acute, Non-Acute :	0.165, 0, 0.165
Quantity Kg, Acute, Non-Acute :	0, 149.65996
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 551

NPDES - CA

Facility Name :	The Coca Cola Company
Facility Address :	1201 Commerce Blvd, American Canyon, 94503
County :	Napa
Effective Date :	2004-08-17
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I018966
RM Status :	Active
Reg Meas ID :	182518
Reg Meas Type :	Enrollee

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

NPDES - CA ***(cont.)***

Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	The Coca Cola Company
Discharger Address :	1201 Commerce Blvd, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101936
External Permit Number :	CAZ182518
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	The Coca Cola Company
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_LQG

Facility Name :	AMCAN BEVERAGES INC
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2022-02-22
EPA ID :	CAR000271809
Mailing Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

RCRA_LQG ***(cont.)***

Contact :	JACOB BROTHERS
Contact Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Contact Country :	US
Contact Telephone :	707-556-1230
Contact Email :	JABROTHERS@COCA-COLA.COM
EPA Region :	09
Land Type :	Private
Source Type :	Annual/Biennial Report updated with Notification
Classification :	Large Quantity Generator

Description :

Handlers that generate 1,000 kg or more of hazardous waste during any calendar month; or generate more than 1 kg of acutely hazardous waste during any calendar month; or generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1 kg of acutely hazardous waste at any time; or generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Last Date in Agency List : 2023-01-23

Owner/Operator Summary

Owner/Operator Name :	THE COCA-COLA COMPANY
Owner/Operator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
Owner/Operator Country :	US
Owner/Operator Telephone :	707-556-1217
Owner/Operator Email :	DEMERY@COCA-COLA.COM
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Operator
Owner/Operator Start Date :	2004-01-01
Owner/Operator End Date :	N/R

Owner/Operator Name :	THE COCA-COLA COMPANY
Owner/Operator Address :	1734, ATLANTA, GA 30313
Owner/Operator Country :	US
Owner/Operator Telephone :	707-556-1217
Owner/Operator Email :	DEMERY@COCA-COLA.COM
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Owner
Owner/Operator Start Date :	2004-01-01

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

RCRA_LQG ***(cont.)***

Owner/Operator End Date : N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Historical Generators

Date Form Received by Agency :	2022-02-03
Facility Name :	AMCAN BEVERAGES INC
Classification :	Large Quantity Generator
Date Form Received by Agency :	2022-02-01
Facility Name :	AMCAN BEVERAGES INC
Classification :	Large Quantity Generator
Date Form Received by Agency :	2020-02-07
Facility Name :	AMCAN BEVERAGES INC
Classification :	Large Quantity Generator
Date Form Received by Agency :	2020-02-06
Facility Name :	AMCAN BEVERAGES INC
Classification :	Large Quantity Generator
Date Form Received by Agency :	2018-02-12
Facility Name :	AMCAM BEVERAGES INC
Classification :	Small Quantity Generator

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

RCRA_LQG ***(cont.)***

Date Form Received by Agency :	2017-04-03
Facility Name :	AMCAM BEVERAGES INC
Classification :	Small Quantity Generator

Hazardous Waste Summary

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Waste Code / Name :	122 - Alkaline solution without metals (pH > 12.5) 141 - Off-specification, aged, or surplus inorganics 181 - Other inorganic solid waste 221 - Waste oil and mixed oil 223 - Unspecified oil-containing waste 331 - Off-specification, aged, or surplus organics 343 - Unspecified organic liquid mixture 352 - Other organic solids 791 - Liquids with pH < 2 792 - Liquids with pH < 2 with metals

Notices of Violations Summary

Regulation Violated :	N

RCRA_SQG

Facility Name :	THE COCA-COLA COMPANY - AMCAN
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
County :	NAPA
Date Form Received by Agency :	2018-02-07
EPA ID :	CAL000173892
Mailing Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Contact :	JERROD CLARK
Contact Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Contact Country :	US
Contact Telephone :	707-556-1230
Contact Email :	JERCLARK@COCA-COLA.COM
EPA Region :	09
Land Type :	Private
Source Type :	Annual/Biennial Report updated with Notification
Classification :	Small Quantity Generator

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

RCRA_SQG ***(cont.)***

Description : Handlers that generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Last Date in Agency List : 2023-01-23

Owner/Operator Summary

Owner/Operator Name :	THE COCA-COLA COMPANY
Owner/Operator Address :	1734, ATLANTA, GA 30313
Owner/Operator Country :	US
Owner/Operator Telephone :	404-676-2121
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Owner
Owner/Operator Start Date :	2004-01-01
Owner/Operator End Date :	N/R

Owner/Operator Name :	THE COCA-COLA COMPANY
Owner/Operator Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503-9611
Owner/Operator Country :	US
Owner/Operator Telephone :	707-556-1217
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Operator
Owner/Operator Start Date :	2004-01-01
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

RCRA_SQG ***(cont.)***

Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Hazardous Waste Summary
Waste Code / Name :
221 - Waste oil and mixed oil
223 - Unspecified oil-containing waste
331 - Off-specification, aged, or surplus organics
791 - Liquids with pH < 2
D001 - IGNITABLE WASTE
D002 - CORROSIVE WASTE
D007 - CHROMIUM
D009 - MERCURY
D011 - SILVER
D035 - METHYL ETHYL KETONE

Notices of Violations Summary
Regulation Violated : N

RFR - CA

Facility Name :	The Coca Cola Company
Facility Address :	1201 Commerce Blvd, American Canyon, CA 94503
County :	Napa
Effective Date :	2004-08-17
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I018966
SIC/NAICS :	2086
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Bottled and Canned Soft Drinks and Carbonated Waters
Region :	2
Design Flow :	N/R
Major/Minor :	N/R

Map Id: 8
Direction: N
Distance: 0.383 mi., 2025 ft.
Elevation: 29 ft.
Relative: Higher

Site Name : THE COCA COLA COMPANY | AMCAN BEVERAGES INC | THE COCA-COLA COMPANY - AMCAN
1201 COMMERCE BLVD
AMERICAN CANYON | American Canyon | AMERICAN CYN, CA

Database(s) : [BRS, CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_LQG, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317885
EPA ID: N/R

RFR - CA ***(cont.)***

Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	The Coca Cola Company
Agency Address :	1201 Commerce Blvd, American Canyon, CA 94503
Latitude :	38.19086
Longitude :	-122.27463
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	THE COCA COLA COMPANY
Facility Address :	1201 COMMERCE BLVD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ182518
Permittee Name :	The Coca Cola Company
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	2086
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19083
Longitude :	-122.27454
Last Date in Agency List :	2022-12-13

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER]

Envirosite ID: 52317886
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	GL MEZZETTA
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, 94503
Site ID :	470102
EI ID :	227215
EI Description :	Industrial Facility Storm Water
Latitude :	38.193870
Longitude :	-122.275330
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Facility Name :	G. L. MEZZETTA, INC.
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, 94503
Site ID :	393627
EI ID :	10171109
EI Description :	Chemical Storage Facilities
Latitude :	38.192780
Longitude :	-122.276970
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Site ID :	393627
EI ID :	10171109
EI Description :	Hazardous Waste Generator
Latitude :	38.192780
Longitude :	-122.276970
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	GL MEZZETTA
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S227215
Agency Name :	GL MEZZETA INC
Last Date in Agency List :	2022-12-28

Facility Name :	GL MEZZETTA PLANT ADDITION
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

CIWQS - CA ***(cont.)***

County :	NAPA
Place ID :	S228849
Agency Name :	GL MEZZETA INC
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	GL MEZZETTA
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110070087461
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	THE GEOGRAPHIC COORDINATE DETERMINATION METHOD BASED ON ADDRESS MATCHING
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	153
Derived Tribes :	Lytton Rancheria of California - 16.8 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NNN
NPDES IDs :	CAZ182447
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

ECHO ***(cont.)***

CWA SICS :	2035
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2035
Facility NAICS :	311421 - Fruit and Vegetable Canning
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19278
Longitude :	-122.27697
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	GL MEZZETTA

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

FRS ***(cont.)***

Facility Address : 105 MEZZETTA CT, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110070087461
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description : The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Source Description : The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.
OSHA-OIS

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

FRS ***(cont.)***

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	CA-CERS - 10171109 CA-ENVIROVIEW - 118591 EIS - 1354811 ICIS - CAZ182447 OSHA-OIS - 341513653 OSHA-OIS - 341688752 RCRAINFO - CAL000145477
Facility Name :	G L MEZZETTA INC
Facility Address :	105 MEZZETTA COURT, AMERICAN CANYON, CA 94503-9604
County :	NAPA

Site Details

Registry ID :	110013828527
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2018-07-05

Source Description

Source Description :	The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

FRS ***(cont.)***

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Source Description :

The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.

FRS Environmental Interest

Source and System ID :	CA-CERS - 10171109 CA-ENVIROVIEW - 118591 EIS - 1354811
Facility Name :	G. L. MEZZETTA, INC.
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110055854204
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2014-03-25

Source Description

Source Description :

The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : CA-CERS - 10171109

HAZNET - CA

Facility Name : CRYSTAL GEYSER WAREHOUSE
Facility Address : 105 MEZZETTA CT STE 100, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAL000314089
Active : Inactive
Category : STATE
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 501 WASHINGTON ST, CALISTOGA, CA 94515
Latitude : 38.19213690
Longitude : -122.27580809
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Waste Generator Details
State Waste : 2008: 213 - Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.), 0.05 tons to NVD980895338
2006: 221 - Waste oil and mixed oil, 0.133 tons to NVD980895338
2006: 343 - Unspecified organic liquid mixture, 0.15 tons to NVD980895338
2006: 331 - Off-specification, aged or surplus organics, 0.0495 tons to NVD980895338

Facility Name : GL MEZZETTA INC
Facility Address : 105 MEZZETTA CT, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAL000145477
Active : Active
Category : STATE
Facility Types : N/R

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

HAZNET - CA ***(cont.)***

Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	105 MEZZETTA COURT, AMERICAN CANYON, CA 945039604
Latitude :	38.19213690
Longitude :	-122.27580809
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :

2017: 512 - Other empty containers 30 gallons or more, 0.075 tons to CAD059494310
2017: 222 - Oil/water separation sludge, 0.834 tons to CAD980887418
2016: 352 - Other organic solids, 0.05 tons to CAD059494310
2015: 222 - Oil/water separation sludge, 0.6255 tons to CAD980887418
2012: 214 - Unspecified solvent mixture, 0.22 tons to CAD980887418
2012: 331 - Off-specification, aged or surplus organics, 0.03 tons to CAD059494310
2011: 331 - Off-specification, aged or surplus organics, 0.03 tons to CAD059494310

HIST CHMIRS - CA

Facility Address :	105 Mezzetta Court, American Canyon, 94503
County :	Napa County
Notified Date :	2008-06-09 14:37:00
Control Number :	08-4111
Substance 1 :	Unspecified
Quantity 1 :	Unknown
Measure 1 :	Gal(s)
Type 1 :	UNSPECIFIED
Pipeline 1 :	N/R
Vessel 1 (300 Tons) :	N/R
Substance 2 :	N/R
Quantity 2 :	N/R
Measure 2 :	N/R
Type 2 :	N/R
Pipeline 2 :	N/R
Vessel 2 (300 Tons) :	N/R
Substance 3 :	N/R
Quantity 3 :	N/R
Measure 3 :	N/R
Type 3 :	N/R
Pipeline 3 :	N/R

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

HIST CHMIRS - CA ***(cont.)***

Vessel 3 (300 Tons) :	N/R

Description :

A breach in a secondary treatment pond is possibly the cause of this release, caller states the exact cause is still under investigation. Caller estimates a possible release of over 1000 gallons over an extended period of time. Caller states it looks like grey bio-waste. The source seems to originate in the incorporated area of the City of American Canyon, flowing into the Unincorporated area of Napa County. Caller states that as of today the release is secured.

Contained :	Yes
Water? :	Yes
Water Way :	Creek - The Green Island Vineyard Creek
Incident Date :	2008-06-06
Time :	1500
Spill Site :	Industrial Plant,Other
Site :	Creek - The Green Island Vineyard Creek
Cause :	N/R
Other Causes :	N/R
Injuries (Y/N) :	N/R
Injuries Number :	0
Fatal (Y/N) :	N/R
Fatal Number :	0
Evacs (Y/N) :	N/R
Evacs Number :	0
Cleanup :	Responsible Party
Admin Agency :	N/R

HWG - CA

Facility Name :	CRYSTAL GEYSER WAREHOUSE
Facility Address :	105 MEZZETTA CT STE 100, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000314089
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	501 WASHINGTON ST, CALISTOGA, CA 94515
Owner Name :	CRYSTAL GEYSER WATER COMPANY
Owner Address :	501 WASHINGTON ST, CALISTOGA, CA 94515
Operator Name :	ERNESTO OLIVERAS
Operator Address :	105 MEZZETTA CT STE 100, AMERICAN CANYON, CA 945039604
Latitude :	38.193861
Longitude :	-122.275327

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

HWG - CA ***(cont.)***

Facility Name :	GL MEZZETTA INC
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000145477
Status :	Active
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	105 MEZZETTA COURT, AMERICAN CANYON, CA 945039604
Owner Name :	GL MEZZETTA INC
Owner Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 945039604
Operator Name :	HAROLD YEE
Operator Address :	105 MEZZETTA COURT, AMERICAN CANYON, CA 94503
Latitude :	38.193861
Longitude :	-122.275327

ICIS

Facility Name :	GL MEZZETTA
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ182447
ICIS Facility Interest ID :	3600722559
Facility UIN :	110070087461
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.19387
Longitude :	-122.27533
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	2035
SIC Description :	Pickles, Sauces, And Salad Dressings

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

INACTIVE PCS ***(cont.)***

Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101909
External Permit Number :	CAZ182447
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	GL Mezzeta Inc
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

NPDES - CA

Facility Name :	GL Mezzetta
Facility Address :	105 Mezzetta Ct, American Canyon, 94503
County :	Napa
Effective Date :	1998-01-28
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I013731
RM Status :	Active
Reg Meas ID :	182447
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	GL Mezzeta Inc
Discharger Address :	105 Mezzetta Ct, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101909
External Permit Number :	CAZ182447
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	GL Mezzeta Inc
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_NONGEN

Facility Name :	GL MEZZETTA INC
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503-9604
County :	NAPA
Date Form Received by Agency :	1997-05-05
EPA ID :	CAL000145477
Mailing Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503-9604
Contact :	HAROLD YEE
Contact Address :	105 MEZZETTA COURT, AMERICAN CANYON, CA 94503
Contact Country :	N/R
Contact Telephone :	707-648-1050
Contact Email :	HYEE@MEZZETTA.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100 AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Owner/Operator Summary

Owner/Operator Name :	GL MEZZETTA INC
Owner/Operator Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503-9604
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-648-1050
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	HAROLD YEE
Owner/Operator Address :	105 MEZZETTA COURT, AMERICAN CANYON, CA 94503
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-648-1050
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

RFR - CA

Facility Name :	GL Mezzetta
Facility Address :	105 Mezzetta Ct, American Canyon, CA 94503
County :	Napa
Effective Date :	1998-01-28
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I013731
SIC/NAICS :	2035
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Pickled Fruits and Vegetables, Vegetable Sauces and Seasonings, and Salad Dressings
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	GL Mezzeta Inc
Agency Address :	105 Mezzetta Ct, American Canyon, CA 94503
Latitude :	38.19387
Longitude :	-122.27533
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	GL MEZZETTA
Facility Address :	105 MEZZETTA CT, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ182447
Permittee Name :	GL Mezzeta Inc
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	N/R
Expiration Date :	2020-06-30

Map Id: 9
Direction: NNW
Distance: 0.442 mi., 2335 ft.
Elevation: 21 ft.
Relative: Higher

Site Name : GL MEZZETTA | CRYSTAL GEYSER WAREHOUSE | GL MEZZETTA PLANT ADDITION
105 MEZZETTA CT | 105 MEZZETTA COURT | 105 MEZZETTA CT STE 100
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317886
EPA ID: N/R

STORMWATER ***(cont.)***

EPA Region :	09
SIC Code :	2035
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19278
Longitude :	-122.27697
Last Date in Agency List :	2022-12-13

Map Id: 10
Direction: NE
Distance: 0.446 mi., 2354 ft.
Elevation: N/R
Relative: N/R

Site Name : West Napa fault
38.18859, -122.263829
CA

Database(s) : [SEISMIC - CA]

Envirosite ID: 51587513
EPA ID: N/R

SEISMIC - CA

Fault ID :	36
Fault Age :	HOL
Fault Source :	Bryant (1982g)
Zone Name :	West Napa fault zone
Line Type :	solid
Line Value :	1
JEN ID :	152
Section Number :	36b
Section Name :	Napa County Airport section
Date :	N/R
Rule ID :	7
Shape Length :	852.775812195

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER]

Envirosite ID: 52317887
EPA ID: N/R

CIWQS - CA

Facility Name :	WALLABY YOGURT COMPANY LLC
Facility Address :	110 MEZZETTA COURT, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S851337
Agency Name :	WALLABY YOGURT COMPANY LLC
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	WALLABY YOGURT COMPANY
Facility Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	N/R
FIPS Code :	N/R
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

ECHO ***(cont.)***

CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	N/R
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2019-07-15

Facility Name :	WALLABY YOGURT COMPANY
Facility Address :	110 MEZZETTA CT B, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

ECHO ***(cont.)***

Last Inspection Date :	N/R
Registry ID :	110055675381
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 16.8 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NNN
NPDES IDs :	CAZ480602
CWA Permit Types :	Minor
CWA Compliance Tracking :	Off
CWA NAICS :	N/R
CWA SICS :	2026
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Terminated Permit
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2026

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

ECHO ***(cont.)***

Facility NAICS :	56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19295
Longitude :	-122.27464
Last Date in Agency List :	2023-01-16

Facility Name :	WALLABY YOGURT COMPANY LLC
Facility Address :	110 MEZZETTA CT B, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	N/R
Registry ID :	110055675381
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

ECHO ***(cont.)***

Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____U_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 16.8 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NNN
NPDES IDs :	CAZ480602
CWA Permit Types :	Minor
CWA Compliance Tracking :	Off
CWA NAICS :	N/R
CWA SICS :	2026
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Terminated Permit
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____U
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2026
Facility NAICS :	56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

ECHO ***(cont.)***

NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19295
Longitude :	-122.27464
Last Date in Agency List :	2021-02-17

FRS

Facility Name :	WALLABY YOGURT COMPANY
Facility Address :	110 MEZZETTA CT B, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110055675381
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description : The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

FRS ***(cont.)***

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID : CA-CERS - 10172567
CA-ENVIROVIEW - 170142
ICIS - CAZ480602
RCRAINFO - CAC003007277

Facility Name : WALLABY YOGURT COMPANY LLC
Facility Address : 110 MEZZETTA CT B, AMERICAN CANYON, CA 94503
County : NAPA

Site Details

Registry ID : 110055675381
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-05-03

Source Description

Source Description : The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

FRS ***(cont.)***

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	CA-CERS - 10172567 CA-ENVIROVIEW - 170142 ICIS - CAZ480602 RCRAINFO - CAC003007277

HAZNET - CA

Facility Name :	WALLABY YOGURT COMPANY
Facility Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAC003007277
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

HAZNET - CA ***(cont.)***

Latitude :	38.19197852
Longitude :	-122.27569593
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :

2019: 135 - Unspecified aqueous solution, 1.26000 tons to CAD008488025
2019: 141 - Off-specification, aged or surplus inorganics, 1.45950 tons to CAD008488025
2019: 791 - Liquids with pH <= 2, 1.87650 tons to CAD008488025
2019: 181 - Other inorganic solid waste, 0.28000 tons to CAD028409019
2019: 122 - Alkaline solution without metals pH >= 12.5, 2.31850 tons to CAD008488025
2019: 791 - Liquids with pH <= 2, 0.41700 tons to CAD008488025
2019: 551 - Laboratory waste chemicals, 0.04250 tons to CAD028409019
2019: 123 - Unspecified alkaline solution, 1.45950 tons to CAD008488025
2019: 331 - Off-specification, aged or surplus organics, 0.16500 tons to CAD028409019

Facility Name :	WALLABY YOGURT COMPANY
Facility Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000382838
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 945030000
Latitude :	38.19294900
Longitude :	-122.27460750
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Generator EPA ID :	CAL000413258
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

HAZNET - CA ***(cont.)***

Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 945030000
Latitude :	38.19294900
Longitude :	-122.27460750
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HWG - CA

Facility Name :	WALLABY YOGURT COMPANY
Facility Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAC003007277
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Owner Name :	WALLABY YOGURT COMPANY
Owner Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Operator Name :	TIBI MOLNAR
Operator Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Latitude :	38.191979
Longitude :	-122.275696

Facility Name :	WALLABY YOGURT COMPANY
Facility Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000382838
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 945030000
Owner Name :	JERRY CHOU
Owner Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 945030000
Operator Name :	RIE SUGISAWA
Operator Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 94503
Latitude :	38.19295
Longitude :	-122.27464
EPA ID :	CAL000413258
Status :	Inactive

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

HWG - CA ***(cont.)***

Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 945030000
Owner Name :	WWF OPERATING COMPANY
Owner Address :	12002 AIRPORT WAY, BROOMFIELD, CO 80021
Operator Name :	RIE SUGISAWA
Operator Address :	110 MEZZETTA CT STE B, AMERICAN CANYON, CA 94503
Latitude :	38.192949
Longitude :	-122.274608

ICIS

Facility Name :	WALLABY YOGURT COMPANY LLC
Facility Address :	110 MEZZETTA COURT, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ480602
ICIS Facility Interest ID :	3600743815
Facility UIN :	110055675381
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.193066
Longitude :	-122.274549
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	2026
SIC Description :	Fluid Milk

INACTIVE PCS

Issue Date :	2017-07-25
Original Issue Date :	2017-07-25
Effective Date :	2017-07-25
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	2019-06-06
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601126105
External Permit Number :	CAZ480602
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Terminated

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

INACTIVE PCS ***(cont.)***

Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Wallaby Yogurt Company LLC
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Manifest Number :	020350535JJK
Shipped Date :	2019-04-10
Updated Date :	2019-11-14
Received Date :	2019-04-11
Status :	Signed
Generator ID :	CAC003007277
Generator Name :	WALLABY YOGURT COMPANY
Generator Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Generator Mailing :	110 MEZZETTA COURT SUITE B ATT: TIBI MOLNAR, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	CAD008488025
Destination Name :	PHIBRO-TECH INC
Destination Mailing :	8851 DICE ROAD CA90670 CA037US 8851, SANTA FE SPRINGS, CA 90670
Destination Address :	8851 DICE ROAD, SANTA FE SPRINGS, CA 90670-2515
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN2031

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

MANIFEST EPA ***(cont.)***

DOT Information :	UN2031, WASTE NITRIC ACID 8, PGII (AC-55-5)
Non Waste Description :	N/R
Quantity :	250 Gallons
Quantity Tons, Acute, Non-Acute :	1.0425354, 0, 1.0425354
Quantity Kg, Acute, Non-Acute :	0, 945.61096
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN2031
DOT Information :	UN2031, WASTE NITRIC ACID 8, PGII (ULTRASIL 78)
Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Waste Line Number :	3
Is DOT Hazardous :	Y
DOT ID Number :	UN2693
DOT Information :	UN2693, BISULFITES , AQUEOUS SOLUTIONS, N.O.S. 8, PG III (FILTRAPURE FG-BS)
Non Waste Description :	N/R
Quantity :	100 Gallons
Quantity Tons, Acute, Non-Acute :	0.41701418, 0, 0.41701418
Quantity Kg, Acute, Non-Acute :	0, 378.2444
Management Method :	H121 - NEUTRALIZATION ONLY
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Waste Line Number :	4
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON RCRA HAZARDOUS WASTE LIQUID (STER-BAC-QUAT)
Quantity :	150 Gallons
Quantity Tons, Acute, Non-Acute :	0.62552124, 0, 0.62552124
Quantity Kg, Acute, Non-Acute :	0, 567.3666
Management Method :	H121 - NEUTRALIZATION ONLY
Is EPA Waste :	N

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Federal Code :	N/R
State Code :	CA - 135
Waste Line Number :	5
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON RCRA HAZARDOUS WASTE LIQUID (ULTRESIL 02)
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H121 - NEUTRALIZATION ONLY
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 135

Manifest Details

Manifest Number :	020350536JJK
Shipped Date :	2019-04-10
Updated Date :	2019-11-13
Received Date :	2019-04-11
Status :	Signed
Generator ID :	CAC003007277
Generator Name :	WALLABY YOGURT COMPANY
Generator Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Generator Mailing :	110 MEZZETTA COURT SUITE B TIBI MOLNAR, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	CAD008488025
Destination Name :	PHIBRO-TECH INC
Destination Mailing :	8851 DICE ROAD CA90670 CA037US 8851, SANTA FE SPRINGS, CA 90670
Destination Address :	8851 DICE ROAD, SANTA FE SPRINGS, CA 90670-2515
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN2672
DOT Information :	UN2672, WASTE AMMONIA SOLUTION,8, PGIII

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 122

Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN1760
DOT Information :	UN1760, WASTE CORROSIVE LIQUIDS, N.O.S. 8, PGIII (BOILERMATE 1200S)
Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 122

Waste Line Number :	3
Is DOT Hazardous :	Y
DOT ID Number :	UN3266
DOT Information :	UN3266, WASTE CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S 8, PGIII (BOOST 3201)
Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 122

Waste Line Number :	4
Is DOT Hazardous :	Y
DOT ID Number :	UN1824
DOT Information :	UN1824, WASTE SODIUM HYDROXIDE SOLUTION 8, PG II (CONQUEST)
Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 122
Waste Line Number :	5
Is DOT Hazardous :	Y
DOT ID Number :	UN3266
DOT Information :	UN3266, WASTE CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S 8, PGII (ENFORCE LP)
Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 122

Manifest Details

Manifest Number :	020350537JJK
Shipped Date :	2019-04-10
Updated Date :	2019-11-08
Received Date :	2019-04-11
Status :	Signed
Generator ID :	CAC003007277
Generator Name :	WALLABY YOGURT COMPANY
Generator Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Generator Mailing :	110 MEZZETTA COURT SUITE B ATT: TIBI MOLNAR, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	CAD008488025
Destination Name :	PHIBRO-TECH INC
Destination Mailing :	8851 DICE ROAD CA90670 CA037US 8851, SANTA FE SPRINGS, CA 90670
Destination Address :	8851 DICE ROAD, SANTA FE SPRINGS, CA 90670-2515
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN3265
DOT Information :	UN3265, WASTE CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. 8, PG III (ULTRSIL MP)
Non Waste Description :	N/R
Quantity :	100 Gallons
Quantity Tons, Acute, Non-Acute :	0.41701418, 0, 0.41701418
Quantity Kg, Acute, Non-Acute :	0, 378.2444
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN3265
DOT Information :	UN3265, WASTE CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. 8, PG III (CHEMQUEST 3506)
Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Manifest Details

Manifest Number :	020350538JJK
Shipped Date :	2019-04-10
Updated Date :	2019-11-08
Received Date :	2019-04-11
Status :	Signed
Generator ID :	CAC003007277
Generator Name :	WALLABY YOGURT COMPANY
Generator Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Generator Mailing :	110 MEZZETTA COURT SUITE B ATT: TIBI MOLNAR, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	CAD008488025
Destination Name :	PHIBRO-TECH INC

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Destination Mailing :	8851 DICE ROAD CA90670 CA037US 8851, SANTA FE SPRINGS, CA 90670
Destination Address :	8851 DICE ROAD, SANTA FE SPRINGS, CA 90670-2515
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN3093
DOT Information :	UN3093, WASTE CORROSIVE LIQUIDS, OXIDIZING , N.O.S. 8 (5.1), PG II (BOOST 3200)
Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H121 - NEUTRALIZATION ONLY
Is EPA Waste :	Y
Federal Code :	D001
State Code :	CA - 135

Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN3109
DOT Information :	UN3109, WASTE ORGANIC PEROXIDE TYPE F, LIQUID 5.2 (OXONIA ACTIVE)
Non Waste Description :	N/R
Quantity :	100 Gallons
Quantity Tons, Acute, Non-Acute :	0.41701418, 0, 0.41701418
Quantity Kg, Acute, Non-Acute :	0, 378.2444
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D001, D002
State Code :	CA - 141

Manifest Details

Manifest Number :	020350540JJK
Shipped Date :	2019-04-10
Updated Date :	2019-04-30

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Received Date :	2019-04-11
Status :	Signed
Generator ID :	CAC003007277
Generator Name :	WALLABY YOGURT COMPANY
Generator Address :	110 MEZZETTA COURT SUITE B, American Canyon, CA 94503
Generator Mailing :	110 MEZZETTA COURT SUITE B, American Canyon, CA 94503
Generator Contact :	N/R
Destination ID :	CAD028409019
Destination Name :	CROSBY & OVERTON
Destination Mailing :	1630 W. 17TH STREET CA90813 CA037US 1630, LONG BEACH, CA 90813
Destination Address :	1630 W. 17TH STREET, LONG BEACH, CA 90813-0000
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1719
DOT Information :	UN1719, Waste Caustic alkali liquids n.o.s., 8, III
Non Waste Description :	N/R
Quantity :	60 Pounds
Quantity Tons, Acute, Non-Acute :	0.03, 0, 0.03
Quantity Kg, Acute, Non-Acute :	0, 27.2109
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 551

Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN2672
DOT Information :	UN2672, Waste Ammonia solution, 8, III
Non Waste Description :	N/R
Quantity :	25 Pounds
Quantity Tons, Acute, Non-Acute :	0.0125, 0, 0.0125
Quantity Kg, Acute, Non-Acute :	0, 11.337875
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 551

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Line Number :	3
Is DOT Hazardous :	Y
DOT ID Number :	UN1760
DOT Information :	UN1760, Waste Corrosive liquids n.o.s, 8, III
Non Waste Description :	N/R
Quantity :	60 Pounds
Quantity Tons, Acute, Non-Acute :	0.03, 0, 0.03
Quantity Kg, Acute, Non-Acute :	0, 27.2109
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 181

Waste Line Number :	4
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON RCRA HAZARDOUS WASTE SOLID
Quantity :	500 Pounds
Quantity Tons, Acute, Non-Acute :	0.25, 0, 0.25
Quantity Kg, Acute, Non-Acute :	0, 226.7575
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 181

Waste Line Number :	5
Is DOT Hazardous :	Y
DOT ID Number :	UN2920
DOT Information :	UN2920, Waste Corrosive liquids, flammable n.o.s., 8, I
Non Waste Description :	N/R
Quantity :	50 Gallons
Quantity Tons, Acute, Non-Acute :	0.20850709, 0, 0.20850709
Quantity Kg, Acute, Non-Acute :	0, 189.1222
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D001, D002
State Code :	CA - 331

NPDES - CA

Facility Name :	Wallaby Yogurt Company LLC
Facility Address :	110 Mezzetta Court, American Canyon, 94503
County :	Napa

Effective Date :	2017-07-25
Adoption Date :	N/R

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

NPDES - CA ***(cont.)***

Expiration Date :	N/R
Termination Date :	2019-06-06
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I027272
RM Status :	Terminated
Reg Meas ID :	480602
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Wallaby Yogurt Company LLC
Discharger Address :	110 Mezzetta Court Suite B, American Canyon, California 94503
Last Date in Agency List :	2022-05-17

PCS FACILITY

Issue Date :	2017-07-25
Original Issue Date :	2017-07-25
Effective Date :	2017-07-25
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601126105
External Permit Number :	CAZ480602
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Wallaby Yogurt Company LLC
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2019-05-07

RCRA_NONGEN

Facility Name :	WALLABY YOGURT COMPANY
Facility Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Date Form Received by Agency :	2019-03-26
EPA ID :	CAC003007277
Mailing Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Contact :	TIBI MOLNAR
Contact Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Contact Country :	N/R
Contact Telephone :	707-312-7342
Contact Email :	RSONDUR@PATRIOTENVIRONMENTAL.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	TIBI MOLNAR
Owner/Operator Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-312-7342
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	WALLABY YOGURT COMPANY
Owner/Operator Address :	110 MEZZETTA COURT SUITE B, AMERICAN CANYON, CA 94503
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-312-7342
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	Y
Underground Injection Activity :	N

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RFR - CA

Facility Name :	Wallaby Yogurt Company LLC
Facility Address :	110 Mezzetta Court, American Canyon, CA 94503
County :	Napa
Effective Date :	2017-07-25
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I027272
SIC/NAICS :	2026
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Fluid Milk
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Wallaby Yogurt Company LLC
Agency Address :	110 Mezzetta Court Suite B, American Canyon, CA 94503
Latitude :	38.193066
Longitude :	-122.274549
Last Date in Agency List :	2019-04-22

Map Id: 11
Direction: N
Distance: 0.467 mi., 2467 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : WALLABY YOGURT COMPANY LLC
110 MEZZETTA COURT | 110 MEZZETTA COURT SUITE B | 110 MEZZETTA CT B AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 52317887
EPA ID: N/R

STORMWATER

Facility Name :	WALLABY YOGURT COMPANY LLC
Facility Address :	110 MEZZETTA COURT, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ480602
Permittee Name :	Wallaby Yogurt Company LLC
Permit Status :	Terminated
Permit Issuing Name :	State
Issued Date :	2017-07-25
Effective Date :	2017-07-25
Termination Date :	2019-06-06
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	2026
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19295
Longitude :	-122.27464
Last Date in Agency List :	2022-12-13

Map Id: 12
Direction: ENE
Distance: 0.502 mi., 2651 ft.
Elevation: N/R
Relative: N/R

Site Name : West Napa fault
38.183678, -122.258995
CA

Database(s) : [SEISMIC - CA]

Envirosite ID: 51614145
EPA ID: N/R

SEISMIC - CA

Fault ID :	36
Fault Age :	HOL
Fault Source :	Bryant (1982g)
Zone Name :	West Napa fault zone
Line Type :	dotted
Line Value :	3
JEN ID :	152
Section Number :	36b
Section Name :	Napa County Airport section
Date :	N/R

Map Id: 12
Direction: ENE
Distance: 0.502 mi., 2651 ft.
Elevation: N/R
Relative: N/R

Site Name : West Napa fault
38.183678, -122.258995
CA

Database(s) : [SEISMIC - CA] ***(cont.)***

Envirosite ID: 51614145
EPA ID: N/R

SEISMIC - CA ***(cont.)***

Rule ID :	8
Shape Length :	672.765672339

Map Id: 13
Direction: NNE
Distance: 0.605 mi., 3195 ft.
Elevation: N/R
Relative: N/R

Site Name : West Napa fault
38.194753, -122.270446
CA

Database(s) : [SEISMIC - CA]

Envirosite ID: 51602863
EPA ID: N/R

SEISMIC - CA

Fault ID :	36
Fault Age :	HOL
Fault Source :	Bryant (1982g)
Zone Name :	West Napa fault zone
Line Type :	solid
Line Value :	1
JEN ID :	152
Section Number :	36b
Section Name :	Napa County Airport section
Date :	N/R
Rule ID :	35
Shape Length :	753.891785247

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER]

Envirosite ID: 315834
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	PURPLE BRANDS, LLC
Facility Address :	205 JIM OSWALT WAY, AMERICAN CANYON, 94503
Site ID :	68959
EI ID :	10172257

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

EI Description :	Chemical Storage Facilities
Latitude :	38.195274
Longitude :	-122.276666
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	PURPLE WINE COMPANY, LLC
Facility Address :	205 JIM OSWALD WAY B, AMERICAN CANYON, 94503
Site ID :	68959
EI ID :	10172257
EI Description :	Chemical Storage Facilities
Latitude :	38.195270
Longitude :	-122.276670
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-06-27
Facility Name :	SONOMA WINE CO
Facility Address :	205 JIM OSWALT WAY, AMERICAN CANYON, 94503
Site ID :	542827
EI ID :	825840
EI Description :	Industrial Facility Storm Water
Latitude :	38.194550
Longitude :	-122.277610
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	SONOMA WINE CO
Facility Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S825840
Agency Name :	SONOMA WINE CO
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	SONOMA WINE CO
Facility Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
County :	NAPA COUNTY

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

ECHO ***(cont.)***

Last Inspection Date :	N/R
Registry ID :	110070092968
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 16.9 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051065
MYRTK Universe :	NNN
NPDES IDs :	CAZ441439
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2084
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2084

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

ECHO ***(cont.)***

Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19455
Longitude :	-122.27761
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	SONOMA WINE CO
Facility Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
County :	NAPA COUNTY

Site Details

Registry ID :	110070092968
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

FRS ***(cont.)***

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest
Source and System ID : ICIS - CAZ441439

Facility Name : SONOMA WINE CO.
Facility Address : 205 JIM OSWALD WAY B, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110055655795
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description :

The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest
Source and System ID : CA-CERS - 10172257
CA-ENVIROVIEW - 68959

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

HAZNET - CA

Facility Name :	SONOMA WINE CO.
Facility Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAC002778000
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
Latitude :	38.19524285
Longitude :	-122.27676720
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2014: 791 - Liquids with pH <= 2, 1 tons to CAD059494310 2014: 122 - Alkaline solution without metals pH >= 12.5, 0.2 tons to CAD059494310

HWG - CA

Facility Name :	SONOMA WINE CO.
Facility Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAC002778000
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
Owner Name :	DERIEK BENHAM
Owner Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
Operator Name :	CRAIG MCCORMICK
Operator Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
Latitude :	38.195243
Longitude :	-122.276767

ICIS

Facility Name :	SONOMA WINE CO

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

ICIS ***(cont.)***

Facility Address : 205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ441439
ICIS Facility Interest ID :	3600730664
Facility UIN :	110070092968
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.19455
Longitude :	-122.27761
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	2084
SIC Description :	Wines, Brandy, And Brandy Spirits

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601110037
External Permit Number :	CAZ441439
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Sonoma Wine Co
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

NPDES - CA

Facility Name :	Sonoma Wine Co
Facility Address :	205 Jim Oswalt Way, American Canyon, 94503
County :	Napa
Effective Date :	2013-10-15
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I024520
RM Status :	Active
Reg Meas ID :	441439
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Sonoma Wine Co
Discharger Address :	9119 Graton Rd, Graton, California 95444
Last Date in Agency List :	2023-02-15

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601110037
External Permit Number :	CAZ441439
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Sonoma Wine Co
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

PCS FACILITY ***(cont.)***

Last Date in Agency List :	2020-02-11

RFR - CA

Facility Name :	Sonoma Wine Co
Facility Address :	205 Jim Oswalt Way, American Canyon, CA 94503
County :	Napa
Effective Date :	2013-10-15
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I024520
SIC/NAICS :	2084
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Wines, Brandy, and Brandy Spirits
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Sonoma Wine Co
Agency Address :	9119 Graton Rd, Graton, CA 95444
Latitude :	38.19455
Longitude :	-122.27761
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	SONOMA WINE CO
Facility Address :	205 JIM OSWALT WAY, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ441439
Permittee Name :	Sonoma Wine Co
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09

Map Id: 14
Direction: NNW
Distance: 0.645 mi., 3408 ft.
Elevation: 24 ft.
Relative: Higher

Site Name : SONOMA WINE CO. | PURPLE WINE COMPANY, LLC | PURPLE BRANDS, LLC
205 JIM OSWALT WAY | 205 JIM OSWALD WAY B
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 315834
EPA ID: N/R

STORMWATER ***(cont.)***

SIC Code :	2084
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19455
Longitude :	-122.27761
Last Date in Agency List :	2022-12-13

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER]

Envirosite ID: 253956
EPA ID: CAL000183448

CALEPA SITES - CA

Facility Name :	1111 GREEN ISLAND ROAD
Facility Address :	1111 GREEN ISLAND ROAD, AMERICAN CANYON, 94503
Site ID :	519428
EI ID :	T10000012793
EI Description :	Cleanup Program Site
Latitude :	38.195970
Longitude :	-122.275750
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

CALEPA SITES - CA ***(cont.)***

Facility Name :	NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND ROAD, AMERICAN CANYON, 94503-9639
Site ID :	482475
EI ID :	110037975224
EI Description :	US EPA Air Emission Inventory System (EIS)
Latitude :	38.196090
Longitude :	-122.275280
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	CALIFORNIA STONECRAFT LLC
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S876602
Agency Name :	CALIFORNIA STONECRAFT LLC
Last Date in Agency List :	2022-12-28
Facility Name :	NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S616784
Agency Name :	NAPA VALLEY CAST STONE
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	BREF2 1111 GREEN ISLAND, LLC
Facility Address :	1111 GREEN ISLAND RD., AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110071212013
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

ECHO ***(cont.)***

Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNY
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	56299 - All Other Waste Management Services, 327991 - Cut Stone and Stone Product Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

ECHO ***(cont.)***

Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	N
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2023-01-16

Facility Name :	BREF2 1111 GREEN ISLAND, LLC
Facility Address :	1111 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	N/R
Registry ID :	110071212013
FIPS Code :	N/R
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

ECHO ***(cont.)***

Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNY
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	327991 - Cut Stone and Stone Product Manufacturing, 56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

ECHO ***(cont.)***

Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	N
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2022-07-02
Facility Name :	NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	2019-03-20
Registry ID :	110037975224
FIPS Code :	06055
EPA Region :	09
Inspection Count :	1
Last Inspection Days :	1355
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	N/R
Three-Year Compliance Status :	N/R
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 17 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

ECHO ***(cont.)***

Derived CD113 :	05
Derived CB2010 :	060552010051068
MYRTK Universe :	NNN
NPDES IDs :	CAZ276868
CWA Permit Types :	Minor
CWA Compliance Tracking :	Off
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	1
CWA Last Inspection Days :	1354
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Terminated Permit
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	327332 - Concrete Pipe Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	2019-03-20
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	Y

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

ECHO ***(cont.)***

Latitude :	38.19609
Longitude :	-122.27528
Last Date in Agency List :	2023-01-16

EMI - CA

Facility Name :	CALIFORNIA STONECRAFT
Facility Address :	1111 GREEN ISLAND ROAD, AMERICAN CANYON, 94503
County :	Napa
Facility ID :	24284
Air Basin Code :	San Francisco Bay Area
District :	BAY AREA AQMD
County ID :	NAP
SIC Code :	3272
CHAPIS :	N/R
CERR Code :	N/R
Last Date in Agency List :	2021-04-02

Additional Details

Year :	2018
Total Organic Gases (Tons/Year) :	.156596665
Reactive Organic Gases (Tons/Year) :	.1529349131376
Carbon Monoxide (Tons/Year) :	N/R
Nitrogen Oxides (Tons/Year) :	N/R
Sulfur Oxides (Tons/Year) :	N/R
Particulate Matter (Tons/Year) :	N/R
Fine Particulate Matter (Tons/Year) :	N/R

Facility Name :	NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND ROAD, AMERICAN CANYON, 94503
County :	Napa
Facility ID :	16231
Air Basin Code :	San Francisco Bay Area
District :	BAY AREA AQMD
County ID :	NAP
SIC Code :	3272
CHAPIS :	N/R
CERR Code :	N/R
Last Date in Agency List :	2019-07-08

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

EMI - CA ***(cont.)***

Additional Details

Year :	2017
Total Organic Gases (Tons/Year) :	.156492822
Reactive Organic Gases (Tons/Year) :	.1528334983186
Carbon Monoxide (Tons/Year) :	N/R
Nitrogen Oxides (Tons/Year) :	N/R
Sulfur Oxides (Tons/Year) :	N/R
Particulate Matter (Tons/Year) :	N/R
Fine Particulate Matter (Tons/Year) :	N/R

FRS

Facility Name :	BREF2 1111 GREEN ISLAND, LLC
Facility Address :	1111 GREEN ISLAND RD., AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110071212013
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

RCRAInfo is EPA’s comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	RCRAINFO - CAC003157586 RCRAINFO - CAP000333377
Facility Name :	BREF2 1111 GREEN ISLAND, LLC
Facility Address :	1111 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

FRS ***(cont.)***

Site Details
Registry ID : 110071212013
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-08-10

Source Description

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest
Source and System ID : RCRAINFO - CAC003157586
RCRAINFO - CAP000333377

Facility Name : NAPA VALLEY CAST STONE
Facility Address : 1111 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503-9639
County : NAPA

Site Details
Registry ID : 110037975224
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description :

The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

FRS ***(cont.)***

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest

Source and System ID :	CA-ENVIROVIEW - 137188 EIS - 10146011 ICIS - CAZ276868

HAZNET - CA

Facility Name :	BACCHUS CONSTRUCTION
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000183448
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1370 TRANCAS ST STE 334, NAPA, CA 945580000
Latitude :	38.19551398
Longitude :	-122.27535225
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HAZNET - CA ***(cont.)***

Waste Generator Details

State Waste : 2006: 141 - Off-specification, aged or surplus inorganics, 1.02165 tons to CAD028409019

Facility Name : C-LINE EXPRESS
Facility Address : 1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details

Generator EPA ID : CAL000191639
Active : Inactive
Category : STATE
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : PO BOX 540, NAPA, CA 945590000
Latitude : 38.19551398
Longitude : -122.27535225
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Waste Generator Details

State Waste : 2004: 223 - Unspecified oil-containing waste, 0.0417 tons to CAD093459485
2004: 221 - Waste oil and mixed oil, 2.28 tons to CAD980887418
2002: 221 - Waste oil and mixed oil, 5.149 tons to CAD980887418
2000: 352 - Other organic solids, 0.5 tons to CAD059494310
2000: 221 - Waste oil and mixed oil, 2.831 tons to CAD980887418

Facility Name : HATCH AND KIRK
Facility Address : 1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details

Generator EPA ID : CAD982345233
Active : Inactive
Category : STATE
Facility Types : N/R

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HAZNET - CA ***(cont.)***

Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Latitude :	38.19551398
Longitude :	-122.27535225
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :

2003: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.07089 tons to CAT000613943
2002: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.26266 tons to CAT000613943
2002: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.12927 tons to CA0000084517
2001: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.1917 tons to CAT000613943
2001: 134 - Aqueous solution with total organic residues less than 10 percent, 0.0714 tons to CA0000084517
2001: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.3 tons to CA0000084517
2001: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.0667 tons to CAT000613943
2000: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.075 tons to CA0000084517
2000: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.1584 tons to CA0000084517
2000: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.1 tons to CAT000613943
2000: 134 - Aqueous solution with total organic residues less than 10 percent, 0.2898 tons to CA0000084517
1999: 134 - Aqueous solution with total organic residues less than 10 percent, 0.0588 tons to CAD093459485
1999: 134 - Aqueous solution with total organic residues less than 10 percent, 0.0966 tons to CA0000084517
1999: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.1042 tons to CA0000084517

Facility Name :	HATCH AND KIRK
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HAZNET - CA ***(cont.)***

Site Details

Generator EPA ID :	CAL000002364
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945890000
Latitude :	38.19551398
Longitude :	-122.27535225
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08
Facility Name :	HATCH & KIRK INC
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA

Site Details

Generator EPA ID :	CAL000033967
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945890000
Latitude :	38.19551398
Longitude :	-122.27535225
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08
Facility Name :	NAPA VALLEY CAST STONE LLC
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000326691
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HAZNET - CA ***(cont.)***

Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Latitude :	38.19551398
Longitude :	-122.27535225
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2007: 141 - Off-specification, aged or surplus inorganics, 0.6255 tons to CAD028409019
Facility Name :	N V CAST STONE LLC/NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAC002575344
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Latitude :	38.19551398
Longitude :	-122.27535225
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08
Facility Name :	UNDERDROUND STORAGE SYSTEM
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA

Site Details

Generator EPA ID :	CAL000262731
Active :	Inactive
Category :	STATE
Facility Types :	N/R

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HAZNET - CA ***(cont.)***

Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1370 TRANCAS ST # 334, NAPA, CA 944558
Latitude :	38.19551398
Longitude :	-122.27535225
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HIST HAZNET - CA

Facility Name :	N V CAST STONE LLC/NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, 94503-9639
ID Number :	CAC002575344
Last Date in Agency List :	2014-11-17

HWG - CA

Facility Name :	BACCHUS CONSTRUCTION
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000183448
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1370 TRANCAS ST STE 334, NAPA, CA 945580000
Owner Name :	HARRISON WESTERN CONSTRUCTION
Owner Address :	1208 QUAIL ST, LAKEWOOD, CO 802150000
Operator Name :	CECIL CONER-FORD
Operator Address :	1370 TRANCAS ST STE 334, NAPA, CA 945580000
Latitude :	38.197005
Longitude :	-122.275614
Facility Name :	BREF2 1111 GREEN ISLAND LLC
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAP000333377
Status :	Inactive
Category :	FEDERAL
Type :	TEMPORARY

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HWG - CA ***(cont.)***

Facility Type :	N/R
Mailing Address :	2175 N CALIFORNIA BLVD STE 415, WALNUT CREEK, CA 94596
Owner Name :	BREF2 1111 GREEN ISLAND LLC
Owner Address :	2175 N CALIFORNIA BLVD STE 415, WALNUT CREEK, CA 94596
Operator Name :	JENNIFER MOON
Operator Address :	2175 N CALIFORNIA BLVD STE 415, WALNUT CREEK, CA 94596
Latitude :	38.195313
Longitude :	-122.274269

Facility Name :	BREF2 1111 GREEN ISLAND, LLC
Facility Address :	1111 GREEN ISLAND RD., AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAC003157586
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Owner Name :	BREF2 1111 GREEN ISLAND, LLC
Owner Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Operator Name :	BREF2 1111 GREEN ISLAND, LLC
Operator Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Latitude :	38.196033
Longitude :	-122.2757

Facility Name :	C-LINE EXPRESS
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAL000191639
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	PO BOX 540, NAPA, CA 945590000
Owner Name :	C-LINE EXPRESS
Owner Address :	PO BOX 540, NAPA, CA 945590000
Operator Name :	TODD WALKER/VP,SEC,TREAS
Operator Address :	PO BOX 540, NAPA, CA 945590000
Latitude :	38.195313
Longitude :	-122.274269

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HWG - CA ***(cont.)***

Facility Name :	HATCH AND KIRK
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAD982345233
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Owner Name :	HATCH & KIRK
Owner Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Operator Name :	BILL FARRELL SHOP FORMAN
Operator Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Latitude :	38.195313
Longitude :	-122.274269

Facility Name :	HATCH AND KIRK
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA
EPA ID :	CAL000002364
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945890000
Owner Name :	HATCH & KIRK INC
Owner Address :	N/A
Operator Name :	CANCELLED PER SURVEY 3-95 JV
Operator Address :	N/A
Latitude :	38.208708
Longitude :	-122.30561

Facility Name :	HATCH & KIRK INC
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA
EPA ID :	CAL000033967
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HWG - CA ***(cont.)***

Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945890000
Owner Name :	MARSHALL HATCH/JACK/K
Owner Address :	N/A
Operator Name :	INACTIVE PER SURVEY 1/95 HN
Operator Address :	N/A
Latitude :	38.208708
Longitude :	-122.30561

Facility Name :	NAPA VALLEY CAST STONE LLC
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAL000326691
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Owner Name :	NAPA VALLEY CAST STONE LLC
Owner Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Operator Name :	MARK AKEY
Operator Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Latitude :	38.197005
Longitude :	-122.275614

Facility Name :	N V CAST STONE LLC/NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAC002575344
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Owner Name :	N V CAST STONE LLC
Owner Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Operator Name :	BILL TOUGH/PRES
Operator Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 945039639
Latitude :	38.195313
Longitude :	-122.274269

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

HWG - CA ***(cont.)***

Facility Name :	UNDERDROUND STORAGE SYSTEM
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA
EPA ID :	CAL000262731
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1370 TRANCAS ST # 334, NAPA, CA 944558
Owner Name :	DAVID PROVOST
Owner Address :	1370 TRANCAS ST # 334, NAPA, CA 944558
Operator Name :	DAVID PROVOST
Operator Address :	1370 TRANCAS ST # 334, NAPA, CA 944558
Latitude :	38.208708
Longitude :	-122.30561

ICIS

Facility Name :	NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ276868
ICIS Facility Interest ID :	3600726476
Facility UIN :	110037975224
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.197
Longitude :	-122.27558
Last Date in Agency List :	2022-12-28

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	2019-01-11
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601105835
External Permit Number :	CAZ276868
Facility Type Indicator :	NON-POTW

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

INACTIVE PCS ***(cont.)***

Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Terminated
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Napa Valley Cast Stone
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Manifest Number :	017105149FLE
Shipped Date :	2022-05-12
Updated Date :	2022-06-22
Received Date :	2022-05-23
Status :	Signed
Generator ID :	CAP000333377
Generator Name :	BREF2 1111 GREEN ISLAND LLC
Generator Address :	1111 GREEN ISLAND RD., AMERCAN CANYON, CA 94503
Generator Mailing :	2175 N CALIFORNIA BLVD, SUITE 415, AMERICAN CANYON, CA 94596
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC.
Destination Mailing :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Address :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

MANIFEST EPA ***(cont.)***

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN3260
DOT Information :	UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., (SOLIDIFIED FUMING SULFURIC ACID), 8, PG II
Non Waste Description :	N/R
Quantity :	5 Pounds
Quantity Tons, Acute, Non-Acute :	0.0025, 0, 0.0025
Quantity Kg, Acute, Non-Acute :	0, 2.267575
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 181

Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN2810
DOT Information :	UN2810, TOXIC, LIQUIDS, ORGANIC, N.O.S, (VEGETATION KILLER LAB PACK), 6.1, PG III
Non Waste Description :	N/R
Quantity :	40 Pounds
Quantity Tons, Acute, Non-Acute :	0.02, 0, 0.02
Quantity Kg, Acute, Non-Acute :	0, 18.1406
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 232

Waste Line Number :	3
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	(SP) STNON-RCRA LIQUID LAB PACK (DRUM 002)
Quantity :	200 Pounds
Quantity Tons, Acute, Non-Acute :	0.1, 0, 0.1
Quantity Kg, Acute, Non-Acute :	0, 90.703
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 331

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

MANIFEST EPA ***(cont.)***

Waste Line Number :	4
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	(SP) NON-RCRA LIQUID LAB PACK DRUM # 004 SEE ATTACHED INVENTORY
Quantity :	100 Pounds
Quantity Tons, Acute, Non-Acute :	0.05, 0, 0.05
Quantity Kg, Acute, Non-Acute :	0, 45.3515
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 331

Manifest Details

Manifest Number :	017105150FLE
Shipped Date :	2022-05-12
Updated Date :	2022-06-22
Received Date :	2022-05-23
Status :	Signed
Generator ID :	CAP000333377
Generator Name :	BREF2 1111 GREEN ISLAND LLC
Generator Address :	1111 GREEN ISLAND RD., AMERCAN CANYON, CA 94503
Generator Mailing :	2175 N CALIFORNIA BLVD, SUITE 415, AMERICAN CANYON, CA 94596
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC.
Destination Mailing :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Address :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN3267
DOT Information :	UN3267, WASTE CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S., (IMIDAZOLE), 8, PG III

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

MANIFEST EPA ***(cont.)***

Non Waste Description :	N/R
Quantity :	3 Gallons
Quantity Tons, Acute, Non-Acute :	0.012510425, 0, 0.012510425
Quantity Kg, Acute, Non-Acute :	0, 11.347332
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 331
Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN1950
DOT Information :	UN1950, WASTE AEROSOLS, [FLAMMABLE, (EACH NOT EXCEEDING 1 L CAPACITY)], (AEROSOL LAB PACK), 2.1
Non Waste Description :	N/R
Quantity :	10 Pounds
Quantity Tons, Acute, Non-Acute :	0.005, 0, 0.005
Quantity Kg, Acute, Non-Acute :	0, 4.53515
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D001
State Code :	CA - 331
Waste Line Number :	3
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA SOLID LAB PACK - SEE INVENTORY
Quantity :	200 Pounds
Quantity Tons, Acute, Non-Acute :	0.1, 0, 0.1
Quantity Kg, Acute, Non-Acute :	0, 90.703
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 352
Waste Line Number :	4
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	OILY DEBRIS
Quantity :	200 Pounds
Quantity Tons, Acute, Non-Acute :	0.1, 0, 0.1

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

MANIFEST EPA ***(cont.)***

Quantity Kg, Acute, Non-Acute :	0, 90.703
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 352

Manifest Details

Manifest Number :	017105151FLE
Shipped Date :	2022-05-12
Updated Date :	2022-06-09
Received Date :	2022-05-23
Status :	Signed
Generator ID :	CAP000333377
Generator Name :	BREF2 111 GREEN ISLAND
Generator Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	CAD028409019
Destination Name :	CROSBY & OVERTON
Destination Mailing :	1630 W. 17TH STREET, LONG BEACH, CA 90813
Destination Address :	1630 W. 17TH STREET, LONG BEACH, CA 90813
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	NA3082
DOT Information :	NA3082, Hazardous waste, liquid, n.o.s. , 9 , III, RQ
Non Waste Description :	N/R
Quantity :	2 Gallons
Quantity Tons, Acute, Non-Acute :	0.008340283, 0, 0.008340283
Quantity Kg, Acute, Non-Acute :	0, 7.5648875
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D009
State Code :	CA - 331

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

MANIFEST EPA ***(cont.)***

Manifest Details

Manifest Number :	017105153FLE
Shipped Date :	2022-05-12
Updated Date :	2022-06-09
Received Date :	2022-05-23
Status :	Signed
Generator ID :	CAP000333377
Generator Name :	BREF2 111 GREEN ISLAND
Generator Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	CAD028409019
Destination Name :	CROSBY & OVERTON
Destination Mailing :	1630 W. 17TH STREET, LONG BEACH, CA 90813
Destination Address :	1630 W. 17TH STREET, LONG BEACH, CA 90813
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1866
DOT Information :	UN1866, Waste Resin solution, [flammable], 3 , II, RQ
Non Waste Description :	N/R
Quantity :	10 Gallons
Quantity Tons, Acute, Non-Acute :	0.041701417, 0, 0.041701417
Quantity Kg, Acute, Non-Acute :	0, 37.824436
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D001
State Code :	CA - 331

Waste Line Number :	2
Is DOT Hazardous :	Y
DOT ID Number :	UN1866
DOT Information :	UN1866, Waste Resin solution, [flammable], 3 , II, RQ
Non Waste Description :	N/R
Quantity :	150 Pounds
Quantity Tons, Acute, Non-Acute :	0.075, 0, 0.075
Quantity Kg, Acute, Non-Acute :	0, 68.02725
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

MANIFEST EPA ***(cont.)***

Is EPA Waste :	Y
Federal Code :	D001
State Code :	CA - 331

Manifest Details

Manifest Number :	017111106FLE
Shipped Date :	2022-04-05
Updated Date :	2022-05-16
Received Date :	2022-04-15
Status :	Signed
Generator ID :	CAP000333377
Generator Name :	BREF2 1111 GREEN ISLAND LLC
Generator Address :	1111 GREEN ISLAND RD., AMERCAN CANYON, CA 94503
Generator Mailing :	2175 N CALIFORNIA BLVD, SUITE 415, AMERICAN CANYON, CA 94596
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC.
Destination Mailing :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Address :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1789
DOT Information :	RQ, UN1789, WASTE HYDROCHLORIC ACID SOLUTION, 8, PG II
Non Waste Description :	N/R
Quantity :	3 Gallons
Quantity Tons, Acute, Non-Acute :	0.012510425, 0, 0.012510425
Quantity Kg, Acute, Non-Acute :	0, 11.347332
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Waste Line Number :	2
Is DOT Hazardous :	N
DOT ID Number :	N/R

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

MANIFEST EPA ***(cont.)***

DOT Information :	N/R
Non Waste Description :	CASTING FOAM
Quantity :	210 Gallons
Quantity Tons, Acute, Non-Acute :	0.87572974, 0, 0.87572974
Quantity Kg, Acute, Non-Acute :	0, 794.3132
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 331

Waste Line Number :	3
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	OILY DEBRIS
Quantity :	200 Pounds
Quantity Tons, Acute, Non-Acute :	0.1, 0, 0.1
Quantity Kg, Acute, Non-Acute :	0, 90.703
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 352

Waste Line Number :	4
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	(SP) LATEX PAINT COMMODITY PACK
Quantity :	1600 Pounds
Quantity Tons, Acute, Non-Acute :	0.8, 0, 0.8
Quantity Kg, Acute, Non-Acute :	0, 725.624
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 291

NPDES - CA

Facility Name :	Napa Valley Cast Stone
Facility Address :	1111 Green Island Rd, American Canyon, 94503
County :	Napa

Effective Date :	2004-12-30
Adoption Date :	N/R
Expiration Date :	N/R

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

NPDES - CA ***(cont.)***

Termination Date :	2019-01-11
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I019243
RM Status :	Terminated
Reg Meas ID :	276868
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Napa Valley Cast Stone
Discharger Address :	1111 Green Island Rd, American Canyon, California 94503
Last Date in Agency List :	2021-12-07

PCS ENF

Site Details

NPDES ID :	CAZ276868
Last Date in Agency List :	2022-12-28

Formal Enforcement Actions

Settlement Entered Date :	N/R
ENF Identifier :	N/R
Activity ID :	N/R
Activity Type :	N/R
ENF Type :	N/R
Agency :	N/R
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	2019-01-11
Registry ID :	110037975224
ENF Identifier :	CA-ZIEA433335
Activity ID :	3601878003
Activity Type :	Administrative - Informal
ENF Type :	Information Request Letter
Agency :	State

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

PCS FACILITY ***(cont.)***

Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601105835
External Permit Number :	CAZ276868
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Napa Valley Cast Stone
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2018-12-18

RCRA_LQG

Facility Name :	BREF2 1111 GREEN ISLAND, LLC
Facility Address :	1111 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2022-01-18
EPA ID :	CAP000333377
Mailing Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Contact :	JENNIFER MOON
Contact Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Contact Country :	US
Contact Telephone :	925-357-2086
Contact Email :	N/R
EPA Region :	09
Land Type :	Private
Source Type :	Notification
Classification :	Large Quantity Generator

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

RCRA_LQG ***(cont.)***

Description :

Handlers that generate 1,000 kg or more of hazardous waste during any calendar month; or generate more than 1 kg of acutely hazardous waste during any calendar month; or generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1 kg of acutely hazardous waste at any time; or generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Last Date in Agency List : 2023-01-23

Owner/Operator Summary

Owner/Operator Name :	BREF2 1111 GREEN ISLAND, LLC
Owner/Operator Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Owner/Operator Country :	US
Owner/Operator Telephone :	925-357-2086
Owner/Operator Email :	JENNIFER.MOON@TRANSWESTERN.COM
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Owner
Owner/Operator Start Date :	2021-04-16
Owner/Operator End Date :	N/R

Owner/Operator Name :	BREF2 1111 GREEN ISLAND, LLC
Owner/Operator Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Owner/Operator Country :	US
Owner/Operator Telephone :	925-357-2086
Owner/Operator Email :	JENNIFER.MOON@TRANSWESTERN.COM
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Operator
Owner/Operator Start Date :	2021-04-16
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

RCRA_LQG ***(cont.)***

On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Hazardous Waste Summary

Waste Code / Name :	135 - Unspecified aqueous solution D002 - CORROSIVE WASTE D007 - CHROMIUM

Notices of Violations Summary

Regulation Violated :	N

RCRA_NONGEN

Facility Name :	BREF2 1111 GREEN ISLAND, LLC
Facility Address :	1111 GREEN ISLAND RD., AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2022-01-19
EPA ID :	CAC003157586
Mailing Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Contact :	BREF2 1111 GREEN ISLAND, LLC
Contact Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Contact Country :	N/R
Contact Telephone :	925-357-2086
Contact Email :	ADAM@COSTERAENV.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

RCRA_NONGEN ***(cont.)***

Owner/Operator Summary

Owner/Operator Name :	BREF2 1111 GREEN ISLAND, LLC
Owner/Operator Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Owner/Operator Country :	N/R
Owner/Operator Telephone :	925-357-2086
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	BREF2 1111 GREEN ISLAND, LLC
Owner/Operator Address :	2175 N. CALIFORNIA BLVD., SUITE 415, WALNUT CREEK, CA 94596
Owner/Operator Country :	N/R
Owner/Operator Telephone :	925-357-2086
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

RFR - CA

Facility Name :	Napa Valley Cast Stone
Facility Address :	1111 Green Island Rd, American Canyon, CA 94503
County :	Napa
Effective Date :	2004-12-30
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I019243
SIC/NAICS :	Multiple
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Concrete Block and Brick
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Napa Valley Cast Stone
Agency Address :	1111 Green Island Rd, American Canyon, CA 94503
Latitude :	38.197
Longitude :	-122.27558
Last Date in Agency List :	2019-02-11

SLIC REG 2 - CA

Facility Name :	1111 Green Island Road
Facility Address :	1111 Green Island Road, American Canyon, CA 94503
County :	Napa

Site Details

Status Date :	2020-02-21
Status :	Completed - Case Closed
Begin Date :	2019-02-25
Global ID :	T10000012793
Region :	REGION 2

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

SLIC REG 2 - CA ***(cont.)***

Site History :

RP (NV Caststone, LLC) requested agency oversight to facilitate site closure. Site recently used to manufacture architectural cast stone (concrete products). Former industrial uses included diesel engine repair and parts cleaning (1984-2003?). Environmental impacts appear to be associated with past use of an underground oil/water separator collecting wastewater from a wash pad. 2011 data reported groundwater COCs exceeding 2019 ESLs included Petroleum - diesel and select metals (AS, Ba, Cd, Cr, Pb and Hg); soil impacts were limited to low concentrations of As and Pb (at or below background limits). Groundwater plume confined to northeast corner of the site, not fully delineated. Soil vapor data not previously collected for the site.

RB Case Number :	28S0071
Potential Media Affected :	Other Groundwater (uses other than drinking water), Soil Vapor
Potential Contaminants of Concern :	Arsenic, Chromium, Lead, Mercury (elemental), Other Metal, Total Petroleum Hydrocarbons (TPH)
Local Agency :	N/R
Local Case Number :	N/R
Lead Agency :	SAN FRANCISCO BAY RWQCB (REGION 2)
File Location :	All Files are on GeoTracker or in the Local Agency Database
CUF Case :	NO
Caseworker :	PF
Case Type :	Cleanup Program Site
How Discovered :	N/R
How Discovered Description :	N/R
Stop Method :	N/R
Stop Description :	N/R
Calwater Watershed Name :	San Pablo - Napa River (206.50)
DWR Groundwater Subbasin Name :	Napa-Sonoma Valley - Napa-Sonoma Lowlands (2-002.03)
Disadvantaged Community :	N/R
Latitude :	38.19597
Longitude :	-122.27575
Agency URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-01-17

Contacts Summary

Global ID :	T10000012793
Contact Name :	PHYLLIS FLACK
Contact Type :	Regional Board Caseworker - Primary Caseworker
Organization Name :	SAN FRANCISCO BAY RWQCB (REGION 2)
Address :	1515 CLAY ST SUITE 1400
City :	OAKLAND
Phone Number :	N/R
Email :	phyllis.flack@waterboards.ca.gov

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

SLIC REG 2 - CA ***(cont.)***

Regulatory Activities

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Date : 2020-02-21
Global ID : T10000012793
Action Type : ENFORCEMENT
Action : Closure/No Further Action Letter - #28S0071

Date : 2019-12-30
Global ID : T10000012793
Action Type : ENFORCEMENT
Action : Notification - Preclosure - #28S0071

Date : 2019-11-30
Global ID : T10000012793
Action Type : RESPONSE
Action : Site Investigation

Date : 2019-08-12
Global ID : T10000012793
Action Type : ENFORCEMENT
Action : 13267 Requirement - #28S0071

Date : 2019-06-28
Global ID : T10000012793
Action Type : ENFORCEMENT
Action : Annual Estimation Letter - #28S0071

Status History

Status Date : 2020-02-21
Global ID : T10000012793
Status : Completed - Case Closed

Status Date : 2019-05-28
Global ID : T10000012793
Status : Open - Site Assessment

Map Id: 15
Direction: N
Distance: 0.689 mi., 3641 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : NAPA VALLEY CAST STONE | BREF2 1111 GREEN ISLAND LLC | HATCH AND KIRK
1111 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | AMERCAN CANYON, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_LQG, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 253956
EPA ID: CAL000183448

SLIC REG 2 - CA ***(cont.)***

Status Date :	2019-03-12
Global ID :	T10000012793
Status :	Open - Site Assessment
Status Date :	2019-02-25
Global ID :	T10000012793
Status :	Open - Case Begin Date

STORMWATER

Facility Name :	NAPA VALLEY CAST STONE
Facility Address :	1111 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ276868
Permittee Name :	Napa Valley Cast Stone
Permit Status :	Terminated
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	2019-01-11
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	N/R
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19609
Longitude :	-122.27528
Last Date in Agency List :	2022-12-13

Map Id: A16
Direction: NE
Distance: 0.693 mi., 3659 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : POLYVINYL CHEMICAL INDUSTRIES, INC | PCI-NAPA
501 GREEN ISLAND ROAD
VALLEJO, CA 94589

Database(s) : [CS_NAPA COUNTY - CA, ENVIROSTOR - CA, HIST UST - CA]

Envirosite ID: 342910
EPA ID: N/R

CS_NAPA COUNTY - CA

Facility Name :	POLYVINYL CHEMICAL INDUSTRIES, INC
Facility Address :	501 GREEN ISLAND ROAD, VALLEJO, 94589
County :	NAPA
Status Date :	2008-06-05
Status :	NO ACTION REQUIRED
Envirostor ID :	28510002
Program Type :	EVALUATION
Site Code :	N/R
CalEnviroScreen Score :	60-65%
Latitude :	38.1945691521118
Longitude :	-122.265441575033
Last Date in Agency List :	2023-01-20

ENVIROSTOR - CA

Facility Name :	POLYVINYL CHEMICAL INDUSTRIES, INC
Facility Address :	501 GREEN ISLAND ROAD, VALLEJO, CA 94589
County :	NAPA

Site Details

Cleanup Date :	2008-06-05
Cleanup Status :	No Action Required
Site Type :	Evaluation
Site Type Detailed :	Evaluation
Acreage :	0.5
APN :	057160002000
National Priorities List :	NO
Regulatory Agencies Involved :	RWQCB 2 - San Francisco Bay
Lead Agency :	RWQCB 2 - San Francisco Bay
Project Manager :	N/R
Supervisor :	Karen Toth
Office :	Cleanup Berkeley
Envirostor ID :	28510002
Site Code :	N/R
Assembly :	04
Senate :	03
Congressional District :	05
Special Program :	EPA - PASI
Past Uses :	UNKNOWN
Potential COC :	* HYDROCARBON SOLVENTS; * UNSPECIFIED ALKALINE SOLUTIONS; * LATEX WASTE
Confirmed COC :	N/R
Potential Media Affected :	Under Investigation
Restricted Use :	NO
Site Management Req :	N/R
Funding :	EPA Grant
Latitude :	38.194569
Longitude :	-122.265442
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-16

Map Id: A16
Direction: NE
Distance: 0.693 mi., 3659 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : POLYVINYL CHEMICAL INDUSTRIES, INC | PCI-NAPA
501 GREEN ISLAND ROAD
VALLEJO, CA 94589

Database(s) : [CS_NAPA COUNTY - CA, ENVIROSTOR - CA, HIST UST - CA] ***(cont.)***

Envirosite ID: 342910
EPA ID: N/R

ENVIROSTOR - CA ***(cont.)***

Alias :
APN - 057160002000
Alternate Name - CALIFORNIA RESINS (NAME CHANGE 11/17/82)
Alternate Name - PCI
EPA Identification Number - CAD061163325
Envirostor ID Number - 28510002
GeoTracker Global ID - SL0605547879

Completed Activities

Completed Date : 2014-05-01
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Preliminary Assessment Report

Comments : DTSC conducted a reassessment of sites in EPA's CERCLIS database on EPA's behalf. The regional waterboard had reviewed past soil and groundwater investigations and determined that no further action was required. Based on this information and available sampling data, DTSC recommended no further federal assessment under CERCLA.

Completed Date : 2008-05-28
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Site Screening

Comments : The Triage recommended No Further Action. A Sensitive Receptor Survey and Risk Based Corrective Action Assessment submitted to the SF Water Board indicate that the contaminant residuals present at the site do not pose a significant health risk to current or future occupants of the site. Based on this Report, a No Further Action Letter was issued by the SF Board dated November 20, 2000.

Completed Date : 1990-03-29
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Preliminary Assessment Report

Comments : PRELIM ASSESS DONE ECOLOGY AND ENVIRONMENT PRELIMINARY ASSESSMENT 2/12/90. SITE POSES A HIGH POTENTIAL OF RELEASE TO SURFACE WATER. EPA RECOMMENDATION-MEDIUM PRIORITY SSI.

Completed Date : 1988-02-05
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Site Screening
Comments : N/R

Completed Date : 1988-02-05
Area Name : PROJECT WIDE
Sub Area Name : N/R

Map Id: A16
Direction: NE
Distance: 0.693 mi., 3659 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : POLYVINYL CHEMICAL INDUSTRIES, INC | PCI-NAPA
501 GREEN ISLAND ROAD
VALLEJO, CA 94589

Database(s) : [CS_NAPA COUNTY - CA, ENVIROSTOR - CA, HIST UST - CA] ***(cont.)***

Envirosite ID: 342910
EPA ID: N/R

ENVIROSTOR - CA ***(cont.)***

Document Type :	* Discovery
Comments :	FACILITY IDENTIFIED DHS DRIVE-BY. PHOTOS TAKEN SITE SCREENING DONE PAH REQ BASED ON NAPA CO ENVR HLTH FILE
Completed Date :	1988-01-12
Area Name :	PROJECT WIDE
Sub Area Name :	N/R
Document Type :	* Discovery
Comments :	FACILITY IDENTIFIED ENVR HLTH NAPA KNOWN CONTAMINATED SITE
Completed Date :	1987-11-16
Area Name :	PROJECT WIDE
Sub Area Name :	N/R
Document Type :	Site Screening
Comments :	SITE SCREENING DONE MANUFACTURER OF ACRYLIC EMULSIONS CHEMS. ORGANIC CHEMICALS FOUND IN SOIL AND GROUNDWATER AROUND PIT. PCI WAS PART OF BEATRICE CHEMICAL DIVISION OF BEATRICE FOODS. THE DIVISION WAS SOLD TO IMPERIAL CHEMICAL INDUSTRIES 03/01/85.

HIST UST - CA

Facility Name :	PCI-NAPA
Facility Address :	501 GREEN ISLAND RD., VALLEJO, 94589
County :	N/R
PDF Link :	Click here for hyperlink provided by the agency.

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER]

Envirosite ID: 743378
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	ENVIROCARE INTERNATIONAL INC
Facility Address :	507 GREEN ISLAND ROAD, AMERICAN CANYON, 94503
Site ID :	531432
EI ID :	823020
EI Description :	Industrial Facility Storm Water
Latitude :	38.195160
Longitude :	-122.267060
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	ENVIROCARE INTERNATIONAL INC.
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	392229
EI ID :	10422790
EI Description :	Hazardous Waste Generator
Latitude :	38.194910
Longitude :	-122.266990
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Site ID :	392229
EI ID :	10422790
EI Description :	Chemical Storage Facilities
Latitude :	38.194910
Longitude :	-122.266990
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	ENVIROCARE INTERNATIONAL INC
Facility Address :	507 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S823020
Agency Name :	ENVIROCARE INTERNATIONAL INC
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	ENVIROCARE INTERNATIONAL
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

ECHO ***(cont.)***

County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110055863061
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051076
MYRTK Universe :	NNN
NPDES IDs :	CAZ437456
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	3564
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

ECHO ***(cont.)***

CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	3564
Facility NAICS :	56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19491
Longitude :	-122.26699
Last Date in Agency List :	2023-01-16

Facility Name :	ENVIROCARE INTERNATIONAL INC
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	N/R
Registry ID :	110055863061
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

ECHO ***(cont.)***

Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051076
MYRTK Universe :	NNN
NPDES IDs :	CAZ437456
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	3564
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	3564
Facility NAICS :	56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

ECHO ***(cont.)***

Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19491
Longitude :	-122.26699
Last Date in Agency List :	2021-02-17

FRS

Facility Name :	ENVIROCARE INTERNATIONAL
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110055863061
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description : The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

FRS ***(cont.)***

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	CA-CERS - 10422790 CA-ENVIROVIEW - 28479 ICIS - CAZ437456 RCRAINFO - CAL000316073
Facility Name :	ENVIROCARE INTERNATIONAL INC
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110055863061
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-17

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

FRS ***(cont.)***

Source Description

Source Description :

The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).
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Source Description :

RCRAInfo is EPA’s comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :
CA-CERS - 10422790
CA-ENVIROVIEW - 28479
ICIS - CAZ437456
RCRAINFO - CAL000316073

HAZNET - CA

Facility Name : ENVIROCARE
Facility Address : 507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

HAZNET - CA ***(cont.)***

Site Details

Generator EPA ID :	CAC002255801
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Latitude :	38.19515376
Longitude :	-122.26385287
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08
Facility Name :	ENVIROCARE INTERNATIONAL
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000316073
Active :	Active
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Latitude :	38.19515376
Longitude :	-122.26385287
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HIST CHMIRS - CA

Facility Address :	507 Green Island Rd, American Canyon
County :	Napa County
Notified Date :	1999-04-19 11:56:21
Control Number :	99-1723
Substance 1 :	Diesel fuel
Quantity 1 :	200
Measure 1 :	N/R
Type 1 :	N/R
Pipeline 1 :	N/R
Vessel 1 (300 Tons) :	N/R

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

HIST CHMIRS - CA ***(cont.)***

Substance 2 :	N/R
Quantity 2 :	N/R
Measure 2 :	N/R
Type 2 :	N/R
Pipeline 2 :	N/R
Vessel 2 (300 Tons) :	N/R
Substance 3 :	N/R
Quantity 3 :	N/R
Measure 3 :	N/R
Type 3 :	N/R
Pipeline 3 :	N/R
Vessel 3 (300 Tons) :	N/R
Description :	Vehicle vs train. Vehicle caused derailment, allowing substance to spill
Contained :	Yes
Water? :	No
Water Way :	N/R
Incident Date :	1999-04-19
Time :	N/R
Spill Site :	Rail Road
Site :	N/R
Cause :	N/R
Other Causes :	N/R
Injuries (Y/N) :	N/R
Injuries Number :	0
Fatal (Y/N) :	N/R
Fatal Number :	0
Evacs (Y/N) :	N/R
Evacs Number :	0
Cleanup :	Unknown
Admin Agency :	Napa County Dept. Environmental Mgmt

HIST HAZNET - CA

Facility Name :	ENVIROCARE
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, 94503
ID Number :	CAC002255801
Last Date in Agency List :	2014-11-17

HWG - CA

Facility Name :	ENVIROCARE
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAC002255801
Status :	Inactive

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

HWG - CA ***(cont.)***

Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Owner Name :	JOHN TATE III
Owner Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Operator Name :	JEFF GLOVER-SHOP SUPERINTENDNT
Operator Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Latitude :	38.195218
Longitude :	-122.262322

Facility Name :	ENVIROCARE INTERNATIONAL
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAL000316073
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Owner Name :	JOHN TATE III
Owner Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Operator Name :	JEFF GLOVER
Operator Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Latitude :	38.195236
Longitude :	-122.264482

ICIS

Facility Name :	ENVIROCARE INTERNATIONAL INC
Facility Address :	507 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ437456
ICIS Facility Interest ID :	3600730042
Facility UIN :	110055863061
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.19516
Longitude :	-122.26706
Last Date in Agency List :	2022-12-28

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

ICIS ***(cont.)***

Facility SIC

SIC Code :	3564
SIC Description :	Blowers And Fans

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601109415
External Permit Number :	CAZ437456
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	EnviroCare International Inc
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Manifest Number :	020454918JJK
Shipped Date :	2019-12-13
Updated Date :	2020-12-18
Received Date :	2019-12-23
Status :	Corrected
Generator ID :	N/R
Generator Name :	ENVIROCARE INTERNATIONAL
Generator Address :	507 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Generator Mailing :	507 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC
Destination Mailing :	PO BOX 578, BEATTY, NV 89003

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Destination Address :	HWY 95 11 MI S OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	FILTERS CONTAMINATED WITH MERCURY, WTS#40878 (KSW)
Quantity :	192 Pounds
Quantity Tons, Acute, Non-Acute :	0.096, 0, 0.096
Quantity Kg, Acute, Non-Acute :	0, 87.07488
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 352

NPDES - CA

Facility Name :	EnviroCare International Inc
Facility Address :	507 Green Island Road, American Canyon, 94503
County :	Napa
Effective Date :	2013-05-07
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I024246
RM Status :	Active
Reg Meas ID :	437456
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	EnviroCare International Inc
Discharger Address :	507 Green Island Road, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601109415
External Permit Number :	CAZ437456
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	EnviroCare International Inc
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_NONGEN

Facility Name :	ENVIROCARE INTERNATIONAL
Facility Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2019-10-08
EPA ID :	CAL000316073
Mailing Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
Contact :	JEFF GLOVER
Contact Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
Contact Country :	US
Contact Telephone :	707-638-6800
Contact Email :	JEFF_GLOVER@ENVIROCARE.COM
EPA Region :	09
Land Type :	Private
Source Type :	Notification
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Owner/Operator Summary

Owner/Operator Name :	JEFF GLOVER
Owner/Operator Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
Owner/Operator Country :	US
Owner/Operator Telephone :	707-638-6800
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	JOHN TATE III
Owner/Operator Address :	507 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
Owner/Operator Country :	US
Owner/Operator Telephone :	707-638-6800
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	Y
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
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Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

RFR - CA

Facility Name :	EnviroCare International Inc
Facility Address :	507 Green Island Road, American Canyon, CA 94503
County :	Napa
Effective Date :	2013-05-07
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I024246
SIC/NAICS :	3564
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Industrial and Commercial Fans and Blowers and Air Purification Equipment
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	EnviroCare International Inc
Agency Address :	507 Green Island Road, American Canyon, CA 94503
Latitude :	38.19516
Longitude :	-122.26706
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	ENVIROCARE INTERNATIONAL INC
Facility Address :	507 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ437456
Permittee Name :	EnviroCare International Inc
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09

Map Id: A17
Direction: NE
Distance: 0.703 mi., 3714 ft.
Elevation: 38 ft.
Relative: Higher

Site Name : ENVIROCARE INTERNATIONAL INC. | ENVIROCARE
507 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HIST HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 743378
EPA ID: N/R

STORMWATER ***(cont.)***

SIC Code :	3564
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19491
Longitude :	-122.26699
Last Date in Agency List :	2022-12-13

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER]

Envirosite ID: 1043862
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	CLARK'S ROCK
Facility Address :	650 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	20196
EI ID :	10170785
EI Description :	Chemical Storage Facilities
Latitude :	38.196327
Longitude :	-122.265923
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-04-07
Facility Name :	CROWN HILL STONE SUPPLY LLC
Facility Address :	650 GREEN ISLAND ROAD, AMERICAN CANYON, 94503

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

Site ID :	530054
EI ID :	872706
EI Description :	Industrial Facility Storm Water
Latitude :	38.196270
Longitude :	-122.266020
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	CROWN HILL STONE SUPPLY, LLC
Facility Address :	650 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	20196
EI ID :	10170785
EI Description :	Chemical Storage Facilities
Latitude :	38.196327
Longitude :	-122.265923
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	CROWN HILL STONE SUPPLY
Facility Address :	650 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S871588
Agency Name :	CROWN HILL STONE SUPPLY
Last Date in Agency List :	2022-12-28
Facility Name :	CROWN HILL STONE SUPPLY LLC
Facility Address :	650 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S872706
Agency Name :	CROWN HILL STONE SUPPLY LLC
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	CROWN HILL STONE SUPPLY
Facility Address :	650 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	N/R

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

ECHO ***(cont.)***

Last Inspection Date :	2019-03-20
Registry ID :	110070529393
FIPS Code :	06055
EPA Region :	09
Inspection Count :	1
Last Inspection Days :	1355
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 17.2 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051071
MYRTK Universe :	NNN
NPDES IDs :	CAW507402 CAZ508900
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	1
CWA Last Inspection Days :	1354
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

ECHO ***(cont.)***

Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	2019-03-20
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19627
Longitude :	-122.26602
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	CLARK'S ROCK
Facility Address :	650 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110066717716
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

FRS ***(cont.)***

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest
Source and System ID : CA-ENVIROVIEW - 20196

Facility Name : CROWN HILL STONE SUPPLY
Facility Address : 650 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County : N/R

Site Details
Registry ID : 110070529393
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest
Source and System ID : ICIS - CAW507402
ICIS - CAZ508900

HAZNET - CA

Facility Name : CLARK'S ROCK
Facility Address : 650 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

HAZNET - CA ***(cont.)***

Site Details

Generator EPA ID :	CAL000226326
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	650 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Latitude :	38.19530543
Longitude :	-122.26578225
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08
Facility Name :	CLARKS ROCK
Facility Address :	650 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL913386000
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	650 GREEN ISLAND RD, AMERICAN CANYON, CA 945039655
Latitude :	38.19530560
Longitude :	-122.26578216
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HWG - CA

Facility Name :	CLARK'S ROCK
Facility Address :	650 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000226326
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	650 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Owner Name :	CLARK'S ROCK
Owner Address :	650 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

HWG - CA ***(cont.)***

Operator Name : TOM O'CONNER
Operator Address : =L, N/A
Latitude : 38.195262
Longitude : -122.267611

Facility Name : CLARKS ROCK
Facility Address : 650 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

EPA ID : CAL913386000
Status : Inactive
Category : STATE
Type : PERMANENT
Facility Type : N/R
Mailing Address : 650 GREEN ISLAND RD, AMERICAN CANYON, CA 945039655
Owner Name : CLARKS ROCK
Owner Address : 650 GREEN ISLAND RD, AMERICAN CANYON, CA 945039655
Operator Name : HOWARD PETERSON
Operator Address : 650 GREEN ISLAND RD, AMERICAN CANYON, CA 945039655
Latitude : 38.195262
Longitude : -122.267611

ICIS

Facility Name : CROWN HILL STONE SUPPLY
Facility Address : 650 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503

Site Details
NPDES ID : CAW507402
ICIS Facility Interest ID : 3601053255
Facility UIN : 110070529393
Facility Type Code : N/R
Impaired Waters : 303(D) Listed
Latitude : 38.19627
Longitude : -122.26602
Last Date in Agency List : 2022-12-28

Facility Name : CROWN HILL STONE SUPPLY LLC
Facility Address : 650 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503

Site Details
NPDES ID : CAZ508900
ICIS Facility Interest ID : 3601078089

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

ICIS ***(cont.)***

Facility UIN :	110070529393
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.19627
Longitude :	-122.26602
Last Date in Agency List :	2022-12-28

INACTIVE PCS

Issue Date :	2019-05-15
Original Issue Date :	2019-05-15
Effective Date :	2019-05-15
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601856757
External Permit Number :	CAZ508900
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Crown Hill Stone Supply LLC
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Manifest Number :	100063919ELC
Shipped Date :	2021-11-08
Updated Date :	2021-11-09
Received Date :	2021-11-08
Status :	Signed
Generator ID :	CAL000286153
Generator Name :	CITY OF AMERICAN CANYON CORPORATION YARD
Generator Address :	650 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	4381 BROADWAY, SUITE 201, AMERICAN CANYON, CA 94503-0000
Generator Contact :	N/R
Destination ID :	CAD982042475

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Destination Name :	RECOLOGY HAY ROAD
Destination Mailing :	235 N FIRST ST, DIXON, CA 95620
Destination Address :	6426 HAY RD, VACAVILLE, CA 95687
Destination Contact :	N/R
Submission Type :	FullElectronic
Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	NA2212
DOT Information :	RQ, NA2212, ASBESTOS, 9, PGIII
Non Waste Description :	N/R
Quantity :	5 Cubic Yards
Quantity Tons, Acute, Non-Acute :	4.2, 0, 4.2
Quantity Kg, Acute, Non-Acute :	0, 3809.526
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	Y
Federal Code :	N/R
State Code :	CA - 151

NPDES - CA

Facility Name :	Crown Hill Stone Supply LLC
Facility Address :	650 Green Island Road, American Canyon, 94503
County :	Napa
Effective Date :	2019-05-15
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I028169
RM Status :	Active
Reg Meas ID :	508900
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Crown Hill Stone Supply LLC
Discharger Address :	650 Green Island Road, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

PCS FACILITY

Issue Date :	2019-05-15
Original Issue Date :	2019-05-15
Effective Date :	2019-05-15
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601856757
External Permit Number :	CAZ508900
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Crown Hill Stone Supply LLC
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RFR - CA

Facility Name :	Crown Hill Stone Supply LLC
Facility Address :	650 Green Island Road, American Canyon, CA 94503
County :	Napa
Effective Date :	2019-05-15
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I028169
SIC/NAICS :	3273(+)
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Ready-Mixed Concrete
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R

Map Id: A18
Direction: NE
Distance: 0.721 mi., 3805 ft.
Elevation: 39 ft.
Relative: Higher

Site Name : CROWN HILL STONE SUPPLY, LLC | CLARKS ROCK | CLARK'S ROCK
650 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 1043862
EPA ID: N/R

RFR - CA ***(cont.)***

TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Crown Hill Stone Supply LLC
Agency Address :	650 Green Island Road, American Canyon, CA 94503
Latitude :	38.19627
Longitude :	-122.26602
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	CROWN HILL STONE SUPPLY LLC
Facility Address :	650 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ508900
Permittee Name :	Crown Hill Stone Supply LLC
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2019-05-15
Effective Date :	2019-05-15
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	N/R
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19627
Longitude :	-122.26602
Last Date in Agency List :	2022-12-13

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER]

Envirosite ID: 547388
EPA ID: N/R

CALEPA SITES - CA

Facility Name : LEGEND NAPA VALLEY LLC
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, 94503

Site ID : 611733
EI ID : 10896016
EI Description : Chemical Storage Facilities
Latitude : 38.186929
Longitude : -122.265446
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-12-21

Facility Name : LEGEND NAPA VALLEY LLC
Facility Address : 100 NAPA JUNCTION ROAD, AMERICAN CANYON, 94503

Site ID : 621671
EI ID : 903433
EI Description : Industrial Facility Storm Water
Latitude : 38.185716
Longitude : -122.263880
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-12-21

Facility Name : MIOCENE LLC
Facility Address : 100 NAPA JUNCTION ROAD, AMERICAN CANYON, 94503

Site ID : 537054
EI ID : 843263
EI Description : Industrial Facility Storm Water
Latitude : 38.185716
Longitude : -122.263880
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-12-21

Facility Name : MIOCENE WINE LLC
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, 94503

Site ID : 442668
EI ID : 10771042
EI Description : Chemical Storage Facilities
Latitude : 38.186929
Longitude : -122.265446
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-06-27

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

Facility Name : SPRINT UNITED MANAGEMNT CO.
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, 94503

Site ID : 402743
EI ID : 10149309
EI Description : Chemical Storage Facilities
Latitude : 38.186929
Longitude : -122.265446
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-12-21

Facility Name : T-MOBILE WEST, LLC SF70692M
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, 94503

Site ID : 48394
EI ID : 10474462
EI Description : Chemical Storage Facilities
Latitude : 38.186929
Longitude : -122.265446
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-12-21

Facility Name : VERIZON WIRELESS HWY 12 & 29
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, 94503

Site ID : 406017
EI ID : 10143649
EI Description : Chemical Storage Facilities
Latitude : 38.186929
Longitude : -122.265446
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-12-21

CIWQS - CA

Facility Name : LEGEND NAPA VALLEY LLC
Facility Address : 100 NAPA JUNCTION ROAD, AMERICAN CANYON, CA 94503
County : NAPA

Place ID : S903433
Agency Name : LEGEND NAPA VALLEY LLC
Last Date in Agency List : 2022-12-28

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

CIWQS - CA ***(cont.)***

Facility Name :	MIOCENE LLC
Facility Address :	100 NAPA JUNCTION ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S843263
Agency Name :	MIOCENE LLC
Last Date in Agency List :	2022-12-28
Facility Name :	MIOCENE WINERY
Facility Address :	100 NAPA JUNCTION, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	848274
Agency Name :	MIOCENE WINE, LLC
Last Date in Agency List :	2022-12-28

CIWQS 2 - CA

Facility Name :	Miocene Winery
Facility Address :	100 Napa Junction Road, American Canyon, 94503
County :	Napa
Facility ID :	848274
WDID :	2 23CW848274
Facility Type :	All other facilities
Region :	2
Place Type :	Food Processor
Place Subtype :	Winery
Ageny Name :	Miocene Wine, LLC
Agency Type :	Privately-Owned Business
Number of Agencies :	1
Status Date :	2019-10-11
Status :	Draft
Status Enrollee :	N
Individual/General :	I
Fee Code :	58 - Non15 Based on (TTWQ)/CPLX)
Staff Assigned :	N/R
Number of Staff Assigned :	N/R
Supervisor :	N/R
Number of Supervisor :	N/R
Number of Amendments :	0
Number of Reg Measures :	1
Baseline Flow :	N/R
Population (MS4)/Acres :	N/R
Reclamation :	N/R
CAFO Type :	N/R

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

CIWQS 2 - CA ***(cont.)***

CAFO Subtype :	N/R
CAFO Population :	N/R
Onsite :	N/R
Quality Assurance :	N/R
RCRA Flag :	N/R
Total MMP Violations Number :	0
Total Number of Violations :	0
Total Number of Inspections :	1
Date of Most Recent Completed Inspection:	2019-03-26
Date of Most Recent Received Report :	N/R
Total Number of Final (A+H) Enforcement Actions:	0
Most Recent Effective Date of Enf Action (A+H):	N/R
Program :	WDRINDIVSML
Program Category :	WDR
Number of Programs :	1
Complexity :	N/R
Pretreatment :	N/R
Facility Waste Type :	Process waste, NEC
Reg Measure ID :	422126
Reg Measure Type :	WDR
Reg Measure Title :	DRAFT WDR for Miocene Wine, LLC (ROWD 05-02-2018)
Reg Measure Description :	Draft - Winery ROWD received May 2, 2018, and is under review. New winery that plans on discharging approximately 27% (172,000 gallons per year) of the total process wastewater (640,000 gallons per year) to land as irrigation.
SIC 1 :	-
SIC 2 :	-
SIC 3 :	-
Latitude :	38.186589
Longitude :	-122.264713
Last Date in Agency List :	2023-01-11

ECHO

Facility Name :	MIOCENE LLC
Facility Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110070096092
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

ECHO ***(cont.)***

Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 16.5 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051081
MYRTK Universe :	NNN
NPDES IDs :	CAZ467608
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2084
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2084
Facility NAICS :	312130 - Wineries
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

ECHO ***(cont.)***

Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.185716
Longitude :	-122.26388
Last Date in Agency List :	2021-02-17

Facility Name :	MIOCENE WINE LLC
Facility Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	N/R
Registry ID :	110070096092
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 16.5 mile(s)

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

ECHO ***(cont.)***

Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051081
MYRTK Universe :	NNN
NPDES IDs :	CAZ467608
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2084
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2084
Facility NAICS :	312130 - Wineries
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

ECHO ***(cont.)***

Active Flag :	Y
NAA Flag :	Y
Latitude :	38.185716
Longitude :	-122.26388
Last Date in Agency List :	2023-01-16
Last Inspection Date :	N/R
Registry ID :	N/R
FIPS Code :	N/R
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

ECHO ***(cont.)***

CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	312130 - Wineries
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	N/R
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2019-07-15

FRS

Facility Name :	METRO-PCS SF70692M
Facility Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110065269248
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

FRS ***(cont.)***

Source Description

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest

Source and System ID :	CA-ENVIROVIEW - 48394
Facility Name :	MIOCENE LLC
Facility Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110070096092
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-05-03

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

RCRAInfo is EPA’s comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : ICIS - CAZ467608
RCRAINFO - CAL000446673

Facility Name : MIOCENE WINE LLC
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110070096092
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

RCRAInfo is EPA’s comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest
Source and System ID : ICIS - CAZ467608
RCRAINFO - CAL000446673

Facility Name : SPRINT UNITED MANAGEMNT CO.
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County : NAPA

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

FRS ***(cont.)***

Site Details
Registry ID : 110066429751
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest
Source and System ID : CA-ENVIROVIEW - 156328

Facility Name : VERIZON WIRELESS HWY 12 & 29
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110055863668
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2014-03-25

Source Description

Source Description :

The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : CA-CERS - 10143649

HAZNET - CA

Facility Name : MIOCENE WINE LLC
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAL000446673
Active : Inactive
Category : STATE
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
Latitude : 38.17738800
Longitude : -122.25309300
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Facility Name : OAT HILL PARTNERS LIMITED
Facility Address : 100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAC002647933
Active : Inactive
Category : STATE
Facility Types : N/R
Type : TEMPORARY
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : PO BOX 5030, NAPA, CA 945810030
Latitude : 38.18501121
Longitude : -122.25894628
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

HAZNET - CA ***(cont.)***

Waste Generator Details
State Waste :

2009: 141 - Off-specification, aged or surplus inorganics, 0.01668 tons to NVD980895338
2009: 343 - Unspecified organic liquid mixture, 0.0034 tons to NVD980895338
2009: 223 - Unspecified oil-containing waste, 0.31275 tons to CAD982446874
2009: 141 - Off-specification, aged or surplus inorganics, 0.00417 tons to NVD980895338
2009: 791 - Liquids with pH <= 2, 0.01668 tons to NVD980895338
2009: 181 - Other inorganic solid waste, 0.08 tons to NVD980895338
2009: 223 - Unspecified oil-containing waste, 0.3375 tons to NVD980895338
2009: 741 - Liquids with halogenated organic compounds >= 1,000 Mg./L, 0.31275 tons to NVD980895338
2009: 123 - Unspecified alkaline solution, 0.03753 tons to NVD980895338
2009: 232 - Pesticides and other waste associated with pesticide production, 0.0075 tons to NVD980895338
2009: 331 - Off-specification, aged or surplus organics, 0.4816 tons to NVD980895338
2009: 122 - Alkaline solution without metals pH >= 12.5, 0.0417 tons to NVD980895338

HWG - CA

Facility Name :	MIOCENE WINE LLC
Facility Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000446673
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
Owner Name :	HOFACKET WARD FAMILY TRUST
Owner Address :	PO BOX 3796, CAREFREE, AZ 85377
Operator Name :	ADAM BRAUNSTEIN
Operator Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
Latitude :	38.185727
Longitude :	-122.263885
Facility Name :	OAT HILL PARTNERS LIMITED
Facility Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

HWG - CA ***(cont.)***

EPA ID :	CAC002647933
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	PO BOX 5030, NAPA, CA 945810030
Owner Name :	OAT HILL PARTNERS LIMITED
Owner Address :	PO BOX 5030, NAPA, CA 945810030
Operator Name :	CURT FISCHER
Operator Address :	PO BOX 5030, NAPA, CA 945810030
Latitude :	38.185727
Longitude :	-122.263885

ICIS

Facility Name :	MIOCENE LLC
Facility Address :	100 NAPA JUNCTION ROAD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ467608
ICIS Facility Interest ID :	3600734594
Facility UIN :	110070096092
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	38.185716
Longitude :	-122.26388
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	2084
SIC Description :	Wines, Brandy, And Brandy Spirits

INACTIVE PCS

Issue Date :	2015-12-15
Original Issue Date :	2015-12-15
Effective Date :	2015-12-15
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601113968
External Permit Number :	CAZ467608
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

INACTIVE PCS ***(cont.)***

Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Miocene LLC
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

NPDES - CA

Facility Name :	Legend Napa Valley LLC
Facility Address :	100 Napa Junction Road, American Canyon, 94503
County :	Napa
Effective Date :	2022-05-04
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28NEC010986
RM Status :	Active
Reg Meas ID :	548386
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Legend Napa Valley LLC
Discharger Address :	100 Napa Junction Road, American Canyon, California 94503
Last Date in Agency List :	2023-02-15
Facility Name :	Miocene LLC
Facility Address :	100 Napa Junction Road, American Canyon, 94503
County :	Napa
Effective Date :	2015-12-15
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

NPDES - CA ***(cont.)***

Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28NEC001696
RM Status :	Active
Reg Meas ID :	467608
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Miocene LLC
Discharger Address :	4225 Solano Ave #514, Napa, California 94558
Last Date in Agency List :	2023-02-15

PCS FACILITY

Issue Date :	2015-12-15
Original Issue Date :	2015-12-15
Effective Date :	2015-12-15
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601113968
External Permit Number :	CAZ467608
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Miocene LLC
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_NONGEN

Facility Name :	MIOCENE WINE LLC
Facility Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Date Form Received by Agency :	2019-06-17
EPA ID :	CAL000446673
Mailing Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
Contact :	ADAM BRAUNSTEIN
Contact Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
Contact Country :	N/R
Contact Telephone :	707-666-1938
Contact Email :	ADAM@MIOCENWINES.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	ADAM BRAUNSTEIN
Owner/Operator Address :	100 NAPA JUNCTION RD, AMERICAN CANYON, CA 94503
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-666-1938
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	HOFACKET WARD FAMILY TRUST
Owner/Operator Address :	PO BOX 3796, CAREFREE, AZ 85377
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-481-7021
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	Y
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	Y
Underground Injection Activity :	N

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RFR - CA

Facility Name :	Legend Napa Valley LLC
Facility Address :	100 Napa Junction Road, American Canyon, CA 94503
County :	Napa
Effective Date :	2022-05-04
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28NEC010986
SIC/NAICS :	2084
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Wines, Brandy, and Brandy Spirits
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Legend Napa Valley LLC
Agency Address :	100 Napa Junction Road, American Canyon, CA 94503
Latitude :	38.185716
Longitude :	-122.26388
Last Date in Agency List :	2022-11-23

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

RFR - CA ***(cont.)***

Facility Name :	Miocene LLC
Facility Address :	100 Napa Junction Road, American Canyon, CA 94503
County :	Napa
Effective Date :	2015-12-15
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28NEC001696
SIC/NAICS :	2084
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Wines, Brandy, and Brandy Spirits
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Miocene LLC
Agency Address :	4225 Solano Ave #514, Napa , CA 94558
Latitude :	38.185716
Longitude :	-122.26388
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	MIOCENE LLC
Facility Address :	100 NAPA JUNCTION ROAD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ467608
Permittee Name :	Miocene LLC
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2015-12-15
Effective Date :	2015-12-15
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	2084
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R

Map Id: 19
Direction: E
Distance: 0.728 mi., 3844 ft.
Elevation: 70 ft.
Relative: Higher

Site Name : MIOCENE LLC | MIOCENE WINE LLC | LEGEND NAPA VALLEY LLC
100 NAPA JUNCTION RD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, CIWQS 2 - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 547388
EPA ID: N/R

STORMWATER ***(cont.)***

Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.185716
Longitude :	-122.26388
Last Date in Agency List :	2022-12-13

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER]

Envirosite ID: 226227
EPA ID: N/R

AFS

Facility Name :	KREYSLER & ASSOCICATES
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 945039649
County :	Napa

Facility Summary

Program System ID :	0900000006055R9999
Facility Registry ID :	110021275500
EPA Region :	EPA Region 9 - AZ, CA, HI, NV, AS, GU
SIC :	3296 - MINERAL WOOL
NAICS :	327993 - Mineral Wool Manufacturing
Facility Type :	Privately Owned Facility
Air Pollutant Class :	Minor Emissions
Air Operating Status :	Operating
Current High Priority Violation (HPV):	No Violation Identified
Local Control Region Name :	N/R
Last Date in Agency List :	2023-01-23

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

AFS ***(cont.)***

Air Pollutant Details

Program System ID :	0900000006055R9999
Pollutant :	TOTAL HAZARDOUS AIR POLLUTANTS (HAPS)
Substance Registry Services ID (SRS):	761502
Chemical Abstract Service Number :	N/R
Air Pollutant Class :	Minor Emissions

Air Violation History Details

HPV Day Zero Date :	N/R
HPV Resolved Date :	N/R
Program System ID :	0900000006055R9999
Activity ID :	N/R
Agency Type :	N/R
State Code :	N/R
Air Local Control Region Code (LCON):	N/R
Comp Determination UID :	N/R
Enforcement Response Policy :	N/R
Program :	N/R
Pollutant :	N/R
Earliest Determination Date of Federally Reportable Violation (FRV):	N/R

CALEPA SITES - CA

Facility Name :	KREYSLER ASSOC
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	535142
EI ID :	235266
EI Description :	Industrial Facility Storm Water
Latitude :	38.195230
Longitude :	-122.264340
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	KREYSLER & ASSOCIATES
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	128367
EI ID :	10171401
EI Description :	Hazardous Waste Generator
Latitude :	38.194576
Longitude :	-122.265434

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Site ID :	128367
EI ID :	10171401
EI Description :	Chemical Storage Facilities
Latitude :	38.194576
Longitude :	-122.265434
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	WILLIAM KREYSLER & ASSOC INC
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	505314
EI ID :	110021275500
EI Description :	US EPA Air Emission Inventory System (EIS)
Latitude :	38.195240
Longitude :	-122.265520
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	ZENECA/ICI RESINS
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, 94503
Site ID :	251718
EI ID :	SL0605547879
EI Description :	Cleanup Program Site
Latitude :	38.194404
Longitude :	-122.265518
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	KREYSLER ASSOC
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S235266
Agency Name :	WILLIAM KREYSLER
Last Date in Agency List :	2022-12-28

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

CIWQS - CA ***(cont.)***

Facility Name :	ZENECA RESINS
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S274698
Agency Name :	ZENECA RESINS
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	DAVID OSON
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	N/R
FIPS Code :	N/R
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	23899 - All Other Specialty Trade Contractors
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	N/R
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2020-02-10

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

Last Inspection Date :	N/R
Registry ID :	110070732299
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	GDT-ADDRESS MATCHING (GEOCODING)
Reference Point :	ENTRANCE POINT OF A FACILITY OR STATION
Accuracy Meters :	150
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051076
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	23899 - All Other Specialty Trade Contractors
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.195205
Longitude :	-122.265381
Last Date in Agency List :	2023-01-16

Facility Name :	ICI RESINS US
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	1992-04-30
Registry ID :	110002652825
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	9579
Informal Count :	0
Last Informal Action Date :	1987-05-20
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation
Three-Year Compliance Status :	_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	99999999
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051071
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2821
Facility NAICS :	325211 - Plastics Material and Resin Manufacturing, 325192 - Cyclic Crude and Intermediate Manufacturing
Facility Last Inspection EPA Date :	1992-04-30
Facility Last Inspection State Date :	1986-09-29
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	1987-05-20

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	Y
Latitude :	38.19524
Longitude :	-122.26552
Last Date in Agency List :	2018-07-30

Facility Name :	KREYSLER ASSOC
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	N/R

Last Inspection Date :	N/R
Registry ID :	110070087477
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051071
MYRTK Universe :	NNN
NPDES IDs :	CAZ182511
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	3089
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	3089
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19523
Longitude :	-122.26434
Last Date in Agency List :	2018-07-30
Facility Name :	KREYSLER & ASSOCICATES
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	2006-05-23
Registry ID :	110024887871
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	4443
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	Not Available
Three-Year Compliance Status :	_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051071
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	3296
Facility NAICS :	327993 - Mineral Wool Manufacturing
Facility Last Inspection EPA Date :	2006-05-23
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	Y
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19524
Longitude :	-122.26538
Last Date in Agency List :	2018-07-30

Facility Name :	WILLIAM KREYSLER & ASSOC INC
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

County :	NAPA
Last Inspection Date :	2006-05-23
Registry ID :	110021275500
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	6039
Informal Count :	1
Last Informal Action Date :	2020-07-21
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	7
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	___VVVVVVV__
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051071
MYRTK Universe :	NNN
NPDES IDs :	CAZ182511
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	3089
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	1
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	7
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ECHO ***(cont.)***

CWA 13 Quarters Compliance Status :	___VVVVVVV__
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2821 3089 3296
Facility NAICS :	325211 - Plastics Material and Resin Manufacturing, 326199 - All Other Plastics Product Manufacturing, 325192 - Cyclic Crude and Intermediate Manufacturing, 326121 - Unlaminated Plastics Profile Shape Manufacturing, 327993 - Mineral Wool Manufacturing
Facility Last Inspection EPA Date :	2006-05-23
Facility Last Inspection State Date :	1986-09-29
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	2020-07-21
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	Y
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19524
Longitude :	-122.26552
Last Date in Agency List :	2023-01-16

EMI - CA

Facility Name :	WILLIAM KREYSLER & ASSOC INC
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, 94503
County :	Napa
Facility ID :	12852
Air Basin Code :	San Francisco Bay Area
District :	BAY AREA AQMD

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

EMI - CA ***(cont.)***

County ID :	NAP
SIC Code :	3089
CHAPIS :	N/R
CERR Code :	N/R
Last Date in Agency List :	2022-11-29

Additional Details

Year :	2018
Total Organic Gases (Tons/Year) :	2.565395322
Reactive Organic Gases (Tons/Year) :	.9318369129894
Carbon Monoxide (Tons/Year) :	N/R
Nitrogen Oxides (Tons/Year) :	N/R
Sulfur Oxides (Tons/Year) :	N/R
Particulate Matter (Tons/Year) :	N/R
Fine Particulate Matter (Tons/Year) :	N/R

FRS

Facility Name :	DAVID OSON
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110070732299
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : RCRAINFO - CAP000303883

Facility Name : ICI RESINS US
Facility Address : 501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503-9649
County : NAPA

Site Details
Registry ID : 110002652825
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2018-09-13

Source Description
Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.
TRIS is a publicly available EPA database reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities.

Source Description :

NCDB supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

FRS Environmental Interest
Source and System ID : NCDB - I09#1990080801215 1
NCDB - I09#1990080801215 2
RCRAINFO - CAD061163325

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

FRS ***(cont.)***

TRIS - 94589CRSNS501GR

Facility Name : KREYSLER ASSOC
Facility Address : 501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : N/R

Site Details
Registry ID : 110070087477
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2018-09-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest
Source and System ID : ICIS - CAZ182511

Facility Name : KREYSLER & ASSOCICATES
Facility Address : 501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 945039649
County : NAPA

Site Details
Registry ID : 110024887871
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2018-09-13

Source Description
Source Description : AIR contains compliance and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

FRS ***(cont.)***

AFS contains compliance and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies. The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest
Source and System ID : AIRS/AFS - 06055R9999
CA-ENVIROVIEW - 128367
ICIS - 0900000006055R9999

Facility Name : WILLIAM KREYSLER & ASSOC INC
Facility Address : 501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110021275500
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description : AIR contains compliance and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies. AFS contains compliance and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies. The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

FRS ***(cont.)***

Source Description : ICIS provides a database that, when complete, will contain enforcement and compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions and a subset of the Permit Compliance System (PCS), which supports the National Pollutant Discharge Elimination System (NPDES). This information is maintained in ICIS by EPA in the Regional offices and at Headquarters. A future release of ICIS will completely replace PCS and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities that support compliance and enforcement programs, including incident tracking, compliance assistance, and compliance monitoring.
NCDB supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description : RCRAInfo is EPA’s comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.
TRIS is a publicly available EPA database reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities.

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

FRS ***(cont.)***

Source Description :

The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.

FRS Environmental Interest
Source and System ID :
AIRS/AFS - 06055R9999
CA-ENVIROVIEW - 128367
CA-ENVIROVIEW - 216219
CA-ENVIROVIEW - 251718
EIS - 1227311
ICIS - 0900000006055R9999
ICIS - 200001307
ICIS - CAZ182511
NCDB - I09#1990080801215 1
NCDB - I09#1990080801215 2
RCRAINFO - CAD061163325
RCRAINFO - CAL000224163
TRIS - 94589CRSNS501GR

FTTS INSP

Inspection Date : 1990-08-08
Inspection Number : 1990080801215 1
Inspection Name : WWEYGANDT
Investigation Type : 5CI
Reason : NSR
Facility : MN
Action : N
Legislation : T
Region : 09

Inspection Date : 1990-08-08
Inspection Number : 1990080801215 2
Inspection Name : WWEYGANDT
Investigation Type : 8CI
Reason : NSR
Facility : MN
Action : N
Legislation : T
Region : 09

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

HAZNET - CA

Facility Name :	DAVID OSON
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAP000303883
Active :	Inactive
Category :	FEDERAL
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	17104 S FIGUEROA ST, GARDENA, CA 90248
Latitude :	38.19489300
Longitude :	-122.26538250
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Facility Name :	KREYSLER & ASSOCIATES
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000224163
Active :	Active
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Latitude :	38.19515351
Longitude :	-122.26377246
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2019: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.62500 tons to CAD008302903 2018: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.40000 tons to CAD008302903

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

HAZNET - CA ***(cont.)***

2017: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.4 tons to CAD008302903
2017: 331 - Off-specification, aged or surplus organics, 0.2 tons to CAD008302903
2017: 343 - Unspecified organic liquid mixture, 0.02 tons to CAD008302903
2016: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.2 tons to CAD008302903
2015: 331 - Off-specification, aged or surplus organics, 0.225 tons to CAD008302903
2015: 352 - Other organic solids, 0.0125 tons to CAD008302903
2015: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.4 tons to CAD008302903
2014: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.075 tons to CAD008302903
2014: 352 - Other organic solids, 0.17 tons to CAD008302903
2013: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.2 tons to CAD008302903
2013: 352 - Other organic solids, 0.0125 tons to CAD008302903
2012: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.2 tons to CAD008302903
2012: 352 - Other organic solids, 0.03 tons to CAD008302903
2011: 352 - Other organic solids, 0.005 tons to CAD008302903
2011: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.4 tons to CAD008302903
2010: 551 - Laboratory waste chemicals, 0.0225 tons to CAD008302903
2010: 352 - Other organic solids, 0.01 tons to CAD008302903
2010: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.2 tons to CAD008302903
2009: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.2 tons to CAD008302903
2008: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.6 tons to CAD008302903
2008: 331 - Off-specification, aged or surplus organics, 0.2 tons to CAD008302903
2007: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.363 tons to CAD009452657
2006: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.5445 tons to CAD009452657
2006: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.726 tons to CAD009452657
2003: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.363 tons to CAD009452657
2001: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.2 tons to KYD053348108

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

HAZNET - CA ***(cont.)***

Facility Name :	KREYSLR & ASSOCIATES
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAC002747340
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 945039649
Latitude :	38.19515351
Longitude :	-122.26377246
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2013: 181 - Other inorganic solid waste, 0.125 tons to CAD028409019

Facility Name :	WILLIAM KREYSLER
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAC002301409
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	PO BOX 173, PENNGROVE, CA 949510000
Latitude :	38.19515351
Longitude :	-122.26377246
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

HAZNET - CA ***(cont.)***

Waste Generator Details

State Waste :	2001: 151 - Asbestos containing waste, 1.6856 tons to CAL000190080

HIST AFS 2

Facility Name :	KREYSLER & ASSOCICATES
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503-9649
County :	NAPA

Site Details

PEPA :	110024887871
Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
DB Number :	N/R
AQCR :	030
SIC Code :	3296
NIC Code :	327993
DCS :	3
DCL :	B
Government :	0
CMSC :	N/R
HP1F :	N/R
Last Date in Agency List :	2015-01-14

Air Pollutant Data

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
APC :	M
PLAP :	THAP
DCAP :	3
DCLP :	B
DATT :	N/R

Historical Quarterly Status 12

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

HIST AFS 2 ***(cont.)***

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1401
APH :	M

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1402
APH :	M

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1104
APH :	M

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1201
APH :	M

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1204
APH :	M

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

HIST AFS 2 ***(cont.)***

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1403
APH :	M

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1302
APH :	M

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1303
APH :	M

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1202
APH :	M

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
SCH :	3
HDT :	1304
APH :	M

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

HIST AFS 2 ***(cont.)***

Non a Sources - Actions

Region :	09
STTE :	06
County Code :	055
PCDS :	R9999
PEPA :	110024887871
APC :	M
ANT :	FE
DTA :	060523
PAM :	N/R

HWG - CA

Facility Name :	DAVID OSON
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAP000303883
Status :	Inactive
Category :	FEDERAL
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	17104 S FIGUEROA ST, GARDENA, CA 90248
Owner Name :	DAVID OSON
Owner Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Operator Name :	DAVID OSON
Operator Address :	17104 S FIGUEROA ST, GARDENA, CA 90248
Latitude :	38.194893
Longitude :	-122.265383
Facility Name :	KREYSLER & ASSOCIATES
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAL000224163
Status :	Active
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Owner Name :	WILLIAM KREYSLER
Owner Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Operator Name :	ANDREW BRATCHER
Operator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Latitude :	38.195218

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

HWG - CA ***(cont.)***

Longitude :	-122.26222
Facility Name :	KREYSLR & ASSOCIATES
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAC002747340
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 945039649
Owner Name :	MARIE BIRGITTA
Owner Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 945039649
Operator Name :	MARIE BIRGITTA
Operator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 945039649
Latitude :	38.195154
Longitude :	-122.263772
Facility Name :	WILLIAM KREYSLER
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
EPA ID :	CAC002301409
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	PO BOX 173, PENNGROVE, CA 949510000
Owner Name :	WILLIAM KREYSLER
Owner Address :	PO BOX 173, PENNGROVE, CA 949510000
Operator Name :	CORNEY BAXTER/ASSISTANT
Operator Address :	PO BOX 173, PENNGROVE, CA 949510000
Latitude :	38.195218
Longitude :	-122.26222

ICIS

Facility Name :	KREYSLER ASSOC
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

ICIS ***(cont.)***

Site Details

NPDES ID :	CAZ182511
ICIS Facility Interest ID :	3600722595
Facility UIN :	110021275500
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.19523
Longitude :	-122.26434
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	3089
SIC Description :	Plastics Products

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101939
External Permit Number :	CAZ182511
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	William Kreysler
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Manifest Number :	001795215VES
Shipped Date :	2020-06-09
Updated Date :	2021-06-18
Received Date :	2020-06-12
Status :	Corrected
Generator ID :	CAL000224163
Generator Name :	KREYSLER AND ASSOCIATES
Generator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Mailing :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Contact :	N/R
Destination ID :	CAD008302903
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS LLC
Destination Mailing :	107 SOUTH MOTOR AVENUE, AZUSA, CA 91702
Destination Address :	1704 W FIRST ST, AZUSA, CA 91702
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1993
DOT Information :	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (ACETONE, STYRENE MONOMER), 3, II
Non Waste Description :	N/R
Quantity :	1100 Pounds
Quantity Tons, Acute, Non-Acute :	0.55, 0, 0.55
Quantity Kg, Acute, Non-Acute :	0, 498.86652
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	Y
Federal Code :	D001, F003
State Code :	CA - 212

Manifest Details

Manifest Number :	001722049VES
Shipped Date :	2019-12-13
Updated Date :	2021-07-16
Received Date :	2019-12-20
Status :	Corrected
Generator ID :	CAL000224163
Generator Name :	KREYSLER AND ASSOCIATES

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Generator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Mailing :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Contact :	N/R
Destination ID :	CAD008302903
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS LLC
Destination Mailing :	107 107 SOUTH MOTOR AVENUE, AZUSA, CA 91702
Destination Address :	1704 1704 W FIRST ST, AZUSA, CA 91702
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1993
DOT Information :	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (ACETONE, STYRENE MONOMER), 3, II
Non Waste Description :	N/R
Quantity :	400 Pounds
Quantity Tons, Acute, Non-Acute :	0.2, 0, 0.2
Quantity Kg, Acute, Non-Acute :	0, 181.406
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	Y
Federal Code :	D001, F003
State Code :	CA - 212

Manifest Details

Manifest Number :	001721856VES
Shipped Date :	2019-12-03
Updated Date :	2021-07-13
Received Date :	2019-12-11
Status :	Corrected
Generator ID :	CAL000224163
Generator Name :	KREYSLER AND ASSOCIATES
Generator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Mailing :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Contact :	N/R
Destination ID :	CAD008302903
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS LLC
Destination Mailing :	107 107 SOUTH MOTOR AVENUE, AZUSA, CA 91702
Destination Address :	1704 1704 W FIRST ST, AZUSA, CA 91702

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1993
DOT Information :	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (ACETONE, STYRENE MONOMER), 3, II
Non Waste Description :	N/R
Quantity :	400 Pounds
Quantity Tons, Acute, Non-Acute :	0.2, 0, 0.2
Quantity Kg, Acute, Non-Acute :	0, 181.406
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	Y
Federal Code :	D001, F003
State Code :	CA - 212

Manifest Details

Manifest Number :	001717546VES
Shipped Date :	2019-06-14
Updated Date :	2019-07-05
Received Date :	2019-06-21
Status :	Signed
Generator ID :	CAL000224163
Generator Name :	KREYSLER AND ASSOCIATES
Generator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Mailing :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Contact :	N/R
Destination ID :	CAD008302903
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS LLC
Destination Mailing :	107 107 SOUTH MOTOR AVENUE, AZUSA, CA 91702
Destination Address :	1704 1704 W FIRST ST, AZUSA, CA 91702
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1993
DOT Information :	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (ACETONE, STYRENE MONOMER), 3, II
Non Waste Description :	N/R
Quantity :	450 Pounds
Quantity Tons, Acute, Non-Acute :	0.225, 0, 0.225
Quantity Kg, Acute, Non-Acute :	0, 204.08176
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	Y
Federal Code :	D001, F003
State Code :	CA - 212

Manifest Details

Manifest Number :	001518142VES
Shipped Date :	2018-12-11
Updated Date :	2019-01-11
Received Date :	2018-12-14
Status :	Signed
Generator ID :	CAL000224163
Generator Name :	KREYSLER AND ASSOCIATES
Generator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Mailing :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9649
Generator Contact :	N/R
Destination ID :	CAD008302903
Destination Name :	VEOLIA ES TECHNICAL SOLUTIONS LLC
Destination Mailing :	107 107 SOUTH MOTOR AVENUE, AZUSA, CA 91702
Destination Address :	1704 1704 W FIRST ST, AZUSA, CA 91702
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1993
DOT Information :	UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (ACETONE, STYRENE MONOMER), 3, II
Non Waste Description :	N/R

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Quantity :	400 Pounds
Quantity Tons, Acute, Non-Acute :	0.2, 0, 0.2
Quantity Kg, Acute, Non-Acute :	0, 181.406
Management Method :	H061 - FUEL BLENDING
Is EPA Waste :	Y
Federal Code :	D001, F003
State Code :	CA - 212

NPDES - CA

Facility Name :	Kreysler Assoc
Facility Address :	501 Green Island Rd, American Canyon, 94503
County :	Napa
Effective Date :	2001-03-27
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I016434
RM Status :	Active
Reg Meas ID :	182511
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	William Kreysler
Discharger Address :	501 Green Island Rd, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

PCS ENF

Site Details

NPDES ID :	CAZ182511
Last Date in Agency List :	2022-12-28

Formal Enforcement Actions

Settlement Entered Date :	N/R
ENF Identifier :	N/R
Activity ID :	N/R
Activity Type :	N/R
ENF Type :	N/R
Agency :	N/R

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

PCS ENF ***(cont.)***

Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	2020-07-21
Registry ID :	110021275500
ENF Identifier :	CA-ZIEA438211
Activity ID :	3602311994
Activity Type :	Administrative - Informal
ENF Type :	Notice of Noncompliance Issued
Agency :	State

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101939
External Permit Number :	CAZ182511
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	William Kreysler
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_NONGEN

Facility Name :	KREYSLER & ASSOCIATES
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
County :	NAPA

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Date Form Received by Agency :	2001-05-14
EPA ID :	CAL000224163
Mailing Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
Contact :	PAT SORENSEN
Contact Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Contact Country :	N/R
Contact Telephone :	707-552-3500
Contact Email :	PAT@KREYSLER.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	PAT SORENSEN
Owner/Operator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-552-3500
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	WILLIAM KREYSLER
Owner/Operator Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-552-3500
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RCRA_SQG

Facility Name :	DAVID OSON
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2020-01-24
EPA ID :	CAP000303883
Mailing Address :	17104 S. FIGUEROA ST, GARDENA, CA 90248
Contact :	DAVID OSON
Contact Address :	17104 S. FIGUEROA ST, GARDENA, CA 90248
Contact Country :	US
Contact Telephone :	310-714-5608
Contact Email :	DAVIDO@MARTINBROS.NET
EPA Region :	09
Land Type :	Private
Source Type :	Notification
Classification :	Small Quantity Generator
Description :	Handlers that generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.
Last Date in Agency List :	2023-01-23

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

RCRA_SQG ***(cont.)***

Owner/Operator Summary

Owner/Operator Name :	DAVID OSON (MARTIN BROS MANAGER)
Owner/Operator Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Owner/Operator Country :	US
Owner/Operator Telephone :	N/R
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	WILLIAM KREYSLER (PRESIDENT)
Owner/Operator Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Owner/Operator Country :	US
Owner/Operator Telephone :	N/R
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Hazardous Waste Summary

Waste Code / Name :	181 - Other inorganic solid waste
	221 - Waste oil and mixed oil

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

RCRA_SQG ***(cont.)***

D002 - CORROSIVE WASTE

Notices of Violations Summary
Regulation Violated : N

RFR - CA

Facility Name :	Kreysler Assoc
Facility Address :	501 Green Island Rd, American Canyon, CA 94503
County :	Napa
Effective Date :	2001-03-27
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I016434
SIC/NAICS :	3089
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Plastics Products, NEC
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	1
Number of Violations within Five Years:	1
Agency :	William Kreysler
Agency Address :	501 Green Island Rd, American Canyon, CA 94503
Latitude :	38.19523
Longitude :	-122.26434
Last Date in Agency List :	2022-11-23

SLIC REG 2 - CA

Facility Name :	ZENECA/ICI RESINS
Facility Address :	501 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	Napa

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

Site Details

Status Date :	2000-11-20
Status :	Completed - Case Closed
Begin Date :	2000-11-20
Global ID :	SL0605547879
Region :	REGION 2
Site History :	N/R
RB Case Number :	28S0006
Potential Media Affected :	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern :	N/R
Local Agency :	N/R
Local Case Number :	N/R
Lead Agency :	SAN FRANCISCO BAY RWQCB (REGION 2)
File Location :	N/R
CUF Case :	NO
Caseworker :	UUU
Case Type :	Cleanup Program Site
How Discovered :	N/R
How Discovered Description :	N/R
Stop Method :	N/R
Stop Description :	N/R
Calwater Watershed Name :	San Pablo - Napa River (206.50)
DWR Groundwater Subbasin Name :	Napa-Sonoma Valley - Napa-Sonoma Lowlands (2-002.03)
Disadvantaged Community :	N/R
Latitude :	38.194404
Longitude :	-122.265518
Agency URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-01-17

Contacts Summary

Global ID :	SL0605547879
Contact Name :	Regional Water Board
Contact Type :	Regional Board Caseworker - Primary Caseworker
Organization Name :	SAN FRANCISCO BAY RWQCB (REGION 2)
Address :	1515 CLAY ST SUITE 1400
City :	OAKLAND
Phone Number :	N/R
Email :	N/R

Regulatory Activities

Date :	2000-11-20
Global ID :	SL0605547879
Action Type :	ENFORCEMENT
Action :	Closure/No Further Action Letter

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

Date :	1996-01-25
Global ID :	SL0605547879
Action Type :	RESPONSE
Action :	Monitoring Report - Quarterly

Date :	1965-01-02
Global ID :	SL0605547879
Action Type :	Other
Action :	Leak Reported

Status History

Status Date :	2000-11-20
Global ID :	SL0605547879
Status :	Completed - Case Closed

Status Date :	2000-11-20
Global ID :	SL0605547879
Status :	Open - Case Begin Date

STORMWATER

Facility Name :	KREYSLER ASSOC
Facility Address :	501 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ182511
Permittee Name :	William Kreysler
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	3089
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	7
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19524

Map Id: A20
Direction: NE
Distance: 0.731 mi., 3860 ft.
Elevation: 40 ft.
Relative: Higher

Site Name : KREYSLER ASSOC | DAVID OSON | KREYSLER & ASSOCIATES
501 GREEN ISLAND RD
AMERICAN CANYON | American Canyon | VALLEJO, CA

Database(s) : [AFS, CALEPA SITES - CA, CIWQS - CA, ECHO, EMI - CA, FRS, FTTS INSP, HAZNET - CA, HIST AFS 2, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS ENF, PCS FACILITY, RCRA_NONGEN, RCRA_SQG, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 226227
EPA ID: N/R

STORMWATER ***(cont.)***

Longitude :	-122.26552
Last Date in Agency List :	2022-12-13

Map Id: 21
Direction: E
Distance: 0.734 mi., 3873 ft.
Elevation: N/R
Relative: N/R

Site Name : West Napa fault
38.179287, -122.254982
CA

Database(s) : [SEISMIC - CA]

Envirosite ID: 51591508
EPA ID: N/R

SEISMIC - CA

Fault ID :	36
Fault Age :	HOL
Fault Source :	Bryant (1982g)
Zone Name :	West Napa fault zone
Line Type :	solid
Line Value :	1
JEN ID :	152
Section Number :	36b
Section Name :	Napa County Airport section
Date :	N/R
Rule ID :	7
Shape Length :	589.055532649

Map Id: 22
Direction: ESE
Distance: 0.815 mi., 4306 ft.
Elevation: N/R
Relative: N/R

Site Name : West Napa fault
38.166447, -122.251449
CA

Database(s) : [SEISMIC - CA]

Envirosite ID: 51608935
EPA ID: N/R

SEISMIC - CA

Fault ID :	36
Fault Age :	HOL
Fault Source :	Bryant (1982g)
Zone Name :	West Napa fault zone

Map Id: 22
Direction: ESE
Distance: 0.815 mi., 4306 ft.
Elevation: N/R
Relative: N/R

Site Name : West Napa fault
38.166447, -122.251449
CA

Database(s) : [SEISMIC - CA] ***(cont.)***

Envirosite ID: 51608935
EPA ID: N/R

SEISMIC - CA ***(cont.)***

Line Type :	solid
Line Value :	1
JEN ID :	152
Section Number :	36b
Section Name :	Napa County Airport section
Date :	N/R
Rule ID :	7
Shape Length :	1571.17022897

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER]

Envirosite ID: 487611
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	CALIFORNIA AUTO DISMANTLERS
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	232067
EI ID :	SLT2O01220
EI Description :	Cleanup Program Site
Latitude :	38.197959
Longitude :	-122.282120
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	CALIFORNIA AUTO DISMANTLING INC.
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	101795
EI ID :	616794
EI Description :	Industrial Facility Storm Water
Latitude :	38.197150
Longitude :	-122.282410
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-08-26

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

CERCLIS NFRAP

Facility Name :	SUNSHINE AUTO SALVAGE
Facility Address :	1578 GREEN ISLAND ROAD, VALLEJO, CA 94503
County :	NAPA
Site ID :	0905833
Epa ID :	CAD091840710
Short Name :	SUNSHINE AUTO SALVAGE
Congressional District :	N/R
IFMS ID :	N/R
SMSA Number :	N/R
USGC Hydro Unit :	N/R
Federal Facility :	N
DMNSN Number :	N/R
Site Orphan Flag :	N/R
RCRA ID :	N/R
USGS Quadrangle :	N/R
Site Init by Prog :	S
NFRAP Flag :	NFA
Parent ID :	N/R
RST Code :	N/R
EPA Region :	09
Classification :	N/R
Site Settings Code :	N/R
NPL Status :	Not on the NPL
DMNSN Unit Code :	N/R
RBRAC Code :	N/R
RResp Fed Agency Code :	N/R
Non NPL Status :	NFRAP-Site does not qualify for the NPL based on existing information
Non NPL Status Date :	2002-12-10
Site Fips Code :	06055
CC Concurrence Date :	N/R
CC Concurrence FY :	N/R
Alias EPA ID :	N/R
Site FUDS Flag :	N/R

CERCLIS Site Contact Name(s)

Contact ID :	13003854
Contact Title :	Site Assessment Manager (SAM)
Contact ID :	13003858
Contact Title :	Site Assessment Manager (SAM)

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

CERCLIS NFRAP ***(cont.)***

Contact ID :	13004003
Contact Title :	Site Assessment Manager (SAM)
Alias Comments :	CALIFORNIA AUTO DISMANTLING
Site Description :	N/R
Alias Comments :	ULTIMATE ADVENTURE INC. DBA
Site Description :	N/R

CERCLIS Assessment History

Action Code :	001
Action :	PRELIMINARY ASSESSMENT
Date Started :	2001-10-29
Date Completed :	2002-12-10
Priority Level :	1
Operational Unit :	00
Primary Responsibility :	State, Fund Financed
Planning Status :	N/R
Urgency Indicator :	N/R
Action Anomaly :	N/R
Action Code :	001
Action :	ARCHIVE SITE
Date Started :	N/R
Date Completed :	2003-06-12
Priority Level :	1
Operational Unit :	00
Primary Responsibility :	EPA In-House
Planning Status :	N/R
Urgency Indicator :	N/R
Action Anomaly :	N/R
Action Code :	001
Action :	PRE-CERCLIS SCREENING
Date Started :	N/R
Date Completed :	2001-01-10
Priority Level :	1
Operational Unit :	00
Primary Responsibility :	State, Fund Financed
Planning Status :	N/R
Urgency Indicator :	N/R

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

CERCLIS NFRAP ***(cont.)***

Action Anomaly :	N/R
Action Code :	001
Action :	DISCOVERY
Date Started :	N/R
Date Completed :	2001-01-10
Priority Level :	1
Operational Unit :	00
Primary Responsibility :	EPA Fund-Financed
Planning Status :	N/R
Urgency Indicator :	N/R
Action Anomaly :	N/R

CIWQS - CA

Facility Name :	CALIFORNIA AUTO DISMANTLING INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S616794
Agency Name :	CALIFORNIA AUTO DISMANTLING INC
Last Date in Agency List :	2022-12-28
Facility Name :	COPARTS
Facility Address :	1578 GRENN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S863635
Agency Name :	COPARTS
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	CALIFORNIA AUTO DISMANTLING INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110057078095
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

ECHO ***(cont.)***

Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	U_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020402
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051068
MYRTK Universe :	NNN
NPDES IDs :	CAZ276879
CWA Permit Types :	Minor
CWA Compliance Tracking :	Off
CWA NAICS :	N/R
CWA SICS :	5015
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Terminated Permit
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_U
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	5015
Facility NAICS :	4211
Facility Last Inspection EPA Date :	N/R

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

ECHO ***(cont.)***

Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19788
Longitude :	-122.2821
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	CALIFORNIA AUTO DISMANTLING INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110057078095
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

FRS ***(cont.)***

Source Description :

The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest
Source and System ID :

CA-CERS - 10170623
CA-ENVIROVIEW - 101795
CA-ENVIROVIEW - 232067
ICIS - CAZ276879
RCRAINFO - CAL000244543

HWG - CA

Facility Name : COPART INC
Facility Address : 1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

HWG - CA ***(cont.)***

County :	NAPA
EPA ID :	CAC003172438
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	14185 DALLAS PKWY, STE 300, DALLAS, TX 75254
Owner Name :	COPART INC.
Owner Address :	14185 DALLAS PKWY, STE 300, DALLAS, TX 75254
Operator Name :	SEAN MULCAHY / TAX DEPT
Operator Address :	14185 DALLAS PKWY, STE 300, DALLAS, TX 75254
Latitude :	38.197845
Longitude :	-122.282116

ICIS

Facility Name :	CALIFORNIA AUTO DISMANTLING INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ276879
ICIS Facility Interest ID :	3600726494
Facility UIN :	110057078095
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.19715
Longitude :	-122.28241
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	5015
SIC Description :	Motor Vehicle Parts, Used
Facility Name :	COPARTS
Facility Address :	1578 GRENN ISLAND ROAD, AMERICAN CANYON, CA 94503

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

ICIS ***(cont.)***

Site Details

NPDES ID :	CAW497179
ICIS Facility Interest ID :	3600874394
Facility UIN :	110070230574
Facility Type Code :	N/R
Impaired Waters :	N/R
Latitude :	N/R
Longitude :	N/R
Last Date in Agency List :	2022-12-28

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	2019-12-13
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601105861
External Permit Number :	CAZ276879
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Terminated
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	California Auto Dismantling Inc
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Manifest Number :	016996675FLE
Shipped Date :	2022-06-08
Updated Date :	2022-08-21
Received Date :	2022-06-30
Status :	Corrected

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Generator ID :	CAC003172438
Generator Name :	COPART INC
Generator Address :	1578 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Generator Mailing :	14185 DALLAS PARKWAY, STE. 300, DALLAS, TX 75254
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC.
Destination Mailing :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Address :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	NA3077
DOT Information :	RQ, NA3077, HAZARDOUS WASTE, SOLID, N.O.S.(LEAD), 9, PG III
Non Waste Description :	N/R
Quantity :	75 Pounds
Quantity Tons, Acute, Non-Acute :	0.0375, 0, 0.0375
Quantity Kg, Acute, Non-Acute :	0, 34.013626
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	Y
Federal Code :	D008
State Code :	CA - 181

Manifest Details

Manifest Number :	021309137JJK
Shipped Date :	2022-05-12
Updated Date :	2022-06-03
Received Date :	2022-05-13
Status :	Signed
Generator ID :	CAC003172438
Generator Name :	COPART INC
Generator Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	14185 DALLAS PKWY, STE 300 ATTN: TAX DEPT, DALLAS, TX 75254
Generator Contact :	N/R
Destination ID :	CAD981382732
Destination Name :	ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Destination Mailing :	10840 ALTAMONT PASS RD, LIVERMORE, CA 94551
Destination Address :	10840 ALTAMONT PASS RD, LIVERMORE, CA 94551
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	NA2212
DOT Information :	R.Q., NA2212, Asbestos, 9, PG III
Non Waste Description :	N/R
Quantity :	35 Cubic Yards
Quantity Tons, Acute, Non-Acute :	29.4, 0, 29.4
Quantity Kg, Acute, Non-Acute :	0, 26666.682
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 151

NPDES - CA

Facility Name :	CA Auto Dismantling Inc
Facility Address :	1578 Green Island Rd, American Canyon, 94503
County :	Napa
Effective Date :	2005-01-19
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I019282
RM Status :	Active
Reg Meas ID :	276879
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	California Auto Dismantling Inc

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

NPDES - CA ***(cont.)***

Discharger Address :	931 Vreeland Ave, Wilmington, California 90744
Last Date in Agency List :	2015-01-07
Facility Name :	California Auto Dismantling Inc
Facility Address :	1578 Green Island Rd, American Canyon, 94503
County :	Napa
Effective Date :	2005-01-19
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	2019-12-13
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I019282
RM Status :	Terminated
Reg Meas ID :	276879
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	California Auto Dismantling Inc
Discharger Address :	1578 Green Island Rd, American Canyon, California 94503
Last Date in Agency List :	2022-11-09

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601105861
External Permit Number :	CAZ276879
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

PCS FACILITY ***(cont.)***

Permit Name :	California Auto Dismantling Inc
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2019-12-03

RCRA_NONGEN

Facility Name :	COPART INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2022-04-21
EPA ID :	CAC003172438
Mailing Address :	14185 DALLAS PKWY, STE 300 ATTN: TAX DEPT, DALLAS, TX 75254
Contact :	SEAN MULCAHY / TAX DEPT
Contact Address :	14185 DALLAS PKWY, STE 300 ATTN: TAX DEPT, DALLAS, TX 75254
Contact Country :	N/R
Contact Telephone :	972-391-5114
Contact Email :	RENEW.DEPT@COPART.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	COPART INC.
Owner/Operator Address :	14185 DALLAS PKWY, STE 300 ATTN: TAX DEPT, DALLAS, TX 75254
Owner/Operator Country :	N/R
Owner/Operator Telephone :	972-391-5114
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Owner/Operator Name :	SEAN MULCAHY / TAX DEPT
Owner/Operator Address :	14185 DALLAS PKWY, STE 300 ATTN: TAX DEPT, DALLAS, TX 75254
Owner/Operator Country :	N/R
Owner/Operator Telephone :	972-391-5114
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RFR - CA

Facility Name :	CA Auto Dismantling Inc
Facility Address :	1578 Green Island Rd, American Canyon, CA 94503
County :	N/R
Effective Date :	2005-01-19
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

RFR - CA ***(cont.)***

Order Number :	97-03DW
WDID :	2 28I019282
SIC/NAICS :	5015
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Motor Vehicle Parts, Used
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	California Auto Dismantling Inc
Agency Address :	931 Vreeland Ave, Wilmington, CA 90744
Latitude :	38.19699
Longitude :	-122.28262
Last Date in Agency List :	2015-03-10
Facility Name :	California Auto Dismantling Inc
Facility Address :	1578 Green Island Rd, American Canyon, CA 94503
County :	Napa
Effective Date :	2005-01-19
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I019282
SIC/NAICS :	5015
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Motor Vehicle Parts, Used
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

RFR - CA ***(cont.)***

Agency :	California Auto Dismantling Inc
Agency Address :	1578 Green Island Rd, American Canyon, CA 94503
Latitude :	38.19715
Longitude :	-122.28241
Last Date in Agency List :	2019-11-18

SEMS_8R_ARCHIVED SITES

Facility Name :	SUNSHINE AUTO SALVAGE
Facility Address :	1578 GREEN ISLAND ROAD, VALLEJO, CA 94503
County :	NAPA

Site Details

Site ID :	0905833
EPA ID :	CAD091840710
Region :	09
Congressional District :	N/R
Federal Facility :	N
Federal Facility Docket :	N
NPL Status :	Not on the NPL
Non NPL Status :	NFRAP-Site does not qualify for the NPL based on existing information
FIPS Code :	06055
Superfund Alternative Agreement :	N
Last Date in Agency List :	2023-01-20

Additional Information

Start Date :	2001-10-29
Finish Date :	2002-12-10
OU :	00
Action Code :	PA
Action Name :	PA
Sequence :	1
Quality :	N
Current Action Lead :	St Perf

Start Date :	2001-01-10
Finish Date :	2001-01-10
OU :	00
Action Code :	DS
Action Name :	DISCVRY
Sequence :	1
Quality :	N/R

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

SEMS_8R_ARCHIVED SITES ***(cont.)***

Current Action Lead :	EPA Perf
Start Date :	N/R
Finish Date :	2003-06-12
OU :	00
Action Code :	VS
Action Name :	ARCH SITE
Sequence :	1
Quality :	N/R
Current Action Lead :	EPA Perf In-Hse
Start Date :	N/R
Finish Date :	2001-01-10
OU :	00
Action Code :	HX
Action Name :	PRE-CERC
Sequence :	1
Quality :	N/R
Current Action Lead :	St Perf

SLIC REG 2 - CA

Facility Name :	CALIFORNIA AUTO DISMANTLERS
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	Napa

Site Details

Status Date :	2001-10-10
Status :	Completed - Case Closed
Begin Date :	2001-03-08
Global ID :	SLT2O01220
Region :	REGION 2
Site History :	N/R
RB Case Number :	28S0043
Potential Media Affected :	N/R
Potential Contaminants of Concern :	N/R
Local Agency :	N/R
Local Case Number :	N/R
Lead Agency :	SAN FRANCISCO BAY RWQCB (REGION 2)
File Location :	N/R
CUF Case :	NO
Caseworker :	UUU
Case Type :	Cleanup Program Site

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

How Discovered :	N/R
How Discovered Description :	N/R
Stop Method :	N/R
Stop Description :	N/R
Calwater Watershed Name :	San Pablo - Napa River (206.50)
DWR Groundwater Subbasin Name :	Napa-Sonoma Valley - Napa-Sonoma Lowlands (2-002.03)
Disadvantaged Community :	N/R
Latitude :	38.197959
Longitude :	-122.28212
Agency URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-01-17

Contacts Summary

Global ID :	SLT2O01220
Contact Name :	Regional Water Board
Contact Type :	Regional Board Caseworker - Primary Caseworker
Organization Name :	SAN FRANCISCO BAY RWQCB (REGION 2)
Address :	1515 CLAY ST SUITE 1400
City :	OAKLAND
Phone Number :	N/R
Email :	N/R

Regulatory Activities

Date :	2003-03-03
Global ID :	SLT2O01220
Action Type :	RESPONSE
Action :	Correspondence
Date :	2001-10-22
Global ID :	SLT2O01220
Action Type :	ENFORCEMENT
Action :	Closure/No Further Action Letter
Date :	2001-10-10
Global ID :	SLT2O01220
Action Type :	ENFORCEMENT
Action :	Closure/No Further Action Letter
Date :	2001-09-07
Global ID :	SLT2O01220

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

Action Type :	ENFORCEMENT
Action :	Staff Letter
Date :	2001-03-29
Global ID :	SLT2O01220
Action Type :	ENFORCEMENT
Action :	Staff Letter

Status History

Status Date :	2001-10-10
Global ID :	SLT2O01220
Status :	Completed - Case Closed
Status Date :	2001-03-08
Global ID :	SLT2O01220
Status :	Open - Case Begin Date
Status Date :	2001-03-08
Global ID :	SLT2O01220
Status :	Open - Site Assessment

STORMWATER

Facility Name :	CALIFORNIA AUTO DISMANTLING INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ276879
Permittee Name :	California Auto Dismantling Inc
Permit Status :	Terminated
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	2019-12-13
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	5015
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0

Map Id: B23
Direction: NW
Distance: 0.841 mi., 4443 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : CALIFORNIA AUTO DISMANTLING INC. | COPART INC | CALIFORNIA AUTO DISMANTLERS
1578 GREEN ISLAND RD | 1578 GRENN ISLAND ROAD
AMERICAN CANYON | American Canyon | VALLEJO, CA 94503

Database(s) : [CALEPA SITES - CA, CERCLIS NFRAP, CIWQS - CA, ECHO, FRS, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SEMS_8R_ARCHIVED SITES, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 487611
EPA ID: N/R

STORMWATER ***(cont.)***

Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19788
Longitude :	-122.2821
Last Date in Agency List :	2022-12-13

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN]

Envirosite ID: 342913
EPA ID: N/R

CIWQS - CA

Facility Name :	COPARTS
Facility Address :	1578 GREEN ISLAND DRIVE, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S863238
Agency Name :	COPARTS
Last Date in Agency List :	2022-12-28
Facility Name :	FORMER SUNSHINE AUTO SALVAGE
Facility Address :	1578 GREEN ISLAND, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	226276
Agency Name :	CALIFORNIA AUTO DISMANTLING INC
Last Date in Agency List :	2022-12-28

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

CIWQS 2 - CA

Facility Name :	Former Sunshine Auto Salvage
Facility Address :	1578 Green Island, American Canyon, 94503
County :	Napa
Facility ID :	226276
WDID :	N/R
Facility Type :	All other facilities
Region :	2
Place Type :	Facility
Place Subtype :	N/R
Ageny Name :	N/R
Agency Type :	N/R
Number of Agencies :	N/R
Status Date :	N/R
Status :	N/R
Status Enrollee :	N/R
Individual/General :	N/R
Fee Code :	N/R
Staff Assigned :	N/R
Number of Staff Assigned :	N/R
Supervisor :	N/R
Number of Supervisor :	N/R
Number of Amendments :	0
Number of Reg Measures :	N/R
Baseline Flow :	N/R
Population (MS4)/Acres :	N/R
Reclamation :	N/R
CAFO Type :	N/R
CAFO Subtype :	N/R
CAFO Population :	N/R
Onsite :	N/R
Quality Assurance :	N/R
RCRA Flag :	N/R
Total MMP Violations Number :	0
Total Number of Violations :	1
Total Number of Inspections :	0
Date of Most Recent Completed Inspection:	N/R
Date of Most Recent Received Report :	N/R
Total Number of Final (A+H) Enforcement Actions:	4
Most Recent Effective Date of Enf Action (A+H):	2001-10-22
Program :	UNREGS
Program Category :	UNREGS
Number of Programs :	N/R
Complexity :	N/R
Pretreatment :	N/R
Facility Waste Type :	N/R

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

CIWQS 2 - CA ***(cont.)***

Reg Measure ID :	N/R
Reg Measure Type :	N/R
Reg Measure Title :	N/R
Reg Measure Description :	N/R
SIC 1 :	-
SIC 2 :	-
SIC 3 :	-
Latitude :	38.197004
Longitude :	-122.283653
Last Date in Agency List :	2023-01-11

CS_NAPA COUNTY - CA

Facility Name :	SUNSHINE AUTO SALVAGE
Facility Address :	1578 GREEN ISLAND ROAD, AMERICAN CANYON, 94589
County :	NAPA
Status Date :	2001-01-10
Status :	REFER: RWQCB
Envirostor ID :	28500004
Program Type :	EVALUATION
Site Code :	N/R
CalEnviroScreen Score :	60-65%
Latitude :	38.1987381452343
Longitude :	-122.282244869123
Last Date in Agency List :	2023-01-20

ECHO

Facility Name :	COPARTS
Facility Address :	1578 GREEN ISLAND DRIVE, AMERICAN CANYON, CA 94503
County :	NAPA COUNTY
Last Inspection Date :	2019-04-30
Registry ID :	110070230574
FIPS Code :	06055
EPA Region :	09
Inspection Count :	2
Last Inspection Days :	1314
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

ECHO ***(cont.)***

Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	CAW496680 CAW497179
CWA Permit Types :	Minor
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	2
CWA Last Inspection Days :	1696
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Not Applicable
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	2019-04-30
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

ECHO ***(cont.)***

AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	N
Latitude :	38.175095
Longitude :	-122.252743
Last Date in Agency List :	2023-01-16

ENVIROSTOR - CA

Facility Name :	SUNSHINE AUTO SALVAGE
Facility Address :	1578 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94589
County :	NAPA

Site Details

Cleanup Date :	2001-01-10
Cleanup Status :	Refer: RWQCB
Site Type :	Evaluation
Site Type Detailed :	Evaluation
Acreage :	5
APN :	058070020000
National Priorities List :	NO
Regulatory Agencies Involved :	RWQCB 2 - San Francisco Bay
Lead Agency :	RWQCB 2 - San Francisco Bay
Project Manager :	N/R
Supervisor :	Karen Toth
Office :	Cleanup Berkeley
Envirostor ID :	28500004
Site Code :	N/R
Assembly :	04
Senate :	03
Congressional District :	05
Special Program :	EPA - PASI
Past Uses :	BATTERY RECLAMATION, RECYCLING - SCRAP METAL
Potential COC :	TPH-diesel; 1,2,4-Trimethylbenzene; Lead
Confirmed COC :	TPH-diesel-NO; 1,2,4-Trimethylbenzene; Lead
Potential Media Affected :	Soil
Restricted Use :	NO
Site Management Req :	N/R
Funding :	N/R
Latitude :	38.198738
Longitude :	-122.282245
Agency Hyperlink :	Click here for hyperlink provided by the agency.

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

ENVIROSTOR - CA ***(cont.)***

Last Date in Agency List : 2022-12-16

Alias :
APN - 058070020000
Alternate Name - CALIFORNIA AUTO DISMANTLING
Envirostor ID Number - 28500004

Completed Activities

Completed Date : 2002-04-11
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Preliminary Endangerment Assessment Report

Comments : PA/SI completed. The site was recommended for no further CERCLA remedial site assessment.

Completed Date : 2001-01-10
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Site Screening
Comments : N/R

Completed Date : 1988-01-22
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : * Discovery
Comments : N/R

FRS

Facility Name : COPARTS
Facility Address : 1578 GREEN ISLAND DRIVE, AMERICAN CANYON, CA 94503
County : NAPA COUNTY

Site Details

Registry ID : 110070230574
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

FRS ***(cont.)***

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	ICIS - CAW496680 ICIS - CAW497179 RCRAINFO - CAC003172438

HAZNET - CA

Facility Name :	CALIFORNIA AUTO DISMANTLING INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA

Site Details

Generator EPA ID :	CAL000244543
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	2600 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Latitude :	38.19712573
Longitude :	-122.28217306
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

HAZNET - CA ***(cont.)***

Facility Name :	SUNRISE AUTO INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA

Site Details

Generator EPA ID :	CAC002209009
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 945890000
Latitude :	38.19712573
Longitude :	-122.28217306
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2000: 221 - Waste oil and mixed oil, 0.95 tons to CAD099452708

HIST HAZNET - CA

Facility Name :	SUNRISE AUTO INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, 94589
ID Number :	CAC002209009
Last Date in Agency List :	2014-11-17

HWG - CA

Facility Name :	CALIFORNIA AUTO DISMANTLING INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA
EPA ID :	CAL000244543
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	2600 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Owner Name :	FAHIM NOOZAY
Owner Address :	2600 GREEN ISLAND RD, AMERICAN CANYON, CA 945030000
Operator Name :	FAHIM NOOZAY

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

HWG - CA ***(cont.)***

Operator Address :	2600 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Latitude :	38.208708
Longitude :	-122.30561
Facility Name :	SUNRISE AUTO INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
County :	NAPA
EPA ID :	CAC002209009
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 945890000
Owner Name :	SUNRISE AUTO INC
Owner Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 945890000
Operator Name :	PAUL WINDERS
Operator Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 945890000
Latitude :	38.208708
Longitude :	-122.30561

ICIS

Facility Name :	COPARTS
Facility Address :	1578 GREEN ISLAND DRIVE, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAW496680
ICIS Facility Interest ID :	3600869304
Facility UIN :	110070230574
Facility Type Code :	N/R
Impaired Waters :	N/R
Latitude :	N/R
Longitude :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Manifest Number :	016051292JJK
Shipped Date :	2018-12-19
Updated Date :	2020-04-23
Received Date :	2019-01-14
Status :	Signed
Generator ID :	CAL000244543
Generator Name :	California Auto Dismantling

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Generator Address :	1578 Green Island Road, American Canyon, CA 94589
Generator Mailing :	2600 Green Island Road, American Canyon, CA 94503
Generator Contact :	N/R
Destination ID :	CAD980884183
Destination Name :	GEM Rancho Cordova LLC
Destination Mailing :	11855 White Rock Road, Rancho Cordova, CA 95742
Destination Address :	11855 White Rock Road, Rancho Cordova, CA 95742
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN1203
DOT Information :	UN1203 WASTE GASOLINE II 3 D001-100 LBS
Non Waste Description :	N/R
Quantity :	110 Gallons
Quantity Tons, Acute, Non-Acute :	0.4587156, 0, 0.4587156
Quantity Kg, Acute, Non-Acute :	0, 416.06882
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	Y
Federal Code :	D001, D018
State Code :	CA - 331

RCRA_NONGEN

Facility Name :	CALIFORNIA AUTO DISMANTLING INC
Facility Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94589-0000
County :	NAPA
Date Form Received by Agency :	2002-01-10
EPA ID :	CAL000244543
Mailing Address :	2600 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
Contact :	FAHIM NOOZAY
Contact Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Contact Country :	N/R
Contact Telephone :	510-719-7618
Contact Email :	FAHIMNOORZAY@GMAIL.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Last Date in Agency List : 2023-01-23

Owner/Operator Summary

Owner/Operator Name :	FAHIM NOOZAY
Owner/Operator Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-0000
Owner/Operator Country :	N/R
Owner/Operator Telephone :	510-719-7618
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	FAHIM NOOZAY
Owner/Operator Address :	1578 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Owner/Operator Country :	N/R
Owner/Operator Telephone :	510-719-7618
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Map Id: B24
Direction: NW
Distance: 0.846 mi., 4469 ft.
Elevation: 30 ft.
Relative: Higher

Site Name : COPARTS | SUNRISE AUTO INC | FORMER SUNSHINE AUTO SALVAGE
1578 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CIWQS - CA, CIWQS 2 - CA, CS_NAPA COUNTY - CA, ECHO, ENVIROSTOR - CA, FRS, HAZNET - CA, HIST HAZNET - CA, HWG - CA, ICIS, MANIFEST EPA, RCRA_NONGEN] ***(cont.)***

Envirosite ID: 342913
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Notices of Violations Summary
Regulation Violated : N

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER]

Envirosite ID: 911536
EPA ID: N/R

CALEPA SITES - CA

Facility Name : COPART AUCTION YARD
Facility Address : 1660 GREEN ISLAND ROAD, AMERICAN CANYON, 75254

Site ID : 596369
EI ID : 898347
EI Description : Construction Storm Water
Latitude : 38.197430
Longitude : -122.283240
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-12-21

Facility Name : COPART (YD 190)
Facility Address : 1660 GREEN ISLAND RD, AMERICAN CANYON, 94503

Site ID : 430802
EI ID : 10751986
EI Description : Hazardous Waste Generator
Latitude : 38.199370
Longitude : -122.283020
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2022-12-21

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

Facility Name :	ENG BROTHERS WOOD PRODUCTS
Facility Address :	1660 GREEN ISLAND ROAD, AMERICAN CANYON, 94503-9661
Site ID :	466505
EI ID :	110013858646
EI Description :	US EPA Air Emission Inventory System (EIS)
Latitude :	38.197050
Longitude :	-122.283390
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	COPART AUCTION YARD
Facility Address :	1660 GREEN ISLAND ROAD, AMERICAN CANYON, CA 75254
County :	NAPA
Place ID :	S898347
Agency Name :	COPART
Last Date in Agency List :	2022-12-28
Facility Name :	ENG BROS WOOD PROD
Facility Address :	1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S222787
Agency Name :	ENG BROS WOOD PRODUCT
Last Date in Agency List :	2022-12-28
Facility Name :	GI Road
Facility Address :	1660 Green Island Road, American Canyon, CA 94503
County :	Napa
Place ID :	S867217
Agency Name :	Robert A Karn Associates
Last Date in Agency List :	2020-02-04

ECHO

Facility Name :	COPART
Facility Address :	1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

ECHO ***(cont.)***

Last Inspection Date :	N/R
Registry ID :	110070430082
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	GDT-ADDRESS MATCHING (GEOCODING)
Reference Point :	ENTRANCE POINT OF A FACILITY OR STATION
Accuracy Meters :	150
Derived Tribes :	Lytton Rancheria of California - 17 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051068
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

ECHO ***(cont.)***

Facility NAICS :	441310 - Automotive Parts and Accessories Stores
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.197078
Longitude :	-122.283387
Last Date in Agency List :	2023-01-16

Facility Name :	ENG BROTHERS WOOD PRODUCTS
Facility Address :	1660 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA

Last Inspection Date :	N/R
Registry ID :	110013858646
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

ECHO ***(cont.)***

Current Compliance Status :	N/R
Three-Year Compliance Status :	N/R
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30
Derived Tribes :	Lytton Rancheria of California - 17 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051068
MYRTK Universe :	NNN
NPDES IDs :	CAZ182442
CWA Permit Types :	Minor
CWA Compliance Tracking :	Off
CWA NAICS :	N/R
CWA SICS :	2448
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Terminated Permit
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2448
Facility NAICS :	337110 - Wood Kitchen Cabinet and Countertop Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

ECHO ***(cont.)***

NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	Y
Latitude :	38.19705
Longitude :	-122.28339
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	COPART
Facility Address :	1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110070430082
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	RCRAINFO - CAL000432496
Facility Name :	ENG BROS. WOOD AND METAL PRODUCTS INC.
Facility Address :	1660 GREEN ISLAND RD., AMERICAN CANYON, CA 94503
County :	N/R

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

FRS ***(cont.)***

Site Details
Registry ID : 110070327412
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description : OSHA-OIS

FRS Environmental Interest
Source and System ID : OSHA-OIS - 317433993

Facility Name : ENG BROTHERS WOOD PRODUCTS
Facility Address : 1660 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503-9661
County : NAPA

Site Details
Registry ID : 110013858646
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description : The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.
The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : EIS - 1177111
ICIS - CAZ182442

HAZNET - CA

Facility Name : COPART (190)
Facility Address : 1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAL000432496
Active : Active
Category : STATE
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 14185 DALLAS PKWY STE 300, DALLAS, TX 75254
Latitude : 38.19773700
Longitude : -122.28338700
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Waste Generator Details
State Waste : 2018: 223 - Unspecified oil-containing waste, 0.03750 tons to NVT330010000

HWG - CA

Facility Name : COPART (190)
Facility Address : 1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

EPA ID : CAL000432496
Status : Active
Category : STATE
Type : PERMANENT
Facility Type : N/R
Mailing Address : 14185 DALLAS PKWY STE 300, DALLAS, TX 75254
Owner Name : SANTA CLARA FAIRGROUNDS MGMT CORP
Owner Address : 344 TULLY RD, SAN JOSE, TX 95111
Operator Name : KRISTI ROGERS
Operator Address : 14185 DALLAS PARKWAY #300, DALLAS, TX 75254
Latitude : 38.197737

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

HWG - CA ***(cont.)***

Longitude :	-122.283387

ICIS

Facility Name :	ENG BROS WOOD PROD
Facility Address :	1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ182442
ICIS Facility Interest ID :	3600722560
Facility UIN :	110013858646
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.197
Longitude :	-122.28375
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	2448
SIC Description :	Wood Pallets And Skids

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	2017-10-12
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101913
External Permit Number :	CAZ182442
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Terminated
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Eng Bros Wood Product
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

INACTIVE PCS ***(cont.)***

EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Manifest Number :	021309135JJK
Shipped Date :	2022-05-17
Updated Date :	2022-06-03
Received Date :	2022-05-17
Status :	Signed
Generator ID :	CAL000432496
Generator Name :	COPART
Generator Address :	1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	14185 DALLAS PKWY STE 300, DALLAS, TX 75254
Generator Contact :	N/R
Destination ID :	CAD981382732
Destination Name :	ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY
Destination Mailing :	10840 ALTAMONT PASS RD, LIVERMORE, CA 94551
Destination Address :	10840 ALTAMONT PASS RD, LIVERMORE, CA 94551
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	NA2212
DOT Information :	RQ, NA2212, Asbestos, 9, PG III
Non Waste Description :	N/R
Quantity :	18 Cubic Yards
Quantity Tons, Acute, Non-Acute :	15.12, 0, 15.12
Quantity Kg, Acute, Non-Acute :	0, 13714.294
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 151

Manifest Details

Manifest Number :	014665134FLE
Shipped Date :	2020-05-26
Updated Date :	2020-12-15

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Received Date :	2020-06-11
Status :	Corrected
Generator ID :	CAL000432496
Generator Name :	COPART
Generator Address :	1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	14185 DALLAS PKWY STE 300, DALLAS, TX 75254
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC
Destination Mailing :	PO BOX 578, BEATTY, NV 89003
Destination Address :	HWY 95 11 MI S OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	OILY DEBRIS
Quantity :	50 Pounds
Quantity Tons, Acute, Non-Acute :	0.025, 0, 0.025
Quantity Kg, Acute, Non-Acute :	0, 22.67575
Management Method :	H132 - LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 223

NPDES - CA

Facility Name :	Copart Auction Yard
Facility Address :	1660 Green Island Road, American Canyon, 75254
County :	Napa
Effective Date :	2021-10-19
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	2009-0009-DWQ
NPDES Number :	CAS000002
WDID :	2 28C395466
RM Status :	Active
Reg Meas ID :	541749

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

NPDES - CA ***(cont.)***

Reg Meas Type :	Enrollee
Program :	Construction
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Copart
Discharger Address :	14185 Dallas Parkway Suite 400, Dallas, Texas 75254
Last Date in Agency List :	2023-02-15
Facility Name :	Eng Bros Wood Prod
Facility Address :	1660 Green Island Rd, American Canyon, 94503
County :	Napa
Effective Date :	1995-06-16
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	2017-10-12
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I011669
RM Status :	Terminated
Reg Meas ID :	182442
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Eng Bros Wood Product
Discharger Address :	1660 Green Island Rd, American Canyon, California 94503
Last Date in Agency List :	2020-09-21

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101913
External Permit Number :	CAZ182442
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

PCS FACILITY ***(cont.)***

Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Eng Bros Wood Product
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2017-08-15

RCRA_NONGEN

Facility Name :	COPART
Facility Address :	1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2017-12-08
EPA ID :	CAL000432496
Mailing Address :	14185 DALLAS PKWY STE 300, DALLAS, TX 75254
Contact :	SEAN MULCAHY
Contact Address :	14185 DALLAS PKWY STE 300, DALLAS, TX 75254
Contact Country :	N/R
Contact Telephone :	972-391-5114
Contact Email :	RENEW.DEPT@COPART.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	COPART INC
Owner/Operator Address :	14185 DALLAS PKWY STE 300, DALLAS, TX 75254
Owner/Operator Country :	N/R
Owner/Operator Telephone :	972-391-5114
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Owner/Operator Name :	SEAN MULCAHY
Owner/Operator Address :	14185 DALLAS PKWY STE 300, DALLAS, TX 75254
Owner/Operator Country :	N/R
Owner/Operator Telephone :	972-391-5114
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RFR - CA

Facility Name :	Copart Auction Yard
Facility Address :	1660 Green Island Road, American Canyon, CA 75254
County :	Napa
Effective Date :	2021-10-19
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000002
Order Number :	2009-0009-DWQ
WDID :	2 28C395466
SIC/NAICS :	N/R

Map Id: B25
Direction: NW
Distance: 0.867 mi., 4580 ft.
Elevation: 28 ft.
Relative: Higher

Site Name : ENG BROS WOOD PROD | COPART | COPART AUCTION YARD
1660 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 911536
EPA ID: N/R

RFR - CA ***(cont.)***

Program :	CONSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water construction
Place/Project Type :	Construction - Industrial
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Copart
Agency Address :	14185 Dallas Parkway Suite 400, Dallas, TX 75254
Latitude :	38.19743
Longitude :	-122.28324
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	ENG BROS WOOD PROD
Facility Address :	1660 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ182442
Permittee Name :	Eng Bros Wood Product
Permit Status :	Terminated
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	2017-10-12
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	2448
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19705
Longitude :	-122.28339
Last Date in Agency List :	2022-12-13

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER]

Envirosite ID: 728115
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	Freon Free
Facility Address :	120 KLAMATH COURT, AMERICAN CANYON, 94503
Site ID :	532373
EI ID :	852819
EI Description :	Industrial Facility Storm Water
Latitude :	38.113200
Longitude :	-122.152700
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-08-26

CIWQS - CA

Facility Name :	FREONFREE
Facility Address :	120 KLAMATH COURT. SUITE A, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S851691
Agency Name :	FREON FREE
Last Date in Agency List :	2022-12-28
Facility Name :	FREON FREE
Facility Address :	120 KLAMATH COURT SUITE A, AMERICAN CANYON, CA 94503
County :	SOLANO
Place ID :	S852819
Agency Name :	FREON FREE
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	FREONFREE
Facility Address :	120 KLAMATH COURT. SUITE A, AMERICAN CANYON, CA 94503
County :	N/R
Last Inspection Date :	N/R
Registry ID :	110070097203
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

ECHO ***(cont.)***

Penalty Count :	0
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 17 mile(s)
Derived HUC :	18050002
Derived WBD :	N/R
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051079
MYRTK Universe :	NNN
NPDES IDs :	CAZ481286
CWA Permit Types :	Minor
CWA Compliance Tracking :	Off
CWA NAICS :	N/R
CWA SICS :	3639
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	3639
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

ECHO ***(cont.)***

US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	Y
Latitude :	38.19208
Longitude :	-122.25757
Last Date in Agency List :	2017-10-23

Facility Name :	FREON FREE
Facility Address :	120 KLAMATH COURT, AMERICAN CANYON, CA 94503
County :	N/R

Last Inspection Date :	N/R
Registry ID :	110070097325
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	1
Last Informal Action Date :	2021-10-05
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	N/R
Three-Year Compliance Status :	N/R
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 17 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051079
MYRTK Universe :	NNN
NPDES IDs :	CAZ481286 CAZ483042
CWA Permit Types :	Minor

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

ECHO ***(cont.)***

CWA Compliance Tracking :	Off
CWA NAICS :	N/R
CWA SICS :	5093 3639
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	1
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Terminated Permit
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	3639 5093
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	2021-10-05
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	Y
Latitude :	38.19208
Longitude :	-122.25757
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	FREONFREE
Facility Address :	120 KLAMATH COURT. SUITE A, AMERICAN CANYON, CA 94503
County :	N/R

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

FRS ***(cont.)***

Site Details
Registry ID : 110070097203
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2018-02-15

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest
Source and System ID : ICIS - CAZ481286

Facility Name : FREON FREE
Facility Address : 120 KLAMATH COURT, AMERICAN CANYON, CA 94503
County : N/R

Site Details
Registry ID : 110070097325
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest
Source and System ID : ICIS - CAZ481286
ICIS - CAZ483042

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

ICIS

Facility Name :	FREONFREE
Facility Address :	120 KLAMATH COURT. SUITE A, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ481286
ICIS Facility Interest ID :	3600736007
Facility UIN :	110070097325
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	38.19208
Longitude :	-122.25757
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	3639
SIC Description :	Household Appliances

Facility Name :	FREON FREE
Facility Address :	120 KLAMATH COURT, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ483042
ICIS Facility Interest ID :	3600736159
Facility UIN :	110070097325
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	38.1132
Longitude :	-122.1527
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	5093
SIC Description :	Scrap And Waste Materials

INACTIVE PCS

Issue Date :	2016-12-13
Original Issue Date :	2016-12-13
Effective Date :	2016-12-13
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	2017-10-09

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

INACTIVE PCS ***(cont.)***

Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601115385
External Permit Number :	CAZ481286
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Terminated
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Freon Free
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Issue Date :	2017-03-09
Original Issue Date :	2017-03-09
Effective Date :	2017-03-09
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	2019-09-09
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601115534
External Permit Number :	CAZ483042
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Terminated
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Freon Free
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

NPDES - CA

Facility Name :	freonfree
Facility Address :	120 klamath Court. Suite A, American Canyon, 94503
County :	Napa
Effective Date :	2016-12-13
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	2017-10-09
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28NEC002817
RM Status :	Terminated
Reg Meas ID :	481286
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Freon Free
Discharger Address :	120 Klamath Court, American Canyon, California 94503
Last Date in Agency List :	2020-09-21

Facility Name :	Freon Free
Facility Address :	120 Klamath Court, American Canyon, 94503
County :	Solano
Effective Date :	2017-03-09
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	2019-09-09
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 48I027078
RM Status :	Terminated
Reg Meas ID :	483042
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Freon Free
Discharger Address :	120 Klamath Court, American Canyon, California 94503
Last Date in Agency List :	2022-08-12

PCS ENF

Site Details

NPDES ID :	CAZ483042

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

PCS ENF ***(cont.)***

Last Date in Agency List :	2022-12-28

Formal Enforcement Actions

Settlement Entered Date :	N/R
ENF Identifier :	N/R
Activity ID :	N/R
Activity Type :	N/R
ENF Type :	N/R
Agency :	N/R
Fed Penalty Assessed Amount :	N/R
State Local Penalty Amount :	N/R

Informal Enforcement Actions

Achieved Date :	2021-10-05
Registry ID :	110070097325
ENF Identifier :	CA-ZIEA441973
Activity ID :	3603043645
Activity Type :	Administrative - Informal
ENF Type :	Notice of Noncompliance Issued
Agency :	State

PCS FACILITY

Issue Date :	2016-12-13
Original Issue Date :	2016-12-13
Effective Date :	2016-12-13
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601115385
External Permit Number :	CAZ481286
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Freon Free
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

PCS FACILITY ***(cont.)***

Pretreatment Indicator :	N/R
Last Date in Agency List :	2017-08-15
Issue Date :	2017-03-09
Original Issue Date :	2017-03-09
Effective Date :	2017-03-09
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601115534
External Permit Number :	CAZ483042
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Freon Free
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2019-12-03

RFR - CA

Facility Name :	Freon Free
Facility Address :	120 Klamath Court Suite A, American Canyon, CA 94503
County :	Solano
Effective Date :	2017-03-09
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 48I027078
SIC/NAICS :	5093
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Scrap and Waste Materials
Region :	2

Map Id: 26
Direction: ENE
Distance: 0.888 mi., 4690 ft.
Elevation: 59 ft.
Relative: Higher

Site Name : Freon Free
120 KLAMATH COURT | 120 KLAMATH COURT SUITE A
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, ICIS, INACTIVE PCS, NPDES - CA, PCS ENF, PCS FACILITY, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 728115
EPA ID: N/R

RFR - CA ***(cont.)***

Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Freon Free
Agency Address :	120 Klamath Court Suite A, American Canyon, CA 94503
Latitude :	38.1132
Longitude :	-122.1527
Last Date in Agency List :	2020-01-27

STORMWATER

Facility Name :	FREON FREE
Facility Address :	120 KLAMATH COURT, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ483042
Permittee Name :	Freon Free
Permit Status :	Terminated
Permit Issuing Name :	State
Issued Date :	2017-03-09
Effective Date :	2017-03-09
Termination Date :	2019-09-09
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	5093
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19208
Longitude :	-122.25757
Last Date in Agency List :	2022-12-13

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER]

Envirosite ID: 865965
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	BAKER AUTO DISMANTLING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	97116
EI ID :	10170395
EI Description :	Hazardous Waste Generator
Latitude :	38.199600
Longitude :	-122.284531
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-04-29
Site ID :	97116
EI ID :	10170395
EI Description :	Chemical Storage Facilities
Latitude :	38.199600
Longitude :	-122.284531
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-04-29
Facility Name :	BAKER AUTO WRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	434558
EI ID :	T10000011350
EI Description :	Cleanup Program Site
Latitude :	38.199580
Longitude :	-122.284700
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	BAKER AUTO WRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S208552
Agency Name :	CHARLES F BAKER
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	BAKER AUTOWRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

ECHO ***(cont.)***

County :	NAPA
Last Inspection Date :	N/R
Registry ID :	110070447835
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	GDT-ADDRESS MATCHING (GEOCODING)
Reference Point :	ENTRANCE POINT OF A FACILITY OR STATION
Accuracy Meters :	150
Derived Tribes :	Lytton Rancheria of California - 17 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051062
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

ECHO ***(cont.)***

CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	4211
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.197092
Longitude :	-122.284494
Last Date in Agency List :	2023-01-16

Facility Name :	BAKER AUTO WRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	N/R

Last Inspection Date :	N/R
Registry ID :	110070087459
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

ECHO ***(cont.)***

Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	N/R
Three-Year Compliance Status :	_____U
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 17 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051061
MYRTK Universe :	NNN
NPDES IDs :	CAZ182436
CWA Permit Types :	Minor
CWA Compliance Tracking :	Off
CWA NAICS :	N/R
CWA SICS :	5015
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	Terminated Permit
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____U
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	5015
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	Y

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

ECHO ***(cont.)***

Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	Y
Latitude :	38.19701
Longitude :	-122.28472
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	BAKER AUTO DISMANTLING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110055799337
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description : The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

FRS ***(cont.)***

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest

Source and System ID :	CA-CERS - 10170395 CA-ENVIROVIEW - 97116
Facility Name :	BAKER AUTOWRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9661
County :	NAPA

Site Details

Registry ID :	110070447835
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	RCRAINFO - CAL000151995
Facility Name :	BAKER AUTO WRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	N/R

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

FRS ***(cont.)***

Site Details

Registry ID :	110070087459
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest

Source and System ID :	ICIS - CAZ182436

HAZNET - CA

Facility Name :	BAKER AUTOWRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000151995
Active :	Active
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 945039661
Latitude :	38.19712872
Longitude :	-122.28396469
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HWG - CA

Facility Name :	BAKER AUTOWRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

HWG - CA ***(cont.)***

EPA ID :	CAL000151995
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 945039661
Owner Name :	CHARLES F. BAKER
Owner Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 945039661
Operator Name :	CHARLES F BAKER/OWNER
Operator Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Latitude :	38.197108
Longitude :	-122.284182

ICIS

Facility Name :	BAKER AUTO WRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ182436
ICIS Facility Interest ID :	3600722552
Facility UIN :	110070087459
Facility Type Code :	Privately Owned Facility
Impaired Waters :	303(D) Listed
Latitude :	38.19701
Longitude :	-122.28472
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	5015
SIC Description :	Motor Vehicle Parts, Used

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	2021-04-16
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101900
External Permit Number :	CAZ182436
Facility Type Indicator :	NON-POTW

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

INACTIVE PCS ***(cont.)***

Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Terminated
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Charles F Baker
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

NPDES - CA

Facility Name :	Baker Auto Wrecking
Facility Address :	1678 Green Island Rd, American Canyon, 94503
County :	Napa
Effective Date :	1993-03-16
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	2021-03-22
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I009833
RM Status :	Terminated
Reg Meas ID :	182436
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Charles F Baker
Discharger Address :	1678 Green Island Rd, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

PCS FACILITY ***(cont.)***

Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601101900
External Permit Number :	CAZ182436
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Charles F Baker
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_NONGEN

Facility Name :	BAKER AUTOWRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9661
County :	NAPA
Date Form Received by Agency :	1995-03-03
EPA ID :	CAL000151995
Mailing Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94589-9661
Contact :	CHARLES F BAKER/OWNER
Contact Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
Contact Country :	N/R
Contact Telephone :	707-642-9903
Contact Email :	OLDCARSR4U@AOL.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	CHARLES F BAKER/OWNER
Owner/Operator Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94589
Owner/Operator Country :	N/R

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Owner/Operator Telephone :	707-642-9903
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	CHARLES F. BAKER
Owner/Operator Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503-9661
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-642-9903
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RFR - CA

Facility Name :	Baker Auto Wrecking
Facility Address :	1678 Green Island Rd, American Canyon, CA 94503
County :	Napa

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

RFR - CA ***(cont.)***

Effective Date :	1993-03-16
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I009833
SIC/NAICS :	5015
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Motor Vehicle Parts, Used
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Charles F Baker
Agency Address :	1678 Green Island Rd, American Canyon, CA 94503
Latitude :	38.19701
Longitude :	-122.28472
Last Date in Agency List :	2021-03-30

SLIC REG 2 - CA

Facility Name :	Baker Auto Wrecking
Facility Address :	1678 Green Island Rd, American Canyon, CA 94503
County :	Napa

Site Details

Status Date :	2020-02-21
Status :	Completed - Case Closed
Begin Date :	2018-03-01
Global ID :	T10000011350
Region :	REGION 2

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

Site History :

The property has been used for vehicle storage and dismantling for the past 29 years. A fire occurred on site in October 2017, and the Owner has been removing fire damaged vehicles and burn debris from the property since then. A workplan for site investigations was prepared and approved by the Water Board in July 2018. Two time extensions have been allowed for investigation report submittal, due to delays in debris removal; currently report is due July 5, 2019. Some sites proposed for investigation may still be inaccessible, but all accessible locations proposed for sampling will be addressed. Remaining proposed sites to be sampled will be evaluated once debris removal is complete.

RB Case Number :	28S0070
Potential Media Affected :	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern :	Asbestos Containing Materials (ACM), Trichloroethylene (TCE), Chromium, Lead, Zinc, Benzene, Ethylbenzene, Gasoline, MTBE / TBA / Other Fuel Oxygenates, Naphthalene, Other Petroleum, Polynuclear aromatic hydrocarbons (PAHs), Toluene, Waste Oil / Motor / Hydraulic / Lubricating, Xylene
Local Agency :	N/R
Local Case Number :	N/R
Lead Agency :	SAN FRANCISCO BAY RWQCB (REGION 2)
File Location :	All Files are on GeoTracker or in the Local Agency Database
CUF Case :	NO
Caseworker :	PF
Case Type :	Cleanup Program Site
How Discovered :	N/R
How Discovered Description :	N/R
Stop Method :	N/R
Stop Description :	N/R
Calwater Watershed Name :	San Pablo - Napa River (206.50)
DWR Groundwater Subbasin Name :	Napa-Sonoma Valley - Napa-Sonoma Lowlands (2-002.03)
Disadvantaged Community :	N/R
Latitude :	38.19958
Longitude :	-122.2847
Agency URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-01-17

Contacts Summary

Global ID :	T10000011350
Contact Name :	PHYLLIS FLACK
Contact Type :	Regional Board Caseworker - Primary Caseworker
Organization Name :	SAN FRANCISCO BAY RWQCB (REGION 2)
Address :	1515 CLAY ST SUITE 1400
City :	OAKLAND
Phone Number :	N/R
Email :	phyllis.flack@waterboards.ca.gov

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

Regulatory Activities

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Date : 2020-02-21
Global ID : T10000011350
Action Type : ENFORCEMENT
Action : Closure/No Further Action Letter - #28S0070

Date : 2020-01-02
Global ID : T10000011350
Action Type : ENFORCEMENT
Action : 13267 Requirement - #28S0070

Date : 2019-12-30
Global ID : T10000011350
Action Type : ENFORCEMENT
Action : Notification - Preclosure - #28S0070

Date : 2019-11-15
Global ID : T10000011350
Action Type : RESPONSE
Action : Site Investigation

Date : 2019-08-13
Global ID : T10000011350
Action Type : ENFORCEMENT
Action : 13267 Requirement - #28S0070

Status History

Status Date : 2020-02-21
Global ID : T10000011350
Status : Completed - Case Closed

Status Date : 2019-05-30
Global ID : T10000011350
Status : Open - Site Assessment

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

Status Date :	2018-03-01
Global ID :	T10000011350
Status :	Open - Remediation
Status Date :	2018-03-01
Global ID :	T10000011350
Status :	Open - Case Begin Date
Status Date :	2018-03-01
Global ID :	T10000011350
Status :	Open - Site Assessment
Facility Name :	Caltrain Corridor - Baker Auto Wrecking
Facility Address :	1678 Green Island Rd, American Canyon, CA 94503
County :	Napa

Site Details

Status Date :	2018-03-01
Status :	Open - Site Assessment
Begin Date :	2018-03-01
Global ID :	T10000011350
Region :	REGION 2
Site History :	The property has been used for vehicle storage and dismantling for the past 29 years.
RB Case Number :	28S0070
Potential Media Affected :	Other Groundwater (uses other than drinking water), Soil, Under Investigation
Potential Contaminants of Concern :	Asbestos Containing Materials (ACM), Trichloroethylene (TCE), Chromium, Lead, Zinc, Benzene, Ethylbenzene, Gasoline, MTBE / TBA / Other Fuel Oxygenates, Naphthalene, Other Petroleum, Polynuclear aromatic hydrocarbons (PAHs), Toluene, Waste Oil / Motor / Hydraulic / Lubricating, Xylene
Local Agency :	N/R
Local Case Number :	N/R
Lead Agency :	SAN FRANCISCO BAY RWQCB (REGION 2)
File Location :	All Files are on GeoTracker or in the Local Agency Database
CUF Case :	NO
Caseworker :	PF

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

Case Type :	Cleanup Program Site
How Discovered :	N/R
How Discovered Description :	N/R
Stop Method :	N/R
Stop Description :	N/R
Calwater Watershed Name :	San Pablo - Napa River (206.50)
DWR Groundwater Subbasin Name :	Napa-Sonoma Valley - Napa-Sonoma Lowlands (2-002.03)
Disadvantaged Community :	N/R
Latitude :	38.19958
Longitude :	-122.2847
Agency URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2019-03-27

Contacts Summary

Global ID :	T10000011350
Contact Name :	PHYLLIS FLACK
Contact Type :	Regional Board Caseworker
Organization Name :	SAN FRANCISCO BAY RWQCB (REGION 2)
Address :	1515 CLAY ST SUITE 1400
City :	OAKLAND
Phone Number :	N/R
Email :	phyllis.flack@waterboards.ca.gov

Regulatory Activities

Date :	2019-07-05
Global ID :	T10000011350
Action Type :	RESPONSE
Action :	Remedial Investigation Report
Date :	2019-01-22
Global ID :	T10000011350
Action Type :	ENFORCEMENT
Action :	Staff Letter - #28S0070
Date :	2018-07-20
Global ID :	T10000011350
Action Type :	ENFORCEMENT
Action :	13267 Requirement - #28S0070
Date :	2018-06-29
Global ID :	T10000011350
Action Type :	ENFORCEMENT

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

SLIC REG 2 - CA ***(cont.)***

Action :	Annual Estimation Letter - #28S0070
Date :	2018-06-15
Global ID :	T10000011350
Action Type :	RESPONSE
Action :	Site Investigation Workplan

Status History

Status Date :	2018-03-01
Global ID :	T10000011350
Status :	Open - Site Assessment
Status Date :	2018-03-01
Global ID :	T10000011350
Status :	Open - Case Begin Date
Status Date :	2018-03-01
Global ID :	T10000011350
Status :	Open - Remediation
Status Date :	2017-12-01
Global ID :	T10000011350
Status :	Open - Site Assessment

STORMWATER

Facility Name :	BAKER AUTO WRECKING
Facility Address :	1678 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ182436
Permittee Name :	Charles F Baker
Permit Status :	Terminated
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	2021-04-16
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	5015
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R

Map Id: 27
Direction: NW
Distance: 0.911 mi., 4812 ft.
Elevation: 31 ft.
Relative: Higher

Site Name : BAKER AUTO WRECKING | BAKER AUTO DISMANTLING | Caltrain Corridor - Baker Auto Wrecking
1678 GREEN ISLAND RD
AMERICAN CANYON | American Canyon, CA

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, SLIC REG 2 - CA, STORMWATER] ***(cont.)***

Envirosite ID: 865965
EPA ID: N/R

STORMWATER ***(cont.)***

Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19701
Longitude :	-122.28472
Last Date in Agency List :	2022-12-13

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER]

Envirosite ID: 362357
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	SUTTER HOME WINERY,INC.:DIST.CENTER
Facility Address :	303 GREEN ISLAND RD, AMERICAN CANYON, 94503
Site ID :	72729
EI ID :	10172377
EI Description :	Chemical Storage Facilities
Latitude :	38.193417
Longitude :	-122.260063
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Site ID :	72729
EI ID :	10172377
EI Description :	Hazardous Waste Generator

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

Latitude :	38.193417
Longitude :	-122.260063
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	SUTTER HOME WINERY INC DISTRIBUTION
Facility Address :	303 GREEN ISLAND ROAD, AMERICAN CANYON, 94503
Site ID :	543713
EI ID :	829428
EI Description :	Industrial Facility Storm Water
Latitude :	38.193420
Longitude :	-122.260070
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	SUTTER HOME ADDITION
Facility Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S275247
Agency Name :	SUTTER HOME
Last Date in Agency List :	2022-12-28
Facility Name :	SUTTER HOME WINERY INC DISTRIBUTION
Facility Address :	303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S829428
Agency Name :	SUTTER HOME WINERY INC
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	SUTTER HOME WINERY, INC.
Facility Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

ECHO ***(cont.)***

Last Inspection Date :	N/R
Registry ID :	110070454659
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	GDT-ADDRESS MATCHING (GEOCODING)
Reference Point :	ENTRANCE POINT OF A FACILITY OR STATION
Accuracy Meters :	150
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051076
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

ECHO ***(cont.)***

CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	31213 - Wineries
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.195176
Longitude :	-122.260481
Last Date in Agency List :	2023-01-16

Facility Name :	SUTTER HOME WINERY INC DISTRIBUTION
Facility Address :	303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County :	N/R

Last Inspection Date :	N/R
Registry ID :	110070093645
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

ECHO ***(cont.)***

Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	N/R
Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 17 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051076
MYRTK Universe :	NNN
NPDES IDs :	CAZ446451
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2084
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2084
Facility NAICS :	N/R
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

ECHO ***(cont.)***

Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N
RCRA Flag :	N
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.19342
Longitude :	-122.26007
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	SUTTER HOME WINERY, INC.
Facility Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110070454659
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

FRS ***(cont.)***

FRS Environmental Interest
Source and System ID : RCRAINFO - CAL000273842

Facility Name : SUTTER HOME WINERY,INC.:DIST.CENTER
Facility Address : 303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Registry ID : 110055656534
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description
Source Description : The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest
Source and System ID : CA-CERS - 10172377
CA-ENVIROVIEW - 72729

Facility Name : SUTTER HOME WINERY INC DISTRIBUTION
Facility Address : 303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
County : N/R

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

FRS ***(cont.)***

Site Details

Registry ID :	110070093645
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FRS Environmental Interest

Source and System ID :	ICIS - CAZ446451

HAZNET - CA

Facility Name :	SUTTER HOME WINERY, INC.
Facility Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000273842
Active :	Active
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	PO BOX 248, SAINT HELENA, CA 945740248
Latitude :	38.19511817
Longitude :	-122.25900048
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

HAZNET - CA ***(cont.)***

Waste Generator Details
State Waste :

2019: 343 - Unspecified organic liquid mixture, 0.06050 tons to NMD002208627
2019: 291 - Latex waste, 0.23200 tons to AZR000515924
2019: 331 - Off-specification, aged or surplus organics, 0.07500 tons to INR000127621
2019: 352 - Other organic solids, 0.10600 tons to AZR000515924
2019: 551 - Laboratory waste chemicals, 0.00300 tons to NMD002208627
2018: 551 - Laboratory waste chemicals, 0.00300 tons to NMD002208627
2018: 343 - Unspecified organic liquid mixture, 0.06850 tons to AZR000515924
2018: 221 - Waste oil and mixed oil, 0.46300 tons to NMD002208627
2016: 221 - Waste oil and mixed oil, 0.57 tons to CAD982444481
2015: 221 - Waste oil and mixed oil, 0.399 tons to CAD982444481
2014: 352 - Other organic solids, 0.05 tons to CAD980675276
2014: 221 - Waste oil and mixed oil, 0.19 tons to CAD982444481
2014: 181 - Other inorganic solid waste, 0.02 tons to CAD059494310
2013: 352 - Other organic solids, 0.125 tons to CAD980675276
2013: 352 - Other organic solids, 0.05 tons to NVT330010000
2013: 352 - Other organic solids, 0.1 tons to UTD991301748
2012: 352 - Other organic solids, 0.09 tons to NVT330010000
2011: 261 - Polychlorinated biphenyls and material containing PCBs, 0.1102 tons to NVT330010000
2011: 352 - Other organic solids, 0.31 tons to NVT330010000
2010: 352 - Other organic solids, 0.14 tons to NVT330010000
2009: 352 - Other organic solids, 0.135 tons to NVT330010000
2008: 291 - Latex waste, 0.1251 tons to CAD980887418
2008: 221 - Waste oil and mixed oil, 0.4 tons to TXD077603371
2008: 134 - Aqueous solution with total organic residues less than 10 percent, 0.084 tons to CA0000084517
2008: 214 - Unspecified solvent mixture, 0.108 tons to CAD980887418
2008: 352 - Other organic solids, 0.08 tons to NVT330010000
2007: 223 - Unspecified oil-containing waste, 0.05 tons to CAD980887418
2006: 223 - Unspecified oil-containing waste, 0.075 tons to CAD980887418

HIST CHMIRS - CA

Facility Address : 303 Green Island Rd, American Canyon, 94503
County : Napa County

Notified Date : 2008-09-26 10:12:00
Control Number : 08-6987

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

HIST CHMIRS - CA ***(cont.)***

Substance 1 :	Water
Quantity 1 :	79000
Measure 1 :	Gal(s)
Type 1 :	OTHER
Pipeline 1 :	N/R
Vessel 1 (300 Tons) :	N/R
Substance 2 :	N/R
Quantity 2 :	N/R
Measure 2 :	N/R
Type 2 :	N/R
Pipeline 2 :	N/R
Vessel 2 (300 Tons) :	N/R
Substance 3 :	N/R
Quantity 3 :	N/R
Measure 3 :	N/R
Type 3 :	N/R
Pipeline 3 :	N/R
Vessel 3 (300 Tons) :	N/R

Description : A tank pad at the distribution center backed up causing this release, into a nearby storm drain. The storm drain empties to a nearby unknown creek off of Hanna Drive.

Contained :	Yes
Water? :	Yes
Water Way :	Storm Drain / Unknown Creek
Incident Date :	2008-09-19
Time :	1330
Spill Site :	Merchant/Business
Site :	Storm Drain / Unknown Creek
Cause :	N/R
Other Causes :	N/R
Injuries (Y/N) :	N/R
Injuries Number :	0
Fatal (Y/N) :	N/R
Fatal Number :	0
Evacs (Y/N) :	N/R
Evacs Number :	0
Cleanup :	Responsible Party
Admin Agency :	N/R

HWG - CA

Facility Name :	SUTTER HOME WINERY, INC.
Facility Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

HWG - CA ***(cont.)***

EPA ID :	CAL000273842
Status :	Active
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	PO BOX 248, SAINT HELENA, CA 945740248
Owner Name :	SUTTER HOME WINERY INC
Owner Address :	PO BOX 248, SAINT HELENA, CA 945740248
Operator Name :	ALEX BISBIKIS
Operator Address :	P.O. BOX 248, SAINT HELENA, CA 94574
Latitude :	38.195194
Longitude :	-122.258921

ICIS

Facility Name :	SUTTER HOME WINERY INC DISTRIBUTION
Facility Address :	303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ446451
ICIS Facility Interest ID :	3600731405
Facility UIN :	110070093645
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	38.19342
Longitude :	-122.26007
Last Date in Agency List :	2022-12-28

Facility SIC

SIC Code :	2084
SIC Description :	Wines, Brandy, And Brandy Spirits

INACTIVE PCS

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601110776

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

INACTIVE PCS ***(cont.)***

External Permit Number :	CAZ446451
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Sutter Home Winery Inc
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Manifest Number :	016504062FLE
Shipped Date :	2022-07-01
Updated Date :	2022-08-01
Received Date :	2022-07-19
Status :	Signed
Generator ID :	CAL000273842
Generator Name :	SUTTER HOME WINERY
Generator Address :	303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Generator Mailing :	303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC.
Destination Mailing :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Address :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	FREE SULFUR/TOTAL SULFUR
Quantity :	170 Pounds
Quantity Tons, Acute, Non-Acute :	0.085, 0, 0.085
Quantity Kg, Acute, Non-Acute :	0, 77.09756
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Waste Line Number :	2
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	FREE SULFUR/TOTAL SULFUR
Quantity :	65 Pounds
Quantity Tons, Acute, Non-Acute :	0.0325, 0, 0.0325
Quantity Kg, Acute, Non-Acute :	0, 29.478476
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Manifest Details

Manifest Number :	016504063FLE
Shipped Date :	2022-07-01
Updated Date :	2022-09-12
Received Date :	2022-07-07
Status :	Signed
Generator ID :	CAL000273842
Generator Name :	SUTTER HOME WINERY, INC.
Generator Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	PO BOX 248, SAINT HELENA, CA 94574-0248
Generator Contact :	N/R
Destination ID :	AZR000520478
Destination Name :	ENVIRONMENTAL WASTE SOLUTIONS, INC.
Destination Mailing :	PO BOX 626, LOMA LINDA, CA 92354
Destination Address :	31915 INDUSTRIAL LANE, PARKER, AZ 85344
Destination Contact :	N/R
Submission Type :	DataImage5Copy

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA HAZARDOUS WASTE LIQUID
Quantity :	1000 Pounds
Quantity Tons, Acute, Non-Acute :	0.5, 0, 0.5
Quantity Kg, Acute, Non-Acute :	0, 453.515
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 331

Manifest Details

Manifest Number :	015886303FLE
Shipped Date :	2021-12-14
Updated Date :	2022-01-19
Received Date :	2021-12-21
Status :	Signed
Generator ID :	N/R
Generator Name :	SUTTER HOME WINERY
Generator Address :	303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Generator Mailing :	303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
Generator Contact :	N/R
Destination ID :	NVT330010000
Destination Name :	US ECOLOGY NEVADA, INC.
Destination Mailing :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Address :	HWY 95 11 MILES S. OF BEATTY, BEATTY, NV 89003
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN3264
DOT Information :	UN3264, WASTE CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (SULFURIC ACID, IODINE), 8, PG III
Non Waste Description :	N/R
Quantity :	86 Pounds
Quantity Tons, Acute, Non-Acute :	0.043, 0, 0.043
Quantity Kg, Acute, Non-Acute :	0, 39.002293
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	Y
Federal Code :	D002
State Code :	CA - 791

Manifest Details

Manifest Number :	015886304FLE
Shipped Date :	2021-12-14
Updated Date :	2022-02-23
Received Date :	2021-12-16
Status :	Signed
Generator ID :	CAL000273842
Generator Name :	SUTTER HOME WINERY, INC.
Generator Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	PO BOX 248, SAINT HELENA, CA 94574-0248
Generator Contact :	N/R
Destination ID :	AZR000520478
Destination Name :	ENVIRONMENTAL WASTE SOLUTIONS, INC.
Destination Mailing :	PO BOX 626, LOMA LINDA, CA 92354
Destination Address :	31915 INDUSTRIAL LANE, PARKER, AZ 85344
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

MANIFEST EPA ***(cont.)***

DOT Information :	N/R
Non Waste Description :	NON RCRA HAZARDOUS WASTE LIQUID
Quantity :	316 Pounds
Quantity Tons, Acute, Non-Acute :	0.158, 0, 0.158
Quantity Kg, Acute, Non-Acute :	0, 143.31075
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 221

Waste Line Number :	2
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON RCRA HAZARDOUS WASTE SOLID
Quantity :	249 Pounds
Quantity Tons, Acute, Non-Acute :	0.1245, 0, 0.1245
Quantity Kg, Acute, Non-Acute :	0, 112.92524
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 352

Waste Line Number :	3
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON RCRA HAZARDOUS WASTE SOLID
Quantity :	4 Pounds
Quantity Tons, Acute, Non-Acute :	0.002, 0, 0.002
Quantity Kg, Acute, Non-Acute :	0, 1.8140601
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 181

Waste Line Number :	4
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON RCRA HAZARDOUS WASTE SOLID
Quantity :	274 Pounds
Quantity Tons, Acute, Non-Acute :	0.137, 0, 0.137
Quantity Kg, Acute, Non-Acute :	0, 124.26311

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 223

Manifest Details

Manifest Number :	015886305FLE
Shipped Date :	2021-12-14
Updated Date :	2022-01-11
Received Date :	2021-12-28
Status :	Signed
Generator ID :	CAL000273842
Generator Name :	SUTTER HOME WINERY, INC.
Generator Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
Generator Mailing :	PO BOX 248, SAINT HELENA, CA 94574-0248
Generator Contact :	N/R
Destination ID :	NMD002208627
Destination Name :	ADVANCED CHEMICAL TREATMENT, LLC
Destination Mailing :	6133 EDITH BLVD NE, ALBUQUERQUE, NM 87107
Destination Address :	6133 EDITH BLVD NE, ALBUQUERQUE, NM 87107
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Web
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA HAZARDOUS WASTE SOLID (DRIERITE, CALCIUM SULFATE)
Quantity :	4 Pounds
Quantity Tons, Acute, Non-Acute :	0.002, 0, 0.002
Quantity Kg, Acute, Non-Acute :	0, 1.8140601
Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 551

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

NPDES - CA

Facility Name :	Sutter Home Winery Inc Distribution
Facility Address :	303 Green Island Road, American Canyon, 94503
County :	Napa
Effective Date :	2014-05-15
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28I024865
RM Status :	Active
Reg Meas ID :	446451
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Sutter Home Winery Inc
Discharger Address :	Po Box 248, St Helena, California 94574
Last Date in Agency List :	2023-02-15

PCS FACILITY

Issue Date :	2015-07-01
Original Issue Date :	2015-07-01
Effective Date :	2015-07-01
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601110776
External Permit Number :	CAZ446451
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Sutter Home Winery Inc
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC
DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

PCS FACILITY ***(cont.)***

TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_NONGEN

Facility Name :	SUTTER HOME WINERY, INC.
Facility Address :	303 GREEN ISLAND RD, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2003-08-14
EPA ID :	CAL000273842
Mailing Address :	PO BOX 248, SAINT HELENA, CA 94574-0248
Contact :	ALEX BISBIKIS
Contact Address :	P.O. BOX 248, SAINT HELENA, CA 94574
Contact Country :	N/R
Contact Telephone :	209-263-3253
Contact Email :	ABISBIKIS@TFEWINES.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2023-01-23

Owner/Operator Summary

Owner/Operator Name :	ALEX BISBIKIS
Owner/Operator Address :	P.O. BOX 248, SAINT HELENA, CA 94574
Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-263-3253
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R
Owner/Operator Name :	SUTTER HOME WINERY INC
Owner/Operator Address :	PO BOX 248, SAINT HELENA, CA 94574-0248
Owner/Operator Country :	N/R
Owner/Operator Telephone :	707-963-3104
Owner/Operator Email :	N/R

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

RCRA_NONGEN ***(cont.)***

Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

RFR - CA

Facility Name :	Sutter Home Winery Inc Distribution
Facility Address :	303 Green Island Road, American Canyon, CA 94503
County :	Napa
Effective Date :	2014-05-15
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28I024865
SIC/NAICS :	2084
Program :	INDSTW
Regulatory Measure Status :	Active

Map Id: 28
Direction: NE
Distance: 0.915 mi., 4833 ft.
Elevation: 53 ft.
Relative: Higher

Site Name : SUTTER HOME WINERY INC DISTRIBUTION | SUTTER HOME WINERY, INC. | SUTTER HOME WINERY,INC.:DIST. CENTER
303 GREEN ISLAND ROAD
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HIST CHMIRS - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_NONGEN, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 362357
EPA ID: N/R

RFR - CA ***(cont.)***

Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Wines, Brandy, and Brandy Spirits
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Sutter Home Winery Inc
Agency Address :	Po Box 248, St Helena, CA 94574
Latitude :	38.19342
Longitude :	-122.26007
Last Date in Agency List :	2022-11-23

STORMWATER

Facility Name :	SUTTER HOME WINERY INC DISTRIBUTION
Facility Address :	303 GREEN ISLAND ROAD, AMERICAN CANYON, CA 94503
NPDES ID :	CAZ446451
Permittee Name :	Sutter Home Winery Inc
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2015-07-01
Effective Date :	2015-07-01
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	2084
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.19342
Longitude :	-122.26007
Last Date in Agency List :	2022-12-13

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER]

Envirosite ID: 234738
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	RINGGOLD DISTILLERY
Facility Address :	108 DODD CT, AMERICAN CANYON, 94503
Site ID :	566055
EI ID :	10842043
EI Description :	Chemical Storage Facilities
Latitude :	38.194470
Longitude :	-122.258190
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Site ID :	566055
EI ID :	10842043
EI Description :	Hazardous Waste Generator
Latitude :	38.194470
Longitude :	-122.258190
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	RINGGOLD DISTILLERY
Facility Address :	108 DODD CT., AMERICAN CANYON, 94503
Site ID :	540886
EI ID :	853830
EI Description :	Industrial Facility Storm Water
Latitude :	38.194500
Longitude :	-122.258110
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Facility Name :	RINGGOLD STORAGE
Facility Address :	118 DODD CT, AMERICAN CANYON, 94503
Site ID :	566431
EI ID :	10843363
EI Description :	Chemical Storage Facilities
Latitude :	38.193800
Longitude :	-122.258240
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

CALEPA SITES - CA ***(cont.)***

Facility Name :	VA FILTRATION USA
Facility Address :	110 DODD CT, AMERICAN CANYON, 94503
Site ID :	165340
EI ID :	10504285
EI Description :	Chemical Storage Facilities
Latitude :	38.194408
Longitude :	-122.258232
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21

CIWQS - CA

Facility Name :	RINGGOLD DISTILLERY
Facility Address :	108 DODD CT., AMERICAN CANYON, CA 94503
County :	NAPA
Place ID :	S853830
Agency Name :	RINGGOLD DISTILLING LLC
Last Date in Agency List :	2022-12-28

ECHO

Facility Name :	RINGGOLD DISTILLERY
Facility Address :	108 DODD CT., AMERICAN CANYON, CA 94503
County :	NAPA COUNTY
Last Inspection Date :	N/R
Registry ID :	110070097450
FIPS Code :	06055
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	N/R

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

ECHO ***(cont.)***

Reference Point :	N/R
Accuracy Meters :	17531
Derived Tribes :	Lytton Rancheria of California - 17.1 mile(s)
Derived HUC :	18050002
Derived WBD :	180500020401
Derived STCTY FIPS :	06055
Derived Zip :	94503
Derived CD113 :	05
Derived CB2010 :	060552010051078
MYRTK Universe :	NNN
NPDES IDs :	CAZ484389
CWA Permit Types :	Minor
CWA Compliance Tracking :	On
CWA NAICS :	N/R
CWA SICS :	2085
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	0
CWA Current Compliance Status :	No Violation Identified
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	_____
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	2085
Facility NAICS :	312140 - Distilleries
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	Y
SDWIS Flag :	N

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

ECHO ***(cont.)***

RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	38.1945
Longitude :	-122.25811
Last Date in Agency List :	2023-01-16

FRS

Facility Name :	CULLIGAN WATER
Facility Address :	110 DODD CT, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110066409345
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest

Source and System ID :	CA-ENVIROVIEW - 22811

Facility Name :	PRISMEDICAL CORP
Facility Address :	118 DODD CT, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110038289009
FRS Facility URL :	Click here for hyperlink provided by the agency.

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

FRS ***(cont.)***

Last Date in Agency List : 2023-02-13

Source Description

Source Description :

SSTS tracks the registration of all pesticide-producing establishments and tracks annually the types and amounts of pesticides, active ingredients, and related devices that are produced, sold, or distributed.

FRS Environmental Interest

Source and System ID : SSTS - 084007CA001

Facility Name : RINGGOLD DISTILLERY
Facility Address : 108 DODD CT., AMERICAN CANYON, CA 94503
County : NAPA COUNTY

Site Details

Registry ID : 110070097450
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2023-02-13

Source Description

Source Description :

The NPDES module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

FRS ***(cont.)***

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	ICIS - CAZ484389 RCRAINFO - CAR000307892
Facility Name :	VA FILTRATION USA
Facility Address :	110 DODD CT, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Registry ID :	110065599506
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-02-13

Source Description

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest

Source and System ID :	CA-ENVIROVIEW - 165340

HAZNET - CA

Facility Name :	CULLIGAN WATER
Facility Address :	110 DODD CT, AMERICAN CANYON, CA 94503
County :	NAPA

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

HAZNET - CA ***(cont.)***

Site Details

Generator EPA ID :	CAC002646542
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	110 DODD CT, AMERICAN CANYON, CA 945031085
Latitude :	38.19428655
Longitude :	-122.25755176
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2009: 121 - Alkaline solution (pH >= 12.5) with metals, 0.229 tons to NVT330010000 2009: 791 - Liquids with pH <= 2, 0.2 tons to NVT330010000 2009: 123 - Unspecified alkaline solution, 0.2 tons to NVT330010000
Facility Name :	JUVENAL DIRECT, INC
Facility Address :	120 DODD CT, AMERICAN CANYON, CA 94503
County :	NAPA

Site Details

Generator EPA ID :	CAL000177554
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	120 DODD CT, AMERICAN CANYON, CA 945031085
Latitude :	38.19418456
Longitude :	-122.25770146
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2004: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.14178 tons to CAT000613943

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

HAZNET - CA ***(cont.)***

2003: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.2085 tons to CAT000613943
2002: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.18765 tons to CAT000613943
2001: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.3458 tons to CAT000613943
2000: 741 - Liquids with halogenated organic compounds >= 1,000 Mg. /L, 0.0625 tons to CAT000613943

Facility Name : PRISMEDICAL CORPORATION
Facility Address : 118 DODD CT, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAL000288449
Active : Inactive
Category : STATE
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 118 DODD CT, AMERICAN CANYON, CA 945031085
Latitude : 38.19420496
Longitude : -122.25767152
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Facility Name : RINGGOLD DISTILLERY
Facility Address : 108 DODD CT, AMERICAN CANYON, CA 94503
County : NAPA

Site Details
Generator EPA ID : CAR000307892
Active : Active
Category : FEDERAL
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 108 DODD CT, AMERICAN CANYON, CA 94503
Latitude : 38.19447000
Longitude : -122.25819150
Agency Hyperlink : Click here for hyperlink provided by the agency.

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

HAZNET - CA ***(cont.)***

Last Date in Agency List : 2021-07-08

HWG - CA

Facility Name : CULLIGAN WATER
Facility Address : 110 DODD CT, AMERICAN CANYON, CA 94503
County : NAPA

EPA ID : CAC002646542
Status : Inactive
Category : STATE
Type : TEMPORARY
Facility Type : N/R
Mailing Address : 110 DODD CT, AMERICAN CANYON, CA 945031085
Owner Name : CULLIGAN WATER
Owner Address : 110 DODD CT, AMERICAN CANYON, CA 945031085
Operator Name : DAVID MARGOLATI
Operator Address : 110 DODD CT, AMERICAN CANYON, CA 945031085
Latitude : 38.194361
Longitude : -122.257334

Facility Name : JUVENAL DIRECT, INC
Facility Address : 120 DODD CT, AMERICAN CANYON, CA 94503
County : NAPA

EPA ID : CAL000177554
Status : Inactive
Category : STATE
Type : PERMANENT
Facility Type : N/R
Mailing Address : 120 DODD CT, AMERICAN CANYON, CA 945031085
Owner Name : JUVENAL DIRECT INC
Owner Address : 120 DODD CT, AMERICAN CANYON, CA 945031085
Operator Name : RUI MIRANDA
Operator Address : 120 DODD CT, AMERICAN CANYON, CA 945031085
Latitude : 38.19385
Longitude : -122.25839

Facility Name : PRISMEDICAL CORPORATION
Facility Address : 118 DODD CT, AMERICAN CANYON, CA 94503
County : NAPA

EPA ID : CAL000288449
Status : Inactive

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

HWG - CA ***(cont.)***

Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	118 DODD CT, AMERICAN CANYON, CA 945031085
Owner Name :	PRISMEDICAL CORPORATION
Owner Address :	118 DODD CT, AMERICAN CANYON, CA 945031085
Operator Name :	JOHN ANES - VP DEVELOPMENT
Operator Address :	118 DODD CT, AMERICAN CANYON, CA 945031085
Latitude :	38.194406
Longitude :	-122.257459

Facility Name :	RINGGOLD DISTILLERY
Facility Address :	108 DODD CT, AMERICAN CANYON, CA 94503
County :	NAPA

EPA ID :	CAR000307892
Status :	Active
Category :	FEDERAL
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	108 DODD CT, AMERICAN CANYON, CA 94503
Owner Name :	RINGGOLD DISTILLING LLC
Owner Address :	108 DODD CT, AMERICAN CANYON, CA 94503
Operator Name :	TODD NELSON
Operator Address :	108 DODD CT, AMERICAN CANYON, CA 94503
Latitude :	38.194383
Longitude :	-122.258374

ICIS

Facility Name :	RINGGOLD DISTILLERY
Facility Address :	108 DODD CT., AMERICAN CANYON, CA 94503

Site Details

NPDES ID :	CAZ484389
ICIS Facility Interest ID :	3600736328
Facility UIN :	110070097450
Facility Type Code :	Privately Owned Facility
Impaired Waters :	N/R
Latitude :	38.1945
Longitude :	-122.25811
Last Date in Agency List :	2022-12-28

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

ICIS ***(cont.)***

Facility SIC

SIC Code :	2085
SIC Description :	Distilled And Blended Liquors

INACTIVE PCS

Issue Date :	2017-06-23
Original Issue Date :	2017-06-23
Effective Date :	2017-06-23
Expiration Date :	2020-06-30
Retirement Date :	N/R
Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601115711
External Permit Number :	CAZ484389
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Expired
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Ringgold Distilling LLC
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2022-12-28

MANIFEST EPA

Manifest Details

Manifest Number :	016327386FLE
Shipped Date :	2021-07-26
Updated Date :	2021-09-09
Received Date :	2021-08-20
Status :	Signed
Generator ID :	CAR000307892
Generator Name :	Loch & Union Distilling
Generator Address :	108 Dodd Court, American Canyon, CA 94503
Generator Mailing :	108 Dodd Court, American Canyon, CA 94503
Generator Contact :	Loch & Union Distilling
Destination ID :	UTD981552177
Destination Name :	Clean Harbors Aragonite LLC
Destination Mailing :	PO Box 1339, Grantsville, UT 84029

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Destination Address :	11600 North Aptus Road, Grantsville, UT 84029
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN2924
DOT Information :	UN2924, WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (ETHANOL, CITRIC ACID), 3, (8), PG II
Non Waste Description :	N/R
Quantity :	2200 Pounds
Quantity Tons, Acute, Non-Acute :	1.1, 0, 1.1
Quantity Kg, Acute, Non-Acute :	0, 997.73303
Management Method :	H040 - INCINERATION
Is EPA Waste :	Y
Federal Code :	D001, D002
State Code :	CA - 331, CA - 343

Manifest Details

Manifest Number :	015510127FLE
Shipped Date :	2021-03-01
Updated Date :	2021-04-13
Received Date :	2021-03-24
Status :	Signed
Generator ID :	CAR000307892
Generator Name :	Loch & Union Distilling
Generator Address :	108 Dodd Court, American Canyon, CA 94503
Generator Mailing :	108 Dodd Court, American Canyon, CA 94503
Generator Contact :	Loch & Union Distilling
Destination ID :	UTD981552177
Destination Name :	Clean Harbors Aragonite LLC
Destination Mailing :	PO Box 1339, Grantsville, UT 84029
Destination Address :	11600 North Aptus Road, Grantsville, UT 84029
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Last Date in Agency List : 2023-02-13

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN2924
DOT Information :	UN2924, WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (ETHANOL, CITRIC ACID), 3, (8), PG II
Non Waste Description :	N/R
Quantity :	2100 Pounds
Quantity Tons, Acute, Non-Acute :	1.05, 0, 1.05
Quantity Kg, Acute, Non-Acute :	0, 952.3815
Management Method :	H040 - INCINERATION
Is EPA Waste :	Y
Federal Code :	D001, D002
State Code :	CA - 331

Manifest Details

Manifest Number :	014563848FLE
Shipped Date :	2020-06-15
Updated Date :	2020-07-09
Received Date :	2020-06-19
Status :	Signed
Generator ID :	CAR000307892
Generator Name :	Loch & Union Distilling
Generator Address :	108 Dodd Court, American Canyon, CA 94503
Generator Mailing :	108 Dodd Court, American Canyon, CA 94503
Generator Contact :	Loch & Union Distilling
Destination ID :	NED981723513
Destination Name :	Clean Harbors Environmental Services, Inc.
Destination Mailing :	2247 South Highway 71, Kimball, NE 69145
Destination Address :	2247 South Highway 71, Kimball, NE 69145
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2023-02-13

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

MANIFEST EPA ***(cont.)***

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	UN2924
DOT Information :	UN2924, WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (CITRIC ACID), 3, (8), PG II
Non Waste Description :	N/R
Quantity :	2000 Pounds
Quantity Tons, Acute, Non-Acute :	1, 0, 1
Quantity Kg, Acute, Non-Acute :	0, 907.03
Management Method :	H040 - INCINERATION
Is EPA Waste :	Y
Federal Code :	D001, D002
State Code :	CA - 331

NPDES - CA

Facility Name :	Ringgold Distillery
Facility Address :	108 Dodd Ct., American Canyon, 94503
County :	Napa
Effective Date :	2017-06-23
Adoption Date :	N/R
Expiration Date :	N/R
Termination Date :	N/R
Order Number :	97-03-DWQ
NPDES Number :	CAS000001
WDID :	2 28NEC003327
RM Status :	Active
Reg Meas ID :	484389
Reg Meas Type :	Enrollee
Program :	Industrial
Facility Place ID :	N/R
Region Code :	2
Discharger ID :	0
Discharger :	Ringgold Distilling LLC
Discharger Address :	108 Dodd Ct, American Canyon, California 94503
Last Date in Agency List :	2023-02-15

PCS FACILITY

Issue Date :	2017-06-23
Original Issue Date :	2017-06-23
Effective Date :	2017-06-23
Expiration Date :	2020-06-30
Retirement Date :	N/R

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

PCS FACILITY ***(cont.)***

Termination Date :	N/R
Issuing Agency :	CA Waterboards
Agency Type :	State
Activity ID :	3601115711
External Permit Number :	CAZ484389
Facility Type Indicator :	NON-POTW
Permit Type :	General Permit Covered Facility-NPDES)
Major Minor Status :	N
Permit Status :	Effective
Total Design Flow Number :	N/R
Actual Average Flow Number :	N/R
State Water Body :	N/R
State Water Body Name :	N/R
Permit Name :	Ringgold Distilling LLC
Permit Comp Status :	Y
RNC Tracking :	Y
Master External Permit Number :	CAS000001
TMDL Interface :	N/R
EDMR Authorization :	N
Pretreatment Indicator :	N/R
Last Date in Agency List :	2020-02-11

RCRA_SQG

Facility Name :	RINGGOLD DISTILLERY
Facility Address :	108 DODD CT, AMERICAN CANYON, CA 94503
County :	NAPA
Date Form Received by Agency :	2020-05-11
EPA ID :	CAR000307892
Mailing Address :	108 DODD CT, AMERICAN CANYON, CA 94503
Contact :	MATTHEW MEYER
Contact Address :	108 DODD CT, AMERICAN CANYON, CA 94503
Contact Country :	US
Contact Telephone :	773-203-2700
Contact Email :	MATT@LOCHANDUNION.COM
EPA Region :	09
Land Type :	Private
Source Type :	Notification
Classification :	Small Quantity Generator
Description :	Handlers that generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.
Last Date in Agency List :	2023-01-23

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

RCRA_SQG ***(cont.)***

Owner/Operator Summary

Owner/Operator Name :	RINGGOLD DISTILLING, LLC
Owner/Operator Address :	108 DODD CT, AMERICAN CANYON, CA 94503
Owner/Operator Country :	US
Owner/Operator Telephone :	N/R
Owner/Operator Email :	MATT@LOCHANDUNION.COM
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	WILLIAM H DODD
Owner/Operator Address :	7 GLENEAGLE CIR, NAPA, CA 94558
Owner/Operator Country :	US
Owner/Operator Telephone :	N/R
Owner/Operator Email :	BILL@BILLDODD.COM
Owner/Operator Fax :	N/R
Legal Status :	Private
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Hazardous Waste Summary

Waste Code / Name :	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) D001 - IGNITABLE WASTE

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

RCRA_SQG ***(cont.)***

Waste Code / Name :

F003 - THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Notices of Violations Summary
Regulation Violated : N

RFR - CA

Facility Name :	Ringgold Distillery
Facility Address :	108 Dodd Ct., American Canyon, CA 94503
County :	Napa
Effective Date :	2017-06-23
Adoption Date :	N/R
Termination Date :	N/R
Expiration/Review Date :	N/R
NPDES Number :	CAS000001
Order Number :	2014-0057-DWQ
WDID :	2 28NEC003327
SIC/NAICS :	2085
Program :	INDSTW
Regulatory Measure Status :	Active
Regulatory Measure Type :	Storm water industrial
Place/Project Type :	Industrial - Distilled and Blended Liquors
Region :	2
Design Flow :	N/R
Major/Minor :	N/R
Complexity :	N/R
TTWQ :	N/R
Number of Enforcement Actions within Five Years:	N/R
Number of Violations within Five Years:	N/R
Agency :	Ringgold Distilling LLC
Agency Address :	108 Dodd Ct, American Canyon, CA 94503
Latitude :	38.1945
Longitude :	-122.25811
Last Date in Agency List :	2022-11-23

Map Id: 29
Direction: ENE
Distance: 0.967 mi., 5106 ft.
Elevation: 60 ft.
Relative: Higher

Site Name : RINGGOLD DISTILLERY | CULLIGAN WATER | VA FILTRATION USA
108 DODD CT | 110 DODD CT | 118 DODD CT
AMERICAN CANYON | American Canyon, CA 94503

Database(s) : [CALEPA SITES - CA, CIWQS - CA, ECHO, FRS, HAZNET - CA, HWG - CA, ICIS, INACTIVE PCS, MANIFEST EPA, NPDES - CA, PCS FACILITY, RCRA_SQG, RFR - CA, STORMWATER] ***(cont.)***

Envirosite ID: 234738
EPA ID: N/R

STORMWATER

Facility Name :	RINGGOLD DISTILLERY
Facility Address :	108 DODD CT., AMERICAN CANYON, CA 94503
NPDES ID :	CAZ484389
Permittee Name :	Ringgold Distilling LLC
Permit Status :	Expired
Permit Issuing Name :	State
Issued Date :	2017-06-23
Effective Date :	2017-06-23
Termination Date :	N/R
Expiration Date :	2020-06-30
EPA Region :	09
SIC Code :	2085
NAICS Code :	N/R
EJ Indexes Above 80th Percentile :	Y
Significant Noncompliance Status :	N/R
Quarters with Noncompliance :	0
Industrial Stormwater Formal Enforcement Actions:	N/R
Facility Map Flag :	Y
DRF URL :	Click here for hyperlink provided by the agency.
Latitude :	38.1945
Longitude :	-122.25811
Last Date in Agency List :	2022-12-13

No unmappable sites reported.

FEDERAL RCRA NON-CORRACTS TSD FACILITIES LIST

ARCHIVED RCRA TSDF: Resource Conservation and Recovery Act hazardous waste transportation storage disposal and treatment facilities

Agency Version Date: 12/15/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/13/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 12/15/2022

RCRA_TSDF: Resource Conservation and Recovery Act hazardous waste transportation storage disposal and treatment facilities

Agency Version Date: 12/15/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/13/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 12/15/2022

FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS

AST PBS: Bulk petroleum terminals with a total bulk storage capacity of 50,000 barrels or more.

Agency Version Date: 02/02/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 05/01/2023
Agency: Department of Homeland Security
Agency Contact: 202-853-5361
Most Recent Contact: 02/02/2023

EPA UST: Facilities listed in the EPA UST Finder database

Agency Version Date: 01/17/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/14/2023
Agency: EPA
Agency Contact: (202) 566-1667
Most Recent Contact: 01/17/2023

FEMA UST: FEMA underground storage tank listing

Agency Version Date: 09/16/2022
Agency Update Frequency: Varies
Planned Next Contact: 06/07/2023
Agency: FEMA
Agency Contact: 202-212-5283
Most Recent Contact: 03/09/2023

HIST INDIAN UST R7: Historical Underground Storage Tanks on Indian Land in EPA Region 7

Agency Version Date: 08/10/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/26/2023
Agency: U.S. Environmental Protection Agency Region 7
Agency Contact: 855-246-3642
Most Recent Contact: 01/30/2023

AST - CA: Listing of tank facilities that are subject to the California Aboveground Petroleum Storage Act

Agency Version Date: 12/15/2022
Agency Update Frequency: No update
Planned Next Contact: 03/13/2023
Agency: California Environmental Protection Agency Unified Program Section
Agency Contact: 916-327-5092
Most Recent Contact: 12/15/2022

FID UST - CA: The State Water Resource Control Board's Facility Inventory Database underground storage tank locations listing

Agency Version Date: 02/15/2023
Agency Update Frequency: Varies
Planned Next Contact: 05/12/2023
Agency: California Environmental Protection Agency
Agency Contact: 916-341-5791
Most Recent Contact: 02/15/2023

HIST AST - CA: Historical listing of tank facilities that are subject to the California Aboveground Petroleum Storage Act

Agency Version Date: 07/19/2019
Agency Update Frequency: Quarterly
Planned Next Contact: 03/17/2023
Agency: California Environmental Protection Agency Unified Program Section
Agency Contact: 916-327-5092
Most Recent Contact: 12/21/2022

FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS (cont.)

HIST UST - CA: Historical UST listing

Agency Version Date: 12/23/2021
Agency Update Frequency: Varies
Planned Next Contact: 06/01/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 03/06/2023

UST - CA: Listing of active underground storage tank facilities

Agency Version Date: 02/15/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 05/12/2023
Agency: CA Gov geotracker state water resources control board
Agency Contact: N/R
Most Recent Contact: 02/15/2023

UST_NAPA COUNTY - CA: Underground storage tank sites located in Napa county.

Agency Version Date: 03/03/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/11/2023
Agency: CA Gov geotracker state water resources control board
Agency Contact: 916-341-5791
Most Recent Contact: 02/14/2023

FEDERAL CERCLIS LIST

CERCLIS NFRAP: The CERCLIS sites with No Further Remedial Action Planned from the CERCLIS program database. The Environmental Protection Agency decommissioned the CERCLIS data in 2014. The last update was November 12, 2013.

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 01/13/2023

CERCLIS-HIST: The CERCLIS program database contains information on the assessment and remediation of federal hazardous waste sites. The Environmental Protection Agency decommissioned the CERCLIS data in 2014. The last update was November 12, 2013.

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 01/13/2023

EPA SAA: Listing of Sites with Superfund Alternative Approach Agreements.

Agency Version Date: 11/01/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 04/13/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 01/17/2023

FEDERAL FACILITY: Sites where Federal Facilities Restoration and Reuse Office (FFRRO) arranged cleanup for Base Closure and Property Transfer at Federal Facilities

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8712
Most Recent Contact: 01/13/2023

SEMS_8R_ACTIVE SITES: The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. NPL sites include latitude and longitude information. For non-NPL sites, a brief site status is provided.

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

FEDERAL CERCLIS LIST (cont.)

SEMS_8R_ARCHIVED SITES: The Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

FEDERAL RCRA CORRACTS FACILITIES LIST

CORRACTS: List of facilities where Resource Conservation and Recovery Act Corrective Action Program used to investigate and remediate hazardous releases

Agency Version Date: 12/15/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/13/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-1667
Most Recent Contact: 12/15/2022

HIST CORRACTS 2: List of facilities where Resource Conservation and Recovery Act Corrective Action Program used to investigate and remediate hazardous releases that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 05/05/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-1667
Most Recent Contact: 02/08/2023

FEDERAL DELISTED NPL SITE LIST

DELISTED NPL: National Priority List of sites that were delisted and no longer require action

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

DELISTED PROPOSED NPL: Sites that have been delisted from the proposed National Priority List

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

SEMS_DELETED NPL: All Deleted National Priority List Sties

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

FEDERAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

EPA LF MOP: Sites in the EPA Landfill Methane Outreach Program

Agency Version Date: 12/13/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/10/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 12/13/2022

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS

EPA LUST: Releases listed in the EPA UST Finder database

Agency Version Date: 01/17/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/14/2023
Agency: EPA
Agency Contact: (202) 566-1667
Most Recent Contact: 01/17/2023

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS (cont.)

HIST INDIAN LUST R4: Historical Leaking Underground Storage Tanks on Indian Land in EPA Region 4

Agency Version Date: 08/23/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/26/2023
Agency: U.S. Environmental Protection Agency Region 4
Agency Contact: 855-246-3642
Most Recent Contact: 01/30/2023

HIST INDIAN LUST R8: Historical Leaking Underground Storage Tanks on Indian Land in EPA Region 8

Agency Version Date: 08/16/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 04/18/2023
Agency: U.S. Environmental Protection Agency Region 8
Agency Contact: 855-246-3642
Most Recent Contact: 01/20/2023

LUST REG 1 - CA: Leaking underground storage tanks in Region 1: Del Norte Glenn Humboldt Lake Marin Mendocino Modoc Siskiyou Sonoma andTrinity counties.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

LUST REG 2 - CA: Leaking underground storage tanks in Region 2: Alameda Contra Costa San Francisco Santa Clara (north of Morgan Hill) San Mateo Marin Sonoma Napa Solano counties

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

LUST REG 3 - CA: Leaking underground storage tanks in Region 3: Santa Clara (south of Morgan Hill) San Mateo (southern part) Santa Cruz SanBenito Monterey Kern (some parts) San Luis Obispo Santa Barbara Ventura(northern part) counties

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

LUST REG 4 - CA: Leaking underground storage tanks in Region 4: Los Angeles Ventura counties (Small parts of Kern and Santa Barbara counties).

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

LUST REG 5 - CA: Leaking underground storage tanks in Region 5: Modoc Shasta Lassen Plumas Butte Glen Colusa Lake Sutter Yuba Sierra Nevada Placer Yolo Napa (Northeast) Solano (West) Sacramento El Dorado Amador Calaveras San Joaquin Contra Costa (East) Stanislaus Toulumne Merced Mariposa Madera Kings Fresno Tulare Kern (Very small portions of San Benito and SanLuis Obispo) counties

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

LUST REG 6 - CA: Leaking underground storage tanks in Region 6: Modoc (East) Lassen (East side and Eagle Lake) Sierra Nevada Placer El Dorado Alpine Mono Inyo Kern (East) San Bernardino Los Angeles (Northeast corner) counties

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS (cont.)

LUST REG 7 - CA: Leaking underground storage tanks in Region 7: Imperial San Bernardino Riverside and San Diego counties.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

LUST REG 8 - CA: Leaking underground storage tanks in Region 8: Orange Riverside San Bernardino counties.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

LUST REG 9 - CA: Leaking underground storage tanks in Region 9: San Diego Imperial Riverside counties.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SLIC REG 1 - CA: List of Region 1 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SLIC REG 2 - CA: List of Region 2 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SLIC REG 3 - CA: List of Region 3 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SLIC REG 4 - CA: List of Region 4 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SLIC REG 5 - CA: List of Region 5 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SLIC REG 6 - CA: List of Region 6 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database that is no longer in current agency list.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SLIC REG 7 - CA: List of Region 7 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS (cont.)

SLIC REG 8 - CA: List of Region 8 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SLIC REG 9 - CA: List of Region 9 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database that is no longer in current agency list.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

FEDERAL ERNS LIST

ERNS: Emergency Response Notification System records of reported spills

Agency Version Date: 01/09/2023
Agency Update Frequency: Annually
Planned Next Contact: 04/06/2023
Agency: National Response Center United States Coast Guard
Agency Contact: N/R
Most Recent Contact: 01/09/2023

FEDERAL INSTITUTIONAL CONTROLS / ENGINEERING CONTROLS REGISTRIES

FED E C: Federal listing of remediation sites with engineering controls

Agency Version Date: 02/06/2023
Agency Update Frequency: Varies
Planned Next Contact: 05/04/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 02/06/2023

FED I C: Federal listing of remediation sites with institutional controls

Agency Version Date: 02/06/2023
Agency Update Frequency: Varies
Planned Next Contact: 05/04/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 02/06/2023

RCRA IC_EC: Sites with institutional or engineering controls related to Resource Conservation and Recovery Act

Agency Version Date: 01/20/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/18/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 01/20/2023

FEDERAL RCRA GENERATORS LIST

HIST RCRA_CESQG: List of Resource Conservation and Recovery Act licensed conditionally exempt small quantity generators that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 05/05/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 02/08/2023

HIST RCRA_LQG: List of Resource Conservation and Recovery Act licensed large quantity generators that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 05/05/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 02/08/2023

FEDERAL RCRA GENERATORS LIST (cont.)

HIST RCRA_NONGEN: List of Resource Conservation and Recovery Act licensed non-generators that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 05/05/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 02/08/2023

HIST RCRA_SQG: List of Resource Conservation and Recovery Act licensed small quantity generators that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 05/05/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 02/08/2023

RCRA_LQG: Resource Conservation and Recovery Act listing of licensed large quantity generators

Agency Version Date: 12/15/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/13/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 12/15/2022

RCRA_NONGEN: Resource Conservation and Recovery Act listing of licensed non-generators

Agency Version Date: 12/15/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/13/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 12/15/2022

RCRA_SQG: Resource Conservation and Recovery Act listing of licensed small quantity generators

Agency Version Date: 12/15/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/13/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 12/15/2022

RCRA_VSQG: Resource Conservation and Recovery Act listing of licensed very small quantity generators.

Agency Version Date: 12/15/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/13/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 215-814-2469
Most Recent Contact: 12/15/2022

FEDERAL NPL SITE LIST

NPL: List of priority contaminated sites among identified releases or threatened releases of hazardous substances pollutants or contaminants nationally

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

NPL EPA R1 GIS: Geospatial data for the Environmental Protection Agency Region 1 National Priority List subject to environmental regulation

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 01/13/2023

NPL EPA R3 GIS: Geospatial data for the Environmental Protection Agency Region 3 National Priority List subject to environmental regulation

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 01/13/2023

FEDERAL NPL SITE LIST (cont.)

NPL EPA R6 GIS: Geospatial data for the Environmental Protection Agency Region 6 National Priority List subject to environmental regulation

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 01/13/2023

NPL EPA R8 GIS: Geospatial data for the Environmental Protection Agency Region 8 National Priority List subject to environmental regulation

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 01/13/2023

NPL EPA R9 GIS: Geospatial data for the Environmental Protection Agency Region 9 National Priority List subject to environmental regulation

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-2132
Most Recent Contact: 01/13/2023

PART NPL: Sites that are a part of an National Priority List site referred to as the parent site

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

PROPOSED NPL: Sites that have been proposed for the National Priority List

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

SEMS_FINAL NPL: All Included National Priority List Sites

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

SEMS_PROPOSED NPL: All Proposed National Priority List Sites

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

STATE- AND TRIBAL - EQUIVALENT CERCLIS

ENVIROSTOR - CA: Department of Toxic Substances Controls

Agency Version Date: 12/08/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 06/01/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-327-1077
Most Recent Contact: 03/06/2023

HIST TOXIC PITS - CA: Listing of Toxic Pit Cleanup Act sites that are no longer in current agency list.

Agency Version Date: 10/12/2018
Agency Update Frequency: Quarterly
Planned Next Contact: 03/21/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 12/23/2022

STATE- AND TRIBAL - EQUIVALENT CERCLIS (cont.)

OIL & GAS CLEANUP - CA: List of SWRCB Oil & Gas Cleanup Sites from GeoTracker Site Cleanup Program database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: California Regional Water Quality Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SWRCB CLEANUP - CA: List of SWRCB Cleanups from Geotracker including CAF, Sampling Points, and Projects.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: California Regional Water Quality Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

SWRCB NON_CASE - CA: List of SWRCB Non-Case sites from GeoTracker Site Cleanup Program database.

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: California Regional Water Quality Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

TOXIC PITS - CA: Listing of Toxic Pit Cleanup Act sites

Agency Version Date: 12/26/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/20/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 12/22/2022

STATE- AND TRIBAL - EQUIVALENT NPL

HIST RESPONSE - CA: List of state response sites with confirmed releases and potential high risk that are no longer in current agency list.

Agency Version Date: 10/17/2017
Agency Update Frequency: Annually
Planned Next Contact: 04/26/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-327-1077
Most Recent Contact: 01/30/2023

RESPONSE - CA: State response sites with confirmed releases and potential high risk

Agency Version Date: 12/08/2022
Agency Update Frequency: Annually
Planned Next Contact: 06/01/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-327-1077
Most Recent Contact: 03/06/2023

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

HIST SWF/LF - CA: List of Solid Waste Information System's solid waste facilities and landfills that is no longer in current agency list.

Agency Version Date: 03/05/2018
Agency Update Frequency: Annually
Planned Next Contact: 04/24/2023
Agency: Department of Resources Recycling and Recovery
Agency Contact: 916-341-6066
Most Recent Contact: 01/25/2023

SWF/LF - CA: Solid Waste Information System's facility listing of solid waste facilities and landfills

Agency Version Date: 02/23/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 05/22/2023
Agency: Department of Resources Recycling and Recovery
Agency Contact: 916-341-6066
Most Recent Contact: 02/23/2023

STATE RCRA GENERATORS LIST

HWG - CA: Hazardous waste generator listing

Agency Version Date: 12/01/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 05/25/2023
Agency: Department of Toxic Substances Control
Agency Contact: N/R
Most Recent Contact: 02/27/2023

STATE AND TRIBAL BROWNFIELD SITES

TRIBAL BROWNFIELDS: Tribal brownfield remediation site listing

Agency Version Date: 02/10/2017
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 05/26/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 02/28/2023

STATE AND TRIBAL VOLUNTARY CLEANUP SITES

VCP - CA: Voluntary Cleanup Program remediation sites listing

Agency Version Date: 12/08/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 06/01/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 03/06/2023

LOCAL BROWNFIELD LISTS

BROWNFIELDS-ACRES: EPA Brownfields Assessment, Cleanup and Redevelopment Exchange System.

Agency Version Date: 11/28/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 05/22/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 02/23/2023

FED BROWNFIELDS: Federal brownfield remediation sites

Agency Version Date: 10/13/2022
Agency Update Frequency: Semi Annually
Planned Next Contact: 04/06/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 01/09/2023

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES

FED CDL: The U.S. Department of Justice listing of clandestine drug lab locations

Agency Version Date: 12/29/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/27/2023
Agency: U.S. Department of Justice
Agency Contact: 202-307-7610
Most Recent Contact: 12/29/2022

US HIST CDL: The U.S. Department of Justice historical listing of clandestine drug lab locations

Agency Version Date: 08/05/2019
Agency Update Frequency: Quarterly
Planned Next Contact: 04/28/2023
Agency: U.S. Department of Justice
Agency Contact: 202-307-7610
Most Recent Contact: 02/01/2023

CDL - CA: Listing of Meth and clandestine drug labs maintained by the Department of Toxic Substances Control

Agency Version Date: 12/22/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/16/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 12/20/2022

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES (cont.)

CS_NAPA COUNTY - CA: Napa county listing of Contaminated sites

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: Napa County Department of Environmental Management
Agency Contact: 707-253-4471
Most Recent Contact: 01/13/2023

SCH - CA: Listing of possible hazardous material contamination sites on existing school properties

Agency Version Date: 01/10/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/06/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/10/2023

RECORDS OF EMERGENCY RELEASE REPORTS

HMIRS (DOT): Hazardous Material spills reported by the Department of Transportation

Agency Version Date: 12/06/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/30/2023
Agency: U.S. Department of Transportation
Agency Contact: (202) 366-4996
Most Recent Contact: 03/03/2023

CHMIRS - CA: California Hazardous Material Incident Reporting System's reported accidental hazardous material incidents releases or spills

Agency Version Date: 09/29/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/23/2023
Agency: California Emergency Management Agency
Agency Contact: 916-845-8275
Most Recent Contact: 12/27/2022

HIST CHMIRS - CA: California Hazardous Material Incident Reporting System's reported accidental hazardous material incidents releases or spills

Agency Version Date: 04/06/2017
Agency Update Frequency: Quarterly
Planned Next Contact: 04/24/2023
Agency: California Emergency Management Agency
Agency Contact: 916-845-8275
Most Recent Contact: 01/25/2023

LOCAL LAND RECORDS

LIENS 2: Comprehensive Environmental Response Compensation and Liability Act sites with liens

Agency Version Date: 05/11/2017
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 05/29/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 03/02/2023

DEED - CA: The Department of Toxic Substances Control's listing of property locations with Deed restrictions

Agency Version Date: 01/12/2023
Agency Update Frequency: Semi Annually
Planned Next Contact: 04/10/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-341-5791
Most Recent Contact: 01/12/2023

HIST LIENS - CA: The Department of Toxic Substances Control's listing of property locations with environmental liens that is no longer in current agency list.

Agency Version Date: 12/04/2018
Agency Update Frequency: Annually
Planned Next Contact: 04/19/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/23/2023

LIENS - CA: The Department of Toxic Substances Control's listing of property locations with environmental liens

Agency Version Date: 11/28/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/22/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 02/23/2023

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

ODI: Open dump inventory sites

Agency Version Date: 10/03/2017
Agency Update Frequency: No Update
Planned Next Contact: 04/25/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 01/27/2023

TRIBAL ODI: Indian land open dump inventory for all regions

Agency Version Date: 02/07/2023
Agency Update Frequency: Varies
Planned Next Contact: 05/05/2023
Agency: Indian Health Service
Agency Contact: 301-443-3593
Most Recent Contact: 02/07/2023

HAULERS - CA: Waste Tire Manifest Program Hauler Registration listing

Agency Version Date: 12/12/2022
Agency Update Frequency: Varies
Planned Next Contact: 06/05/2023
Agency: California Department of Resources Recycling and Recovery (CalRecycle)
Agency Contact: 916-341-6066
Most Recent Contact: 03/09/2023

SWRCY - CA: Listing of facilities which perform recycled material processing activities

Agency Version Date: 01/30/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/27/2023
Agency: California Department of Resources Recycling and Recovery (CalRecycle)
Agency Contact: 916-341-6066
Most Recent Contact: 01/30/2023

OTHER ASCERTAINABLE RECORDS

AFS: Air Facility Systems Quarterly Extract

Agency Version Date: 01/16/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/13/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/16/2023

ALT FUELING: Alternative Fueling Stations by fuel type.

Agency Version Date: 12/13/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/10/2023
Agency: U.S. Department of Energy
Agency Contact: N/R
Most Recent Contact: 12/13/2022

ARENAS: List of Arenas and Sport Venues

Agency Version Date: 01/31/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/28/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/31/2023

ARENAS 2: List of Convention Centers and Fairgrounds

Agency Version Date: 11/04/2022
Agency Update Frequency: Varies
Planned Next Contact: 04/27/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/31/2023

BRS: Reporting of hazardous waste generation and management from large quantity generators

Agency Version Date: 12/15/2022
Agency Update Frequency: Biennial
Planned Next Contact: 03/13/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 12/15/2022

OTHER ASCERTAINABLE RECORDS (cont.)

CDC HAZDAT: The Agency for Toxic Substances and Disease Registry's Hazardous Substance Release/Health Effects Database.

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: Agency for Toxic Substances and Disease Registry
Agency Contact: 770-488-6399
Most Recent Contact: 01/13/2023

CHURCHES: List of places of worship

Agency Version Date: 02/02/2023
Agency Update Frequency: Varies
Planned Next Contact: 05/01/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 02/02/2023

COAL ASH DOE: List of existing and planned generators with 1 megawatt or greater of combined capacity that are utilizing coal ash impoundments.

Agency Version Date: 12/01/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/25/2023
Agency: Department of Energy
Agency Contact: (202) 586-8800
Most Recent Contact: 02/27/2023

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

Agency Version Date: 02/18/2021
Agency Update Frequency: Varies
Planned Next Contact: 04/17/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/19/2023

COAL GAS: Manufactured Gas Plant locations

Agency Version Date: 12/23/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/17/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 12/21/2022

COLLEGES: List of major Universities & Colleges

Agency Version Date: 01/05/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/03/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/05/2023

COLLEGES 2: List of Universities & Colleges

Agency Version Date: 01/06/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/06/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/06/2023

CONSENT (DECREES): Legal decisions regarding responsibility for Superfund locations

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 01/13/2023

CORRECTIVE ACTIONS_2020: In 2009 the EPA created the 2020 Corrective Action Baseline list of contaminated or potentially contaminated sites with a cleanup goal to complete 95% by the year 2020. The names on the list indicate the facility owners who may or may not have caused the contamination.

Agency Version Date: 12/21/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/04/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: N/R
Most Recent Contact: 01/06/2023

OTHER ASCERTAINABLE RECORDS (cont.)

DAYCARE: List of Daycare facilities

Agency Version Date: 01/03/2023
Agency Update Frequency: Varies
Planned Next Contact: 03/31/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/03/2023

DEBRIS EPA LF: EPA list of designated landfill facilities for the safe disposal of disaster debris.

Agency Version Date: 12/29/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/27/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 12/29/2022

DEBRIS EPA SWRCY: EPA list of facilities for the safe recovery, recycling, and disposal of disaster debris.

Agency Version Date: 12/29/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/27/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 12/30/2022

DOD: Department of Defense sites from the Protected Areas Database (PAD-US)

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: United States Geologic Survey (USGS)
Agency Contact: 1-888-275-8747
Most Recent Contact: 01/13/2023

DOT OPS: Incident Data Report

Agency Version Date: 01/30/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/27/2023
Agency: U.S. Department of Transportation
Agency Contact: (202) 366-4996
Most Recent Contact: 01/30/2023

ECHO: ECHO is EPA Enforcement and Compliance History Online website to search for facilities in your community to assess their compliance with environmental regulations related to CAA, CWA, RCRA, & SDWA.

Agency Version Date: 12/09/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 06/02/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 202-566-1667
Most Recent Contact: 03/07/2023

ENOI: The Electronic Notice of Intent (eNOI) database contains construction sites and industrial facilities that submit permit requests to EPA for Construction General Permits (CGP) and Multi-Sector General Permits (MSGP).

Agency Version Date: 03/19/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/18/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/20/2023

EPA FUELS: List of companies and facilities registered to participate in EPA Fuel Programs under Title 40 CFR Part 80.

Agency Version Date: 01/19/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/17/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: (202) 564-2307
Most Recent Contact: 01/19/2023

EPA OSC: Listing of oil spills and hazardous substance release sites requiring EPA On-Site Coordinators.

Agency Version Date: 12/02/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 05/26/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: (202) 564-2307
Most Recent Contact: 02/28/2023

OTHER ASCERTAINABLE RECORDS (cont.)

EPA WATCH: The EPA Watch List was used to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. EPA maintained the lists from 2011 - 2013.

Agency Version Date: 02/09/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 05/26/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: (202) 564-2307
Most Recent Contact: 03/01/2023

FA HWF: Hazardous Waste Facilities with Financial Assurance

Agency Version Date: 12/22/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/20/2023
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 12/22/2022

FEDLAND: Federal Lands from the Protected Areas Database (PAD-US)

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: United States Geologic Survey (USGS)
Agency Contact: 1-888-275-8747
Most Recent Contact: 01/13/2023

FRS: Facility Registry Systems

Agency Version Date: 01/24/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/20/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/24/2023

FTTS: Tracking of administrative and enforcement activities related to FIFRA/TSCA

Agency Version Date: 04/06/2013
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 03/15/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 564-2280
Most Recent Contact: 12/19/2022

FTTS INSP: Tracking of inspections related to FIFRA/TSCA

Agency Version Date: 05/08/2017
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 06/02/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 564-2280
Most Recent Contact: 03/07/2023

FUDS: Defense sites that require cleanup

Agency Version Date: 01/24/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/21/2023
Agency: US Army Corps of Engineering
Agency Contact: (202) 761-0011
Most Recent Contact: 01/24/2023

GOV MANSIONS: List of Governors Mansions

Agency Version Date: 01/31/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/27/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/31/2023

HIST AFS: List of Air Facility Systems Quarterly Extract that are no longer in current agency list.

Agency Version Date: 06/14/2019
Agency Update Frequency: Quarterly
Planned Next Contact: 05/26/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/28/2023

OTHER ASCERTAINABLE RECORDS (cont.)

HIST AFS 2: List of Air Facility Systems Quarterly Extract that are no longer in current agency list.

Agency Version Date: 11/26/2018
Agency Update Frequency: Quarterly
Planned Next Contact: 03/30/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/02/2023

HIST DOD: Department of Defense historical sites

Agency Version Date: 01/13/2023
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/11/2023
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 01/13/2023

HIST LEAD_SMELTER: List of former lead smelter sites that is no longer in current agency list.

Agency Version Date: 12/12/2018
Agency Update Frequency: Annually
Planned Next Contact: 03/15/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 12/19/2022

HIST MLTS: List of sites in possession/use of radioactive materials regulated by NRC that is no longer in current agency list.

Agency Version Date: 07/13/2016
Agency Update Frequency: Annually
Planned Next Contact: 03/24/2023
Agency: Nuclear Regulatory Commission
Agency Contact: (800) 397-4209
Most Recent Contact: 12/28/2022

HIST PCB TRANS: List of PCB Disposal Facilities that are no longer in current agency list.

Agency Version Date: 01/18/2018
Agency Update Frequency: No Update
Planned Next Contact: 04/14/2023
Agency: Environmental Protection Agency
Agency Contact: (703) 308-8404
Most Recent Contact: 01/18/2023

HIST PCS ENF: List of permitted facilities to discharge wastewater (Federal equivalent to NPDES) that are no longer in current agency list.

Agency Version Date: 12/08/2018
Agency Update Frequency: Annually
Planned Next Contact: 04/27/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 01/31/2023

HIST PCS FACILITY: List of Permitted facilities to discharge wastewater (Federal equivalent to NPDES) that are no longer in current agency list.

Agency Version Date: 12/18/2018
Agency Update Frequency: Annually
Planned Next Contact: 04/27/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 01/31/2023

HIST SSTS: List of tracking of facilities who produce pesticides and their quantity that are no longer in current agency list.

Agency Version Date: 02/13/2019
Agency Update Frequency: Annually
Planned Next Contact: 04/17/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/19/2023

HOSPITALS: List of major Hospitals

Agency Version Date: 01/05/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/03/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/05/2023

OTHER ASCERTAINABLE RECORDS (cont.)

ICIS: Comprised of all Federal Administrative and Judicial enforcement information [intended to replace PCS] by tracking enforcement and compliance information (also contains what used to be known as FFTS)

Agency Version Date: 12/13/2022
Agency Update Frequency: Varies
Planned Next Contact: 06/06/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 03/10/2023

INACTIVE PCS: Inactive Permitted facilities to discharge wastewater

Agency Version Date: 12/13/2022
Agency Update Frequency: Varies
Planned Next Contact: 06/06/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 03/10/2023

LUCIS: Land Use Control Information Systems

Agency Version Date: 12/12/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 06/06/2023
Agency: Department of the Navy: BRAC PMO
Agency Contact: (619) 532-0900
Most Recent Contact: 03/08/2023

LUCIS 2: Land Use Control Information Systems

Agency Version Date: 01/17/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/14/2023
Agency: Department of the Navy: BRAC PMO
Agency Contact: (619) 532-0900
Most Recent Contact: 01/18/2023

MANIFEST EPA: EPA Hazardous Waste Electronic Manifest System (e-Manifest)

Agency Version Date: 01/24/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/21/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/24/2023

MINE OPERATIONS: Mine plants and operations for commodities monitored by the National Minerals Information Center of the USGS

Agency Version Date: 01/27/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/25/2023
Agency: USGS Mineral Resources Program
Agency Contact: (703) 648-5953
Most Recent Contact: 01/27/2023

MINES: Mines Master Index Files

Agency Version Date: 12/15/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/13/2023
Agency: Department of Labor
Agency Contact: (202) 693-9400
Most Recent Contact: 12/15/2022

MINES USGS: Listing of all active mines and mineral plants in 2003

Agency Version Date: 01/27/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/25/2023
Agency: USGS Mineral Resources Program
Agency Contact: (703) 648-5953
Most Recent Contact: 01/27/2023

MLTS: Sites in possession/use of radioactive materials regulated by NRC

Agency Version Date: 07/15/2022
Agency Update Frequency: Varies
Planned Next Contact: 04/07/2023
Agency: Nuclear Regulatory Commission
Agency Contact: (800) 397-4209
Most Recent Contact: 01/11/2023

OTHER ASCERTAINABLE RECORDS (cont.)

NPL AOC: Areas of Concern related to NPL remediation sites

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: Environmental Protection Agency
Agency Contact: N/R
Most Recent Contact: 01/13/2023

NPL LIENS: National Priority List of sites with Liens

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

NURSING HOMES: List of Nursing Homes

Agency Version Date: 01/02/2023
Agency Update Frequency: Varies
Planned Next Contact: 03/31/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/02/2023

OSHA: OSHA's listing of inspections violations and fatality information

Agency Version Date: 12/12/2022
Agency Update Frequency: Varies
Planned Next Contact: 06/05/2023
Agency: Occupational Safety & Health Administration
Agency Contact: 800-321-6742
Most Recent Contact: 03/09/2023

PADS: Listing of generators transporters commercial store/ brokers and disposers of PCB

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: Environmental Protection Agency
Agency Contact: (703) 308-8404
Most Recent Contact: 01/13/2023

PCB TRANSFORMER: Disposal and Storage of Polychlorinated Biphenyl (PCB) Waste

Agency Version Date: 01/27/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/25/2023
Agency: Environmental Protection Agency
Agency Contact: (703) 308-8404
Most Recent Contact: 01/27/2023

PCS ENF: Permitted facilities to discharge wastewater (Federal equivalent to NPDES)

Agency Version Date: 12/13/2022
Agency Update Frequency: Varies
Planned Next Contact: 06/06/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 03/10/2023

PCS FACILITY: Permitted facilities to discharge wastewater (Federal equivalent to NPDES)

Agency Version Date: 12/13/2022
Agency Update Frequency: Varies
Planned Next Contact: 06/06/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 564-6582
Most Recent Contact: 03/10/2023

PFAS NPL: List of NPL sites with PFAS or PFOA contamination

Agency Version Date: 01/09/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/06/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/09/2023

PFAS TRIS: List of TRIS sites where PFAS or PFOA are used/manufactured/ treated/ transported/released.

Agency Version Date: 12/13/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/10/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 12/13/2022

OTHER ASCERTAINABLE RECORDS (cont.)

PFAS UCMR3: List of PWS wells sampled for Unregulated Contaminant Monitoring Rule (UCMR)

Agency Version Date: 06/02/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 05/18/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 02/20/2023

PRISONS: List of Prison facilities

Agency Version Date: 11/29/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/23/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 02/24/2023

PRP: A listing of verified Potentially Responsible Parties at CERCLIS sites

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 800-424-9346
Most Recent Contact: 01/13/2023

RAATS: Listing of major violators with enforcement actions issued under RCRA. Includes administrative and civil actions filed by the EPA. This dataset is no longer maintained.

Agency Version Date: 09/23/2019
Agency Update Frequency: Varies
Planned Next Contact: 03/31/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 01/04/2023

RADINFO: EPA regulated facilities with radiation and radioactive materials

Agency Version Date: 08/01/2019
Agency Update Frequency: Varies
Planned Next Contact: 03/20/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 12/22/2022

RMP: Facilities producing/handling/ process/ distribute/ store specific chemicals report plans required by the Clean Air Act

Agency Version Date: 04/01/2022
Agency Update Frequency: Monthly
Planned Next Contact: 03/17/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 564-2534
Most Recent Contact: 12/21/2022

ROD: Permanent remedy at an NPL site

Agency Version Date: 01/13/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/11/2023
Agency: Environmental Protection Agency
Agency Contact: (800) 424-9346
Most Recent Contact: 01/13/2023

SCHOOLS PRIVATE: List of Private Schools

Agency Version Date: 01/05/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/03/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/05/2023

SCHOOLS PUBLIC: List of Public Schools

Agency Version Date: 01/05/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/03/2023
Agency: DHS Homeland Infrastructure Foundation
Agency Contact: N/R
Most Recent Contact: 01/05/2023

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners

Agency Version Date: 11/18/2022
Agency Update Frequency: No Update
Planned Next Contact: 05/11/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/14/2023

OTHER ASCERTAINABLE RECORDS (cont.)

SEMS_SMELTER: This report includes sites that have smelting-related, or potentially smelting-related, indicators in the SEMS database. The report includes information on the site location as well as contaminants of concern.

Agency Version Date: 01/13/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/11/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 703-603-8867
Most Recent Contact: 01/13/2023

SSTS: Tracking of facilities who produce pesticides and their quantity

Agency Version Date: 11/24/2022
Agency Update Frequency: Annually
Planned Next Contact: 05/18/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/20/2023

STORMWATER: Permitted storm water sites

Agency Version Date: 12/06/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/30/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 03/03/2023

TOSCA-PLANT: Plants controlled by the Toxic Substance Control Act

Agency Version Date: 09/05/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/26/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 02/27/2023

TRIS: Information regarding toxic chemicals that are being used/manufactured/ treated/ transported/released into the environment

Agency Version Date: 12/13/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/10/2023
Agency: Environmental Protection Agency
Agency Contact: (202) 566-1667
Most Recent Contact: 12/13/2022

UMTRA: Uranium Recovery Sites

Agency Version Date: 06/21/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/10/2023
Agency: United States Nuclear Regulatory Commission
Agency Contact: (301) 415-8200
Most Recent Contact: 12/13/2022

VAPOR: EPA Vapor Intrusion Database

Agency Version Date: 03/19/2021
Agency Update Frequency: Varies
Planned Next Contact: 05/19/2023
Agency: U.S. Environmental Protection Agency
Agency Contact: 855-246-3642
Most Recent Contact: 02/21/2023

BOND EXPENDITURE PLAN - CA: Hazardous Substance Cleanup Bond Act of 1984 Article 7.5 of Health and Safety Code 25385 listing of orphan sites

Agency Version Date: 12/08/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 06/01/2023
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 03/06/2023

CALEPA SITES - CA: CalEPA Regulated Sites from the Certified Unified Program Agencies (CUPA).

Agency Version Date: 12/16/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/14/2023
Agency: California Environmental Protection Agency Unified Program Section
Agency Contact: 916-327-5092
Most Recent Contact: 12/16/2022

OTHER ASCERTAINABLE RECORDS (cont.)

CIWQS - CA: California Integrated Water Quality System database facilities listing which includes owner information, violations, inspections, and other regulatory matters

Agency Version Date: 12/01/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/26/2023
Agency: CA State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 02/27/2023

CIWQS 2 - CA: California Integrated Water Quality System database facilities listing which includer owner information violations inspections and other regulatory matters

Agency Version Date: 12/26/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/20/2023
Agency: CA State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 12/22/2022

CORTESE - CA: Compliance document used in providing information about the location of hazardous material release sites utilized by the state local agencies and developers

Agency Version Date: 09/12/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 06/01/2023
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 03/06/2023

DAYCARE - CA: List of daycare locations

Agency Version Date: 01/03/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 03/31/2023
Agency: California Department of Social Services
Agency Contact: 916-651-6040
Most Recent Contact: 01/03/2023

DRYCLEANERS - CA: Listing of drycleaning facilities

Agency Version Date: 09/09/2014
Agency Update Frequency: Quarterly
Planned Next Contact: 05/30/2023
Agency: California EPA Air Resources Board
Agency Contact: 916-324-3013
Most Recent Contact: 03/03/2023

DRYCLEANERS_BAY AREA - CA: Listing of drycleaning facilities in Bay Area

Agency Version Date: 07/01/2021
Agency Update Frequency: Quarterly
Planned Next Contact: 05/29/2023
Agency: Bay Area AQMD
Agency Contact: 415-749-4784
Most Recent Contact: 03/03/2023

EMI - CA: An estimation of air pollution for a listing of air permitted facilities

Agency Version Date: 11/25/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/19/2023
Agency: California Air Resources Board
Agency Contact: 916-327-6251
Most Recent Contact: 02/21/2023

FA - CA: Listing of the Department of Toxic Substance Control's Financial Assurance report sites and facilities

Agency Version Date: 01/11/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/07/2023
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/11/2023

FA 2 - CA: Financial Assurance Information for solid waste facilities

Agency Version Date: 07/08/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/30/2023
Agency: Department of Environment & Natural Resources
Agency Contact: 916-341-6066
Most Recent Contact: 01/04/2023

OTHER ASCERTAINABLE RECORDS (cont.)

FIRE AREAS - CA: The multi-agency statewide database of fire perimeters.

Agency Version Date: 12/22/2022
Agency Update Frequency: No Update
Planned Next Contact: 03/20/2023
Agency: California Department of Forestry and Fire Protection
Agency Contact: 916-445-4302
Most Recent Contact: 12/22/2022

HAZNET - CA: Listing of hazardous waste manifests from when hazardous waste is transported from generators to permitted recycling treatment storage or disposal facilities by registered hazardous waste transporters

Agency Version Date: 04/05/2021
Agency Update Frequency: Annually
Planned Next Contact: 05/30/2023
Agency: California Environmental Protection Agency
Agency Contact: 916-341-5791
Most Recent Contact: 03/03/2023

HIGH FIRE - CA: Fire hazard severity zones mapped as areas of significant fire hazards on the basis of fuels terrain weather and other factors

Agency Version Date: 02/17/2023
Agency Update Frequency: No update
Planned Next Contact: 05/16/2023
Agency: California Department of Forestry and Fire Protection
Agency Contact: 916-445-4302
Most Recent Contact: 02/17/2023

HIST CORTESE - CA: The historical compliance document used in providing information about the location of hazardous material release sites utilized by the state local agencies and developers

Agency Version Date: 01/19/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/17/2023
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/19/2023

HIST HAZNET - CA: List of hazardous waste manifests from when hazardous waste is transported from generators to permitted recycling treatment storage or disposal facilities by registered hazardous waste transporters that are no longer in current agency list.

Agency Version Date: 10/10/2018
Agency Update Frequency: Annually
Planned Next Contact: 04/27/2023
Agency: California Environmental Protection Agency
Agency Contact: 916-341-5791
Most Recent Contact: 01/31/2023

HIST HWP - CA: List of the Department of Toxic Substance Control's hazardous waste transporters and corrective action that are no longer in current agency list.

Agency Version Date: 01/18/2019
Agency Update Frequency: Annually
Planned Next Contact: 04/05/2023
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/09/2023

HIST LDS - CA: List of areas of land on or in which hazardous waste is placed or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area that are no longer in current agency list.

Agency Version Date: 05/20/2018
Agency Update Frequency: Annually
Planned Next Contact: 05/03/2023
Agency: State Water Qualilty Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 02/06/2023

HIST MCS - CA: List of the State Water Resources Control Boards investigation and remediation of water quality issues at military facilities that is no longer in current agency list.

Agency Version Date: 09/24/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 05/26/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 02/28/2023

OTHER ASCERTAINABLE RECORDS (cont.)

HIST NFA - CA: Historical No further action cleanup sites listing

Agency Version Date: 02/21/2019
Agency Update Frequency: Quarterly
Planned Next Contact: 04/24/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/25/2023

HWM COMMERCIAL FACILITIES - CA: Listing of all commercial hazardous waste permitted off-site transfer recycling treatment storage and disposal facilities

Agency Version Date: 01/04/2023
Agency Update Frequency: Varies
Planned Next Contact: 03/31/2023
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-5308
Most Recent Contact: 01/04/2023

HWP - CA: Facility listing of the Department of Toxic Substance Control's hazardous waste transporters and corrective action

Agency Version Date: 01/12/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/10/2023
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/12/2023

HWT - CA: Listing of registered hazardous waste transporters

Agency Version Date: 01/19/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/17/2023
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/19/2023

LDS - CA: List of Land Disposal Cleanup Sites from Geotracker

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

MCS - CA: List of Military Cleanup Sites from Geotracker

Agency Version Date: 01/10/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/10/2023

MWMP - CA: Listing of treatment and transfer stations that properly handle and dispose of medical waste that are permitted and inspected by the Medical Waste Management Program

Agency Version Date: 01/16/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/13/2023
Agency: California-Health Human Services Department of Public Health
Agency Contact: 916-449-5661
Most Recent Contact: 01/16/2023

MWMP 2 - CA: Listing of facilities that generate permitted medical waste and are inspected by the Medical Waste Management Program

Agency Version Date: 01/13/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 04/03/2023
Agency: California-Health Human Services Department of Public Health
Agency Contact: 916-449-5661
Most Recent Contact: 01/05/2023

NFA - CA: No further action cleanup sites listing

Agency Version Date: 12/08/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 06/01/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 03/06/2023

OTHER ASCERTAINABLE RECORDS (cont.)

NFE - CA: Unconfirmed contaminated properties listing

Agency Version Date: 12/06/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 06/01/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 03/06/2023

NPDES - CA: Listing of facilities with wastewater and NPDES permits including stormwater

Agency Version Date: 02/01/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/28/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 02/01/2023

PERCHLORATE 2 - CA: Listing of contaminated sites where the primary known chemical is perchlorate

Agency Version Date: 12/06/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 05/30/2023
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 03/03/2023

PFAS - CA: List of PFAS sites and areas of interest

Agency Version Date: 12/22/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/20/2023
Agency: California State Water Resources Control Board
Agency Contact: N/R
Most Recent Contact: 12/22/2022

PFAS DOD - CA: List of DoD facilities conducting PFAS investigations

Agency Version Date: 12/22/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/20/2023
Agency: California State Water Resources Control Board
Agency Contact: N/R
Most Recent Contact: 12/22/2022

PFAS GAMA - CA: PFOS & PFAS GAMA Well Sampling program

Agency Version Date: 12/19/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 03/16/2023
Agency: California State Water Resources Control Board
Agency Contact: N/R
Most Recent Contact: 12/19/2022

PROPOSITION 65 - CA: Listing of Proposition 65 enforcement reporting notice sites in accordance with "The Safe Drinking Water and Toxic Enforcement Act of 1986"

Agency Version Date: 06/11/2021
Agency Update Frequency: No update
Planned Next Contact: 05/11/2023
Agency: State of California Department of JusticeOffice of the Attorney General
Agency Contact: 510-873-6321
Most Recent Contact: 02/14/2023

RFR - CA: State Water Resources Control Board Regulated Facility Report database listing which includes program agency type and their permit status

Agency Version Date: 11/21/2022
Agency Update Frequency: Varies
Planned Next Contact: 05/15/2023
Agency: CA State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 02/16/2023

SWAT - CA: The SWAT Reports Summary Data and the Waste Management Unit Database were published by State Water Resources Control Board staff and the Regional Water Quality Control Boards for tracking and inventory of waste management units.

Agency Version Date: 08/08/2015
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/28/2023
Agency: Department of Ecology
Agency Contact: 916-322-2861
Most Recent Contact: 02/01/2023

OTHER ASCERTAINABLE RECORDS (cont.)

WDR - CA: List of Waste Discharge Requirement Sites.

Agency Version Date: 12/06/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 05/30/2023
Agency: State Water Resources Control Board
Agency Contact: N/R
Most Recent Contact: 03/03/2023

WDS - CA: Listing of waste discharge system reporting facilities

Agency Version Date: 01/05/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 04/03/2023
Agency: State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 01/05/2023

WILDLANDS - CA: The Wildlands Conservancy listing of preserves in California

Agency Version Date: 01/30/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/27/2023
Agency: The Wildlands Conservancy
Agency Contact: 909-797-8507
Most Recent Contact: 01/30/2023

WIP - CA: Listing of Well Investigation Program cases in the San Gabriel and San Fernando Valley area

Agency Version Date: 07/01/2009
Agency Update Frequency: Varies
Planned Next Contact: 04/19/2023
Agency: Los Angeles Water Quality Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 01/23/2023

OTHER

SEISMIC - CA: Earthquake Zones of Required Investigation. Shows the location of both Seismic Hazard Zones and Earthquake Fault Zones

Agency Version Date: 01/05/2023
Agency Update Frequency: Varies
Planned Next Contact: 04/03/2023
Agency: State of California Department of Conservation
Agency Contact: 916-324-7299
Most Recent Contact: 01/05/2023

SUBJECT PROPERTY ADDRESS:

SDG Commerce 220
1055 Commerce Ct
American Canyon, CA 94503

SUBJECT PROPERTY COORDINATES:

Latitude(North):	38.185594 - 38°11'8.1"
Longitude(West):	-122.273824 - -122°16'25.8"
Universal Transverse Mercator:	Zone 10N
UTM X (Meters):	563595.70
UTM Y (Meters):	4226656.54
State Plane Coordinates:	0402 - California Zone 2 (US Survey Feet)
X Coordinate (Feet):	6482957.025 E
Y Coordinate (Feet):	1829528.733 N

ELEVATION:

Elevation:	19 ft. above sea level

USGS TOPOGRAPHIC MAP:

Subject Property Map:	38122-B3 Cuttings Wharf, CA
Most Recent Revision:	2018

GEOHYDROLOGY DATA:

SUBJECT PROPERTY TOPOGRAPHY:

Topographic Gradient: West

DFIRM FLOOD ZONE:

	DFIRM Flood
Subject Property County:	Electronic Data:
NAPA	Yes - refer to the PROPERTY PROXIMITY MAP and AREA MAP
Flood Plain Panel at Subject Property:	06055C0617F (Eff. date 8/3/2016) 06095C0420F (Eff. date 8/3/2016) 06097C1075F (Eff. date 10/2/2015)
Additional Panels in search area:	06055C0616F (Eff. date 8/3/2016) 06055C0608F (Eff. date 8/3/2016) 06055C0609F (Eff. date 8/3/2016)

FEMA FLOOD ZONE:

	FEMA Flood
Subject Property County:	Electronic Data:
NAPA	Yes - refer to the PROPERTY PROXIMITY MAP and AREA MAP
Flood Plain Panel at Subject Property:	0602050480B
Additional Panels in search area:	0602050460B 0602050490B 0602050470A

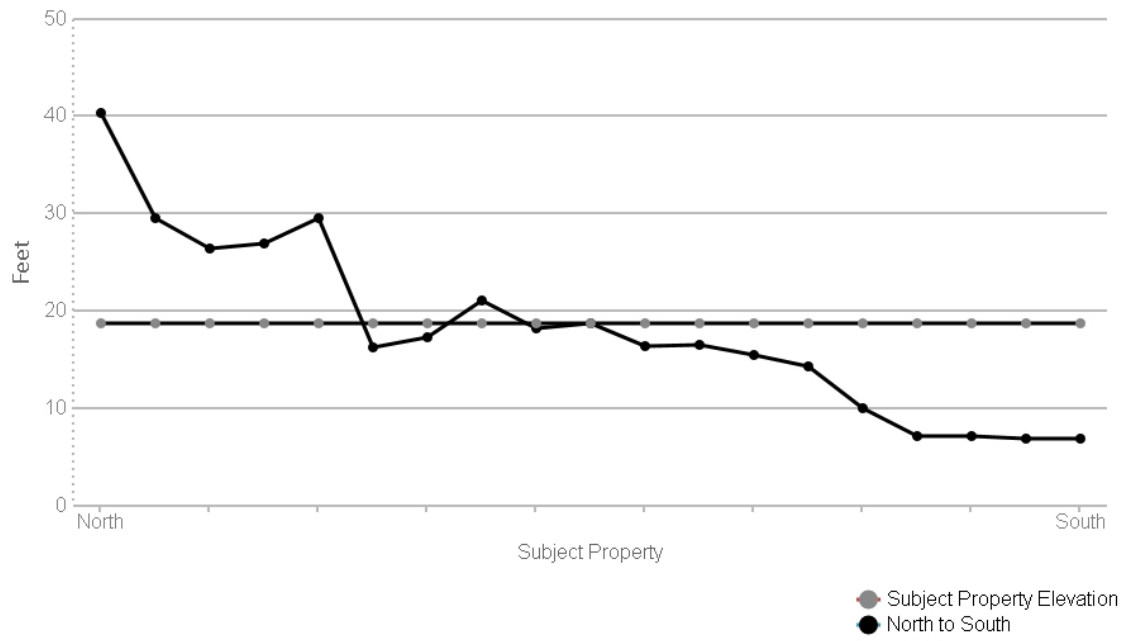
NATIONAL WETLAND INVENTORY:

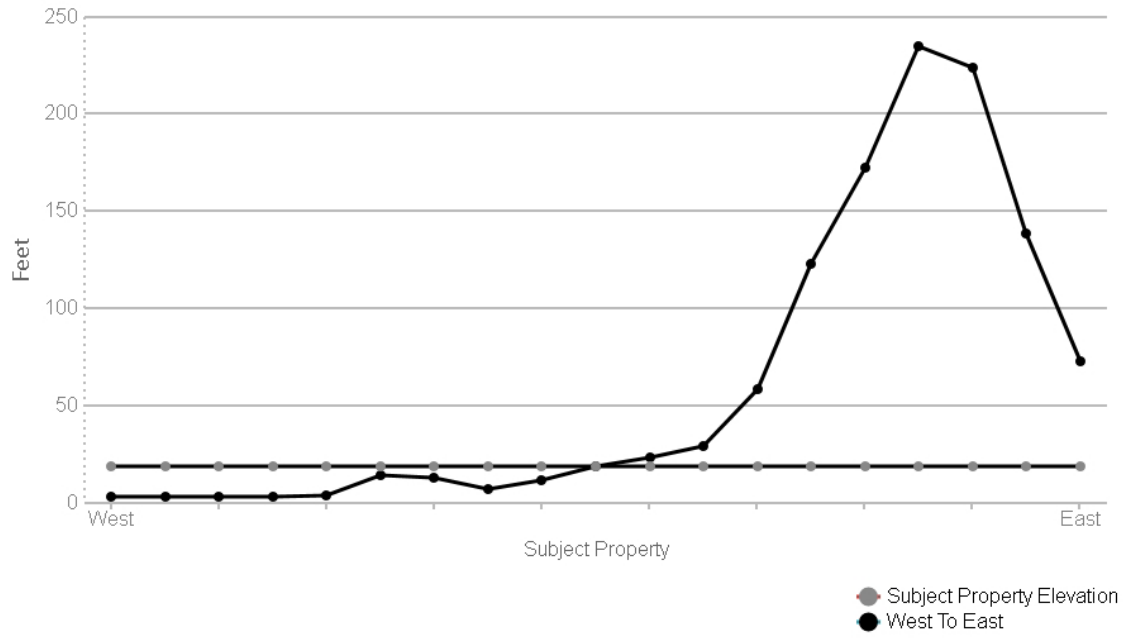
	NWI Electronic
NWI Quad at Subject Property:	Data Coverage:
Cuttings Wharf	Yes - refer to the Geological Findings Map

LITHOSTRATIGRAPHIC INFORMATION:

ROCK STRATIGRAPHIC UNIT:		GEOLOGIC AGE IDENTIFICATION
Era:	Cenozoic	Category: 4 Q Quaternary
System:	Quaternary	
Series:	Quaternary	
Code:	Q	

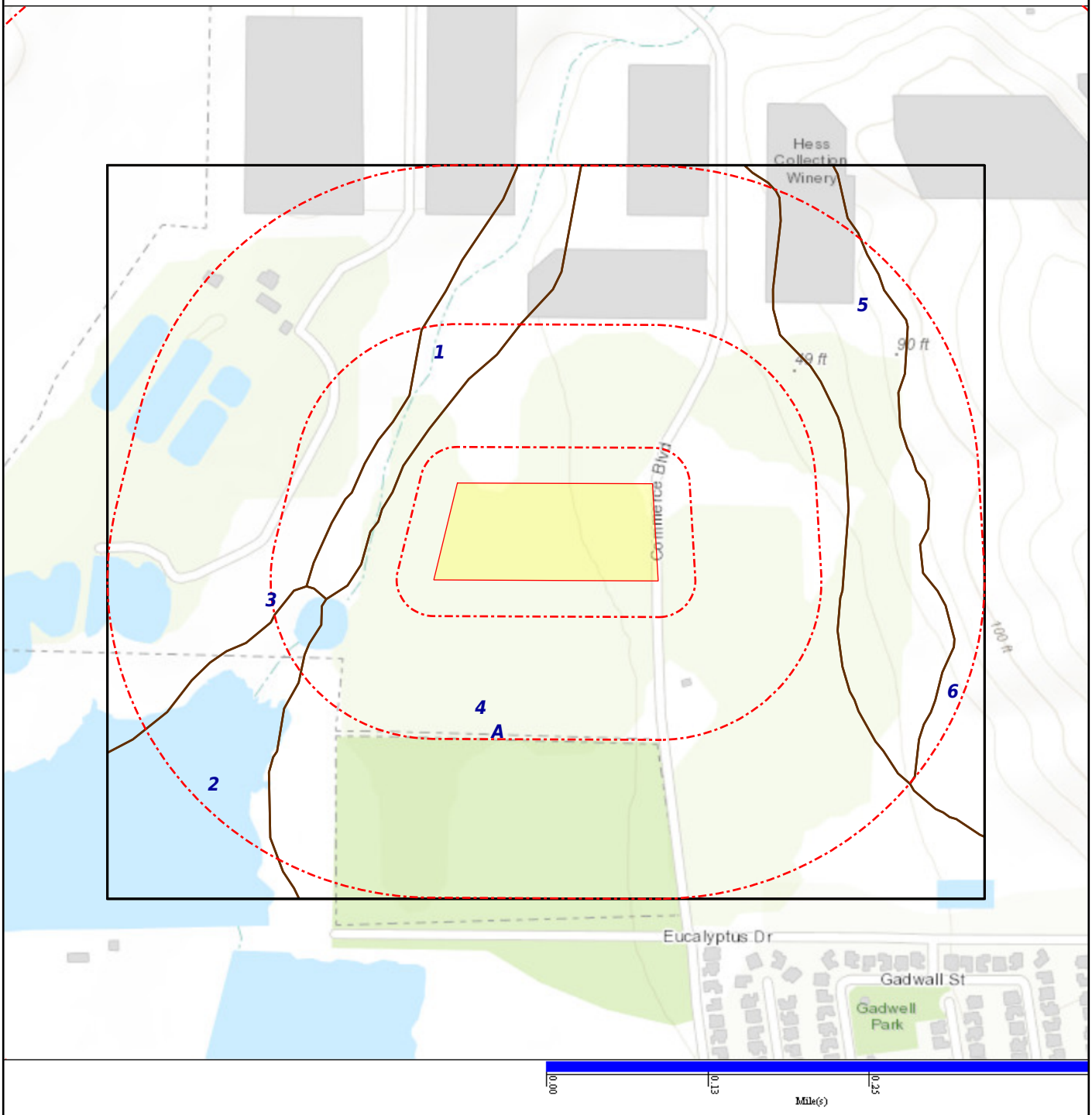
SURROUNDING ELEVATION PROFILES:





SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: March 10, 2023



SOIL COMPOSITION IN GENERAL AREA OF SUBJECT PROPERTY:

Agency source: Soil Conservation Service, US Department of Agriculture

SOIL MAP ID 1	SSURGO
USDA Soil Name	Clear Lake,Series
USDA Soil Texture	Clay
Hydrologic Soil Group	D
Soil Drainage Class	Poorly drained
Hydric Classification	95
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-15	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.41	6.6-8.4
2	15-66	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.41	6.6-8.4
3	66-91	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and	0.42-1.41	6.6-8.4

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	66-91	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.41	6.6-8.4
4	91-152	Clay	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.41	6.6-8.4

SOIL MAP ID 2 **SSURGO**

USDA Soil Name	Reyes,Series
USDA Soil Texture	Silty clay loam
Hydrologic Soil Group	C/D
Soil Drainage Class	Poorly drained
Hydric Classification	95
Corrosion Potential - Uncoated Steel	Moderate

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-36	Silty clay loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays, (liquid limit is 50% or more), Elastic Silt. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil	0.42-1.4	3.6-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-36	Silty clay loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	3.6-5.5
2	36-152	Silty clay loam	Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	3.6-5

SOIL MAP ID 3 **SSURGO**

USDA Soil Name	Haire,Series
USDA Soil Texture	Loam
Hydrologic Soil Group	D
Soil Drainage Class	Moderately well drained
Hydric Classification	5
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-56	Loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials,	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and	1.4-4	5.1-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-56	Loam	1984.	the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	5.1-6
2	56-69	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	5.1-6
3	69-114	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.01-0.42	4.5-5.5
4	114-152	Sandy clay	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	0.01-0.42	4.5-5.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
4	114-152	Sandy clay	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	test D 2487, in ASTM, 1984).	0.01-0.42	4.5-5.5

SOIL MAP ID 4 **SSURGO**

USDA Soil Name	Haire,Series
USDA Soil Texture	Clay loam
Hydrologic Soil Group	D
Soil Drainage Class	Moderately well drained
Hydric Classification	5
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-56	Clay loam	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	5.1-6
2	56-69	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure	COARSE-GRAINED SOILS, Sands, sands with fines, Clayey Sand. Reference: This is a classification of soil material designed for general construction purposes. It is dependent	1.4-4	5.1-6

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
2	56-69	Sandy clay loam	M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	5.1-6
3	69-114	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.01-0.42	4.5-5.5
4	114-152	Sandy clay	Silt-Clay materials (more than 35% passing No. 200) clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.01-0.42	4.5-5.5

SOIL MAP ID 5	SSURGO
USDA Soil Name	Fagan,Series
USDA Soil Texture	Clay loam
Hydrologic Soil Group	C
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-41	Clay loam	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	5.6-6.5
2	41-71	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	5.6-6.5
3	71-117	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	5.6-6.5
4	117-150		No data	No data	1.4-4	0-0

SOIL MAP ID 6	SSURGO
USDA Soil Name	Fagan,Series
USDA Soil Texture	Clay loam
Hydrologic Soil Group	C
Soil Drainage Class	Well drained
Hydric Classification	0
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-41	Clay loam	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	1.4-4	5.6-6.5
2	41-71	Clay	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is 50% or more), Fat Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM test D 2487, in ASTM, 1984).	0.42-1.4	5.6-6.5
3	71-117	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	FINE-GRAINED SOILS, Silts and clays (liquid limit is less than 50%), Lean Clay. Reference: This is a classification of soil material designed for general construction purposes. It is dependent on the particle size distribution of the <75 mm, the liquid limit, and the plasticity index and on whether the soil material is high in organic matter (ASTM	1.4-4	5.6-6.5

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
3	71-117	Sandy clay loam	Silt-Clay materials (more than 35% passing No. 200), clayey soils. Reference: This is a classification of soil material for highway and airfield construction (Procedure M 145-73 in Am. Assoc. of State Highway and Transportation Officials, 1984.	test D 2487, in ASTM, 1984).	1.4-4	5.6-6.5
4	117-150		No data	No data	1.4-4	0-0

SOIL MAP ID A **STATSGO**

USDA Soil Name	Haire,Series
USDA Soil Texture	Loam
Hydrologic Soil Group	C
Soil Drainage Class	Moderately well drained
Hydric Classification	1
Corrosion Potential - Uncoated Steel	High

Layer	Depth (inches)	Soil Texture	AASHTO Group	Unified Soil Description	Saturated Hydraulic Conductivity micro m/sec	Soil Reaction pH
1	0-12	Loam	No data	No data	4.2343-14.1143	5.6-7.3
2	12-24	Sandy clay loam	No data	No data	1.4114-4.2343	5.6-7.3
3	24-36	No data	No data	No data	0-0.4234	5.1-6
4	36-60	No data	No data	No data	0.4234-1.4114	4.5-5.5

WATER AGENCY DATA:

WATER AGENCY SEARCH DISTANCES:

DATABASE:	SEARCH DISTANCE (MILES):
NWIS	1.000
OIL & GAS WELLS - CA	0.000
PWS	1.000
WELLS - GAMA - CA	0.000

DISTANCE TO NEAREST:	DISTANCE:
NWIS	0.816 mi / 4310 ft

DISTANCE TO NEAREST:	DISTANCE:
OIL & GAS WELLS - CA	N/A
PWS	0.914 mi / 4828 ft
WELLS - GAMA - CA	0.816 mi / 4310 ft

FEDERAL WATER AGENCY DATA SUMMARY:

MAP ID:	WELL ID:	LOCATION FROM SP:
11	381153122162801 | USGS-381153122162801	1/2 - 1 Mile N
14	CA2810005 | CABERNET VILLAGE | AMERICAN CANYON, CITY OF-WTP CONV & MEMBRANE COMBINED TREATED	1/2 - 1 Mile E

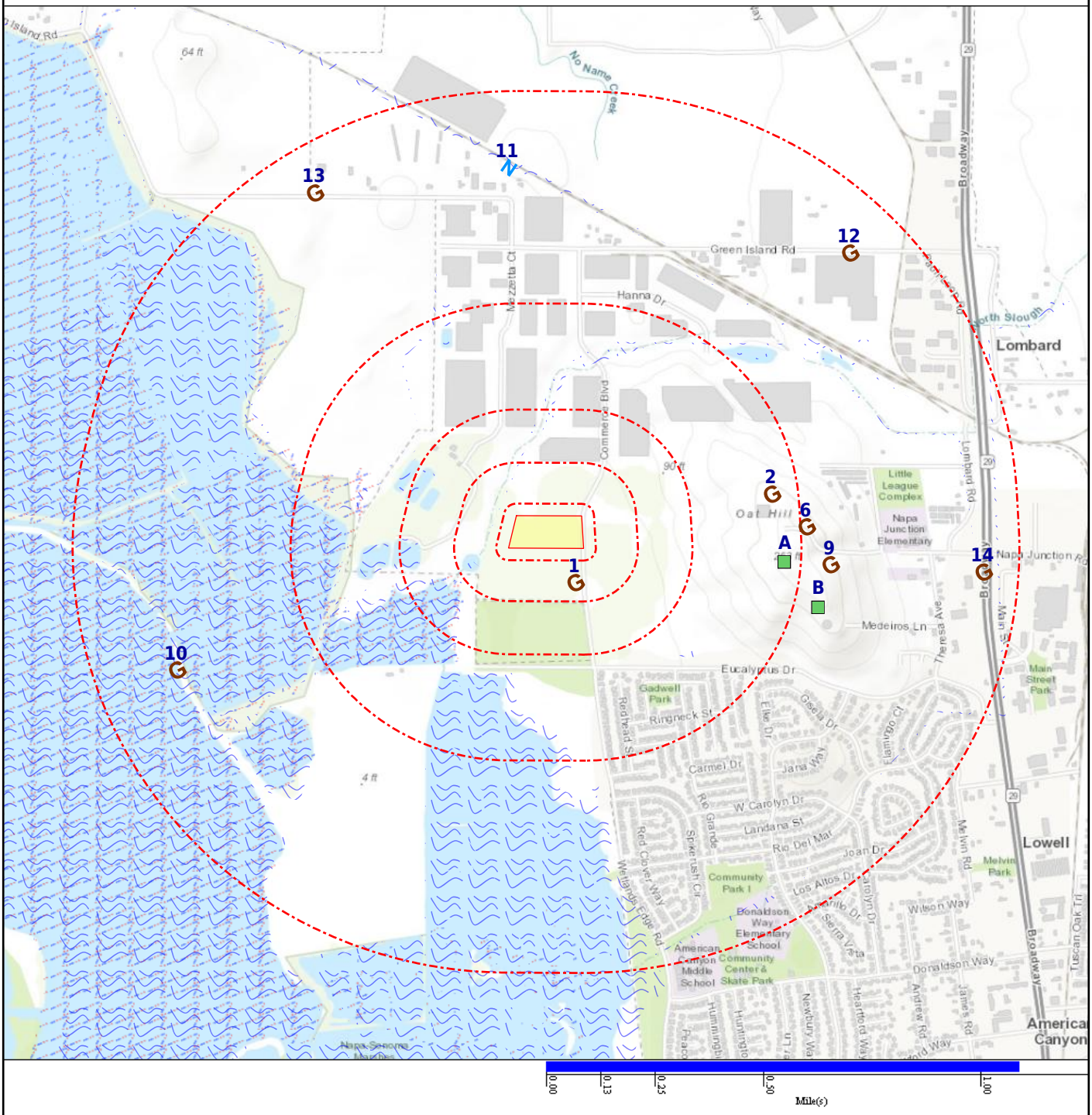
Note: PWS System location is not always the same as well location.

STATE/LOCAL WATER AGENCY DATA SUMMARY:

MAP ID:	WELL ID:	LOCATION FROM SP:
11	381153122162801 | USGS-381153122162801	1/2 - 1 Mile N

SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: March 10, 2023



Subject Property
Geological Site
Basins (No Data)
NWI
DAMS
NWIS
Geologic Cluster
Oil & Gas Wells (No Data)

Map Id: 1
Direction: SSE
Distance: 0.084 mi., 444 ft.
Elevation: 20 ft.
Relative: Higher

Site Name : N/R
38.1838333, -122.2726667
CA

Database(s) : [EPICENTERS]

Envirosite ID: 7280319
EPA ID: N/R

EPICENTERS

Updated Date :	2014-05-17
Time :	10:45:13
ID Number :	nc72216661
Status :	N/R
Type :	earthquake
Depth :	8.18
Magnitude :	1.3
Magnitude Type :	Duration (Md)
Magnitude Error :	N/R
Magnitude NST :	N/R
Magnitude Source :	N/R
NST :	28
Gap :	94
DMIN :	0.06227
RMS :	0.11
Net :	nc
Horizontal Error :	N/R
Depth Error :	N/R
Location Source :	N/R
Latitude :	38.1838333
Longitude :	-122.2726667
Last Date in Agency List :	2014-07-15

Map Id: 2
Direction: E
Distance: 0.435 mi., 2297 ft.
Elevation: 227 ft.
Relative: Higher

Site Name : TOWER
38.186806, -122.264417
AMERICAN CANYON, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 813167
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2015-03-20
Action :	Change
FAA Study Number :	2015AWP01423OE
OBS Number :	06-002129
Obstacle Type :	TOWER
City Name :	AMERICAN CANYON
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	None
Verification Status :	Verified
Quantity :	1
Mark Indicator :	None
Above Ground Level Height (Feet) :	00037
Above Mean Sea Level Height (Feet) :	00275
Horizontal Accuracy :	+-20'
Vertical Accuracy :	+-3'
Latitude :	38 11 12.50N
Longitude :	122 15 51.90W

Map Id: A3
Direction: E
Distance: 0.458 mi., 2421 ft.
Elevation: 254 ft.
Relative: Higher

Site Name : POLE
38.184633, -122.263881
NAPA, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 823156
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2017-07-13
Action :	Change
FAA Study Number :	N/R
OBS Number :	06-023508
Obstacle Type :	POLE
City Name :	NAPA
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	Unknown
Verification Status :	Verified
Quantity :	1
Mark Indicator :	None
Above Ground Level Height (Feet) :	00032
Above Mean Sea Level Height (Feet) :	00318
Horizontal Accuracy :	+-20'
Vertical Accuracy :	+-10'
Latitude :	38 11 04.68N
Longitude :	122 15 49.97W

Map Id: A4
Direction: E
Distance: 0.463 mi., 2445 ft.
Elevation: 256 ft.
Relative: Higher

Site Name : TANK
38.184525, -122.263806
AMERICAN CANYON, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 819184
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2015-07-30
Action :	Add
FAA Study Number :	N/R
OBS Number :	06-038207
Obstacle Type :	TANK
City Name :	AMERICAN CANYON
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	Unknown
Verification Status :	Verified
Quantity :	1
Mark Indicator :	None
Above Ground Level Height (Feet) :	00061
Above Mean Sea Level Height (Feet) :	00315
Horizontal Accuracy :	+-20'
Vertical Accuracy :	+-10'
Latitude :	38 11 04.29N
Longitude :	122 15 49.70W

Map Id: A5
Direction: E
Distance: 0.464 mi., 2450 ft.
Elevation: 259 ft.
Relative: Higher

Site Name : TOWER
38.184611, -122.263778
AMERICAN CANYON, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 813391
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2015-07-30
Action :	Change
FAA Study Number :	2010AWP06530OE
OBS Number :	06-021547
Obstacle Type :	TOWER
City Name :	AMERICAN CANYON
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	Red
Verification Status :	Verified
Quantity :	1
Mark Indicator :	None
Above Ground Level Height (Feet) :	00048
Above Mean Sea Level Height (Feet) :	00306
Horizontal Accuracy :	+-500'
Vertical Accuracy :	+-125'
Latitude :	38 11 04.60N
Longitude :	122 15 49.60W

Map Id: 6
Direction: E
Distance: 0.511 mi., 2699 ft.
Elevation: 228 ft.
Relative: Higher

Site Name : POLE
38.185719, -122.262928
NAPA, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 823157
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2017-06-28
Action :	Change
FAA Study Number :	N/R
OBS Number :	06-023574
Obstacle Type :	POLE
City Name :	NAPA
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	Unknown
Verification Status :	Verified
Quantity :	1
Mark Indicator :	None
Above Ground Level Height (Feet) :	00041
Above Mean Sea Level Height (Feet) :	00274
Horizontal Accuracy :	+-20'
Vertical Accuracy :	+-10'
Latitude :	38 11 08.59N
Longitude :	122 15 46.54W

Map Id: B7
Direction: ESE
Distance: 0.552 mi., 2917 ft.
Elevation: 233 ft.
Relative: Higher

Site Name : POLE
38.183069, -122.26245
NAPA, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 823155
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2017-07-07
Action :	Change
FAA Study Number :	N/R
OBS Number :	06-023572
Obstacle Type :	POLE
City Name :	NAPA
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	Unknown
Verification Status :	Verified
Quantity :	1
Mark Indicator :	Unknown
Above Ground Level Height (Feet) :	00036
Above Mean Sea Level Height (Feet) :	00277
Horizontal Accuracy :	+-20'
Vertical Accuracy :	+-10'
Latitude :	38 10 59.05N
Longitude :	122 15 44.82W

Map Id: B8
Direction: ESE
Distance: 0.562 mi., 2969 ft.
Elevation: 235 ft.
Relative: Higher

Site Name : TOWER
38.183, -122.262283
VALLEJO, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 814336
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2016-06-02
Action :	Add
FAA Study Number :	2015AWP09925OE
OBS Number :	06-038761
Obstacle Type :	TOWER
City Name :	VALLEJO
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	None
Verification Status :	Verified
Quantity :	1
Mark Indicator :	None
Above Ground Level Height (Feet) :	00033
Above Mean Sea Level Height (Feet) :	00277
Horizontal Accuracy :	+-20'
Vertical Accuracy :	+-3'
Latitude :	38 10 58.80N
Longitude :	122 15 44.22W

Map Id: 9
Direction: E
Distance: 0.564 mi., 2979 ft.
Elevation: 222 ft.
Relative: Higher

Site Name : T-L TWR
38.184422, -122.261947
AMERICAN CANYON, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 811975
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2015-07-30
Action :	Change
FAA Study Number :	N/R
OBS Number :	06-023573
Obstacle Type :	T-L TWR
City Name :	AMERICAN CANYON
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	Unknown
Verification Status :	Verified
Quantity :	1
Mark Indicator :	None
Above Ground Level Height (Feet) :	00041
Above Mean Sea Level Height (Feet) :	00261
Horizontal Accuracy :	+-20'
Vertical Accuracy :	+-10'
Latitude :	38 11 03.92N
Longitude :	122 15 43.01W

Map Id: 10
Direction: WSW
Distance: 0.816 mi., 4310 ft.
Elevation: 4 ft.
Relative: Lower

Site Name : N/R
38.1808319, -122.2894974
CA

Database(s) : [EPICENTERS]

Envirosite ID: 7275760
EPA ID: N/R

EPICENTERS

Updated Date :	2014-10-06
Time :	19:55:39
ID Number :	nc72320606
Status :	N/R
Type :	earthquake
Depth :	7.98
Magnitude :	1.9
Magnitude Type :	Duration (Md)
Magnitude Error :	N/R
Magnitude NST :	N/R
Magnitude Source :	N/R
NST :	25
Gap :	155
DMIN :	0.06028
RMS :	0.1
Net :	nc
Horizontal Error :	N/R
Depth Error :	N/R
Location Source :	N/R
Latitude :	38.1808319
Longitude :	-122.2894974
Last Date in Agency List :	2014-10-14

Map Id: 11
Direction: N
Distance: 0.816 mi., 4310 ft.
Elevation: 43 ft.
Relative: Higher

Site Name : 381153122162801 | USGS-381153122162801
38.197973, -122.275527
CA

Database(s) : [NWIS, WELLS - GAMA - CA]

Envirosite ID: 31284568
EPA ID: N/R

NWIS

Site Identification Number :	381153122162801
Site Type :	Well
Station Name :	004N004W14C002M
Agency :	U.S. Geological Survey
District :	N/R
State :	CA
County :	Napa County
Country :	USA
Land Net Location :	NENWS14 T04N R04W M
Name of Location Map :	CUTTINGS WHARF
Scale of Location Map :	24000
Altitude of Gage/Land Surface :	34
Method Altitude Determined :	Interpolated from topographic map.
Altitude Accuracy :	10
Altitude Datum :	National Geodetic Vertical Datum of 1929
Hydrologic Unit :	San Pablo Bay
Drainage Basin :	N/R
Topographic Setting :	Valley flat
Flags for the Type of Data Collected:	NONONNNNNNNNNNNNNNNNNNNNNNNO
Flags for Instruments at Site :	NNNNNNNNNNNNNNNNNNNNNNNNNNNN
Date of First Construction :	N/R
Date Site Established or Inventoried:	2012-04-12
Drainage Area :	N/R
Contributing Drainage Area :	N/R
Data Reliability :	Data have been checked by the reporting agency.
Data-Other GW Files :	YYNNNYNN
National Aquifer :	California Coastal Basin aquifers
Local Aquifer :	N/R
Local Aquifer Type :	N/R
Well Depth :	80.0
Hole Depth :	N/R
Source of Depth Data :	N/R
Project Number :	7479230400
Real-Time Data Flag :	0
Peak-Streamflow Data Begin Date :	N/R
Peak-Streamflow Data End Date :	N/R
Peak-Streamflow Data Count :	0
Water-Quality Data Begin Date :	2012-04-19
Water-Quality Data End Date :	2012-04-19
Water-Quality Data Count :	2
Field Water-Level Measurements Begin Date:	1963-04-05
Field Water-level Measurements End Date:	2012-04-19
Field Water-Level Measurements Count:	28
Site-Visit Data Begin Date :	N/R
Site-Visit Data End Date :	N/R
Site-Visit Data Count :	0
Latitude :	38.197973
Longitude :	-122.275527
Last Date in Agency List :	2023-02-13

WELLS - GAMA - CA

Well Details

Well ID :	USGS-381153122162801

Map Id: 11
Direction: N
Distance: 0.816 mi., 4310 ft.
Elevation: 43 ft.
Relative: Higher

Site Name : 381153122162801 | USGS-381153122162801
38.197973, -122.275527
CA

Database(s) : [NWIS, WELLS - GAMA - CA] ***(cont.)***

Envirosite ID: 31284568
EPA ID: N/R

WELLS - GAMA - CA ***(cont.)***

Well Type :	WATER SUPPLY, OTHER
Well Depth (Ft.) :	80.0
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	N/R
Data Source :	NWIS
Source Name :	USGS-381153122162801
Other Names :	N/R
Latitude :	38.1979728
Longitude :	-122.2755275
Last Date in Agency List :	2022-07-29

GM Chemicals

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Samp Collection Date :	2012-04-19
Chemical :	DBCP (1,2-Dibromo-3-chloropropane (DBCP)) ND UG/L
CAS Number :	N/R
Reporting Limit :	.4

Samp Collection Date :	2012-04-19
Chemical :	TBME (Bromoform (THM)) ND UG/L
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	2012-04-19
Chemical :	SC (Specific Conductivity) 1520 UMHOS/CM
CAS Number :	N/R
Reporting Limit :	5

Samp Collection Date :	2012-04-19
Chemical :	DIELDRIN (Dieldrin) .065 UG/L
CAS Number :	N/R
Reporting Limit :	.008

Samp Collection Date :	2012-04-19
Chemical :	TCLME (Chloroform (THM)) .03 UG/L
CAS Number :	N/R
Reporting Limit :	.03

Samp Collection Date :	2012-04-19
Chemical :	DICHLORVOS (Dichlorvos (DDVP)) ND UG/L
CAS Number :	N/R
Reporting Limit :	.04

Map Id: 11
Direction: N
Distance: 0.816 mi., 4310 ft.
Elevation: 43 ft.
Relative: Higher

Site Name : 381153122162801 | USGS-381153122162801
38.197973, -122.275527
CA

Database(s) : [NWIS, WELLS - GAMA - CA] ***(cont.)***

Envirosite ID: 31284568
EPA ID: N/R

WELLS - GAMA - CA ***(cont.)***

Samp Collection Date :	2012-04-19
Chemical :	NO2 (Nitrite as N) .007 MG/L
CAS Number :	N/R
Reporting Limit :	.001

Samp Collection Date :	2012-04-19
Chemical :	TCPR123 (1,2,3-Trichloropropane (1,2,3 TCP)) ND UG/L
CAS Number :	N/R
Reporting Limit :	.005

Samp Collection Date :	2012-04-19
Chemical :	ETBE (Ethyl tertiary butyl ether (ETBE)) ND UG/L
CAS Number :	N/R
Reporting Limit :	.032

Samp Collection Date :	2012-04-19
Chemical :	H-3 (Tritium) 5.6 pCi/L
CAS Number :	N/R
Reporting Limit :	N/R

Source Details

Datum :	NAD83
Well Depth (Ft.) :	80
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Latitude :	38.1979728
Longitude :	-122.2755275

Source Chemicals

Samp Collection Date-Time :	2012-04-19 10:30:00
Chemical :	1,2,3-Trichloropropane Not Detected UG/L
Analytical Method :	N/R
Reporting Limit :	0.0050
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:30:00
Chemical :	Perchlorate 1.62 UG/L
Analytical Method :	N/R
Reporting Limit :	0.10
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20:00
Chemical :	1,2-Dibromo-3-chloropropane Not Detected UG/L
Analytical Method :	USGS OF 97-829
Reporting Limit :	0.40
Lab Note :	N/R

Map Id: 11
Direction: N
Distance: 0.816 mi., 4310 ft.
Elevation: 43 ft.
Relative: Higher

Site Name : 381153122162801 | USGS-381153122162801
38.197973, -122.275527
CA

Database(s) : [NWIS, WELLS - GAMA - CA] ***(cont.)***

Envirosite ID: 31284568
EPA ID: N/R

WELLS - GAMA - CA ***(cont.)***

Samp Collection Date-Time :	2012-04-19 10:20:00
Chemical :	Tribromomethane Not Detected UG/L
Analytical Method :	USGS OF 97-829
Reporting Limit :	0.1
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20:00
Chemical :	Specific conductance 1520 US/CM @25C
Analytical Method :	USGS TWRI 5-A1/1989, p 461
Reporting Limit :	5
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20:00
Chemical :	Dieldrin 0.065 UG/L
Analytical Method :	USGS OF 95-181
Reporting Limit :	0.008
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20:00
Chemical :	Chloroform 0.03 UG/L
Analytical Method :	USGS OF 97-829
Reporting Limit :	0.03
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20:00
Chemical :	Dichlorvos Not Detected UG/L
Analytical Method :	USGS WRI 01-4098
Reporting Limit :	0.04
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20:00
Chemical :	Nitrite 0.007 MG/L AS N
Analytical Method :	N/R
Reporting Limit :	0.0010
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20:00
Chemical :	Ethyl tert-butyl ether Not Detected UG/L
Analytical Method :	USGS OF 97-829
Reporting Limit :	0.032
Lab Note :	N/R

Well Details

Well ID :	381153122162801
Well Type :	WATER SUPPLY, OTHER
Well Depth (Ft.) :	80.0
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R

Map Id: 11
Direction: N
Distance: 0.816 mi., 4310 ft.
Elevation: 43 ft.
Relative: Higher

Site Name : 381153122162801 | USGS-381153122162801
38.197973, -122.275527
CA

Database(s) : [NWIS, WELLS - GAMA - CA] ***(cont.)***

Envirosite ID: 31284568
EPA ID: N/R

WELLS - GAMA - CA ***(cont.)***

Source :	N/R
Data Source :	NWIS
Source Name :	381153122162801
Other Names :	D1-NSF-VP25
Latitude :	38.1979728
Longitude :	-122.2755275
Last Date in Agency List :	2023-01-19

GM Chemicals

Samp Collection Date :	2012-04-19
Chemical :	FONOFOS (Fonofos) < .0048 UG/L
CAS Number :	N/R
Reporting Limit :	.0048

Samp Collection Date :	2012-04-19
Chemical :	PH (pH) 7 PH UNITS
CAS Number :	N/R
Reporting Limit :	N/R

Samp Collection Date :	2012-04-19
Chemical :	PCA (1,1,2,2 Tetrachloroethane (PCA)) < .14 UG/L
CAS Number :	N/R
Reporting Limit :	.14

Samp Collection Date :	2012-04-19
Chemical :	DIMETHAT (Dimethoate) < .006 UG/L
CAS Number :	N/R
Reporting Limit :	.006

Samp Collection Date :	2012-04-19
Chemical :	H2H1RAT (delta H2/H1) -37.5 per mil
CAS Number :	N/R
Reporting Limit :	N/R

Samp Collection Date :	2012-04-19
Chemical :	TRIFLURALIN (Trifluralin) < .018 UG/L
CAS Number :	N/R
Reporting Limit :	.018

Samp Collection Date :	2012-04-19
Chemical :	DCE12C (cis-1,2 Dichloroethylene) < .022 UG/L
CAS Number :	N/R
Reporting Limit :	.022

Samp Collection Date :	2012-04-19
Chemical :	BRME (Methyl Bromide (Bromomethane)) < .2 UG/L
CAS Number :	N/R

Map Id: 11
Direction: N
Distance: 0.816 mi., 4310 ft.
Elevation: 43 ft.
Relative: Higher

Site Name : 381153122162801 | USGS-381153122162801
38.197973, -122.275527
CA

Database(s) : [NWIS, WELLS - GAMA - CA] ***(cont.)***

Envirosite ID: 31284568
EPA ID: N/R

WELLS - GAMA - CA ***(cont.)***

Reporting Limit : .2

Samp Collection Date : 2012-04-19
Chemical : DCE11 (1,1 Dichloroethylene (1,1 DCE)) < .022 UG/L
CAS Number : N/R
Reporting Limit : .022

Samp Collection Date : 2012-04-19
Chemical : C-14 (Carbon 14) .21 PCT MODERN
CAS Number : N/R
Reporting Limit : N/R

Source Details
Datum : NAD83
Well Depth (Ft.) : 80
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 38.1979728
Longitude : -122.2755275

Source Chemicals
Samp Collection Date-Time : 2012-04-19 10:30
Chemical : Perchlorate 1.62 ug/l
Analytical Method : MS050
Reporting Limit : .1
Lab Note : N/R

Samp Collection Date-Time : 2012-04-19 10:30
Chemical : 1,2,3-Trichloropropane < .005 ug/l
Analytical Method : MS047
Reporting Limit : .005
Lab Note : N/R

Samp Collection Date-Time : 2012-04-19 10:20
Chemical : Fonofos < .0048 ug/l
Analytical Method : GCM35
Reporting Limit : .0048
Lab Note : N/R

Samp Collection Date-Time : 2012-04-19 10:20
Chemical : pH 7 std units
Analytical Method : EL009
Reporting Limit : N/R
Lab Note : N/R

Map Id: 11
Direction: N
Distance: 0.816 mi., 4310 ft.
Elevation: 43 ft.
Relative: Higher

Site Name : 381153122162801 | USGS-381153122162801
38.197973, -122.275527
CA

Database(s) : [NWIS, WELLS - GAMA - CA] ***(cont.)***

Envirosite ID: 31284568
EPA ID: N/R

WELLS - GAMA - CA ***(cont.)***

Samp Collection Date-Time :	2012-04-19 10:20
Chemical :	1,1,2,2-Tetrachloroethane < .14 ug/l
Analytical Method :	GCM66
Reporting Limit :	.14
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20
Chemical :	Dimethoate < .006 ug/l
Analytical Method :	GCM40
Reporting Limit :	.006
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20
Chemical :	Deuterium/Hydrogen ratio -37.5 per mil
Analytical Method :	MS007
Reporting Limit :	N/R
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20
Chemical :	Trifluralin < .018 ug/l
Analytical Method :	GCM35
Reporting Limit :	.018
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20
Chemical :	cis-1,2-Dichloroethylene < .022 ug/l
Analytical Method :	GCM66
Reporting Limit :	.022
Lab Note :	N/R

Samp Collection Date-Time :	2012-04-19 10:20
Chemical :	Methyl bromide < .2 ug/l
Analytical Method :	GCM66
Reporting Limit :	.2
Lab Note :	N/R

Map Id: 12
Direction: NE
Distance: 0.867 mi., 4577 ft.
Elevation: 50 ft.
Relative: Higher

Site Name : BLDG
38.195058, -122.261139
AMERICAN CANYON, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 52137611
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2022-10-12

Map Id: 12
Direction: NE
Distance: 0.867 mi., 4577 ft.
Elevation: 50 ft.
Relative: Higher

Site Name : BLDG
38.195058, -122.261139
AMERICAN CANYON, CA

Database(s) : [DIGITAL OBSTACLE] ***(cont.)***

Envirosite ID: 52137611
EPA ID: N/R

DIGITAL OBSTACLE ***(cont.)***

Action :	Add
FAA Study Number :	2022AWP02057OE
OBS Number :	06-245394
Obstacle Type :	BLDG
City Name :	AMERICAN CANYON
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	None
Verification Status :	Unverified
Quantity :	1
Mark Indicator :	None
Above Ground Level Height (Feet) :	00075
Above Mean Sea Level Height (Feet) :	00120
Horizontal Accuracy :	+-250'
Vertical Accuracy :	+-50'
Latitude :	38 11 42.21N
Longitude :	122 15 40.10W

Map Id: 13
Direction: NW
Distance: 0.886 mi., 4681 ft.
Elevation: 32 ft.
Relative: Higher

Site Name : POLE
38.197097, -122.283672
NAPA, CA

Database(s) : [DIGITAL OBSTACLE]

Envirosite ID: 806691
EPA ID: N/R

DIGITAL OBSTACLE

Date of Action :	2013-01-03
Action :	Add
FAA Study Number :	N/R
OBS Number :	06-023568
Obstacle Type :	POLE
City Name :	NAPA
State Identifier :	CA
Country Identifier :	USA
Type of Lighting :	Unknown
Verification Status :	Verified
Quantity :	1
Mark Indicator :	Unknown
Above Ground Level Height (Feet) :	00032
Above Mean Sea Level Height (Feet) :	00063
Horizontal Accuracy :	+-20'
Vertical Accuracy :	+-3'
Latitude :	38 11 49.55N
Longitude :	122 17 01.22W

Map Id: 14
Direction: E
Distance: 0.914 mi., 4829 ft.
Elevation: 63 ft.
Relative: Higher

Site Name : CA2810005 | CABERNET VILLAGE | AMERICAN CANYON, CITY OF-WTP CONV & MEMBRANE COMBINED TREATED
4381 BROADWAY STREET, SUITE 201 | 4381 BROADWAY ST
AMERICAN CANYON, CA 94503

Database(s) : [PWS, PWS ENF]

Envirosite ID: 457519
EPA ID: N/R

PWS

Facility Address :	4381 Broadway Street, Suite 201, AMERICAN CANYON, CA 94503
PWS ID :	CA2810005
PWS Type :	Community water system
PWS Name :	AMERICAN CANYON, CITY OF
Activity Status :	Active
Primary Source :	Surface water
Submission Year :	2020
Submission Year Quarter :	2020Q3
Population Served Count :	20,315
Service Connections Count :	5298
Population Category 2 :	10,000+
Population Category 3 :	3,301-50,000
Population Category 4 :	10K-49,999
Population Category 5 :	10,001-100,000
Population Category 11 :	10,001-50,000
Submission Quarter :	3
Submission Status Code :	Y
First Reported Date :	1979-03-22
Last Reported Date :	2020-08-14
Deactivation Date :	N/R
GW or SW :	Surface water
Is Grant Eligible :	Y
Is Outstanding Performer :	N/R
Is School or Daycare :	N
Is Source Water Protected :	N/R
Primacy Agency :	California
Primacy Type :	State
Org Name :	HERNANDEZ III, FELIX
EPA Region :	Region 9
Admin Name :	HERNANDEZ III, FELIX
Owner Type :	Local government
Phone Number :	707-647-4525
Phone Ext Number :	N/R
Alt Phone Number :	N/R
Email Address :	fhernandez@cityofamericancanyon.org
Fax Number :	N/R
Is Wholesaler :	N
LT2 Schedule Category :	N/R
NPM Candidate :	Y
CDS ID :	N/R
DBPR Schedule Category :	N/R
Outstanding Performer Date :	N/R
Season Begin Date :	N/R
Season End Date :	N/R
Source Water Protection Date :	N/R
Seasonal Startup System :	N/R
Reduced Monitoring Begin Date :	N/R
Reduced Monitoring End Date :	N/R
Reduced RTCR Monitoring :	N/R
Last Date in Agency List :	2020-10-26

Map Id: 14
Direction: E
Distance: 0.914 mi., 4829 ft.
Elevation: 63 ft.
Relative: Higher

Site Name : CA2810005 | CABERNET VILLAGE | AMERICAN CANYON, CITY OF-WTP CONV & MEMBRANE COMBINED TREATED
4381 BROADWAY STREET, SUITE 201 | 4381 BROADWAY ST
AMERICAN CANYON, CA 94503

Database(s) : [PWS, PWS ENF] ***(cont.)***

Envirosite ID: 457519
EPA ID: N/R

PWS ENF

Facility Address : 4381 Broadway Street, Suite 201, AMERICAN CANYON, CA 94503

Site Details

PWS ID :	CA2810005
PWS Name :	AMERICAN CANYON, CITY OF
EPA Region :	Region 9
Primacy Agency :	California
PWS Type :	Community water system
Primacy Type :	State
Primary Source :	Surface water
Activity Status :	Active
Deactivation Date :	N/R
Owner Type :	Local government
Phone Number :	707-647-4525
Last Date in Agency List :	2021-04-12

Violation Details

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

RTC Enforcement ID :	N/R
Violation ID :	9903012
Submission Year :	2020
Violation First Reported Date :	2020-06-25
Contaminant Name :	TTHM
Rule Family :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	1
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Known
RTC Date :	N/R
Enforcement Action Description :	State Administrative/Compliance Order without penalty issued
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	N/R
Violation ID :	9903011
Submission Year :	2020
Violation First Reported Date :	2020-06-25
Contaminant Name :	TTHM
Rule Family :	Stage 2 Disinfectants and Disinfection Byproducts Rule

Map Id: 14
Direction: E
Distance: 0.914 mi., 4829 ft.
Elevation: 63 ft.
Relative: Higher

Site Name : CA2810005 | CABERNET VILLAGE | AMERICAN CANYON, CITY OF-WTP CONV & MEMBRANE COMBINED TREATED
4381 BROADWAY STREET, SUITE 201 | 4381 BROADWAY ST
AMERICAN CANYON, CA 94503

Database(s) : [PWS, PWS ENF] ***(cont.)***

Envirosite ID: 457519
EPA ID: N/R

PWS ENF ***(cont.)***

Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	1
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Known
RTC Date :	N/R
Enforcement Action Description :	State Administrative/Compliance Order without penalty issued
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	N/R
Violation ID :	9903007
Submission Year :	2020
Violation First Reported Date :	2020-06-25
Contaminant Name :	TTHM
Rule Family :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	1
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Known
RTC Date :	N/R
Enforcement Action Description :	State Administrative/Compliance Order without penalty issued
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	N/R
Violation ID :	9903009
Submission Year :	2020
Violation First Reported Date :	2020-06-25
Contaminant Name :	TTHM
Rule Family :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	1
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Known

Map Id: 14
Direction: E
Distance: 0.914 mi., 4829 ft.
Elevation: 63 ft.
Relative: Higher

Site Name : CA2810005 | CABERNET VILLAGE | AMERICAN CANYON, CITY OF-WTP CONV & MEMBRANE COMBINED TREATED
4381 BROADWAY STREET, SUITE 201 | 4381 BROADWAY ST
AMERICAN CANYON, CA 94503

Database(s) : [PWS, PWS ENF] ***(cont.)***

Envirosite ID: 457519
EPA ID: N/R

PWS ENF ***(cont.)***

RTC Date :	N/R
Enforcement Action Description :	State Administrative/Compliance Order without penalty issued
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	N/R
Violation ID :	9903014
Submission Year :	2020
Violation First Reported Date :	2020-08-14
Contaminant Name :	TTHM
Rule Family :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	1
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Known
RTC Date :	N/R
Enforcement Action Description :	N/R
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	N/R
Violation ID :	9903010
Submission Year :	2020
Violation First Reported Date :	2020-06-25
Contaminant Name :	TTHM
Rule Family :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	1
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Known
RTC Date :	N/R
Enforcement Action Description :	State Administrative/Compliance Order without penalty issued
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	N/R
Violation ID :	9903008
Submission Year :	2020
Violation First Reported Date :	2020-06-25

Map Id: 14
Direction: E
Distance: 0.914 mi., 4829 ft.
Elevation: 63 ft.
Relative: Higher

Site Name : CA2810005 | CABERNET VILLAGE | AMERICAN CANYON, CITY OF-WTP CONV & MEMBRANE COMBINED TREATED
4381 BROADWAY STREET, SUITE 201 | 4381 BROADWAY ST
AMERICAN CANYON, CA 94503

Database(s) : [PWS, PWS ENF] ***(cont.)***

Envirosite ID: 457519
EPA ID: N/R

PWS ENF ***(cont.)***

Contaminant Name :	TTHM
Rule Family :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	1
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Known
RTC Date :	N/R
Enforcement Action Description :	State Administrative/Compliance Order without penalty issued
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	N/R
Violation ID :	9903013
Submission Year :	2020
Violation First Reported Date :	2020-08-14
Contaminant Name :	TTHM
Rule Family :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 2 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	1
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Known
RTC Date :	N/R
Enforcement Action Description :	N/R
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	1003010
Violation ID :	503001
Submission Year :	2020
Violation First Reported Date :	2008-02-25
Contaminant Name :	TTHM
Rule Family :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Rule Group :	Disinfectants and Disinfection Byproducts Rule
Rule Name :	Stage 1 Disinfectants and Disinfection Byproducts Rule
Violation Type :	Maximum Contaminant Level Violation, Average
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	N/R
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503

Map Id: 14
Direction: E
Distance: 0.914 mi., 4829 ft.
Elevation: 63 ft.
Relative: Higher

Site Name : CA2810005 | CABERNET VILLAGE | AMERICAN CANYON, CITY OF-WTP CONV & MEMBRANE COMBINED TREATED
4381 BROADWAY STREET, SUITE 201 | 4381 BROADWAY ST
AMERICAN CANYON, CA 94503

Database(s) : [PWS, PWS ENF] ***(cont.)***

Envirosite ID: 457519
EPA ID: N/R

PWS ENF ***(cont.)***

Address Line 2 :	N/R
Compliance Status :	Returned to Compliance
RTC Date :	2010-04-28
Enforcement Action Description :	State Compliance achieved
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RTC Enforcement ID :	1003012
Violation ID :	1003005
Submission Year :	2020
Violation First Reported Date :	2013-06-26
Contaminant Name :	Surface Water Treatment Rule
Rule Family :	Surface Water Treatment Rules
Rule Group :	Microbials
Rule Name :	Surface Water Treatment Rule
Violation Type :	Treatment Technique (SWTR and GWR)
Is Health Based :	Y
Is Major Violation :	N/R
Severity Indicator Count :	N/R
Public Notification Tier :	2
Address Line 1 :	4381 Broadway Street, Suite 201, AMERICAN CANYON, 94503
Address Line 2 :	N/R
Compliance Status :	Returned to Compliance
RTC Date :	2010-06-03
Enforcement Action Description :	State Compliance achieved
Admin Name :	HERNANDEZ III, FELIX
Email Address :	fhernandez@cityofamericancanyon.org

RADON DATA:

STATE SOURCE: CA

Radon Test Results:

Zip:	Total Sites:	Cnt >=4 pCi/L:	Pct >= 4 pCi/L:	Max Result (pCi/L):
94503	18	0	0	1.3

FEDERAL AREA RADON INFORMATION FOR: 94503

NUMBER OF SAMPLE SITES: No Available Data

FEDERAL EPA RADON ZONE FOR NAPA COUNTY: Zone = 3

Note: Zone 1 indoor average level > 4 pCI/L

: Zone 2 indoor average level > = 2 pCI/L and <= 4 pCI/L

: Zone 3 indoor average < 2 pCI/L

HIST PWS ENF
Historical Public Water Supply locations with Enforcement Violations
Environmental Protection Agency
(800) 426-4791
List of Safe Drinking Water Information Systems (SDWIS) with enforcement violations that are no longer in current agency list.

NWIS
National Water Information Systems
United States Geological Society
(703) 648-5953
Information on all water resources for the United States. This database contains all current and historical data for the nation.

PWS
Public Water Supply
Environmental Protection Agency
(800) 426-4791
Safe drinking water information Systems

PWS ENF
Public Water Supply locations with Enforcement Violations
Environmental Protection Agency
(800) 426-4791
Safe drinking water information Systems with enforcememnt violations

WELLS - GAMA - CA
California Groundwater Ambient Monitoring Assessment
State Water Resources Control Board
916-341-5791
Brings together datasets from California state agencies including: Public Health Water Resources and Pesticide Regulation as well as from the US Geological Survey Lawrence Livermore National Laboratory and the Water Boards. It shows results for untreated raw water in different types of wells for naturally-occurring and man-made chemicals.

FLOOD Q3
Flood data
Environmental Protection Agency
(202) 566-1667
Q3 Flood Data

HYDROLOGIC UNIT
Hydrologic Unit Maps
USGS
The United States Geological Survey created a hierarchical system of hydrologic units originally called regions, sub-regions, accounting units, and cataloging units. Each unit was assigned a unique Hydrologic Unit Code (HUC). As first implemented the system had 21 regions, 221 subregions, 378 accounting units, and 2,264 cataloging units. Over time the system was changed and expanded. As of 2010 there are six levels in the hierarchy, represented by hydrologic unit codes from 2 to 12 digits long, called regions, subregions, basins, subbasins, watersheds, and subwatersheds. The table below describes the system's hydrologic unit levels and their characteristics, along with example names and codes.

WETLANDS NWI
National Wetland Inventory
U.S. Fish and Wildlife Service
(703) 358-2171
Wetland Inventory for the United States

SSURGO
Detailed Soil Data Map
Natural Resources Conservation Service: U.S. Department of Agriculture
(202) 690-4985
Detailed Soil Data Map

STATSGO & MUI
General Soil Data Map
Natural Resources Conservation Service: U.S. Department of Agriculture
(202) 690-4985
General Soil Data Map

USGS GEOLOGIC AGE
USGS Digital Data Series DDS
Natural Resources Conservation Service: U.S. Department of Agriculture
(202) 690-4985
USGS Digital Data Series DDS: Geologic Age and Rock Stratigraphic Unit

DAMS - CA
California Dam Inundation Maps
Department of Water Resources
916-845-8275
Dam inundation maps show the maximum extent of damage of a flood wave from a dam failure

OIL & GAS WELLS - CA
Oil and Gas Well Data
State of California Department of Conservation
916-327-1042
Oil and gas well locations and detail for all 6 districts

RADON
National Radon Database
U.S. Environmental Protection Agency
215-814-2469
A study of the EPA/State Residential Radon Survey and the National Residential Radon Survey.

RADON - CA
Radon tested locations in California
California Department of Health Services
(916) 449-5674
A table of long term and short term indoor radon measurments

RADON EPA
RADON EPA
U.S. Environmental Protection Agency
215-814-2469
EPA list of Radon zones

AIRPORT FACILITIES
Airport landing facilities
Federal Aviation Administration
(866) 835-5322
Airport landing facilities

BASINS
Better Assessment Science Integrating point & Non-point Sources
U.S. Environmental Protection Agency
855-246-3642
Integrated geographical information system national watershed data and environmental assessment known as Better Assessment Science Integrating point & Non-point Sources

DIGITAL OBSTACLE
Obstacles of interest to aviation users
Federal Aviation Administration
855-379-6518
The Digital Obstacle File describes all known obstacles of interest to aviation users in the U.S. with limited coverage of the Pacific the Caribbean Canada and Mexico. The obstacles are assigned unique numerical identifiers; accuracy codes and listed in order of ascending latitude within each state or area by FAA Region.

EPICENTERS
National Geographical Data Center
National Geographical Data Center
303-497-6826
List of recent and historic earthquakes and information.

FLOOD DFIRM
National Flood Hazard Layer Database
Federal Emergency Management Agency
The National Flood Hazard Layer Database (NFHL) is a computer database that contains the flood hazard map information from FEMAs Flood Map Modernization program. These map data are from Digital Flood Insurance Rate Map (DFIRM) databases and Letters of Map Revision.

ENVIROSITE
Corporation

City Directory Report | 2023

Order Number: 84481

Report Generated: 03/13/2023

SDG Commerce 220

1055 Commerce Court
American Canyon, CA 94503

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56 Broome Corporate Parkway
Conklin, NY 13748

Toll Free: 866-211-2028
www.envirositecorp.com

Prepared for Envirosite Corporation By:

Property Archives

Envirosite's Standard City Directory Report is a screening tool designed to assist in historical use determination of a subject property and adjacent properties. It includes a search of Property Archives digital datasets and national book collections including the Library of Congress and/or the Allen County Public Library at five year intervals or the closest available intervals.

RESEARCH SUMMARY:

The following research sources were consulted in the preparation of this report:

SOURCE:	***YEAR:***
Property Archives	2018, 2015, 2010, 2006, 2002, 1998, 1993

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This report was prepared by Property Archives, LLC for Envirosite Corporation

Property Archives

SUBJECT PROPERTY:

1055 Commerce Court , American Canyon, CA 94503

ADJOINING PROPERTIES:

Eucalyptus Dr, American Canyon, CA

Commerce Ct, American Canyon, CA (aka Commerce Blvd)

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2018 **Commerce Ct, American Canyon, CA (aka Commerce Blvd)**

WESTERN CARRIERS INC	1155 COMMERCE BLVD	
WESTERN WINE SVC	1155 COMMERCE BLVD	
BIAGI BROTHERS	1166 COMMERCE BLVD	D
HESS COLLECTION WINERY	1166 COMMERCE BLVD	
BARRY CALLEBAUT USA LLC	1175 COMMERCE BLVD	D
AMCAN BEVERAGES INC	1201 COMMERCE BLVD	
ORORA	1245 COMMERCE BLVD	1
Q P I	1245 COMMERCE BLVD	
VIN GO LLC	1245 COMMERCE BLVD	
WINECARE LOGISTICS	1245 COMMERCE BLVD	

2015 **Commerce Ct, American Canyon, CA (aka Commerce Blvd)**

WESTERN CARRIERS INC	1155 COMMERCE BLVD	
WESTERN WINE SVC	1155 COMMERCE BLVD	
HESS COLLECTION WINERY	1166 COMMERCE BLVD	
BARRY CALLEBAUT USA LLC	1175 COMMERCE BLVD	D
GOLDEN STATE VINTNERS	1175 COMMERCE BLVD	
AMCAN BEVERAGES INC	1201 COMMERCE BLVD	
BILL HALL	1245 COMMERCE BLVD	
LILLY LIANG	1245 COMMERCE BLVD	
BACCHUS FULFILLMENT	1245 COMMERCE BLVD	
GOOD HEALTH AMERICA	1245 COMMERCE BLVD	
PACKAGING PLUS NAPA	1245 COMMERCE BLVD	1
VIN GO LLC	1245 COMMERCE BLVD	

2010 **Commerce Ct, American Canyon, CA (aka Commerce Blvd)**

WESTERN CARRIERS INC	1155 COMMERCE BLVD	
OSCAR CAMACHO	1175 COMMERCE BLVD	D
WILLIE PEETE	1201 COMMERCE BLVD	
JACQUES PEASHA	1201 COMMERCE BLVD	
KIT LEUNG	1245 COMMERCE BLVD	
SPENCER KINCH	1245 COMMERCE BLVD	
ANNETTE GEISNER	1245 COMMERCE BLVD	
GOOD HEALTH AMERICA	1245 COMMERCE BLVD	
BARRY SALT	1245 COMMERCE BLVD	1
DHC GRANITE	11750 COMMERCE BLVD	

2006 **Commerce Ct, American Canyon, CA (aka Commerce Blvd)**

GRAPEVINE EXPRESS	1166 COMMERCE BLVD	
John Bulleri	1166 COMMERCE BLVD	
Oscar Camacho	1175 COMMERCE BLVD	
Carol Thompson	1175 COMMERCE BLVD	
LIQUID TRENDS	1175 COMMERCE BLVD	
Ted Apostolou	1175 COMMERCE BLVD	A
FLUID RESOURCE MANAGEMENT	1201 COMMERCE BLVD	
Dan Hamcock	1201 COMMERCE BLVD	
Spencer Kinch	1245 COMMERCE BLVD	
GOOD HEALTH AMERICA	1245 COMMERCE BLVD	

PIONEER TIRE SUPPLY	1245 COMMERCE BLVD

2002 **Commerce Ct, American Canyon, CA (aka Commerce Blvd)**

Pokka Beverages Inc	1201 Commerce Blvd
Pioneer Tire Supply	1245 Commerce Blvd
Western Wine Svc	1275 Commerce Blvd

1998 **Commerce Ct, American Canyon, CA (aka Commerce Blvd)**

Good Health America	1245 Commerce Blvd
Pioneer Tire Supply	1245 Commerce Blvd

1993: **Commerce Ct, American Canyon, CA (aka Commerce Blvd)**

No results

2018: **Eucalyptus Dr, American Canyon, CA**

GEORGE COUCH	2 EUCALYPTUS DR
GEORGE COUCH	2 EUCALYPTUS DR
JAMES REID	130 EUCALYPTUS DR
JAMES REID	130 EUCALYPTUS DR
LYN MARIE JACINTO	5500 EUCALYPTUS DR
KAREN PICKERING	5500 EUCALYPTUS DR
ALFRED CARRERO	5500 EUCALYPTUS DR
ALICIA GUZMAN	5500 EUCALYPTUS DR
ANGELA FREEMAN	5500 EUCALYPTUS DR
ANNA SOLATAN	5500 EUCALYPTUS DR
AUDREY RESENDEZ	5500 EUCALYPTUS DR
BAMBI BLAZER	5500 EUCALYPTUS DR
BRENDA NAVARRO	5500 EUCALYPTUS DR
BYRON BURGESS	5500 EUCALYPTUS DR
AILEEN MIRABEL	5500 EUCALYPTUS DR
DAISEY SEVILLA	5500 EUCALYPTUS DR
DAN BLANKENSHIP	5500 EUCALYPTUS DR
EMILY WILSON	5500 EUCALYPTUS DR
ERINN BEATTY	5500 EUCALYPTUS DR
EVELYN LIBOON	5500 EUCALYPTUS DR
GLENN DACLAN	5500 EUCALYPTUS DR
JAMES FREEMAN	5500 EUCALYPTUS DR
KIERA ILUSORIO	5500 EUCALYPTUS DR
LAURA AUDIJE	5500 EUCALYPTUS DR
MARILYN ANDREWS	5500 EUCALYPTUS DR
RUBY LATIGUE	5500 EUCALYPTUS DR
MATHEW MANNING	5500 EUCALYPTUS DR
MATTHEW FULTZ	5500 EUCALYPTUS DR
NESTOR VALERIO	5500 EUCALYPTUS DR
YOLANDA BROADFOOT	5500 EUCALYPTUS DR
RACHEL CRIST	5500 EUCALYPTUS DR
RAQUEL AGUADO	5500 EUCALYPTUS DR
ROBERT DOUGLAS	5500 EUCALYPTUS DR
SHARON BEATTY	5500 EUCALYPTUS DR
BENTON ONEAL	5500 EUCALYPTUS DR
SHIRLEY BRISCOE	5500 EUCALYPTUS DR
SIMONS WONG	5500 EUCALYPTUS DR
TEODORA CARINO	5500 EUCALYPTUS DR
LODGE AT NAPA JUNCTION	5500 EUCALYPTUS DR
KHALED ALTHAMER	5500 EUCALYPTUS DR
CHANTELL YOUNG	5500 EUCALYPTUS DR
JASON FERRONI	5500 EUCALYPTUS DR
KATHERINE PERALTA	5500 EUCALYPTUS DR
KATHERINE PERALTA	5500 EUCALYPTUS DR
VINE ELECTRIC	5500 EUCALYPTUS DR
BRENDA NAVARRO	5500 EUCALYPTUS DR
ALFRED CARRERO	5500 EUCALYPTUS DR
ALICIA GUZMAN	5500 EUCALYPTUS DR

ANGELA FREEMAN	5500 EUCALYPTUS DR
ANNA SOLATAN	5500 EUCALYPTUS DR
AUDREY RESENDEZ	5500 EUCALYPTUS DR
BAMBI BLAZER	5500 EUCALYPTUS DR
BENTON ONEAL	5500 EUCALYPTUS DR
CHANTELL YOUNG	5500 EUCALYPTUS DR
AILEEN MIRABEL	5500 EUCALYPTUS DR
KAREN PICKERING	5500 EUCALYPTUS DR
DAISEY SEVILLA	5500 EUCALYPTUS DR
DAN BLANKENSHIP	5500 EUCALYPTUS DR
EMILY WILSON	5500 EUCALYPTUS DR
ERINN BEATTY	5500 EUCALYPTUS DR
EVELYN LIBOON	5500 EUCALYPTUS DR
GLENN DACLAN	5500 EUCALYPTUS DR
JAMES FREEMAN	5500 EUCALYPTUS DR
BYRON BURGESS	5500 EUCALYPTUS DR
KHALED ALTHAMER	5500 EUCALYPTUS DR
JASON FERRONI	5500 EUCALYPTUS DR
RAQUEL AGUADO	5500 EUCALYPTUS DR
ROBERT DOUGLAS	5500 EUCALYPTUS DR
LYN MARIE JACINTO	5500 EUCALYPTUS DR
MARILYN ANDREWS	5500 EUCALYPTUS DR
MATHEW MANNING	5500 EUCALYPTUS DR
MATTHEW FULTZ	5500 EUCALYPTUS DR
NESTOR VALERIO	5500 EUCALYPTUS DR
NIKKIE SHARE	5500 EUCALYPTUS DR
RACHEL CRIST	5500 EUCALYPTUS DR
RUBY LATIGUE	5500 EUCALYPTUS DR
LAURA AUDIJE	5500 EUCALYPTUS DR
KIERA ILUSORIO	5500 EUCALYPTUS DR
SHARON BEATTY	5500 EUCALYPTUS DR
SHIRLEY BRISCOE	5500 EUCALYPTUS DR
SIMONS WONG	5500 EUCALYPTUS DR
TEODORA CARINO	5500 EUCALYPTUS DR
YOLANDA BROADFOOT	5500 EUCALYPTUS DR
LODGE AT NAPA JUNCTION	5500 EUCALYPTUS DR
VINE ELECTRIC	5500 EUCALYPTUS DR
NIKKIE SHARE	5500 EUCALYPTUS DR

2016: Eucalyptus Dr, American Canyon, CA

George Couch	2 Eucalyptus Dr
Linda Reid	130 Eucalyptus Dr
James Reid	130 Eucalyptus Dr
Alfred Carrero	5500 Eucalyptus Dr
Aloha Khoo	5500 Eucalyptus Dr
Angela Freeman	5500 Eucalyptus Dr
Anna Solatan	5500 Eucalyptus Dr
Audrey Resendez	5500 Eucalyptus Dr
James Freeman	5500 Eucalyptus Dr

Aurora Talucod	5500 Eucalyptus Dr
Brian Adelstein	5500 Eucalyptus Dr
Byron Burgess	5500 Eucalyptus Dr
Chris Mendoza	5500 Eucalyptus Dr
Charina Ho-malasan	5500 Eucalyptus Dr
Daisey Sevilla	5500 Eucalyptus Dr
Dan Blankenship	5500 Eucalyptus Dr
Daniel Freiwald	5500 Eucalyptus Dr
Emily Wilson	5500 Eucalyptus Dr
Benton Oneal	5500 Eucalyptus Dr
Teodora Carino	5500 Eucalyptus Dr Apt 717
Brenda Navarro	5500 Eucalyptus Dr
BLACK DRAGON KENPO YOUTH	5500 EUCALYPTUS DR 431
VINE ELECTRIC	5500 EUCALYPTUS DR
Julie Herbst	5500 Eucalyptus Dr Apt 812
Aida Wong	5500 Eucalyptus Dr
Karen Pickering	5500 Eucalyptus Dr
Nikkie Share	5500 Eucalyptus Dr
Renee Reeves	5500 Eucalyptus Dr
Matthew Fultz	5500 Eucalyptus Dr
Marilyn Andrews	5500 Eucalyptus Dr
Kiera Ilusorio	5500 Eucalyptus Dr
Maria Pedraza	5500 Eucalyptus Dr
Laura Audije	5500 Eucalyptus Dr
Katherine Peralta	5500 Eucalyptus Dr
Maricris Fabella	5500 Eucalyptus Dr
Raquel Aguado	5500 Eucalyptus Dr
Robert Douglas	5500 Eucalyptus Dr
Rosaura Nava	5500 Eucalyptus Dr
Rachel Roberts	5500 Eucalyptus Dr Apt 632
Sherri Cotton	5500 Eucalyptus Dr
Shirley Briscoe	5500 Eucalyptus Dr
Simons Wong	5500 Eucalyptus Dr
Yolanda Broadfoot	5500 Eucalyptus Dr
Matthew Roberts	5500 Eucalyptus Dr Apt 632
Amor Olivan	5500 Eucalyptus Dr Apt 415
Renee Dixon	5500 Eucalyptus Dr
Jason Ferroni	5500 Eucalyptus Dr
Evelyn Liboon	5500 Eucalyptus Dr
KAUR, RITIKA	5500 EUCALYPTUS DR 935

2015: **Eucalyptus Dr, American Canyon, CA**

GEORGE COUCH	2 EUCALYPTUS DR
GEORGE COUCH	2 EUCALYPTUS DR
MARILYN ANDREWS	5500 EUCALYPTUS DR
LUANNE AYALA	5500 EUCALYPTUS DR
BLACK DRAGON KENPO YOUTH	5500 EUCALYPTUS DR 431
LODGE AT NAPA JUNCTION EMTA	5500 EUCALYPTUS DR
MICHELE LEVENSON	5500 EUCALYPTUS DR

MATTHEW FULTZ	5500 EUCALYPTUS DR
MARY FINKENBINDER	5500 EUCALYPTUS DR
ALAN RET	5500 EUCALYPTUS DR
NORMA MALLORCA	5500 EUCALYPTUS DR
LIRIO MURELLA	5500 EUCALYPTUS DR
JAMES FREEMAN	5500 EUCALYPTUS DR
KIERA ILUSORIO	5500 EUCALYPTUS DR
KATHERINE PERALTA	5500 EUCALYPTUS DR
KASEY THACKER	5500 EUCALYPTUS DR
KAREN PICKERING	5500 EUCALYPTUS DR
JOSHUA MURELLA	5500 EUCALYPTUS DR
MARIA RAZON	5500 EUCALYPTUS DR
EMILY WILSON	5500 EUCALYPTUS DR
GAY CORDERO	5500 EUCALYPTUS DR
CHARLES MALLORCA	5500 EUCALYPTUS DR
BYRON BURGESS	5500 EUCALYPTUS DR
DONALD SMITH	5500 EUCALYPTUS DR
VINE ELECTRIC	5500 EUCALYPTUS DR
DANIEL FREIWALD	5500 EUCALYPTUS DR
DAN BLANKENSHIP	5500 EUCALYPTUS DR
DAISEY SEVILLA	5500 EUCALYPTUS DR
CHRIS MENDOZA	5500 EUCALYPTUS DR
AURORA TALUCOD	5500 EUCALYPTUS DR
JENNIFER REST	5500 EUCALYPTUS DR
EVELYN LIBOON	5500 EUCALYPTUS DR
AUDRY RESENDEZ	5500 EUCALYPTUS DR
ANTONIO TANPOCO	5500 EUCALYPTUS DR
ANNA SOLATAN	5500 EUCALYPTUS DR
ALOHA KHOO	5500 EUCALYPTUS DR
ALFRED CARRERO	5500 EUCALYPTUS DR
ALAN RET	5500 EUCALYPTUS DR
JOHN SHACKFORD	5500 EUCALYPTUS DR
SHERRI COTTON	5500 EUCALYPTUS DR
GAY CORDERO	5500 EUCALYPTUS DR
AURORA TALUCOD	5500 EUCALYPTUS DR
CHARLES MALLORCA	5500 EUCALYPTUS DR
ALFRED CARRERO	5500 EUCALYPTUS DR
ALOHA KHOO	5500 EUCALYPTUS DR
ANNA SOLATAN	5500 EUCALYPTUS DR
ANTONIO TANPOCO	5500 EUCALYPTUS DR
AUDRY RESENDEZ	5500 EUCALYPTUS DR
JAMES FREEMAN	5500 EUCALYPTUS DR
JENNIFER REST	5500 EUCALYPTUS DR
CHRIS MENDOZA	5500 EUCALYPTUS DR
DAISEY SEVILLA	5500 EUCALYPTUS DR
DAN BLANKENSHIP	5500 EUCALYPTUS DR
DANIEL FREIWALD	5500 EUCALYPTUS DR
DONALD SMITH	5500 EUCALYPTUS DR
EMILY WILSON	5500 EUCALYPTUS DR
EVELYN LIBOON	5500 EUCALYPTUS DR
BYRON BURGESS	5500 EUCALYPTUS DR

JOHN SHACKFORD	5500 EUCALYPTUS DR
SHERRI COTTON	5500 EUCALYPTUS DR
LIRIO MURELLA	5500 EUCALYPTUS DR
BLACK DRAGON KENPO YOUTH	5500 EUCALYPTUS DR 431
MARIA RAZON	5500 EUCALYPTUS DR
JOSHUA MURELLA	5500 EUCALYPTUS DR
KAREN PICKERING	5500 EUCALYPTUS DR
KASEY THACKER	5500 EUCALYPTUS DR
KATHERINE PERALTA	5500 EUCALYPTUS DR
KIERA ILUSORIO	5500 EUCALYPTUS DR
LUANNE AYALA	5500 EUCALYPTUS DR
LODGE AT NAPA JUNCTION EMTA	5500 EUCALYPTUS DR
MARILYN ANDREWS	5500 EUCALYPTUS DR
MARY FINKENBINDER	5500 EUCALYPTUS DR
MATTHEW FULTZ	5500 EUCALYPTUS DR
MICHELE LEVENSON	5500 EUCALYPTUS DR
NORMA MALLORCA	5500 EUCALYPTUS DR
RONNETTE PORTER	5500 EUCALYPTUS DR
VINE ELECTRIC	5500 EUCALYPTUS DR
RONNETTE PORTER	5500 EUCALYPTUS DR

2013: **Eucalyptus Dr, American Canyon, CA**

PATRICIA COUCH	2 EUCALYPTUS DR
JAMES REID	130 EUCALYPTUS DR
LINDA REID	130 EUCALYPTUS DR
MARJORIE FOX	229 EUCALYPTUS DR
BETSY DELLAGANA	5500 EUCALYPTUS DR
RESIDENTIAL HOLLAND	5500 EUCALYPTUS DR
LODGE AT NAPA JCT EMTA	5500 EUCALYPTUS DR
VERITA BYRD	5500 EUCALYPTUS DR APT 814
SUZETTE TAWVER	5500 EUCALYPTUS DR
ELVIRA MINOR	5500 EUCALYPTUS DR
BENITA DE ARO	5500 EUCALYPTUS DR
BRYANT LIBOON	5500 EUCALYPTUS DR
BENITA DEHARO	5500 EUCALYPTUS DR APT 224
E FELIX	5500 EUCALYPTUS DR
GUANGYAN ZHOU	5500 EUCALYPTUS DR
SYED HUSSAIN	5500 EUCALYPTUS DR
JEANETTE EKLUND	5500 EUCALYPTUS DR
JIMMY EDWARD	5500 EUCALYPTUS DR
LAKHBIR SINGH	5500 EUCALYPTUS DR
LYNN ATWOOD	5500 EUCALYPTUS DR
M AQUINO	5500 EUCALYPTUS DR
MELANIE MAEL	5500 EUCALYPTUS DR
EFREN DEHARO	5500 EUCALYPTUS DR APT 224

2011: **Eucalyptus Dr, American Canyon, CA**

SHERWOOD FOREST PAINTBALL	2 EUCALYPTUS DR
JAMES REID	130 EUCALYPTUS DR
LINDA REID	130 EUCALYPTUS DR
RUSTY DAVIS	225 EUCALYPTUS DR
MARJORIE FOX	229 EUCALYPTUS DR
DREW DIGENOVA	5500 EUCALYPTUS DR
JIMMY EDWARD	5500 EUCALYPTUS DR
JEREMIAH EDLINGER	5500 EUCALYPTUS DR
BENITA DEHARO	5500 EUCALYPTUS DR APT 224
JENICA ROHRER	5500 EUCALYPTUS DR
EFRAIN WALKER	5500 EUCALYPTUS DR
ROVIL RUIZ	5500 EUCALYPTUS DR APT 314
BRENT CONGER	5500 EUCALYPTUS DR
ANNALYN ANTONIO	5500 EUCALYPTUS DR
MELANIE MAEL	5500 EUCALYPTUS DR
GLORIA FARNAL	5500 EUCALYPTUS DR
ROBIN MARTIN	5500 EUCALYPTUS DR APT 726
DAVID HURLEY	5500 EUCALYPTUS DR APT 718
GINA BECK	5500 EUCALYPTUS DR APT 826
MAECOLLEEN BALCEBVER	5500 EUCALYPTUS DR
NATALIE CEJA	5500 EUCALYPTUS DR
ULRICK LAUTURE	5500 EUCALYPTUS DR APT 322
SHARON BEATTY	5500 EUCALYPTUS DR APT 522
ALISA DUNCAN	5500 EUCALYPTUS DR APT 418
ARTHANELL DUNCAN	5500 EUCALYPTUS DR APT 418
KEVIN DUNCAN	5500 EUCALYPTUS DR APT 418
LEROY LITES	5500 EUCALYPTUS DR APT 418
BRYANT LIBOON	5500 EUCALYPTUS DR APT 438
LAURA GUZMAN	5500 EUCALYPTUS DR APT 515
RACHEL MCCLENNON	5500 EUCALYPTUS DR APT 518
AMALIA CONTRERAS	5500 EUCALYPTUS DR APT 532
PAUL MAGUIRE	5500 EUCALYPTUS DR
EVELYN LIBOON	5500 EUCALYPTUS DR APT 438
EFREN DEHARO	5500 EUCALYPTUS DR APT 224
SARAH BELAND	5500 EUCALYPTUS DR
EMILY WILSON	5500 EUCALYPTUS DR APT 734
WANDA SWEENEY	5500 EUCALYPTUS DR APT 115
TAKHAR RAVINDER	5500 EUCALYPTUS DR
MARIA LEECH	5500 EUCALYPTUS DR APT 622
PICKERING KAREN	5500 EUCALYPTUS DR
RESIDENTIAL HOLLAND	5500 EUCALYPTUS DR

2010: **Eucalyptus Dr, American Canyon, CA**

PATRICIA COUCH	2 EUCALYPTUS DR
PATRICIA COUCH	2 EUCALYPTUS DR
LINDA REID	130 EUCALYPTUS DR
JAMES REID	130 EUCALYPTUS DR
JAMES REID	130 EUCALYPTUS DR
LINDA REID	130 EUCALYPTUS DR

MARJORIE FOX	229 EUCALYPTUS DR
MARJORIE FOX	229 EUCALYPTUS DR
LAKHBIR SINGH	5500 EUCALYPTUS DR
EFREN DEHARO	5500 EUCALYPTUS DR APT 224
BENITA DEHARO	5500 EUCALYPTUS DR APT 224
SYED HUSSAIN	5500 EUCALYPTUS DR
MELANIE MAEL	5500 EUCALYPTUS DR
LYNN ATWOOD	5500 EUCALYPTUS DR
JEANETTE EKLUND	5500 EUCALYPTUS DR
M AQUINO	5500 EUCALYPTUS DR
JIMMY EDWARD	5500 EUCALYPTUS DR
GUANGYAN ZHOU	5500 EUCALYPTUS DR
VERITA BYRD	5500 EUCALYPTUS DR APT 814
E FELIX	5500 EUCALYPTUS DR
BRYANT LIBOON	5500 EUCALYPTUS DR
BETSY DELLAGANA	5500 EUCALYPTUS DR
BENITA DE ARO	5500 EUCALYPTUS DR
ELVIRA MINOR	5500 EUCALYPTUS DR
EFREN DEHARO	5500 EUCALYPTUS DR APT 224
LODGE AT NAPA JCT EMTA	5500 EUCALYPTUS DR
LAKHBIR SINGH	5500 EUCALYPTUS DR
BENITA DE ARO	5500 EUCALYPTUS DR
BETSY DELLAGANA	5500 EUCALYPTUS DR
BRYANT LIBOON	5500 EUCALYPTUS DR
E FELIX	5500 EUCALYPTUS DR
VERITA BYRD	5500 EUCALYPTUS DR APT 814
ELVIRA MINOR	5500 EUCALYPTUS DR
JEANETTE EKLUND	5500 EUCALYPTUS DR
JIMMY EDWARD	5500 EUCALYPTUS DR
LYNN ATWOOD	5500 EUCALYPTUS DR
RESIDENTIAL HOLLAND	5500 EUCALYPTUS DR
M AQUINO	5500 EUCALYPTUS DR
MELANIE MAEL	5500 EUCALYPTUS DR
SUZETTE TAWVER	5500 EUCALYPTUS DR
SYED HUSSAIN	5500 EUCALYPTUS DR
BENITA DEHARO	5500 EUCALYPTUS DR APT 224
GUANGYAN ZHOU	5500 EUCALYPTUS DR
LODGE AT NAPA JCT EMTA	5500 EUCALYPTUS DR
SUZETTE TAWVER	5500 EUCALYPTUS DR
RESIDENTIAL HOLLAND	5500 EUCALYPTUS DR

2006: **Eucalyptus Dr, American Canyon, CA**

SHERWOOD FOREST PAINTBALL	2 EUCALYPTUS DR
RESIDENTIAL HOLLAND	5500 EUCALYPTUS DR

2002: **Eucalyptus Dr, American Canyon, CA**

Sherwood Forest Paintball	2 Eucalyptus Dr

Gas Recovery Systems 725 Eucalyptus Dr

1998: Eucalyptus Dr, American Canyon, CA

No results

1993: Eucalyptus Dr, American Canyon, CA

No results

Fire Insurance Maps No Coverage Statement

Site Location
SDG Commerce 220
1055 Commerce Ct
American Canyon, CA

Requested by
Envirosite Corporation
2 Corporate Drive
Shelton, CT

HIG Project #
2073002
Client Project #
84481
Date Created
03/13/2023

Historical Information Gatherers

FIM+ Maps

The HIG Historical Map Collection and the United States Library of Congress Map Collection were searched for fire insurance maps (FIMs), real estate atlases and similar maps for the site location and adjoining properties. No FIMs or similar maps were identified for the site location and/or adjoining properties.

HIG Research Summary

Site Location
SDG Commerce 220
1055 Commerce Ct
American Canyon, CA

Requested by
Envirosite Corporation
2 Corporate Drive
Shelton, CT

HIG Project #
2073002
Client Project #
84481
Date Created
03/13/2023

Historical Information Gatherers

This Research Summary identifies the products and services provided by Historical Information Gatherers, Inc. (HIG) for the above referenced site location. All products are provided as PDFs unless otherwise noted.

FIM+ Maps

The HIG Historical Map Collection and the United States Library of Congress Map Collection were searched for fire insurance maps (FIMs), real estate atlases and similar maps for the site location and adjoining properties. No FIMs or similar maps were identified for the site location and/or adjoining properties.

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APPENDIX D

Historical Research Documentation

ENVIROSITE Corporation

Historical Aerial Photo Report | 2023

Order Number: 84481
Report Generated: 03/15/2023

Project Name: SDG Commerce 220
Project Number: 02-10800-05639

SDG Commerce 220
1055 Commerce Ct
American Canyon, CA, 94503

Contact us at:
(866) 211-2028
envirositecorp.com

Historical Aerial Photo Report 2023

Envirosite's Historical Aerial Photo Report is designed to assist in evaluating a subject property resulting from past activities. Envirosite's Historical Aerial Photo Report includes a search of available historical aerial photographs, dating back to the 1930s, or earliest available photographs.

ENVIROSITE SEARCHED SOURCES

SUBJECT PROPERTY:

SDG Commerce 220
1055 Commerce Ct
American Canyon, CA, 94503

YEAR:	***SCALE:***	***SOURCE:***
1937	1" = 500'	U.S.D.A
1948	1" = 500'	U.S.G.S
1957	1" = 500'	U.S.D.A
1958	1" = 500'	U.S.D.A
1965	1" = 500'	U.S.D.A
1966	1" = 1,000'	U.S.G.S
1968	1" = 500'	U.S.G.S
1970	1" = 500'	U.S.D.A
1971	1" = 1,000'	U.S.G.S
1973	1" = 1,000'	U.S.G.S
1975	1" = 1,000'	U.S.G.S
1982	1" = 1,000'	NHAP
1983	1" = 1,000'	U.S.G.S
1985	1" = 1,000'	U.S.G.S
1988	1" = 500'	U.S.D.A
1989	1" = 1,000'	U.S.G.S
1993	1" = 500'	DOQ
1996	1" = 1,000'	U.S.G.S
1998	1" = 1,000'	NAPP
2005	1" = 500'	NAIP
2009	1" = 500'	NAIP
2010	1" = 500'	NAIP
2012	1" = 500'	NAIP
2014	1" = 500'	NAIP
2016	1" = 500'	NAIP
2018	1" = 500'	NAIP
2020	1" = 500'	NAIP

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FLIGHT YEAR:
1937

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1948

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1957

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1958

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1965

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1966

N
W E
S

Scale: 1" = 1,000'



FLIGHT YEAR:
1968

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1970

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1971

N
W E
S

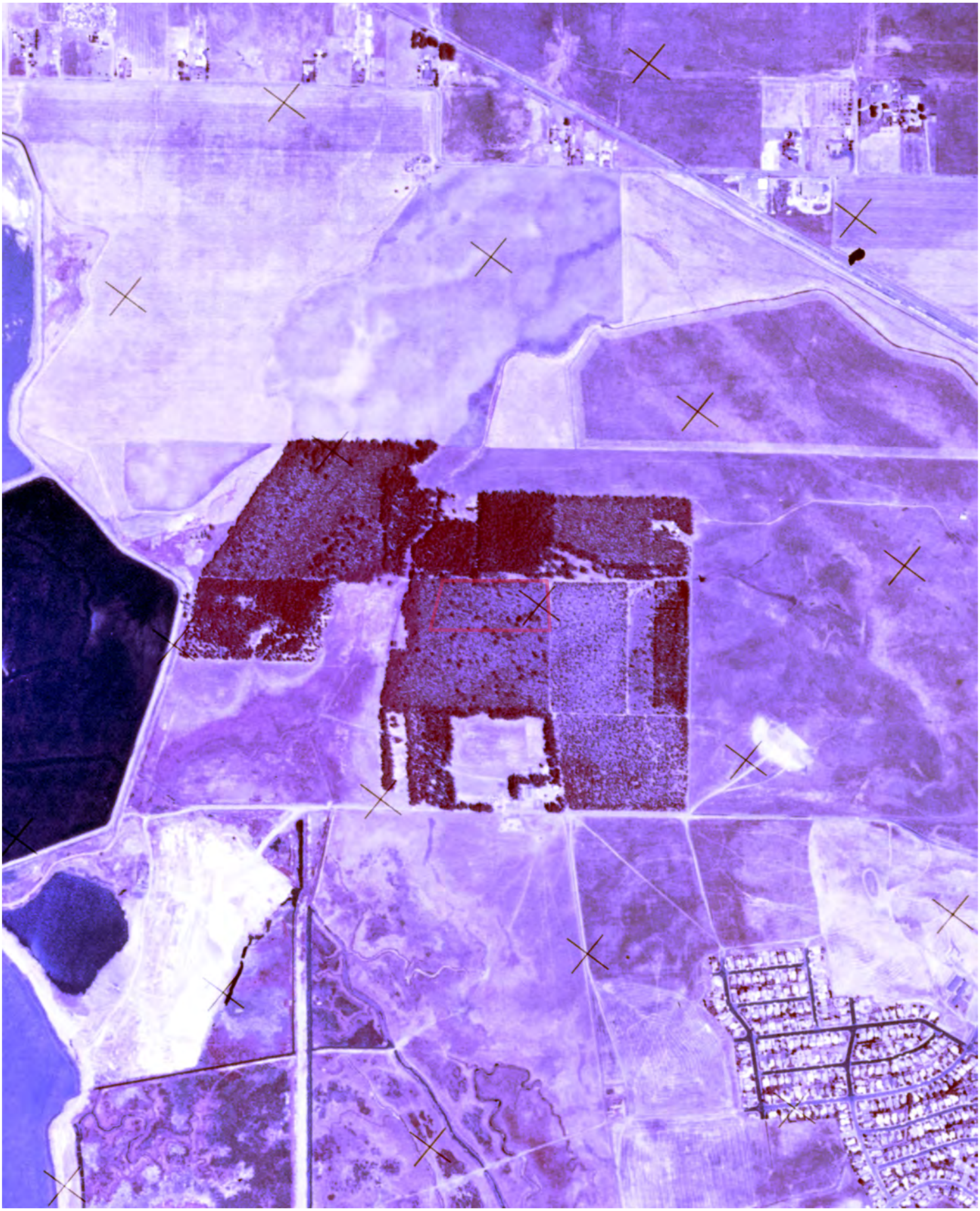
Scale: 1" = 1,000'



FLIGHT YEAR:
1973

N
W E
S

Scale: 1" = 1,000'



FLIGHT YEAR:
1975

N
W E
S

Scale: 1" = 1,000'



FLIGHT YEAR:
1982

N
W E
S

Scale: 1" = 1,000'



FLIGHT YEAR:
1983

N
W E
S

Scale: 1" = 1,000'



FLIGHT YEAR:
1985

N
W E
S

Scale: 1" = 1,000'



FLIGHT YEAR:
1988

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1989

N
W E
S

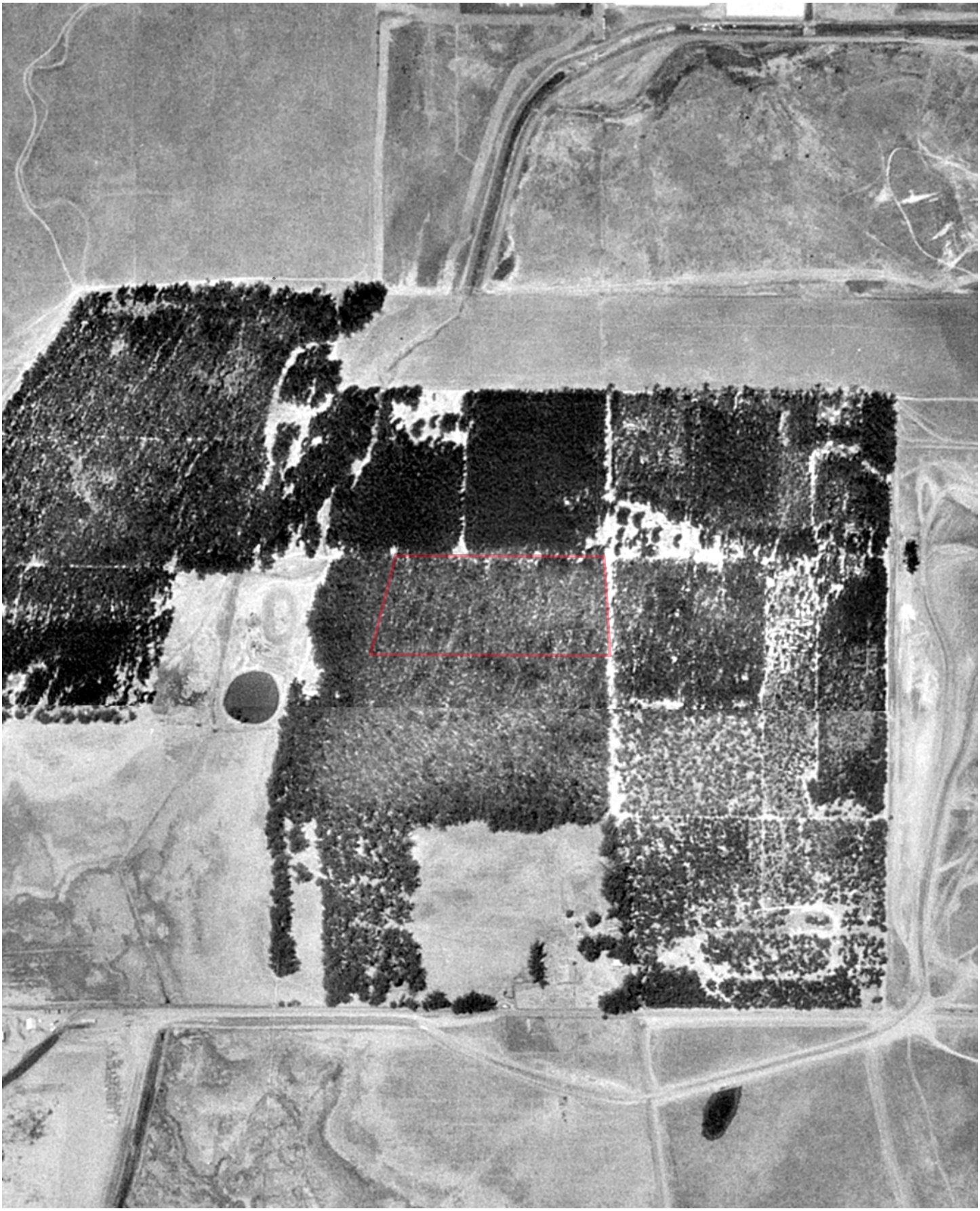
Scale: 1" = 1,000'



FLIGHT YEAR:
1993

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
1996

N
W E
S

Scale: 1" = 1,000'



FLIGHT YEAR:
1998

N
W E
S

Scale: 1" = 1,000'



FLIGHT YEAR:
2005

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
2009

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
2010

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
2012

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
2014

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
2016

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
2018

N
W E
S

Scale: 1" = 500'



FLIGHT YEAR:
2020

N
W E
S

Scale: 1" = 500'



Historical Topographic Map Report | 2023

Order Number: 84481

Report Generated: 03/10/2023

Project Name: SDG Commerce 220

Project Number: 02-10800-05639

SDG Commerce 220
1055 Commerce Ct
American Canyon, CA 94503

Contact us at:
(866) 211-2028
envirositecorp.com

Envirosite's Historical Topographic Map Report is designed to assist in evaluating a subject property resulting from past activities. Envirosite's Historical Topographic Map Report includes a search of USGS historical topographic maps, dating back to the early 1900s.

TOPOGRAPHIC MAPS FOUND:

	Map Name:	Year:	Revision Year:	Scale:
1.	Mare Island	1916	N/R	1 : 62500
2.	Mare Island	1942	N/R	1 : 62500
3.	Cuttings Wharf	1949	N/R	1 : 24000
4.	Cuttings Wharf	1949	1968	1 : 24000
5.	Cuttings Wharf	1949	1968	1 : 24000
6.	Cuttings Wharf	1949	1981	1 : 24000
7.	Cuttings Wharf	1949	1981	1 : 24000
8.	Cuttings Wharf	1951	N/R	1 : 24000
9.	Cuttings_Wharf	2012	N/R	1 : 24000
10.	Cuttings_Wharf	2015	N/R	1 : 24000
11.	Cuttings_Wharf	2018	N/R	1 : 24000
12.	Cuttings_Wharf	2021	N/R	1 : 24000

The USGS 7.5 minute series includes scales 1:24,000 / 1:25,000 / 1:31,680. The USGS 15 minute series includes scales 1:48,000 / 1:62,500 / 1:63,360. The USGS 30x60 minute series scale is 1:100,000.

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SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME:	Mare Island	MAP YEAR:	1916	REVISION YEAR:	N/R
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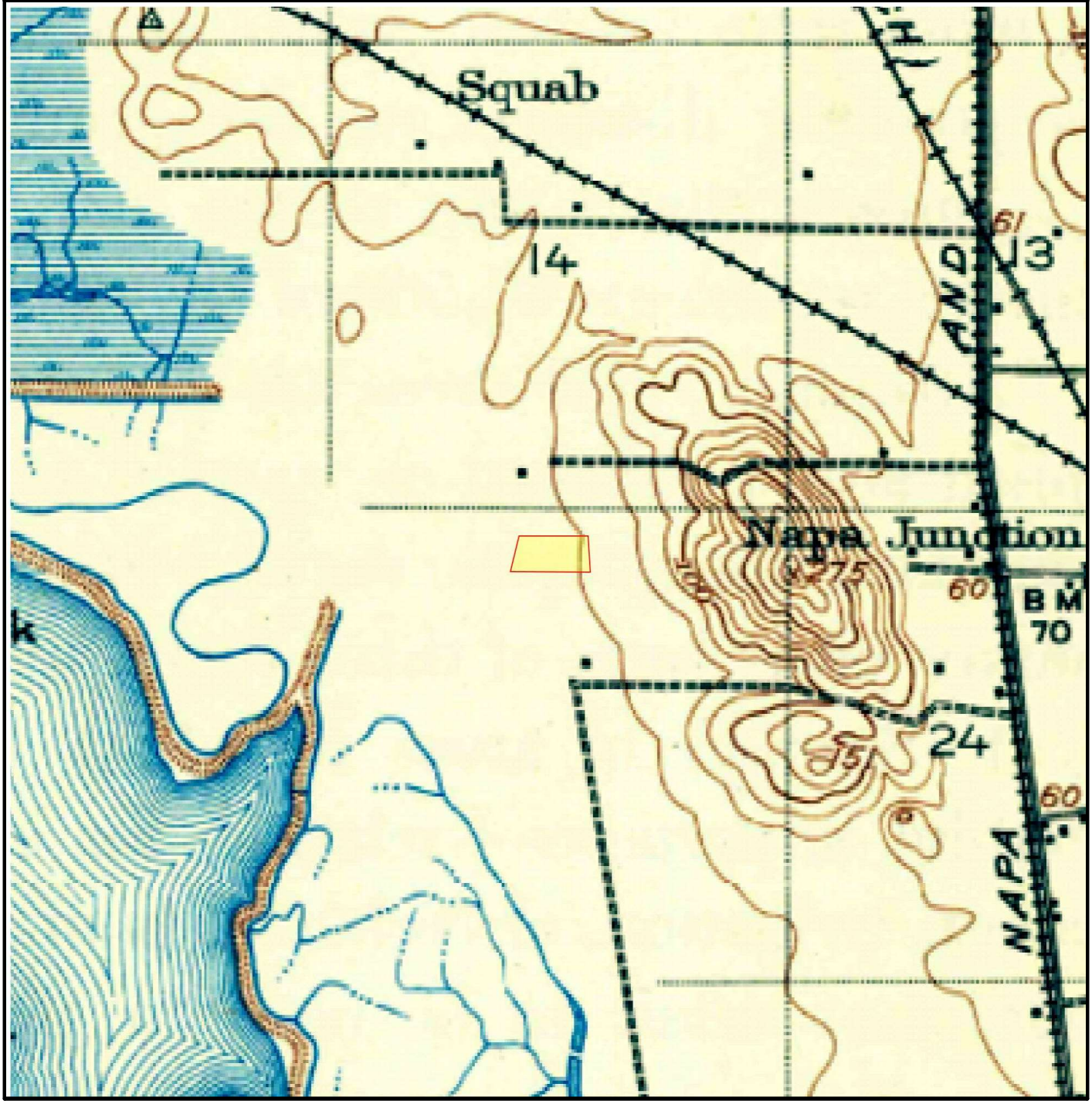

SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

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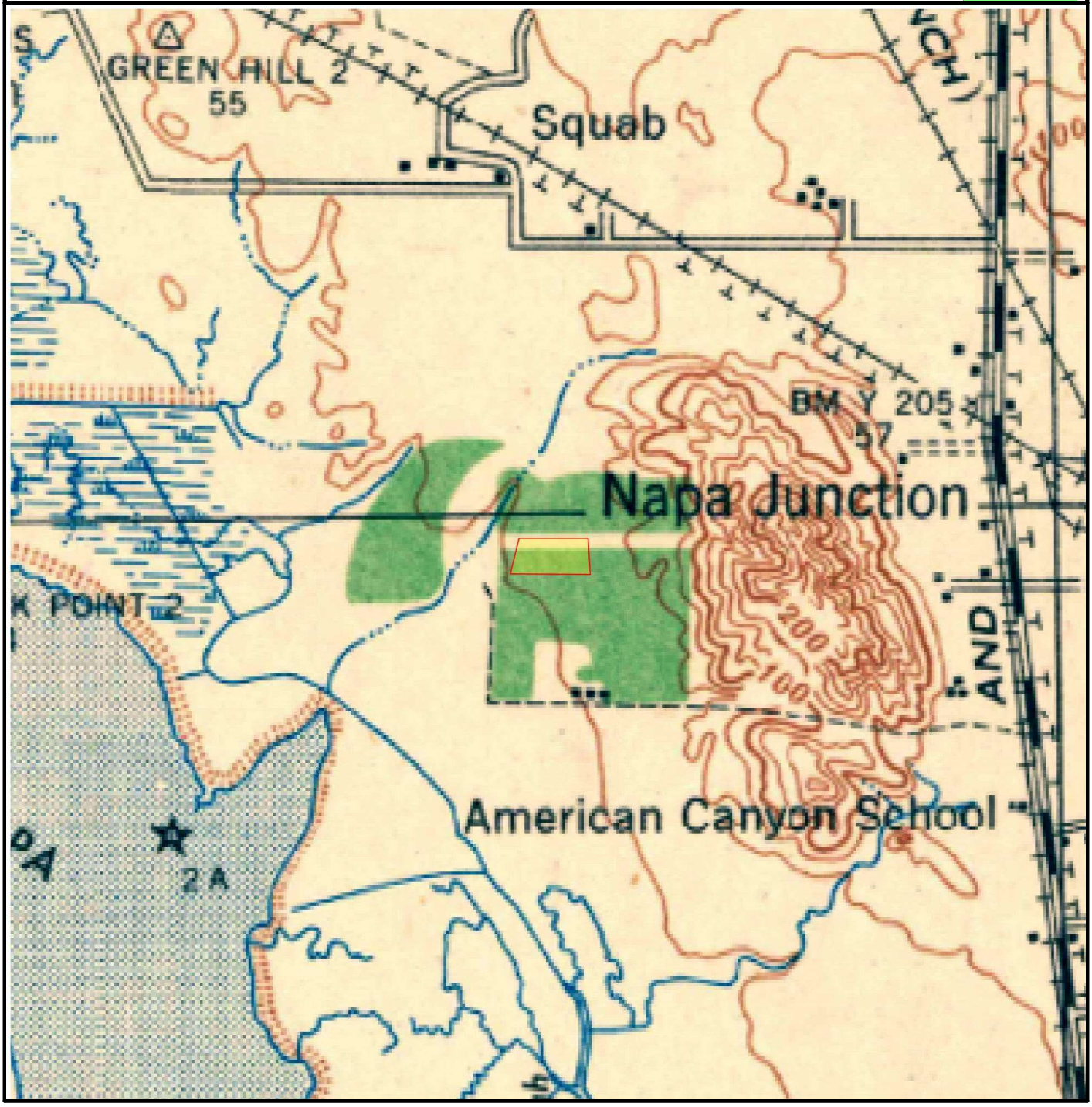


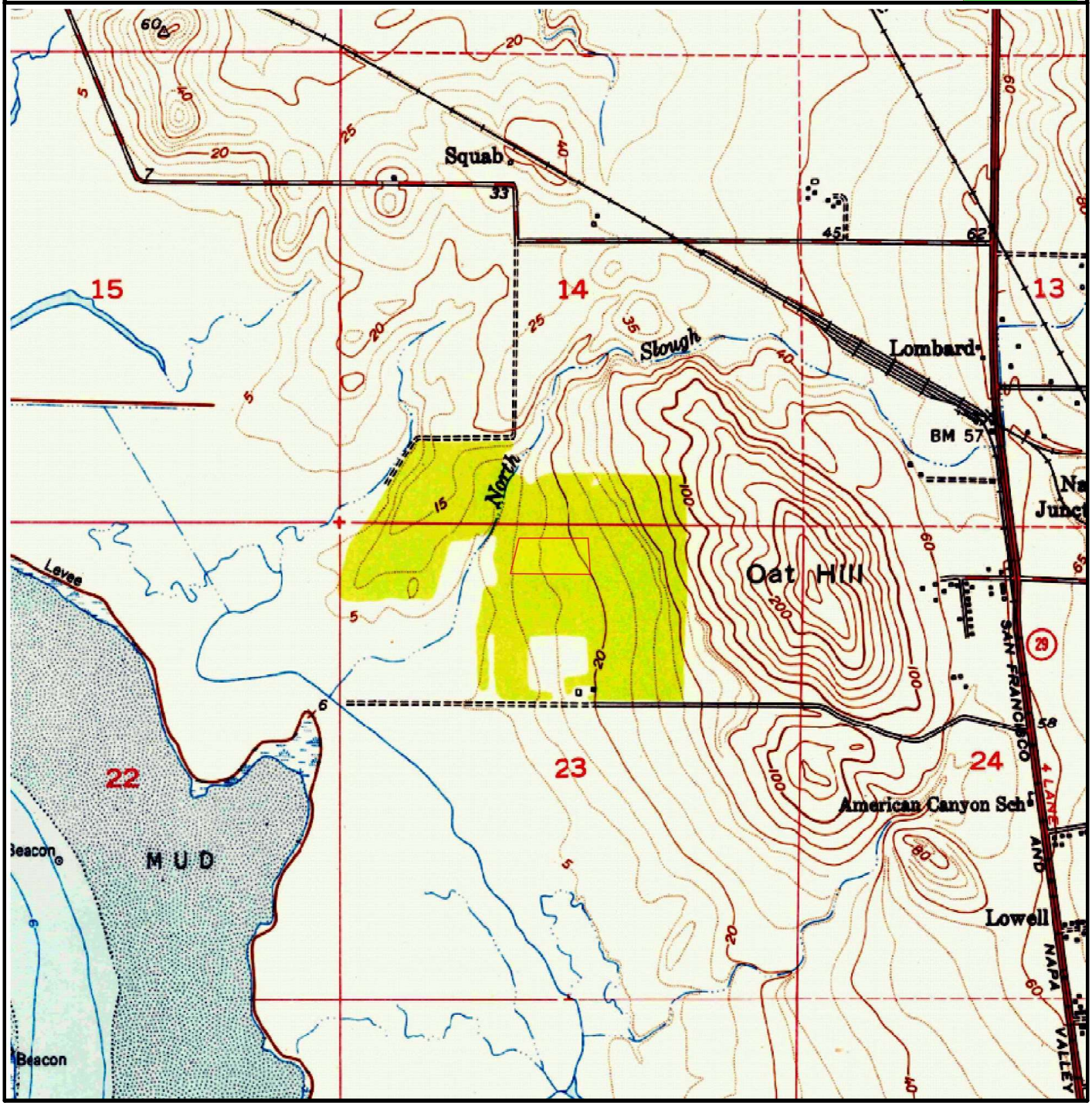
SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME: Cuttings Wharf MAP YEAR: 1949 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

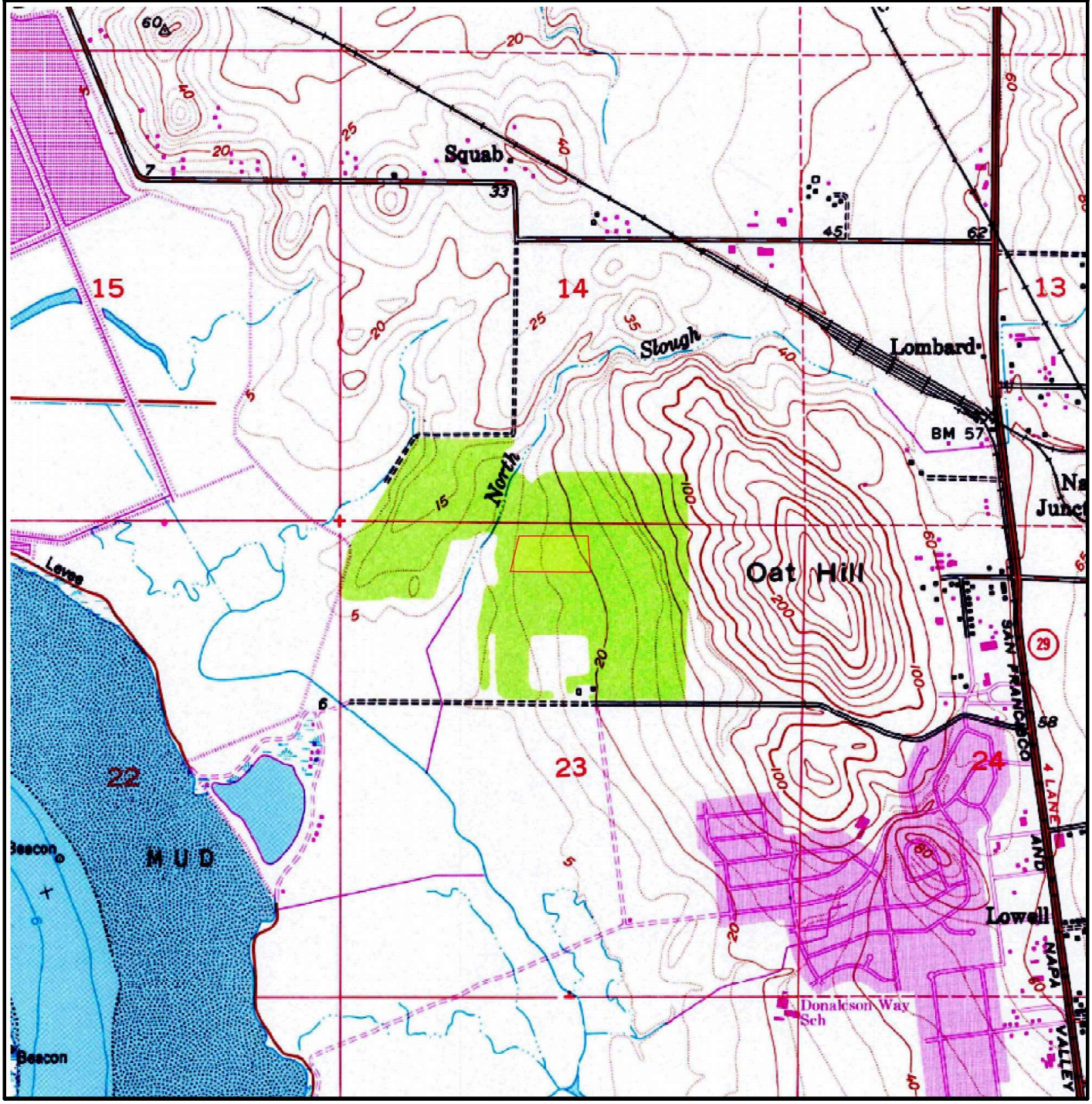


SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME:	Cuttings Wharf	MAP YEAR:	1949	REVISION YEAR:	1968
SCALE:	1 : 24000	Part	1		

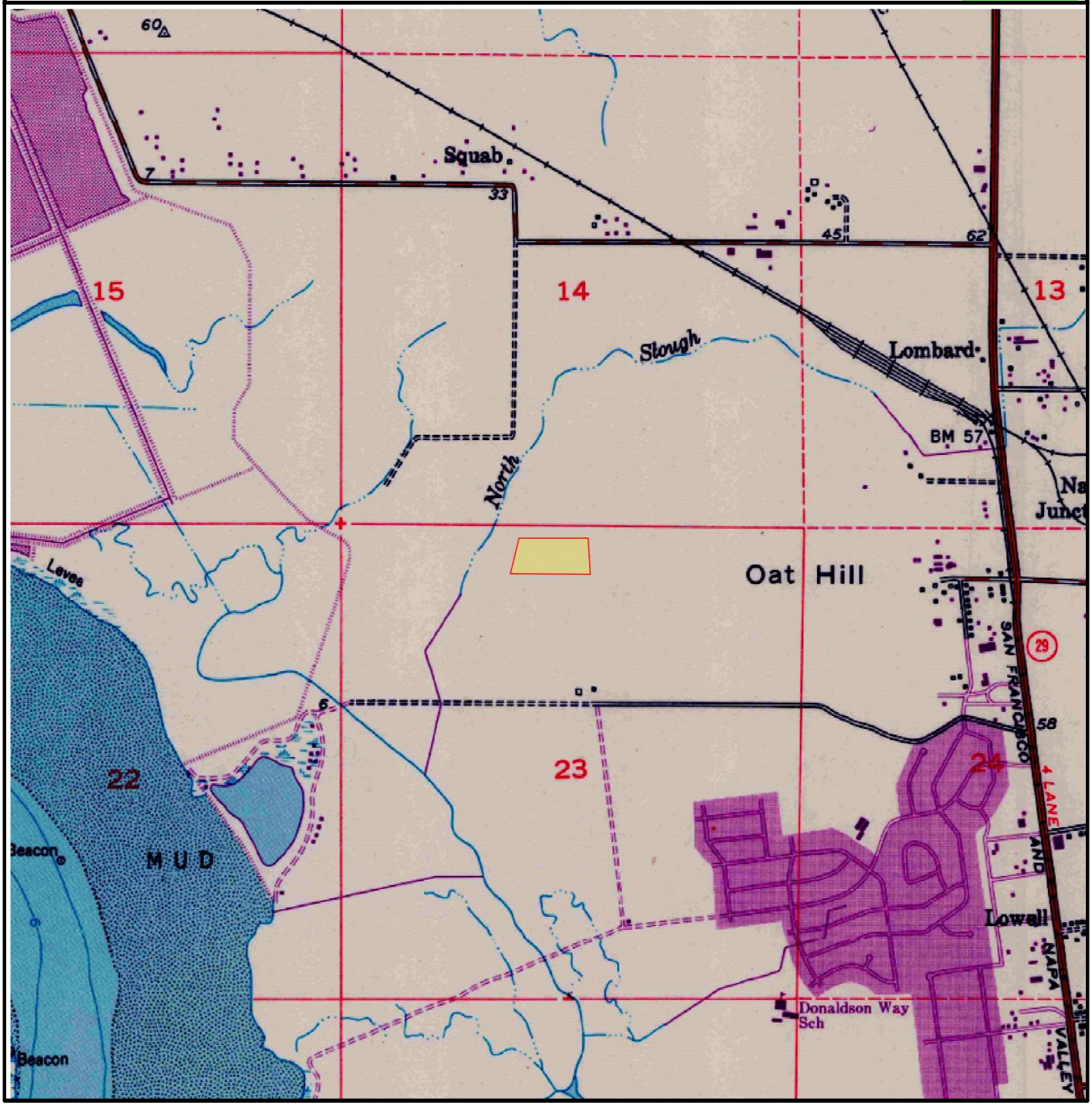


SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME:	Cuttings Wharf	MAP YEAR:	1949	REVISION YEAR:	1968
SCALE:	1 : 24000	Part	1		



SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME:	Cuttings Wharf	MAP YEAR:	1949	REVISION YEAR:	1981
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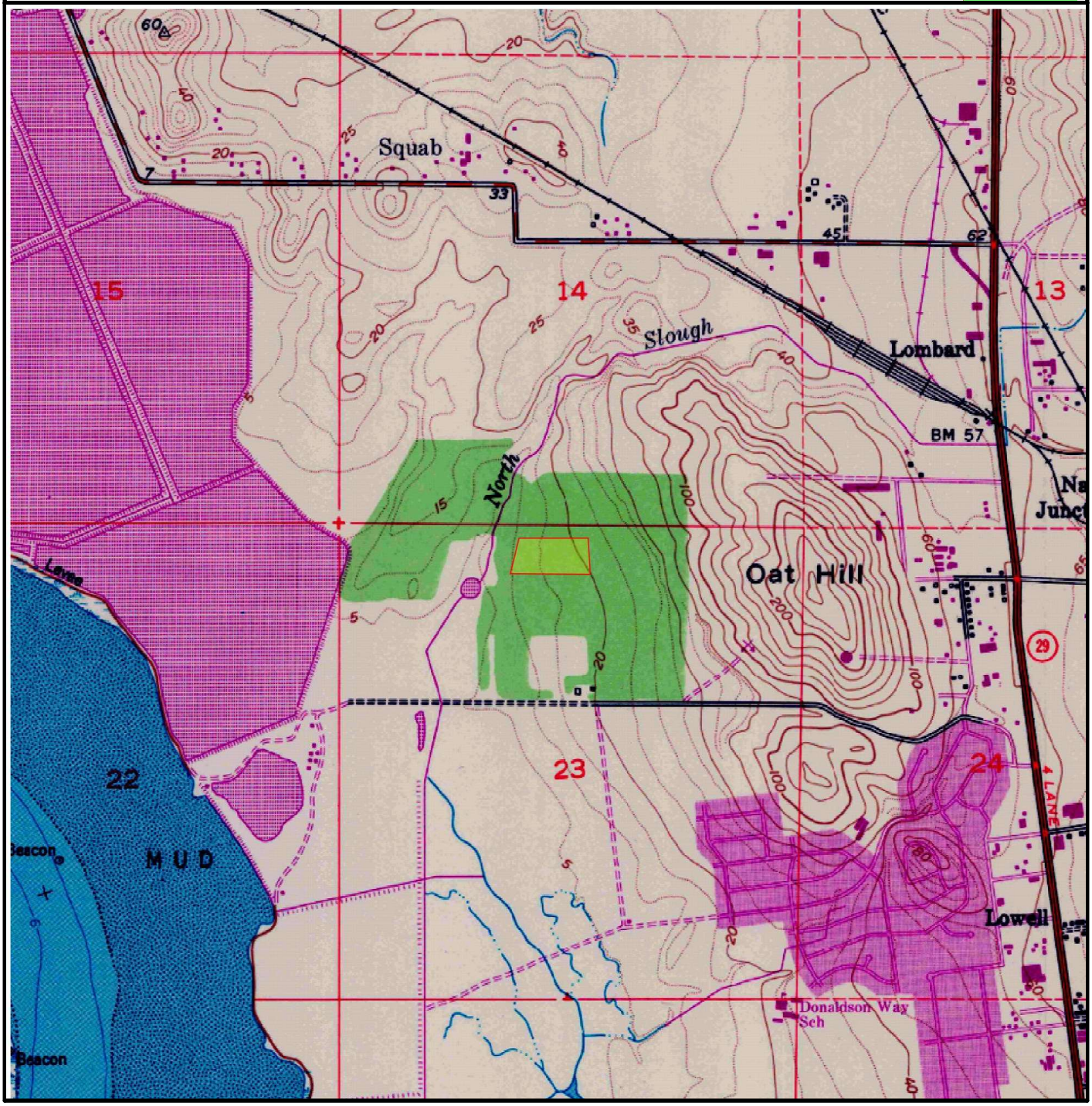
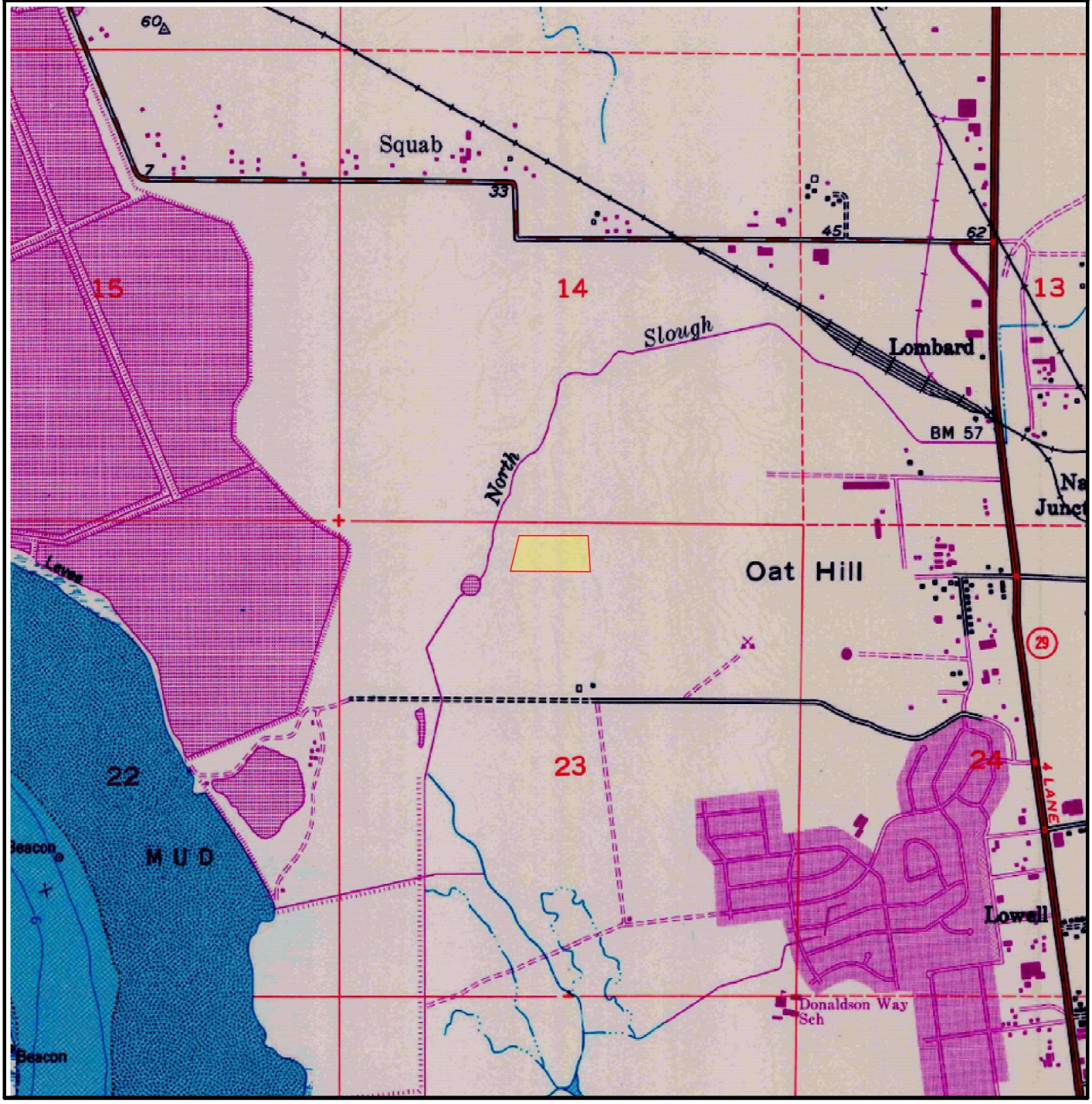


SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME:	Cuttings Wharf	MAP YEAR:	1949	REVISION YEAR:	1981
SCALE:	1 : 24000	Part	1		

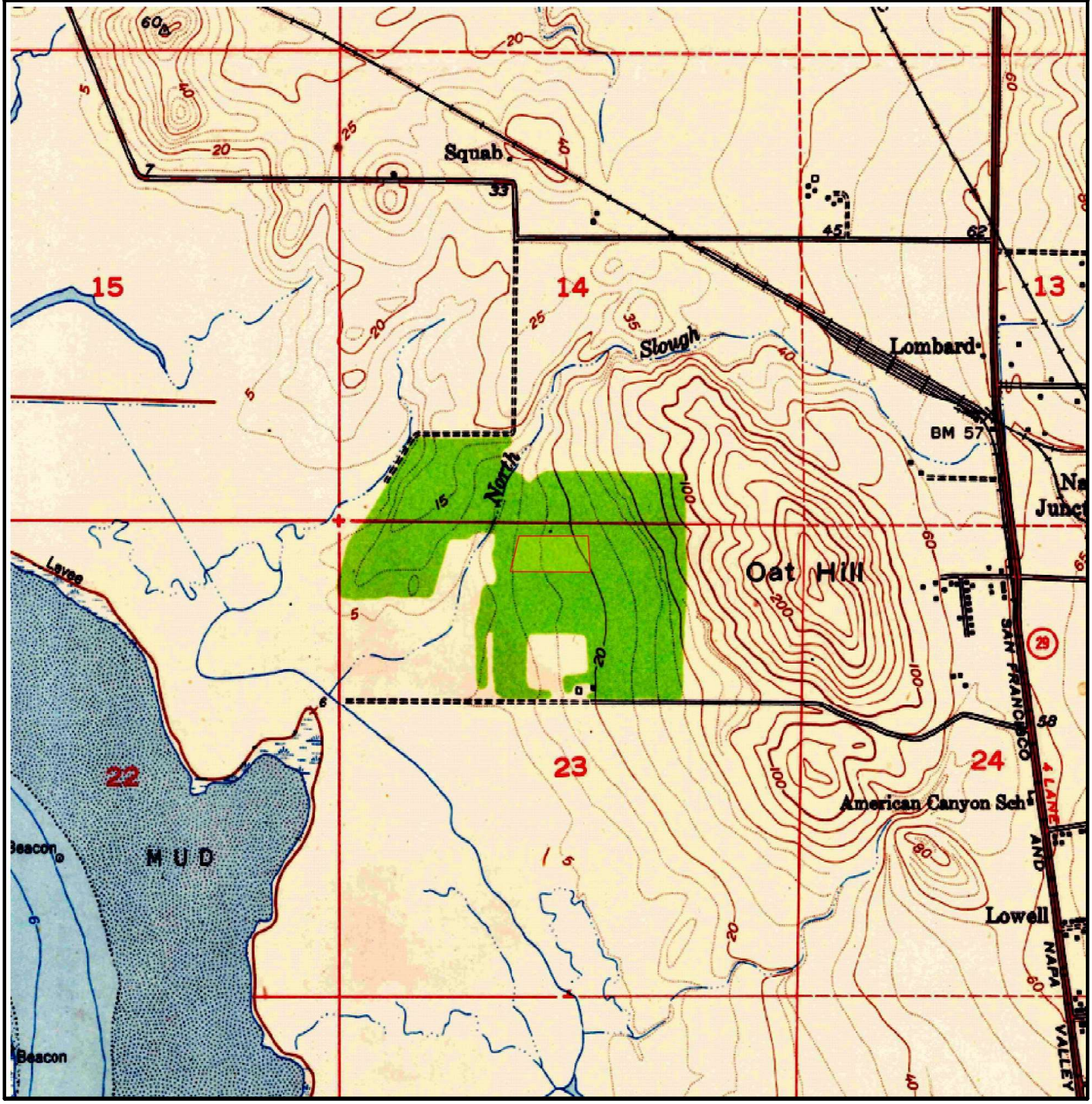


SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME:	Cuttings Wharf	MAP YEAR:	1951	REVISION YEAR:	N/R
SCALE:	1 : 24000	Part	1		



SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME:	Cuttings_Wharf	MAP YEAR:	2012	REVISION YEAR:	N/R
SCALE:	1 : 24000	Part	1		



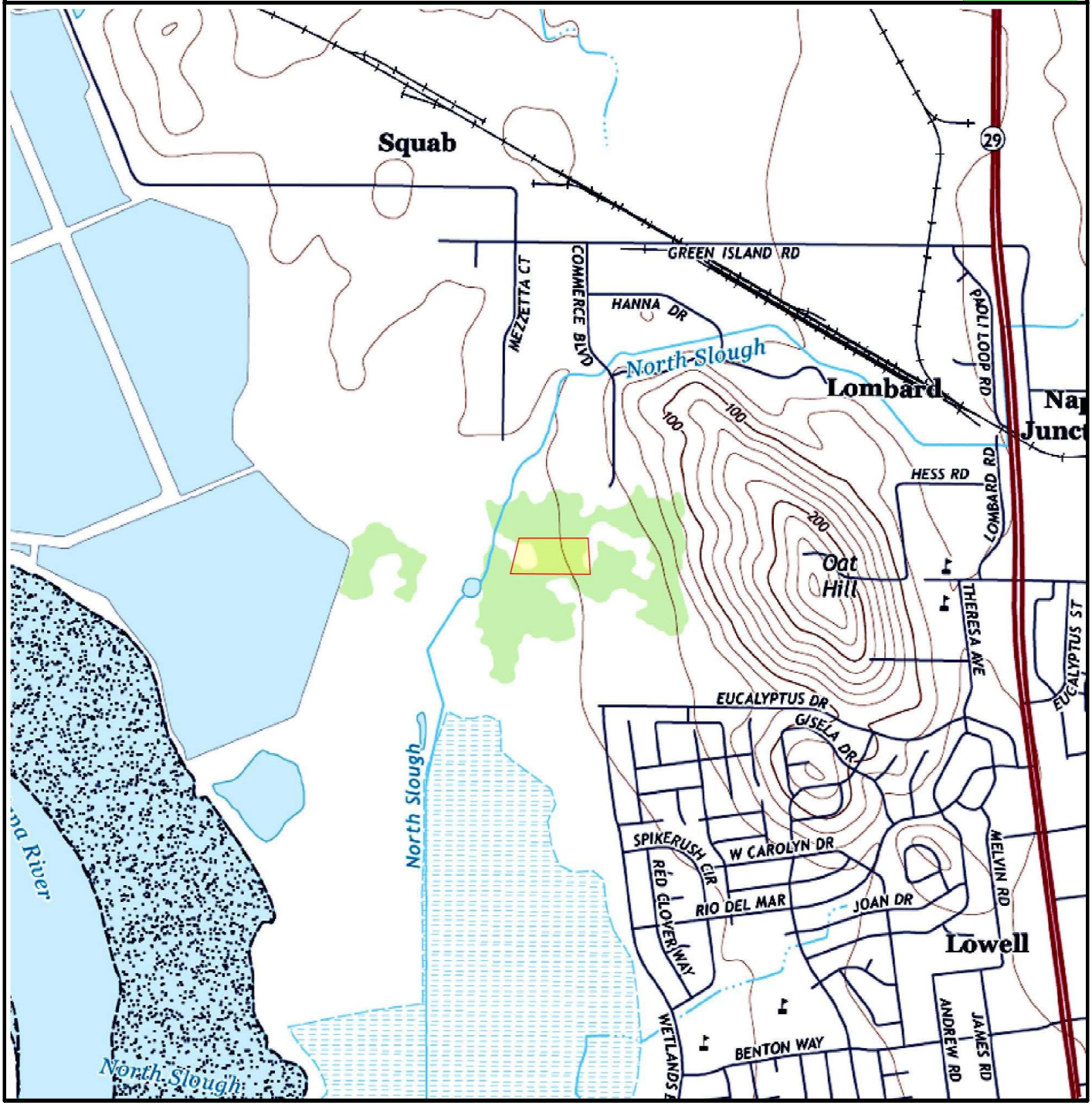
SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME: Cuttings_Wharf MAP YEAR: 2015 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1



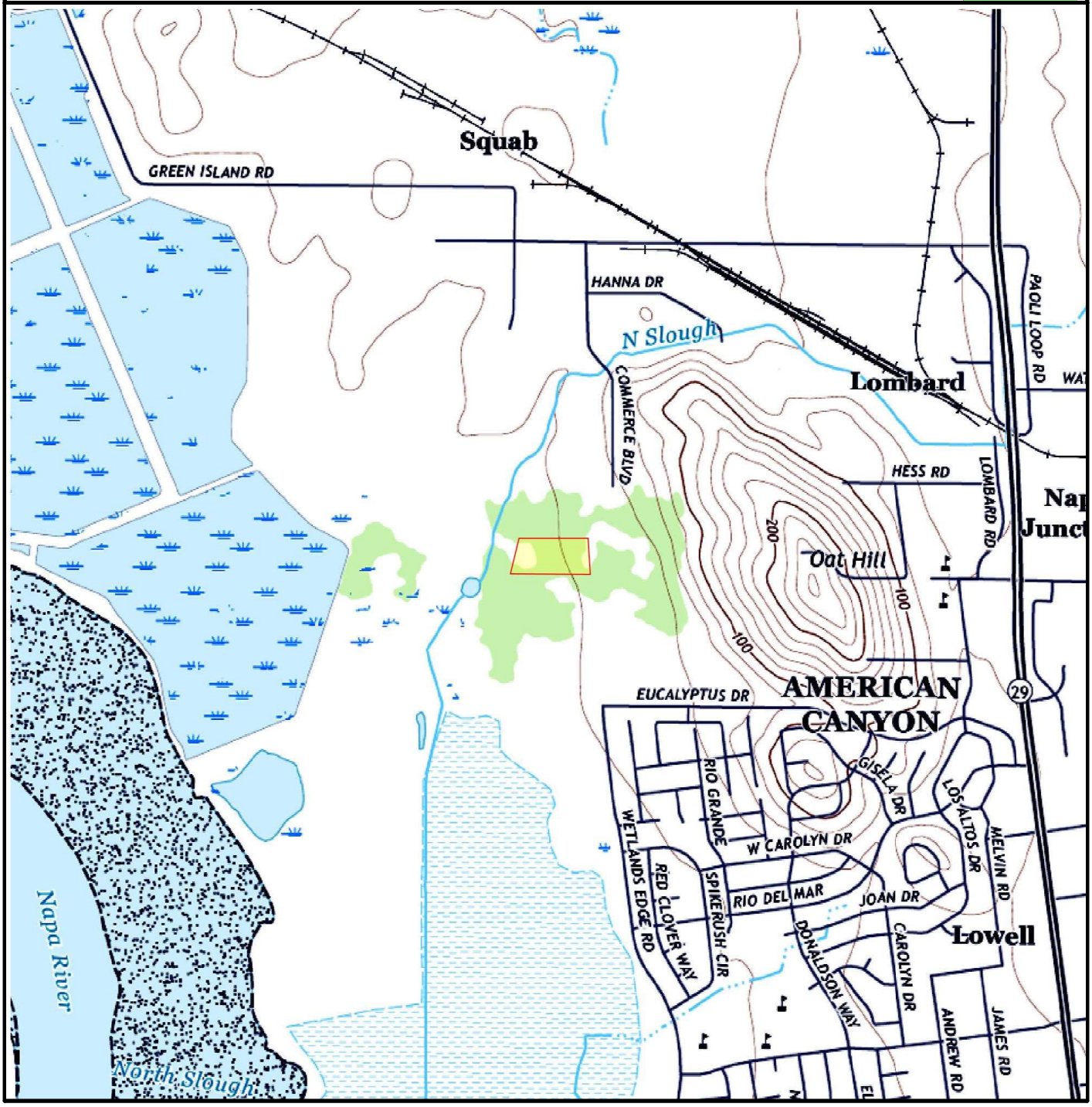
SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME: Cuttings_Wharf MAP YEAR: 2018 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

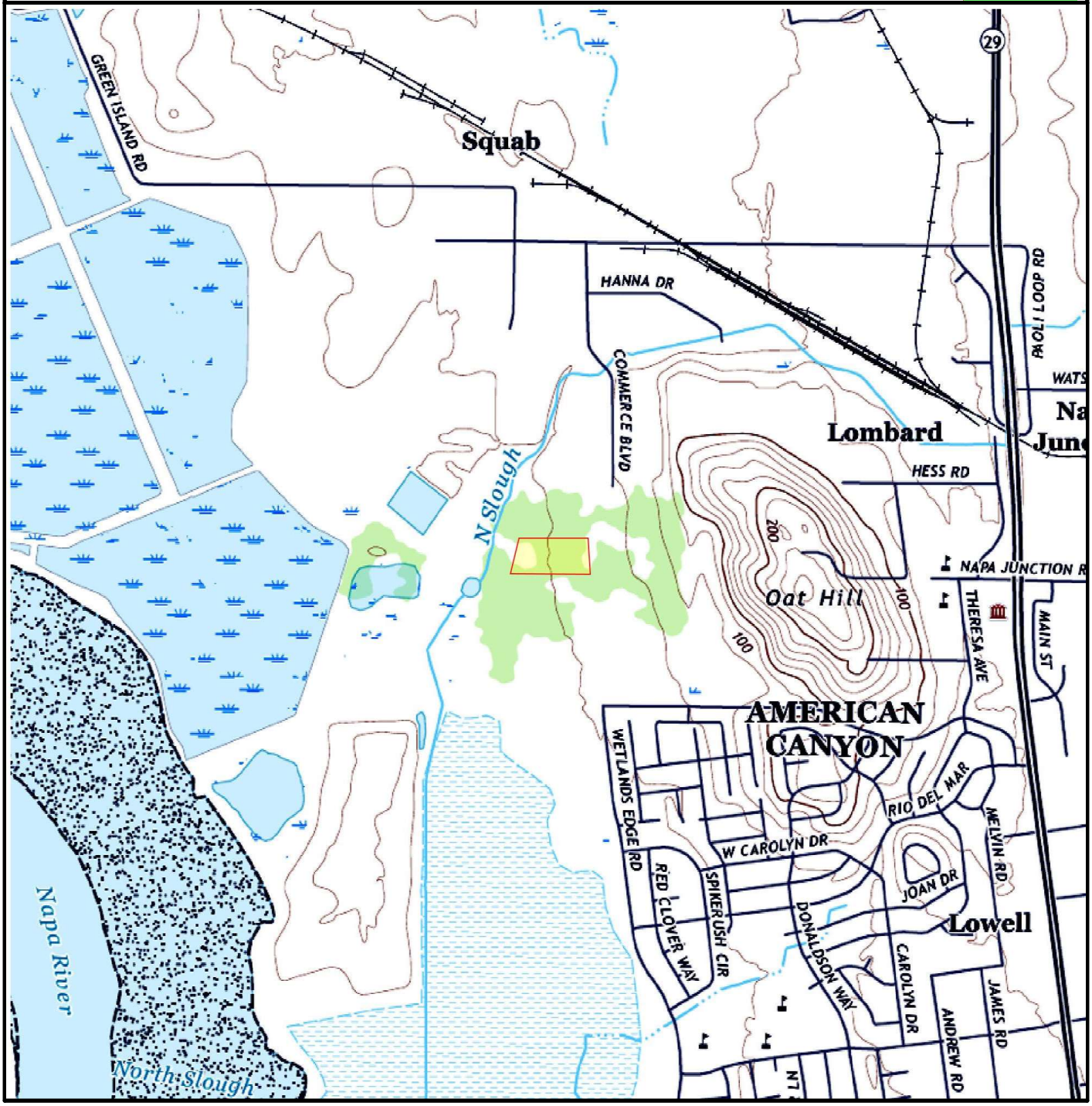


SUBJECT NAME: SDG Commerce 220
ADDRESS: 1055 Commerce Ct, American Canyon, CA, 94503
LAT/LONG: 38.185594 / -122.273824

PREPARED FOR: Cameron-Cole - Alameda
ORDER #: 84481
REPORT DATE: 03/10/2023

SUBJECT QUAD:

MAP NAME: Cuttings_Wharf
MAP YEAR: 2021
REVISION YEAR: N/R
SCALE: 1 : 24000
Part 1



APPENDIX E

Interview Documentation

Interview with User

Date: March 28, 2023

Name: Ms. Janna Waligorski Hudson

Title: Senior Project Manager, FCS

Interviewed by: Angela Mattmiller, Cameron-Cole, LLC

Ms. Hudson was interviewed via a User Questionnaire completed on March 28, 2023. Ms. Hudson indicated that she was unaware of chemicals, hazardous substances, or petroleum products that are present on the property. Ms. Hudson indicated that she was not aware of any AULs, such as engineering controls, land use restrictions, and institutional controls that have been filed or recorded on the subject property.

A summary of the responses is provided in Section 4.0, and a copy of the questionnaire is provided in Appendix B.

Interview with Owner

Date: March 22, 2023

Name: Mr. John Wojtas

Title: Owner Representative, Stravinski Development Group

Interviewed by: Angela Mattmiller, Cameron-Cole, LLC

Mr. Wojtas was interviewed via an Owner Questionnaire completed on March 22, 2023. Mr. Wojtas indicated that he was unaware of chemicals, hazardous substances, or petroleum products that are present on the property. Mr. Wojtas indicated that he was not aware of any AULs, such as engineering controls, land use restrictions, and institutional controls that have been filed or recorded on the subject property.

A copy of the questionnaire is provided in Appendix B.

Interview with Local officials

Date: March 24, 2023

Name: American Canyon Fire Protection District

Title: N/A

Interviewed by: Angela Mattmiller, Cameron-Cole, LLC

Cameron-Cole contacted the American Canyon Fire Protection District on March 24, 2023, requesting records pertaining to fires or responses to incidents, spills, or releases of hazardous substances or petroleum products at, or in the immediate vicinity of the property. Martha Banuelos responded on behalf of the American Canyon Fire Protection District and stated that, "The Fire District does not maintain environmental records on properties."

Date: March 24, 2023

Name: County of Napa Environmental Health Division

Title: N/A

Interviewed by: Angela Mattmiller, Cameron-Cole, LLC

Cameron-Cole contacted the County of Napa Environmental Health Division on March 24, 2023, requesting records regarding environmental violations, releases, or hazardous material or petroleum product storage, storage tanks, or other environmental concerns associated with the subject property. A public records request was submitted to the County of Napa Public Records Department. No response has been received as of the date of this report.

APPENDIX F

Professional Qualifications

Qualifications of Professionals

Angela Mattmiller, Environmental Scientist

Angela Mattmiller has more than nine years of relevant professional experience in environmental science. Ms. Mattmiller has at least six years of experience performing Phase I and Phase II Environmental Site Assessments. Ms. Mattmiller is responsible for performing technical data analysis, developing site maps of groundwater elevation and chemical iso-concentration contours, and preparing environmental reports for various projects. Ms. Mattmiller is specifically involved in assisting clients with their various compliance requirements.

Education:	B.S. Environmental Science, University of Florida, 2002
	ASTM International Standard Practice E1527 Training Courses for Phase I Environmental Site Assessments, 2006, 2007 and 2008
	Environmental Date Resources Due Diligence at Dawn AAI and Liability Course, 2007
Certifications:	40-hour Hazardous Waste Operations and Emergency Response Training
	8-hour HAZWOPER Refresher

Robert Fagerness, PE, Senior Engineer

Mr. Fagerness has more than 33 years of experience conducting Phase I and II Environmental Site Assessments (ESAs), site remediation, environmental compliance, and permitting. His expertise includes collecting soil, groundwater, and soil vapor data; interpreting data; developing SWPPP and Spill Prevention Control and Countermeasure plans; conducting Hazardous Waste Tank Assessments; and providing various environmental permitting services, including human health risk evaluation and National Pollutant Discharge Elimination System (NPDES) permits. Mr. Fagerness is adept in project and construction management, environmental and subsurface investigations, and local, State, and federal agencies coordination. Mr. Fagerness has worked with numerous clients, including investors and lending institutions, to complete thousands of Phase I ESAs for property transactions as part of the due diligence process in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. He has assessed different property types, including commercial, industrial, and multi-family residential developments, as well as self-storage facilities, gas stations, automotive services developments, dry cleaners, day cares, and hotels.

Education:	B.S. Environmental Resources Engineering University of California, Humboldt, CA
	M.S. Civil Engineering, University of California, Sacramento, CA
Certifications:	Licensed Civil Engineer California

Appendix G: Hydrology Report

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HYDROLOGY REPORT

For

SDG Commerce 220 Distribution Center
American Canyon, CA

Prepared for:

SDG Commerce 220, LLC
413 W. Yosemite Avenue, Suite 105
Madera, CA 93637



Project #4122068.0
September 29, 2023

1515 Fourth Street, Napa, CA 94559 www.rsacivil.com 707.252.3301.v 707.252.4966.f

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I. EXECUTIVE SUMMARY 1
II. PURPOSE 1
III. EXISTING CONDITIONS 1
IV. PROPOSED DEVELOPMENT 2
IV.A. RUN-ON SUBBASINS 2
IV. B. ON-SITE SUBBASINS 2
IV. C. STORMWATER DETENTION 2
V. PRE & POST-DEVELOPMENT DRAINAGE STUDY 3
V. A. EXISTING CONDITIONS 3
V. B. PROPOSED CONDITIONS 3
VI. CONCLUSION 4

ATTACHMENTS

1. SITE MAPS & CALCULATION PARAMETERS
2. SSA OUTPUT FILES

I. Executive Summary

A hydrograph analysis was performed for the proposed SDG Commerce 220 Distribution Center project located at Commerce Boulevard in American Canyon, California.

The project site hydrology study was calculated using the following City of American Canyon Engineering Standards Plan and Specifications (ESPS):

Design Area: Detention Basin

Design Method: Unit Hydrograph

Design Return: 100-year/24-hour

Peak discharge from a detention basin shall not exceed 90% of the undeveloped peak flow from the 24-hour, 100-year event.

Pre-Project Peak Flow Rates:

Existing Watershed: $Q_{100\text{-yr-Pre}} = 29.3$ cfs
Existing Watershed: $Q_{100\text{-yr-Pre-90\%}} = 26.4$ cfs

Post-Project Watershed peak flow rates:

Proposed Detention: $V_{100\text{yr-Detained}} = 30{,}930\ ft^3$
Proposed Watershed: $Q_{100\text{-yr Post-Total}} = 24.5$ cfs < 26.4 cfs

Post-project peak runoff rates do not exceed the allowable 90% pre-project stormwater runoff rate, see SSA Output Files for detailed watershed calculations in Attachment 2.

II. Purpose

This report addresses City of American Canyon drainage and hydromodification requirements for the Commerce 220 Distribution Center, including a pre and post construction hydrologic analysis and on-site stormwater detention.

III. Existing Conditions

The Commerce 220 Distribution Center project is located on Commerce Court in American Canyon, California, see Vicinity Map in Attachment 1. The parcel APN is 058-030-069, and has an area of 10.17 acres. The existing site is currently undeveloped.

An additional 13.68 acres is included in the runoff calculations to account for run-on from the upslope drainage from the adjacent property, just east of this development. The run-on areas include a 0.98-acre segment of impervious area on Commerce Boulevard and 12.70 acres of wooded area. The point of concentration for this upslope drainage is the culvert and drain inlets at Commerce Court. Access to the site will be from Commerce Court.

The predominant soil type in the project area is Haire Clay Loam, which is of the Hydraulic Soil Group D, see Hydrologic Soil Map in Attachment 1. The property is relatively flat with gentle slopes draining toward the west. Runoff from the property flows via surface flows to the west property line. Stormwater is ultimately conveyed through the North Slough to the Napa River.

IV. Proposed Development

The project will include the construction of a new warehouse building, including a new driveway, loading docks, and parking areas. A detention pond with biotreatment will be installed on site per BASMAA standards.

IV.A. Run-On Subbasins

The site run-on analysis was determined using the American Canyon Engineering Standard Plans & Specifications (ESPS) and modeled in Autodesk Storm & Sanitary Analysis (SSA). Run-on flows east to west and will be capture by swales and conveyed under Commerce Boulevard by three (3) concrete culverts. Approximately one third of the project run-on will follow existing drainage paths through a series of mapped wetlands and will not be treated or detained in the detention pond. This portion of the run-on will be routed and discharged towards the northwest corner of the property. The remaining two thirds of the run-on will be routed through the on-site storm drain system to the detention pond, see Proposed Conditions Hydrology Exhibit in Attachment 1.

IV.B. On-site Subbasins

Subbasin B consists of the warehouse roof, ADA walkway access, parking lots and driveway surrounding the warehouse. Subbasin C consists of wetlands located to the north of the warehouse, and vegetated area located to the west. Subbasin D consists of the truck loading docks and two parking lots located to the south of the warehouse. Subbasin D has been accounted for in the Hydrology Analysis for ICC 330 Distribution Center, see Proposed Conditions Hydrology Exhibit in Attachment 1.

IV.C. Stormwater Detention

The detention pond is located along the west property line and is designed with biotreatment. The detention pond capacity is 87,684 cubic feet, and will store and treat stormwater from the on-site and offsite watershed. The hydrograph analysis results in a required storage volume of 30,930 cubic feet for the proposed development. Four storm drain outlet structures will be located on the west side of the pond. All structures will control the stormwater outflow through side opening cutouts in the precast structure and receives low flows from the bio-retention sub-drain network. Each side opening has a 12” wide by 9” tall cut-out at an elevation of 11.00 ft, as shown on the Use Permit Plans. The side openings allow stormwater to infiltrate into the biotreatment during smaller storm events per BASMAA standards. Stormwater from the detention pond will discharge to level spreaders along the western property line.

V. PRE & POST-DEVELOPMENT DRAINAGE STUDY

This drainage study computes the pre and post development peak flow rates from the project area for the 100-year, 24-hour design storm. The flow rates were calculated using the City of American Canyon Engineering Standards Plan and Specifications (ESPS). The stormwater quality design storm of intensity (I) = 0.2 in/hr is addressed by the BASMAA Stormwater Control Plan.

The following precipitation data for the project site was collected from the NOAA Atlas 14, Volume 6 – California, see NOAA Precipitation Frequency table in Attachment 1:

Table 1 - NOAA Precipitation Data

Storm Frequency	Precipitation Depth (inches, in 24-hour period)
100-yr	7.36

V. A. Existing Conditions

The method used for studying the site stormwater runoff is a hydrograph analysis. The unit hydrograph rainfall distribution for the City of American Canyon falls under Type IA - Distribution. The SCS hydrograph analysis is based on the National Resources Conservation Service Technical Release 55 for Urban Hydrology for Small Watersheds (TR-55) method.

One watershed was used to model the existing run-on from the upslope area and runoff from the project site. The existing runoff for the 100-year, 24-hour storm event is as follows, refer to SSA Output Files in Attachment 2 for calculations.

Table 2 – Existing Stormwater Runoff

Existing Watershed	A	23.84	[acre]
Existing Impervious Area	A_{Paved}	0.98	[acre]
Existing Curve Number	CN	83	
Existing Time of Concentration	T_C	28.15	[min]
Total Existing Peak Flow (100-yr)	**$Q_{100YEAR-EXIST}$**	**29.3**	**[cfs]**

V. B. Proposed Conditions

The post-development peak flow rates were designed not to exceed 90% of the pre-development peak flow rates for 100-year, 24-hour storm event per City of American Canyon ESPS. Stormwater detention will be provided by a detention pond with biotreatment. Benefits from infiltration within the detention pond were included in the hydrology calculations and were obtained from the USGS Web Soil Survey, see Attachment 1 for additional information.

The proposed watershed was modeled with four subbasin watersheds. Subbasin A is the run-on. Subbasin B is the proposed project run-off to be detained. Subbasin C is the undeveloped run-off that will drain directly off-site (un-detained). Subbasin D is the proposed project run-off that was

included in the Hydrology Analysis for ICC 330 Distribution Center project. The proposed runoff for the 100-year, 24-hour storm event can be found in the SSA Output Files in Attachment 2.

Table 3 – Proposed Stormwater Runoff

Proposed Total Watershed	A	26.62	[acre]
Proposed Total Impervious Area	A_{Paved}	4.25	[acre]
Proposed Curve Number	CN	Varies	
Proposed Time of Concentration	T_C	Varies	[min]
Total Proposed Peak Flow (100-yr)	**$Q_{100YEAR-EXIST}$**	**24.5**	**[cfs]**

Note: A summary of the subbasins can be found in the found in the SSA output files in Attachment 2.

VI. CONCLUSION

The proposed project will result in a net decrease in peak stormwater runoff rates from the existing site conditions. The proposed detention pond, metering structures, and outfalls along the western property line will result in a proposed peak runoff rate (24.5 cfs) that is less than the existing peak runoff rate (29.3 cfs) and less than 90% of the existing peak runoff rate (26.4 cfs). Therefore, the proposed stormwater detention and treatment satisfies the City of American Canyon ESPS and the BASMAA stormwater standards.

ATTACHMENT 1

SITE MAPS &
CALCULATION PARAMETERS

SDG COMMERCE 220 DISTRIBUTION CENTER

V I C I N I T Y M A P

AMERICAN CANYON CALIFORNIA



VICINITY MAP

SCALE: 1" = 3000'

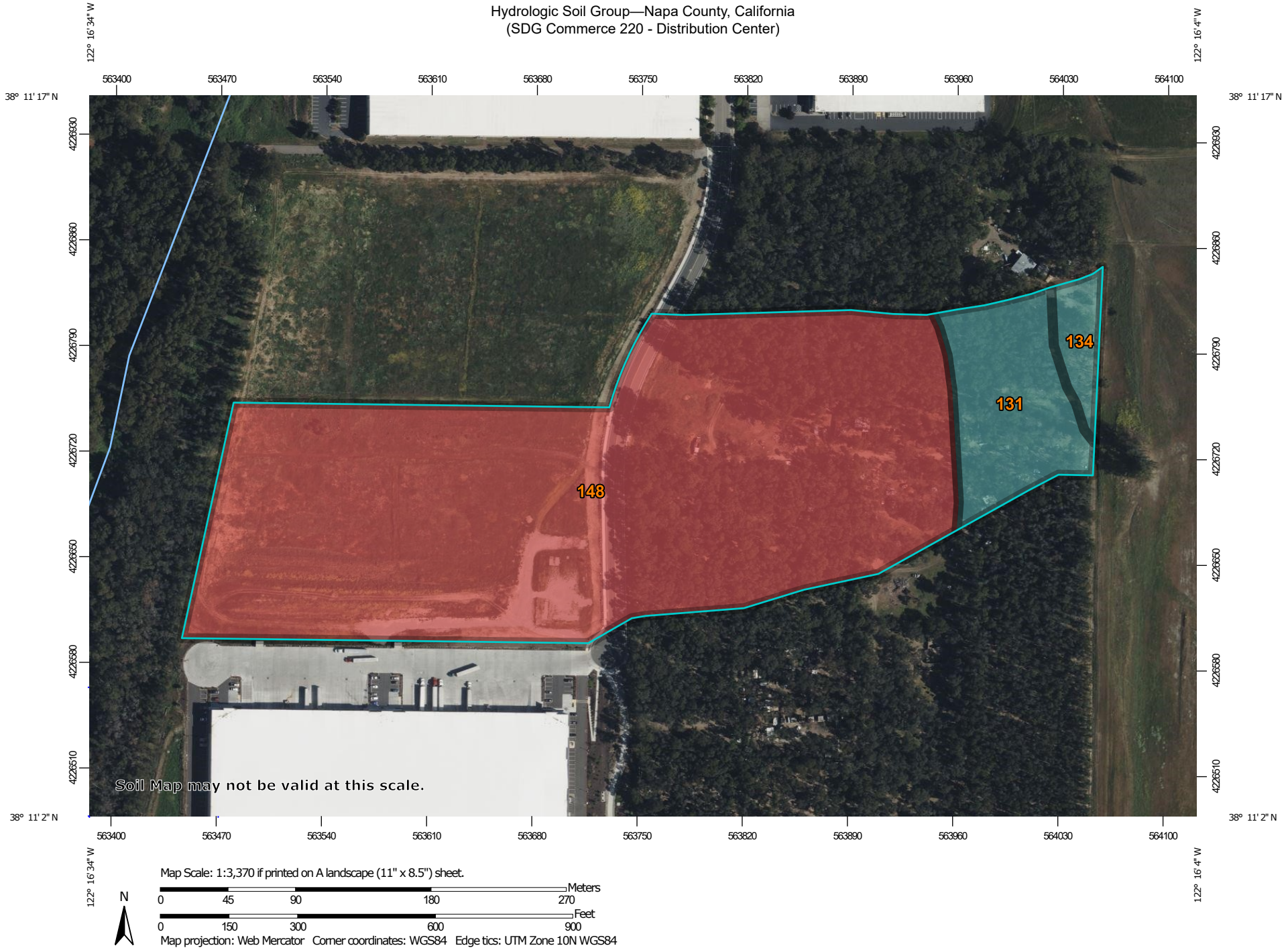
RSA+

1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE|707|252.3301
+ www.RSAcivil.com +

RSA+| CONSULTING CIVIL ENGINEERS + SURVEYORS + est. 1980

JUL. 20, 2023 4122068.0 Exh-Vic Map.dwg

Hydrologic Soil Group—Napa County, California
(SDG Commerce 220 - Distribution Center)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 15, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2022—Apr 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
131	Fagan clay loam, 5 to 15 percent slopes	C	2.6	10.9%
134	Fagan clay loam, 30 to 50 percent slopes, slipped	C	0.6	2.6%
148	Haire clay loam, 2 to 9 percent slopes	D	20.6	86.5%
Totals for Area of Interest			**23.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

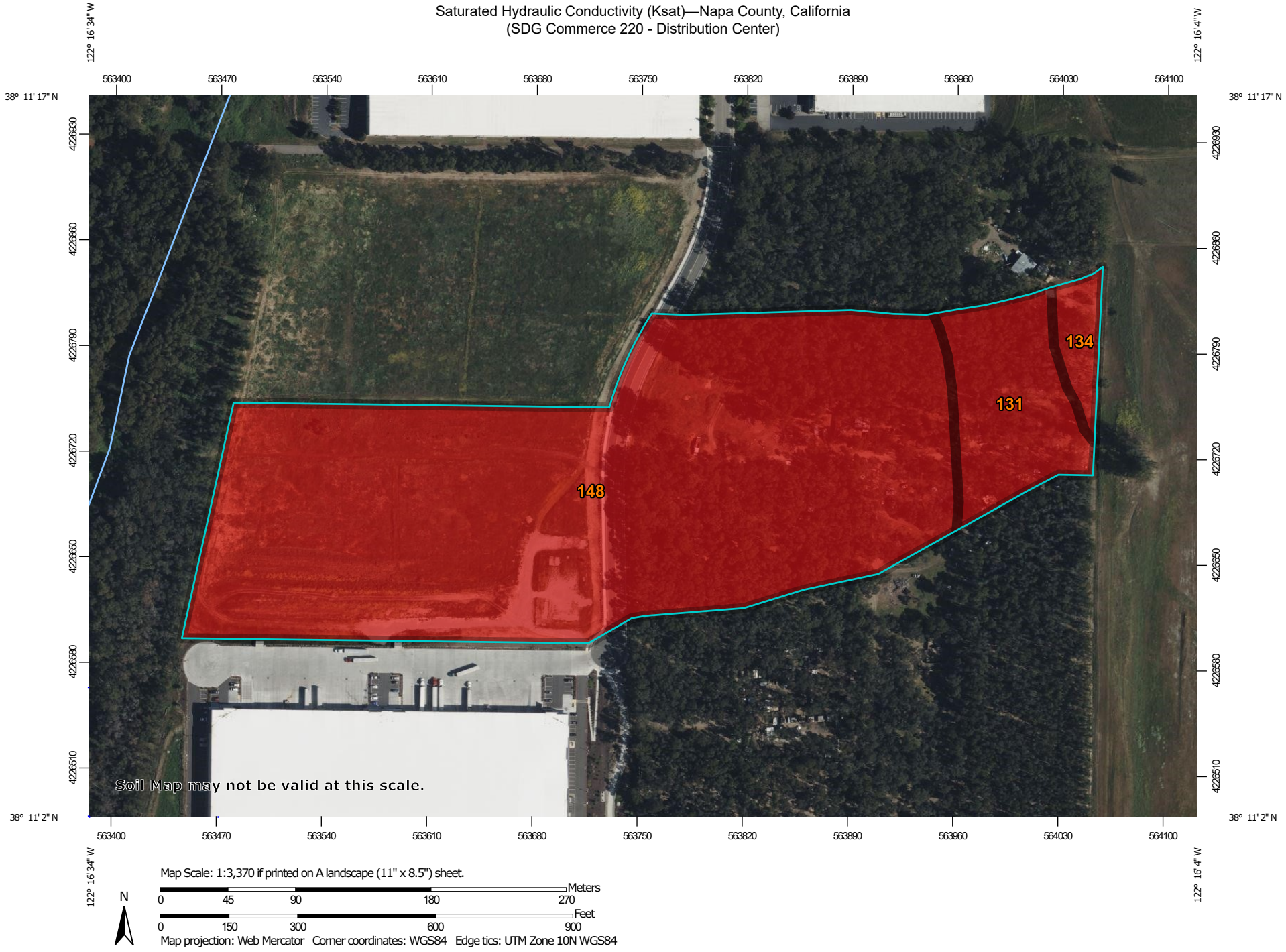
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Saturated Hydraulic Conductivity (Ksat)—Napa County, California
(SDG Commerce 220 - Distribution Center)



Map Scale: 1:3,370 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 45 90 180 270

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

= 2.7000

Not rated or not available

Soil Rating Lines

= 2.7000

Not rated or not available

Soil Rating Points

= 2.7000

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 15, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2022—Apr 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Saturated Hydraulic Conductivity (Ksat)

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
131	Fagan clay loam, 5 to 15 percent slopes	2.7000	2.6	10.9%
134	Fagan clay loam, 30 to 50 percent slopes, slipped	2.7000	0.6	2.6%
148	Haire clay loam, 2 to 9 percent slopes	2.7000	20.6	86.5%
Totals for Area of Interest			**23.8**	**100.0%**

Description

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Rating Options

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

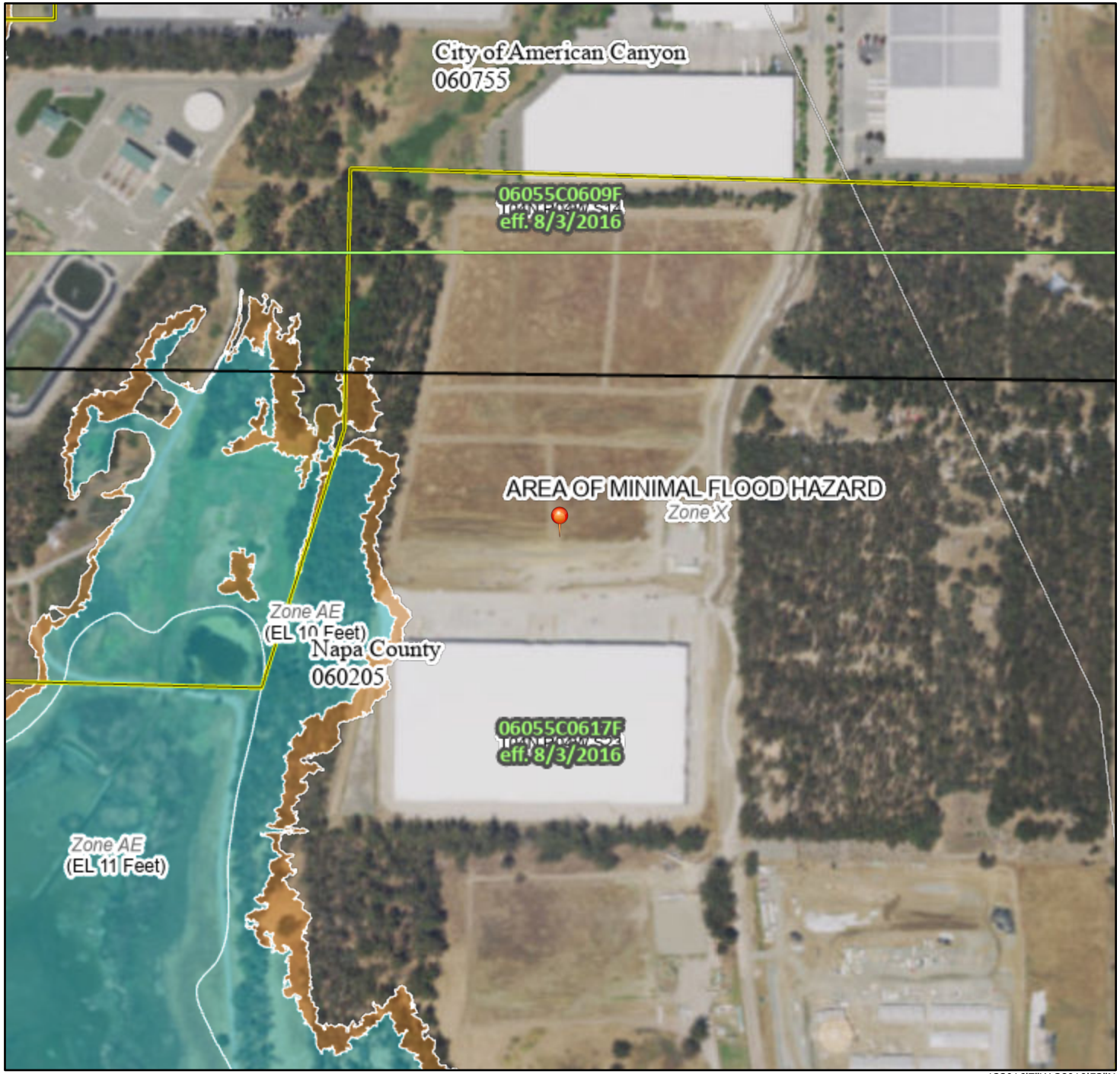
Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

National Flood Hazard Layer FIRMette

FEMA

122°16'44"W 38°11'22"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

122°16'7"W 38°10'53"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/16/2022 at 2:41 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used f regulatory purposes.

2807

NOAA Atlas 14, Volume 6, Version 2
Location name: American Canyon, California, USA*
Latitude: 38.1854°, Longitude: -122.2702°
Elevation: 30.98 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.116 (0.103-0.132)	0.145 (0.129-0.165)	0.185 (0.164-0.210)	0.218 (0.191-0.250)	0.265 (0.224-0.316)	0.302 (0.249-0.370)	0.341 (0.273-0.430)	0.383 (0.297-0.499)	0.442 (0.327-0.604)	0.489 (0.348-0.695)
10-min	0.166 (0.148-0.189)	0.208 (0.185-0.236)	0.264 (0.235-0.301)	0.312 (0.274-0.359)	0.379 (0.320-0.454)	0.433 (0.357-0.531)	0.489 (0.392-0.617)	0.549 (0.426-0.715)	0.633 (0.468-0.865)	0.701 (0.499-0.996)
15-min	0.201 (0.179-0.228)	0.251 (0.224-0.286)	0.320 (0.284-0.364)	0.377 (0.331-0.434)	0.459 (0.387-0.549)	0.524 (0.432-0.642)	0.592 (0.474-0.746)	0.664 (0.515-0.865)	0.766 (0.566-1.05)	0.848 (0.603-1.20)
30-min	0.281 (0.250-0.318)	0.350 (0.312-0.398)	0.446 (0.395-0.508)	0.526 (0.462-0.605)	0.639 (0.540-0.764)	0.730 (0.601-0.894)	0.825 (0.661-1.04)	0.926 (0.718-1.20)	1.07 (0.789-1.46)	1.18 (0.840-1.68)
60-min	0.398 (0.355-0.452)	0.498 (0.443-0.565)	0.633 (0.561-0.721)	0.747 (0.656-0.859)	0.908 (0.767-1.09)	1.04 (0.854-1.27)	1.17 (0.938-1.48)	1.32 (1.02-1.71)	1.52 (1.12-2.07)	1.68 (1.19-2.38)
2-hr	0.592 (0.528-0.672)	0.734 (0.653-0.834)	0.925 (0.820-1.05)	1.08 (0.952-1.25)	1.31 (1.10-1.56)	1.48 (1.22-1.81)	1.66 (1.33-2.09)	1.85 (1.44-2.41)	2.12 (1.56-2.89)	2.32 (1.65-3.30)
3-hr	0.750 (0.668-0.850)	0.929 (0.826-1.06)	1.17 (1.04-1.33)	1.37 (1.20-1.57)	1.64 (1.38-1.96)	1.86 (1.53-2.27)	2.08 (1.66-2.62)	2.31 (1.79-3.01)	2.63 (1.94-3.59)	2.88 (2.05-4.09)
6-hr	1.08 (0.964-1.23)	1.35 (1.20-1.53)	1.70 (1.51-1.94)	1.99 (1.74-2.28)	2.38 (2.01-2.85)	2.69 (2.22-3.29)	3.00 (2.40-3.78)	3.33 (2.58-4.33)	3.77 (2.79-5.15)	4.12 (2.93-5.85)
12-hr	1.44 (1.28-1.63)	1.83 (1.63-2.08)	2.35 (2.08-2.68)	2.77 (2.43-3.18)	3.34 (2.82-3.99)	3.78 (3.12-4.63)	4.22 (3.38-5.33)	4.68 (3.63-6.10)	5.31 (3.92-7.25)	5.79 (4.12-8.23)
24-hr	1.92 (1.73-2.18)	2.52 (2.26-2.85)	3.28 (2.95-3.74)	3.90 (3.48-4.47)	4.74 (4.11-5.58)	5.38 (4.59-6.44)	6.02 (5.03-7.36)	6.68 (5.46-8.36)	7.57 (5.97-9.81)	8.26 (6.32-11.0)
2-day	2.44 (2.19-2.76)	3.19 (2.87-3.62)	4.17 (3.74-4.74)	4.96 (4.42-5.68)	6.02 (5.22-7.08)	6.82 (5.82-8.17)	7.63 (6.38-9.32)	8.46 (6.90-10.6)	9.57 (7.54-12.4)	10.4 (7.98-13.9)
3-day	2.82 (2.54-3.20)	3.70 (3.33-4.20)	4.83 (4.33-5.49)	5.73 (5.11-6.56)	6.94 (6.02-8.17)	7.86 (6.70-9.41)	8.78 (7.33-10.7)	9.71 (7.93-12.1)	11.0 (8.64-14.2)	11.9 (9.13-15.9)
4-day	3.14 (2.83-3.56)	4.12 (3.70-4.67)	5.38 (4.82-6.11)	6.38 (5.68-7.30)	7.71 (6.69-9.07)	8.71 (7.43-10.4)	9.72 (8.12-11.9)	10.7 (8.76-13.4)	12.1 (9.52-15.6)	13.1 (10.0-17.5)
7-day	3.88 (3.50-4.40)	5.14 (4.62-5.83)	6.72 (6.03-7.64)	7.96 (7.10-9.11)	9.58 (8.31-11.3)	10.8 (9.19-12.9)	12.0 (9.99-14.6)	13.1 (10.7-16.4)	14.7 (11.6-19.0)	15.8 (12.1-21.1)
10-day	4.39 (3.95-4.97)	5.83 (5.24-6.62)	7.63 (6.84-8.67)	9.02 (8.04-10.3)	10.8 (9.39-12.7)	12.1 (10.4-14.5)	13.4 (11.2-16.4)	14.7 (12.0-18.4)	16.3 (12.9-21.2)	17.5 (13.4-23.4)
20-day	5.72 (5.15-6.48)	7.60 (6.83-8.62)	9.90 (8.88-11.3)	11.7 (10.4-13.4)	13.9 (12.1-16.4)	15.5 (13.2-18.6)	17.0 (14.2-20.8)	18.5 (15.1-23.2)	20.4 (16.1-26.5)	21.8 (16.7-29.1)
30-day	6.90 (6.21-7.82)	9.11 (8.19-10.3)	11.8 (10.6-13.4)	13.8 (12.3-15.8)	16.4 (14.2-19.3)	18.2 (15.5-21.8)	20.0 (16.7-24.4)	21.6 (17.7-27.0)	23.7 (18.7-30.7)	25.2 (19.3-33.6)
45-day	8.51 (7.66-9.64)	11.1 (9.96-12.6)	14.2 (12.7-16.1)	16.5 (14.7-18.9)	19.5 (16.9-22.9)	21.5 (18.4-25.8)	23.5 (19.6-28.7)	25.4 (20.7-31.7)	27.7 (21.8-35.8)	29.3 (22.5-39.1)
60-day	10.2 (9.20-11.6)	13.1 (11.8-14.9)	16.6 (14.9-18.9)	19.2 (17.1-22.0)	22.5 (19.5-26.4)	24.8 (21.1-29.7)	26.9 (22.5-32.9)	29.0 (23.7-36.3)	31.6 (24.9-40.9)	33.4 (25.5-44.5)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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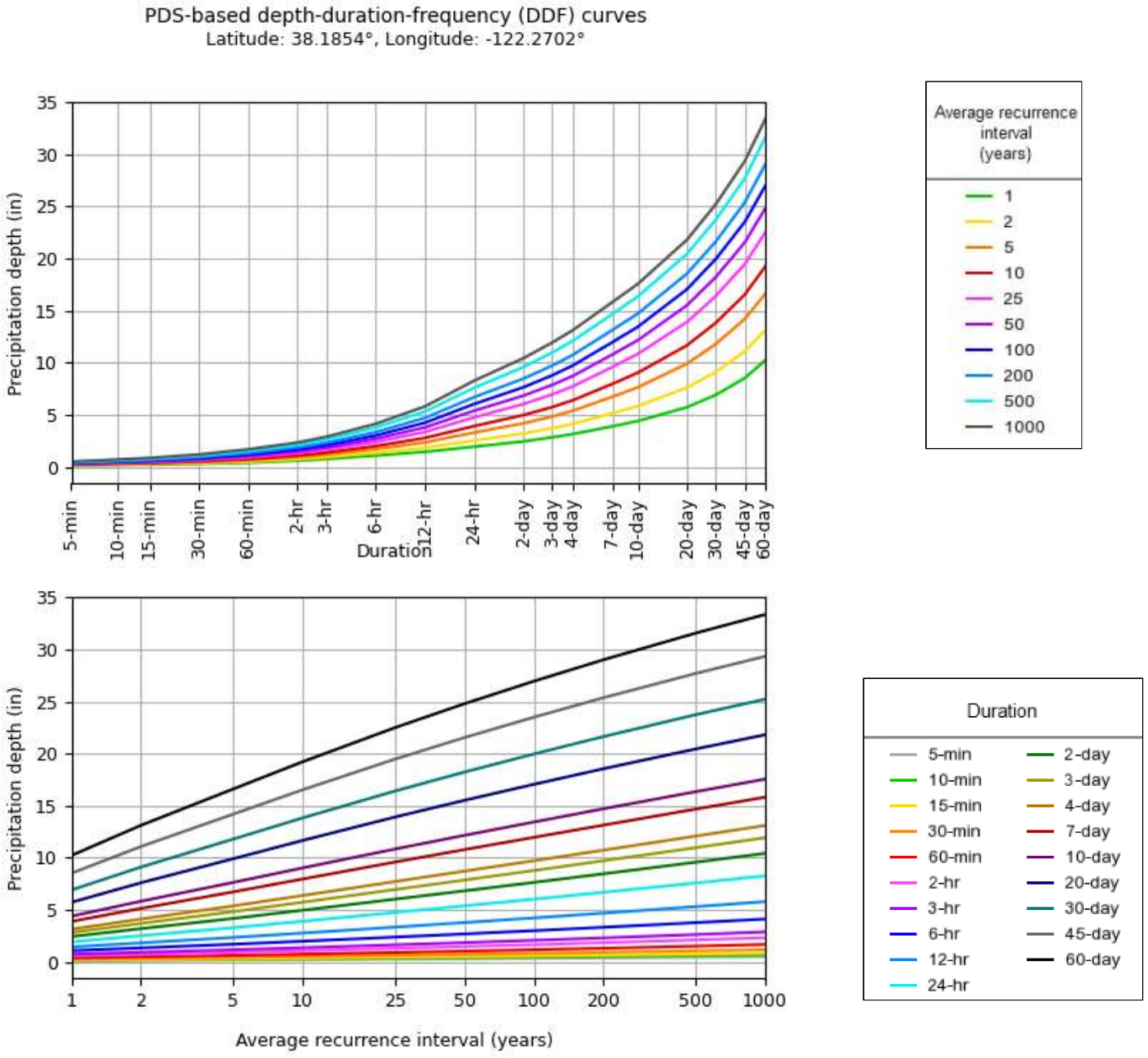
PF graphical



NOAA Atlas 14, Volume 6, Version 2

Created (GMT): Wed Nov 2 15:32:39 2022

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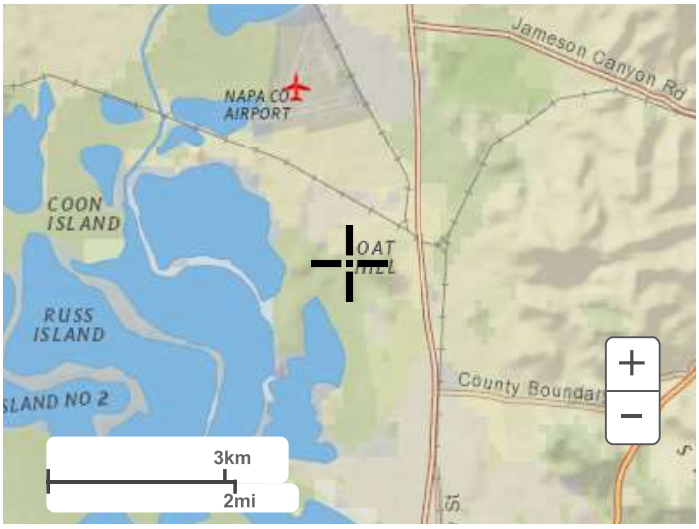
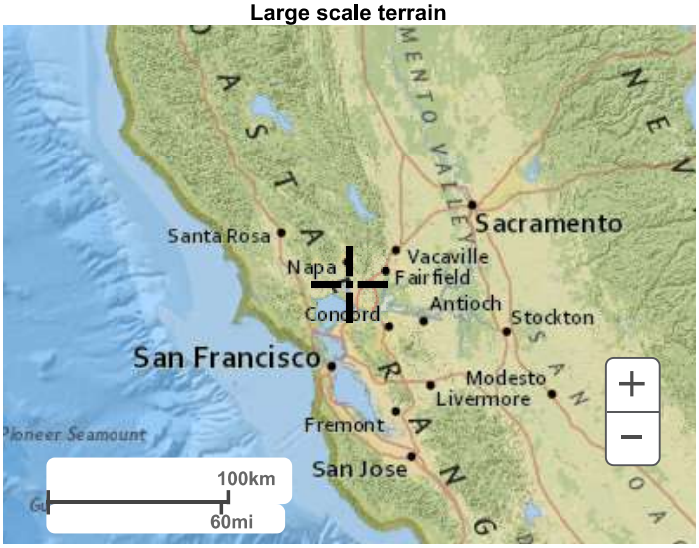
Maps & aerials

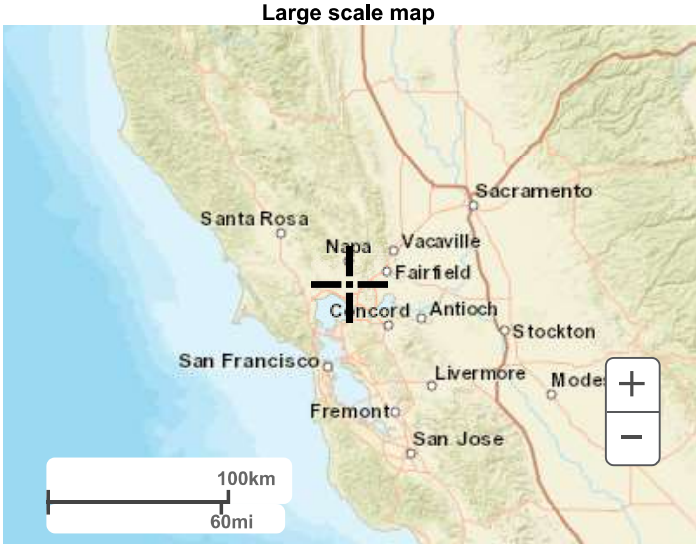
Small scale terrain



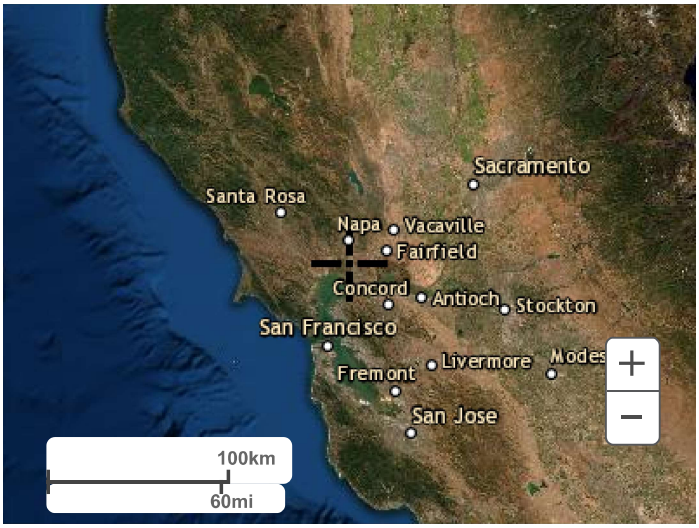
Large scale terrain



Large scale map



Large scale aerial



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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

NOAA Atlas 14, Volume 6, Version 2
Location name: American Canyon, California, USA*
Latitude: 38.1857°, Longitude: -122.2732°
Elevation: m/ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.39 (1.24-1.57)	1.73 (1.54-1.97)	2.21 (1.96-2.51)	2.59 (2.28-2.99)	3.16 (2.66-3.78)	3.60 (2.96-4.42)	4.07 (3.26-5.14)	4.57 (3.54-5.95)	5.27 (3.90-7.20)	5.83 (4.14-8.29)
10-min	0.996 (0.888-1.13)	1.24 (1.10-1.41)	1.58 (1.40-1.80)	1.86 (1.63-2.14)	2.26 (1.91-2.71)	2.58 (2.13-3.16)	2.92 (2.34-3.68)	3.28 (2.54-4.27)	3.77 (2.79-5.16)	4.18 (2.97-5.94)
15-min	0.800 (0.716-0.908)	1.00 (0.892-1.14)	1.27 (1.13-1.45)	1.50 (1.32-1.73)	1.82 (1.54-2.18)	2.08 (1.72-2.55)	2.35 (1.88-2.96)	2.64 (2.05-3.44)	3.04 (2.25-4.16)	3.37 (2.40-4.79)
30-min	0.558 (0.498-0.632)	0.696 (0.620-0.792)	0.886 (0.786-1.01)	1.04 (0.918-1.20)	1.27 (1.07-1.52)	1.45 (1.19-1.78)	1.64 (1.31-2.06)	1.84 (1.43-2.39)	2.12 (1.57-2.89)	2.35 (1.67-3.33)
60-min	0.396 (0.353-0.450)	0.495 (0.440-0.562)	0.629 (0.558-0.717)	0.742 (0.652-0.853)	0.902 (0.762-1.08)	1.03 (0.848-1.26)	1.16 (0.932-1.47)	1.31 (1.01-1.70)	1.51 (1.11-2.06)	1.67 (1.18-2.37)
2-hr	0.294 (0.262-0.334)	0.365 (0.324-0.414)	0.460 (0.408-0.524)	0.538 (0.473-0.619)	0.648 (0.548-0.775)	0.735 (0.606-0.900)	0.824 (0.660-1.04)	0.919 (0.713-1.20)	1.05 (0.776-1.43)	1.15 (0.820-1.64)
3-hr	0.248 (0.221-0.281)	0.307 (0.273-0.349)	0.386 (0.342-0.440)	0.452 (0.397-0.519)	0.542 (0.458-0.648)	0.613 (0.505-0.751)	0.686 (0.550-0.865)	0.763 (0.592-0.994)	0.869 (0.642-1.19)	0.952 (0.677-1.35)
6-hr	0.180 (0.160-0.204)	0.223 (0.199-0.254)	0.281 (0.249-0.320)	0.329 (0.289-0.378)	0.394 (0.333-0.472)	0.445 (0.367-0.545)	0.497 (0.398-0.627)	0.551 (0.427-0.717)	0.624 (0.462-0.853)	0.682 (0.485-0.969)
12-hr	0.118 (0.105-0.134)	0.151 (0.134-0.171)	0.193 (0.171-0.220)	0.228 (0.200-0.262)	0.275 (0.232-0.329)	0.311 (0.256-0.381)	0.347 (0.278-0.438)	0.385 (0.299-0.501)	0.436 (0.323-0.596)	0.476 (0.338-0.676)
24-hr	0.079 (0.072-0.090)	0.104 (0.093-0.118)	0.136 (0.122-0.154)	0.161 (0.144-0.184)	0.196 (0.170-0.230)	0.222 (0.189-0.266)	0.248 (0.207-0.304)	0.276 (0.225-0.345)	0.312 (0.246-0.404)	0.341 (0.261-0.454)
2-day	0.050 (0.045-0.057)	0.066 (0.059-0.075)	0.086 (0.077-0.098)	0.102 (0.091-0.117)	0.124 (0.108-0.146)	0.141 (0.120-0.168)	0.157 (0.131-0.192)	0.174 (0.142-0.218)	0.197 (0.155-0.255)	0.215 (0.164-0.286)
3-day	0.039 (0.035-0.044)	0.051 (0.046-0.058)	0.066 (0.060-0.075)	0.079 (0.070-0.090)	0.095 (0.083-0.112)	0.108 (0.092-0.129)	0.121 (0.101-0.147)	0.133 (0.109-0.167)	0.151 (0.119-0.195)	0.164 (0.125-0.218)
4-day	0.032 (0.029-0.037)	0.042 (0.038-0.048)	0.055 (0.050-0.063)	0.066 (0.059-0.075)	0.079 (0.069-0.094)	0.090 (0.077-0.108)	0.100 (0.084-0.122)	0.111 (0.090-0.138)	0.124 (0.098-0.161)	0.135 (0.103-0.180)
7-day	0.023 (0.021-0.026)	0.030 (0.027-0.034)	0.040 (0.036-0.045)	0.047 (0.042-0.054)	0.056 (0.049-0.066)	0.064 (0.054-0.076)	0.070 (0.059-0.086)	0.077 (0.063-0.097)	0.086 (0.068-0.112)	0.093 (0.071-0.124)
10-day	0.018 (0.016-0.021)	0.024 (0.022-0.027)	0.031 (0.028-0.036)	0.037 (0.033-0.043)	0.045 (0.039-0.053)	0.050 (0.043-0.060)	0.055 (0.046-0.068)	0.061 (0.049-0.076)	0.067 (0.053-0.087)	0.072 (0.055-0.096)
20-day	0.012 (0.011-0.013)	0.016 (0.014-0.018)	0.020 (0.018-0.023)	0.024 (0.021-0.028)	0.029 (0.025-0.034)	0.032 (0.027-0.038)	0.035 (0.029-0.043)	0.038 (0.031-0.048)	0.042 (0.033-0.055)	0.045 (0.034-0.060)
30-day	0.009 (0.009-0.011)	0.013 (0.011-0.014)	0.016 (0.015-0.018)	0.019 (0.017-0.022)	0.023 (0.020-0.027)	0.025 (0.021-0.030)	0.027 (0.023-0.034)	0.030 (0.024-0.037)	0.033 (0.026-0.042)	0.035 (0.027-0.046)
45-day	0.008 (0.007-0.009)	0.010 (0.009-0.012)	0.013 (0.012-0.015)	0.015 (0.014-0.017)	0.018 (0.015-0.021)	0.020 (0.017-0.024)	0.022 (0.018-0.026)	0.023 (0.019-0.029)	0.025 (0.020-0.033)	0.027 (0.021-0.036)
60-day	0.007 (0.006-0.008)	0.009 (0.008-0.010)	0.011 (0.010-0.013)	0.013 (0.012-0.015)	0.015 (0.013-0.018)	0.017 (0.015-0.020)	0.019 (0.016-0.023)	0.020 (0.016-0.025)	0.022 (0.017-0.028)	0.023 (0.018-0.031)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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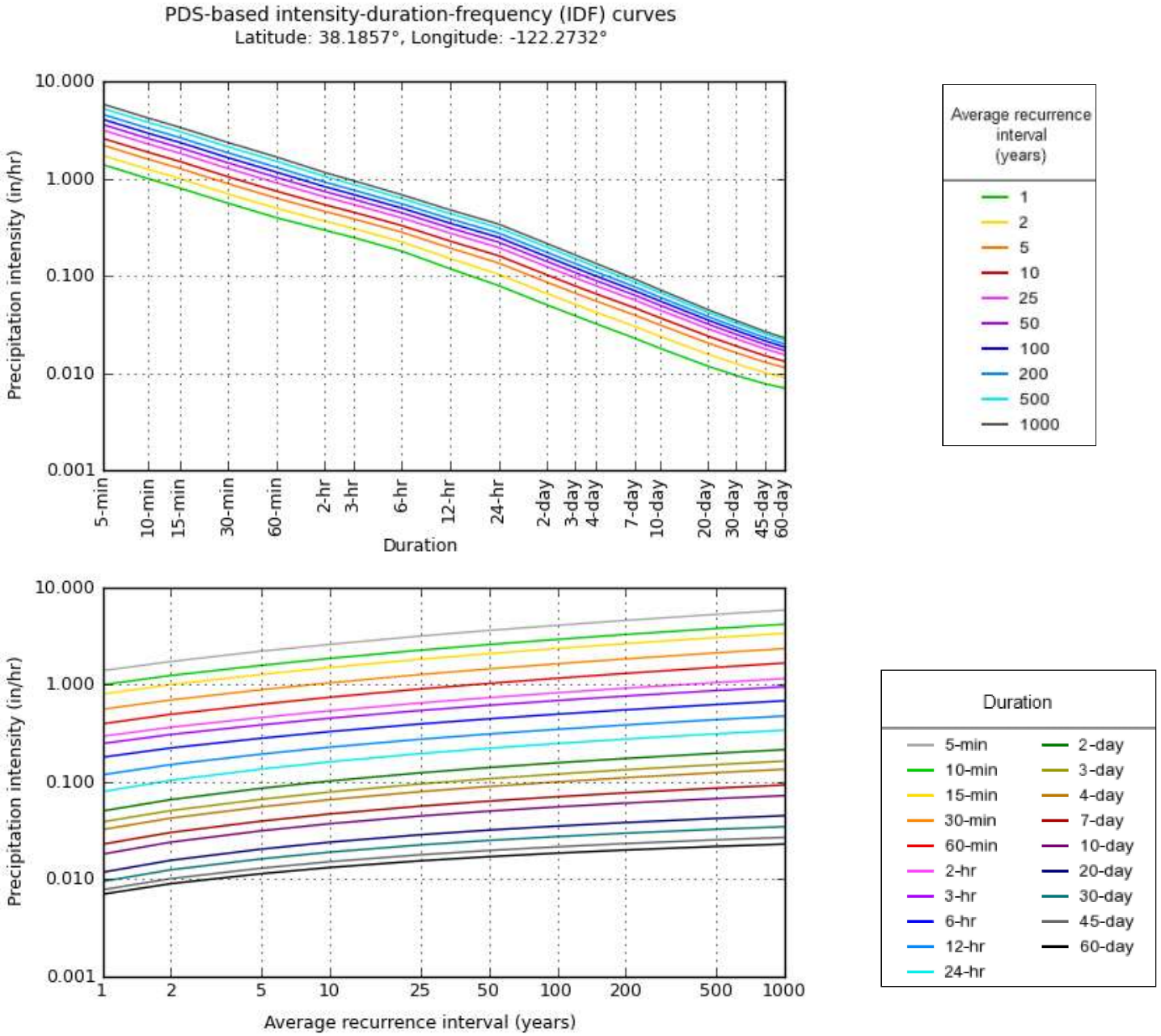
PF graphical



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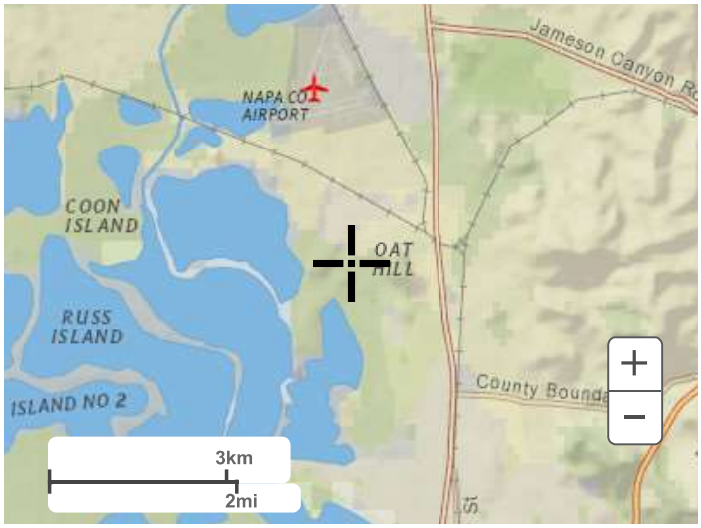
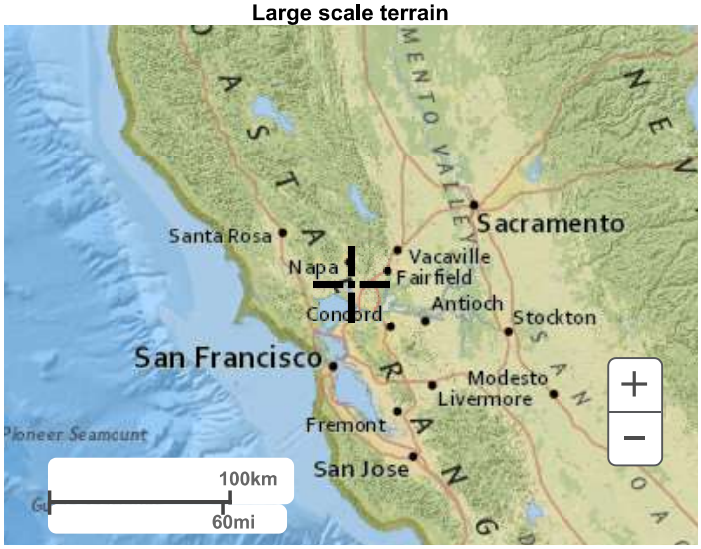
Maps & aerials

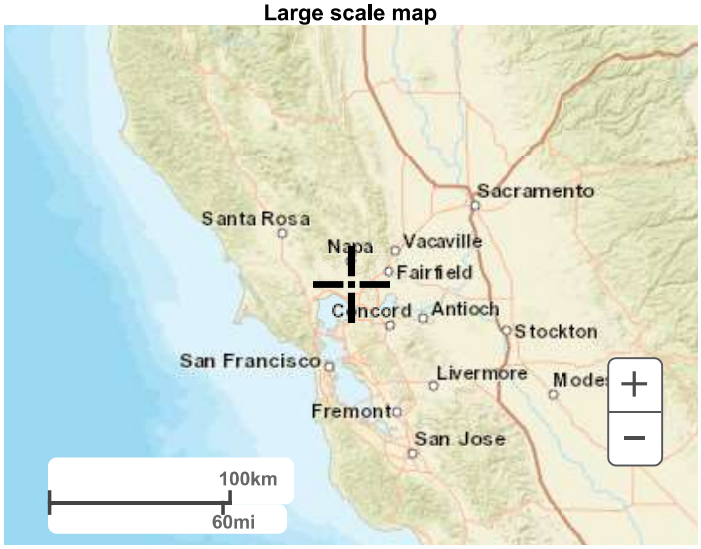
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



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National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
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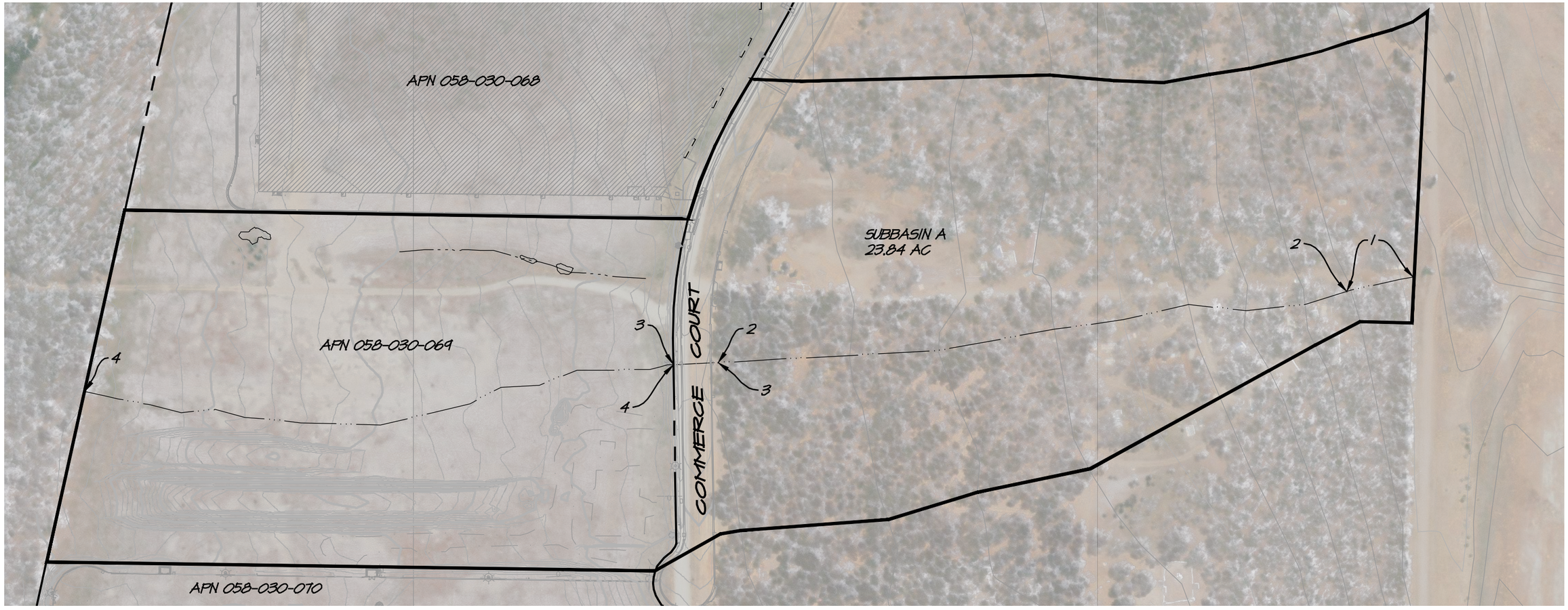
EXISTING CONDITIONS HYDROLOGY EXHIBIT

AMERICAN CANYON CALIFORNIA



TIME OF CONCENTRATION

SUBBASIN	SEGMENT NUMBER	TYPE OF FLOW	SURFACE/PIPE DESCRIPTION	LENGTH (FEET)	AVG. SLOPE (%)
A	1	SHEET FLOW	UNPAVED	100	8.90
	2	SHALLOW FLOW	UNPAVED	933	4.80
	3	CHANNELIZED FLOW	PIPE	71	1.00
	4	SHALLOW FLOW	UNPAVED	881	2.12

GRAPHIC SCALE

150 0 150 300

(IN FEET)
1 inch = 150 FT

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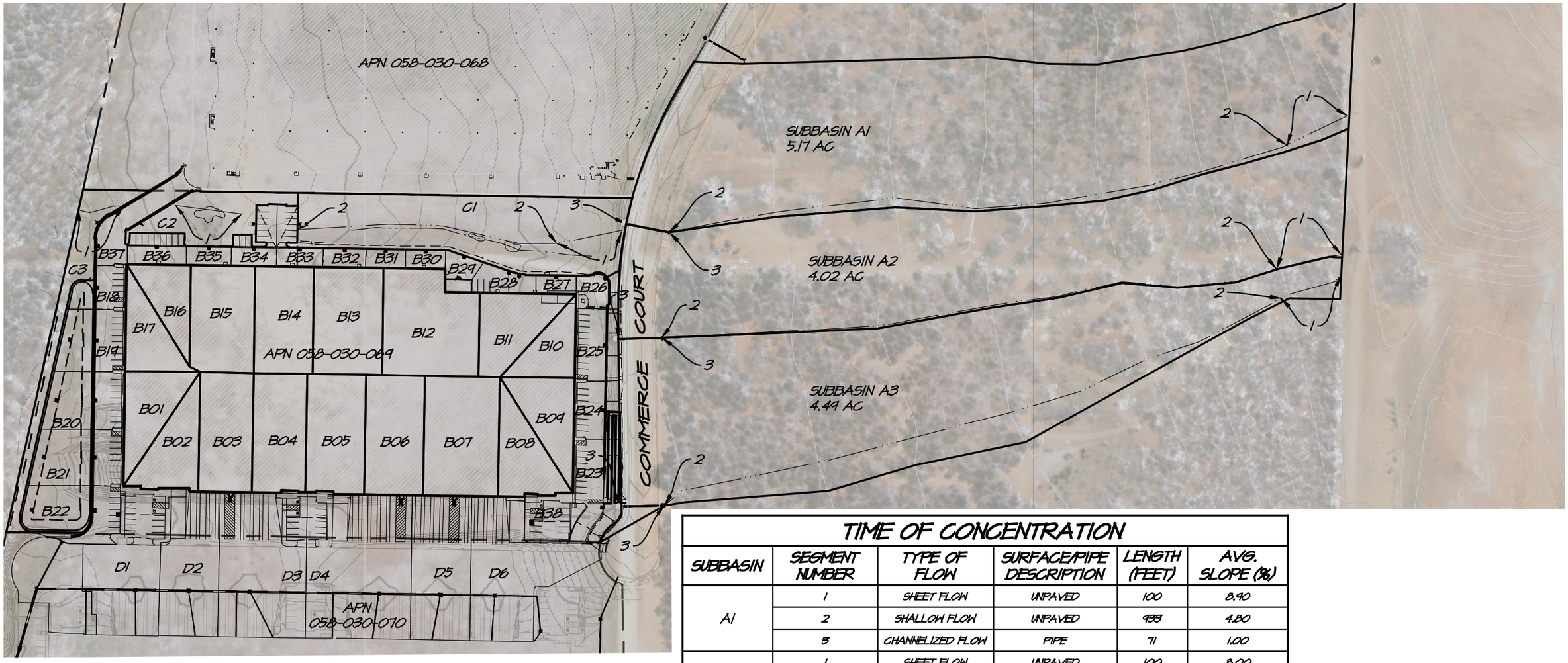
PROPOSED CONDITIONS HYDROLOGY EXHIBIT

AMERICAN CANYON CALIFORNIA



NOTES

MINIMUM TC FOR TR-55 IS 6 MINUTES

TIME OF CONCENTRATION

SUBBASIN	SEGMENT NUMBER	TYPE OF FLOW	SURFACE/PIPE DESCRIPTION	LENGTH (FEET)	AVG. SLOPE (%)
A1	1	SHEET FLOW	UNPAVED	100	8.90
	2	SHALLOW FLOW	UNPAVED	933	4.80
	3	CHANNELIZED FLOW	PIPE	71	1.00
A2	1	SHEET FLOW	UNPAVED	100	8.00
	2	SHALLOW FLOW	UNPAVED	925	4.00
	3	CHANNELIZED FLOW	PIPE	79	1.00
A3	1	SHEET FLOW	UNPAVED	100	7.00
	2	SHALLOW FLOW	UNPAVED	964	4.00
	3	CHANNELIZED FLOW	PIPE	75	1.00
B_{1-25}	ROOF TO DOWNSPOUT = 6 MIN (ASSUMED)*				
C1	1	SHEET FLOW	UNPAVED	100	4.30
	2	SHALLOW FLOW	UNPAVED	390	1.64
C2	1	SHEET FLOW	UNPAVED	100	0.60
C3	1	SHEET FLOW	UNPAVED	100	2.39
$D_{(OFF-SITE)}$	TC ESTIMATED ON SDG COMMERCE 220 HYDROLOGY REPORT**				

GRAPHIC SCALE

150 0 150 300

(IN FEET)
1 inch = 150 FT

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Table 2-2a Runoff curve numbers for urban areas [1]

Cover description: Cover type and hydrologic condition	Average percent impervious area [2]	Curve numbers for hydrologic soil group: A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.) [3]:					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) [4]		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas (pervious areas only, no vegetation) [5]		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

[1] Average runoff condition, and $I_a = 0.2S$.

[2] The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

[3] CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

[4] Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

[5] Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

Table 2-2c Runoff curve numbers for other agricultural lands [1]

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition	A	B	C	D
Pasture, grassland, or range—continuous forage for grazing. [2]	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element. [3]	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	30 [4]	48	65	73
Woods—grass combination (orchard or tree farm). [5]	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods. [6]	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	30 [4]	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

1 Average runoff condition, and $I_a = 0.2S$.

2 *Poor:* <50%) ground cover or heavily grazed with no mulch.
Fair: 50 to 75% ground cover and not heavily grazed.
Good: > 75% ground cover and lightly or only occasionally grazed.

3 *Poor:* <50% ground cover.
Fair: 50 to 75% ground cover.
Good: >75% ground cover.

4 Actual curve number is less than 30; use CN = 30 for runoff computations.

5 CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

6 *Poor:* Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.
Fair: Woods are grazed but not burned, and some forest litter covers the soil.
Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

ATTACHMENT 2

SSA OUTPUT FILES

Project Description

File Name ..... SDG 220 PRE -100YR.SPF

Project Options

Flow Units ..... CFS
Elevation Type ..... Elevation
Hydrology Method ..... SCS TR-55
Time of Concentration (TOC) Method ..... SCS TR-55
Link Routing Method ..... Kinematic Wave
Enable Overflow Ponding at Nodes ..... YES
Skip Steady State Analysis Time Periods ... NO

Analysis Options

Start Analysis On ..... Mar 06, 2023 00:00:00
End Analysis On ..... Mar 07, 2023 00:00:00
Start Reporting On ..... Mar 06, 2023 00:00:00
Antecedent Dry Days ..... 0 days
Runoff (Dry Weather) Time Step ..... 0 01:00:00 days hh:mm:ss
Runoff (Wet Weather) Time Step ..... 0 00:05:00 days hh:mm:ss
Reporting Time Step ..... 0 00:00:30 days hh:mm:ss
Routing Time Step ..... 30 seconds

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1		Time Series	TS-02	Cumulative	inches	California	Napa (Napa Metro)	100	7.36	SCS Type IA 24-hr

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A	23.84	0.00	83	7.36	5.33	127.16	29.3	0 00:28:15

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft^2)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	Junction	0.00	10.50	0.00	6.00	0.00	29.3	0.00	0.00	10.50	0 00:00	0.00	0.00
2	Out-01	Outfall	10.50					29.3	10.50					

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	Link-29	Pipe	Jun-01	Out-01	2018.28	0.00	0.00	0.0000	0.000	0.0150	29.3	0.0	0.00	0.00	0.00	0.00	0.00	

Subbasin Hydrology

Subbasin : A

Input Data

Area (ac)	23.84
Peak Rate Factor	0.00
Weighted Curve Number	82.70
Rain Gage ID	Rain Gage-01

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
50 - 75% grass cover, Fair	10.16	D	84.00
Woods & grass combination, Fair	2.60	C	76.00
Woods & grass combination, Fair	0.60	C	76.00
Woods & grass combination, Fair	9.50	D	82.00
Paved parking & roofs	0.98	D	98.00
Composite Area & Weighted CN	23.84		82.70

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft²)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.8	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	8.9	0.00	0.00
2 yr, 24 hr Rainfall (in) :	4.47	0.00	0.00
Velocity (ft/sec) :	0.10	0.00	0.00
Computed Flow Time (min) :	17.41	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	933	881	0.00
Slope (%) :	4.8	2.12	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.53	2.35	0.00
Computed Flow Time (min) :	4.41	6.25	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	71	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft²) :	1.77	0.00	0.00
Wetted Perimeter (ft) :	4.71	0.00	0.00
Velocity (ft/sec) :	6.47	0.00	0.00
Computed Flow Time (min) :	0.18	0.00	0.00

Total TOC (min) 28.25

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	5.33
Peak Runoff (cfs)	29.27
Weighted Curve Number	82.70
Time of Concentration (days hh:mm:ss)	0 00:28:15

Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft²)
1	Jun-01	0.00	10.50	10.50	0.00	0.00	6.00	-4.50	0.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Jun-01	29.3	29.3	0.00	0.00	0.00	10.50	0.00	0.00	0 00:00	0 00:00	0.00	0.00

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Flap Gate	No. of Barrels
1	Link-29	2018.28	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1

Pipe Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Froude Number	Reported Condition
1	Link-29	29.3	0 08:08	0.0	0.00	0.00		0.00	0.00	0.00		

$Q_{100\text{-}YR\text{-}PRE}$



$Q_{100\text{-}YR\text{-}90\%} = 26.3$ CFS

Project Description

File Name ..... SDG 220 Post.SPF

Project Options

Flow Units ..... CFS
Elevation Type ..... Elevation
Hydrology Method ..... SCS TR-55
Time of Concentration (TOC) Method ..... SCS TR-55
Link Routing Method ..... Kinematic Wave
Enable Overflow Ponding at Nodes ..... YES
Skip Steady State Analysis Time Periods ... YES

Analysis Options

Start Analysis On ..... Mar 13, 2023 00:00:00
End Analysis On ..... Mar 14, 2023 00:00:00
Start Reporting On ..... Mar 13, 2023 00:00:00
Antecedent Dry Days ..... 0 days
Runoff (Dry Weather) Time Step ..... 0 01:00:00 days hh:mm:ss
Runoff (Wet Weather) Time Step ..... 0 00:05:00 days hh:mm:ss
Reporting Time Step ..... 0 00:00:30 days hh:mm:ss
Routing Time Step ..... 30 seconds

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1		Time Series	TS- 100yr	Cumulative	inches	None	None	100	7.36	SCS Type IA 24-hr

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A01	5.17	484.00	81	7.36	5.19	26.80	6.7	0 00:15:27
2	A02	4.02	484.00	81	7.36	5.15	20.70	5.2	0 00:16:18
3	A03	4.49	484.00	83	7.36	5.34	23.96	5.9	0 00:18:52
4	B01	0.22	484.00	98	7.36	7.12	1.57	0.4	0 00:06:00
5	B02	0.23	484.00	98	7.36	7.12	1.62	0.4	0 00:06:00
6	B03	0.33	484.00	98	7.36	7.12	2.34	0.6	0 00:06:00
7	B04	0.33	484.00	98	7.36	7.12	2.32	0.6	0 00:06:00
8	B05	0.36	484.00	98	7.36	7.12	2.55	0.6	0 00:06:00
9	B06	0.36	484.00	98	7.36	7.12	2.57	0.7	0 00:06:00
10	B07	0.46	484.00	98	7.36	7.12	3.28	0.8	0 00:06:00
11	B08	0.23	484.00	98	7.36	7.12	1.64	0.4	0 00:06:00
12	B09	0.22	484.00	98	7.36	7.12	1.57	0.4	0 00:06:00
13	B10	0.16	484.00	98	7.36	7.12	1.14	0.3	0 00:06:00
14	B11	0.25	484.00	98	7.36	7.12	1.80	0.4	0 00:06:00
15	B12	0.49	484.00	98	7.36	7.12	3.47	0.9	0 00:06:00
16	B13	0.38	484.00	98	7.36	7.12	2.72	0.7	0 00:06:00
17	B14	0.32	484.00	98	7.36	7.12	2.30	0.6	0 00:06:00
18	B15	0.35	484.00	98	7.36	7.12	2.50	0.6	0 00:06:00
19	B16	0.17	484.00	98	7.36	7.12	1.19	0.3	0 00:06:00
20	B17	0.19	484.00	98	7.36	7.12	1.33	0.3	0 00:06:00
21	B18	0.11	484.00	98	7.36	7.12	0.77	0.2	0 00:06:00
22	B19	0.21	484.00	98	7.36	7.12	1.51	0.4	0 00:06:00
23	B20	0.24	484.00	98	7.36	7.12	1.68	0.4	0 00:06:00
24	B21	0.26	484.00	98	7.36	7.12	1.87	0.5	0 00:06:00
25	B22	0.27	484.00	98	7.36	7.12	1.93	0.5	0 00:06:00
26	B23	0.23	484.00	98	7.36	7.12	1.65	0.4	0 00:06:00
27	B24	0.14	484.00	98	7.36	7.12	0.97	0.2	0 00:06:00
28	B25	0.16	484.00	98	7.36	7.12	1.14	0.3	0 00:06:00
29	B26	0.08	484.00	98	7.36	7.12	0.57	0.2	0 00:06:00
30	B27	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
31	B28	0.08	484.00	98	7.36	7.12	0.57	0.2	0 00:06:00
32	B29	0.06	484.00	98	7.36	7.12	0.43	0.1	0 00:06:00
33	B30	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
34	B31	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
35	B32	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
36	B33	0.09	484.00	98	7.36	7.12	0.64	0.2	0 00:06:00
37	B34	0.10	484.00	98	7.36	7.12	0.70	0.2	0 00:06:00
38	B35	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
39	B36	0.09	484.00	98	7.36	7.12	0.65	0.2	0 00:06:00
40	B37	0.17	484.00	98	7.36	7.12	1.21	0.3	0 00:06:00
41	B38	0.13	484.00	98	7.36	7.12	0.91	0.2	0 00:06:00
42	C01	1.09	484.00	72	7.36	4.14	4.51	1.1	0 00:05:00
43	C02	0.28	484.00	72	7.36	4.14	1.16	0.3	0 00:29:07
44	C03	0.29	484.00	72	7.36	4.14	1.19	0.3	0 00:16:48
45	D01	0.48	484.00	98	7.36	7.12	3.45	0.9	0 00:06:00
46	D02	0.41	484.00	98	7.36	7.12	2.94	0.7	0 00:06:00
47	D03	0.65	484.00	98	7.36	7.12	4.62	1.1	0 00:06:00
48	D04	0.78	484.00	98	7.36	7.12	5.55	1.4	0 00:06:00
49	D05	0.44	484.00	98	7.36	7.12	3.14	0.8	0 00:06:00
50	D06	0.56	484.00	98	7.36	7.12	3.97	1.0	0 00:06:00
51	D07	0.29	484.00	98	7.36	7.12	2.06	0.5	0 00:06:00

Q_{max} to DI-36x36

Q_{max} to DI-36x36

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	A1.1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.3	19.28	0.00	1.73	0 00:00	0.00	0.00
2	A1-Structure	Junction	16.03	37.64	16.03	37.64	0.00	5.7	18.56	0.00	19.08	0 00:00	0.00	0.00
3	A2.1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.4	19.31	0.00	1.69	0 00:00	0.00	0.00
4	A2-Structure	Junction	15.56	20.55	15.56	20.55	0.00	6.3	18.43	0.00	2.12	0 00:00	0.00	0.00
5	A3-Structure	Junction	15.13	19.11	15.13	19.11	0.00	6.7	16.35	0.00	2.76	0 00:00	0.00	0.00
6	A4-Structure	Junction	14.86	20.27	14.86	20.27	0.00	12.6	17.16	0.00	3.11	0 00:00	0.00	0.00
7	A5-Structure	Junction	13.86	20.07	13.86	20.07	0.00	13.2	18.52	0.00	1.55	0 00:00	0.00	0.00
8	B1-Structure	Junction	12.20	20.13	12.20	20.13	0.00	0.5	12.33	0.00	7.80	0 00:00	0.00	0.00
9	C1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.4	19.31	0.00	1.69	0 00:00	0.00	0.00
10	C2-Structure	Junction	12.20	36.86	12.20	36.86	0.00	0.8	18.42	0.00	18.44	0 00:00	0.00	0.00
11	D1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.3	19.29	0.00	1.71	0 00:00	0.00	0.00
12	D2-Structure	Junction	12.20	38.65	12.20	38.65	0.00	0.7	18.40	0.00	20.25	0 00:00	0.00	0.00
13	D3-Structure	Junction	10.50	16.50	10.50	13.25	0.00	0.7	10.65	0.00	5.85	0 00:00	0.00	0.00
14	D4-Structure	Junction	10.63	13.10	10.63	14.00	0.00	4.3	11.53	0.00	1.57	0 00:00	0.00	0.00
15	E10.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.6	19.35	0.00	1.72	0 00:00	0.00	0.00
16	E10-Structure	Junction	12.29	20.26	12.29	20.26	0.00	3.4	18.70	0.00	1.56	0 00:00	0.00	0.00
17	E11-Structure	Junction	11.95	20.26	11.95	20.26	0.00	3.6	12.64	0.00	7.62	0 00:00	0.00	0.00
18	E13.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.6	19.37	0.00	1.70	0 00:00	0.00	0.00
19	E13-Structure	Junction	11.61	20.26	11.61	20.26	0.00	4.2	18.79	0.00	1.47	0 00:00	0.00	0.00
20	E14.2-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.3	19.28	0.00	1.79	0 00:00	0.00	0.00
21	E14-Structure	Junction	11.22	20.25	11.22	20.25	0.00	4.7	18.64	0.00	1.61	0 00:00	0.00	0.00
22	E15-Structure	Junction	10.79	20.25	10.79	20.25	0.00	5.0	11.77	0.00	8.48	0 00:00	0.00	0.00
23	E16-Structure	Junction	10.62	20.13	10.62	20.13	0.00	5.2	11.60	0.00	8.53	0 00:00	0.00	0.00
24	E1-Structure	Junction	15.10	19.22	15.10	19.22	0.00	0.2	15.26	0.00	3.96	0 00:00	0.00	0.00
25	E2-Structure	Junction	14.73	20.26	14.73	20.26	0.00	0.2	14.91	0.00	5.35	0 00:00	0.00	0.00
26	E4.1-Structure	Junction	19.10	21.08	19.10	21.08	0.00	0.4	19.32	0.00	1.76	0 00:00	0.00	0.00
27	E4-Structure	Junction	14.45	20.30	14.45	20.30	0.00	0.2	14.64	0.00	5.66	0 00:00	0.00	0.00
28	E5-Structure	Junction	14.37	20.09	14.37	20.09	0.00	0.8	18.64	0.00	1.45	0 00:00	0.00	0.00
29	E6-Structure	Junction	14.02	20.20	14.02	20.20	0.00	0.9	14.40	0.00	5.80	0 00:00	0.00	0.00
30	E7.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.9	19.41	0.00	1.66	0 00:00	0.00	0.00
31	E7-Structure	Junction	13.23	20.26	13.23	20.26	0.00	1.8	18.75	0.00	1.51	0 00:00	0.00	0.00
32	E8-Structure	Junction	12.93	20.26	12.93	20.26	0.00	1.9	13.43	0.00	6.83	0 00:00	0.00	0.00
33	E9.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.7	19.38	0.00	1.69	0 00:00	0.00	0.00
34	E9-Structure	Junction	12.62	20.26	12.62	20.26	0.00	2.7	18.87	0.00	1.39	0 00:00	0.00	0.00
35	Jun-01	Junction	0.00	10.50	0.00	0.00	0.00	6.4	0.00	0.00	10.50	0 00:00	0.00	0.00
36	Jun-02	Junction	0.00	6.00	0.00	6.00	0.00	6.7	32.70	0.00	0.80	0 00:00	0.00	0.00
37	Jun-03	Junction	0.00	6.00	0.00	6.00	0.00	6.7	30.70	0.00	0.80	0 00:00	0.00	0.00
38	Jun-04	Junction	19.20	6.00	0.00	6.00	0.00	7.8	19.20	0.00	0.00	0 00:00	0.00	0.00
39	Jun-05	Junction	18.20	6.00	0.00	6.00	0.00	7.8	19.13	0.00	0.57	0 00:00	0.00	0.00
40	Jun-06	Junction	14.60	6.00	0.00	6.00	0.00	8.1	14.60	0.00	0.00	0 00:00	0.00	0.00
41	Jun-07	Junction	13.20	6.00	0.00	6.00	0.00	8.3	14.04	0.00	0.66	0 00:00	0.00	0.00
42	Jun-08	Junction	19.20	6.00	0.00	6.00	0.00	7.8	20.13	0.00	0.57	0 00:00	0.00	0.00
43	Jun-09	Junction	14.60	6.00	0.00	0.00	0.00	8.1	15.44	0.00	0.66	0 00:00	0.00	0.00
44	Out-1A15-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	17.0	12.05	0.00	4.45	0 00:00	0.00	0.00
45	Out-1B1-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	0.5	10.63	0.00	5.87	0 00:00	0.00	0.00
46	Out-1C2-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	0.8	10.67	0.00	5.83	0 00:00	0.00	0.00
47	Out-1D4-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	4.3	11.40	0.00	5.10	0 00:00	0.00	0.00
48	Out-1E16-Pipe	Junction	10.50	16.50	10.50	0.00	0.00	5.2	11.37	0.00	5.13	0 00:00	0.00	0.00
49	Out-1Pipe (53)	Junction	10.50	16.50	10.50	16.50	0.00	4.3	11.29	0.00	5.21	0 00:00	0.00	0.00
50	Out-1Pipe (59)	Junction	10.50	16.50	10.50	16.50	0.00	4.3	11.39	0.00	5.11	0 00:00	0.00	0.00
51	Out-1Pipe (62)	Junction	10.50	16.50	10.50	16.50	0.00	4.3	11.39	0.00	5.11	0 00:00	0.00	0.00
52	Structure - 100	Junction	19.10	19.83	19.10	19.83	0.00	0.6	19.36	0.00	0.47	0 00:00	0.00	0.00
53	Structure - 101	Junction	11.91	19.47	11.91	19.47	0.00	15.7	18.66	0.00	0.81	0 00:00	0.00	0.00
54	Structure - 102	Junction	19.10	19.83	19.10	19.83	0.00	0.6	19.36	0.00	0.47	0 00:00	0.00	0.00
55	Structure - 103	Junction	11.59	19.48	11.59	19.48	0.00	16.2	18.66	0.00	0.82	0 00:00	0.00	0.00
56	Structure - 104	Junction	19.10	19.83	19.10	19.83	0.00	0.4	19.34	0.00	0.49	0 00:00	0.00	0.00
57	Structure - 105	Junction	11.09	19.41	11.09	19.41	0.00	16.6	18.55	0.00	0.86	0 00:00	0.00	0.00
58	Structure - 35	Junction	10.76	18.50	10.76	18.50	0.00	16.6	12.29	0.00	6.21	0 00:00	0.00	0.00
59	Structure - 36	Junction	10.59	20.13	10.59	20.13	0.00	17.0	12.14	0.00	7.99	0 00:00	0.00	0.00
60	Structure - 38	Junction	28.60	31.31	28.60	31.31	0.00	5.2	29.46	0.00	1.85	0 00:00	0.00	0.00
61	Structure - 39	Junction	27.61	32.57	27.61	32.57	0.00	5.2	29.08	0.00	3.49	0 00:00	0.00	0.00
62	Structure - 48	Junction	26.48	1.78	26.48	1.78	0.00	5.9	27.17	0.00	0.81	0 00:00	0.00	0.00
63	Structure - 49	Junction	25.31	29.72	25.31	29.72	0.00	5.9	26.48	0.00	3.24	0 00:00	0.00	0.00
64	Structure - 75	Junction	10.63	13.10	10.63	14.00	0.00	4.3	11.42	0.00	1.68	0 00:00	0.00	0.00
65	Structure - 83	Junction	10.63	13.10	10.63	14.00	0.00	4.3	11.52	0.00	1.58	0 00:00	0.00	0.00
66	Structure - 87	Junction	10.63	13.10	10.63	14.00	0.00	4.3	11.52	0.00	1.58	0 00:00	0.00	0.00
67	Structure - 91	Junction	19.10	21.10	19.10	21.10	0.00	0.4	19.32	0.00	1.78	0 00:00	0.00	0.00
68	Structure - 94	Junction	19.10	19.83	19.10	19.83	0.00	0.8	19.45	0.00	0.37	0 00:00	0.00	0.00
69	Structure - 95	Junction	13.30	19.40	13.30	19.40	0.00	13.9	18.76	0.00	0.64	0 00:00	0.00	0.00
70	Structure - 96	Junction	19.10	19.83	19.10	19.83	0.00	0.7	19.41	0.00	0.42	0 00:00	0.00	0.00
71	Structure - 97	Junction	12.86	19.42	12.86	19.42	0.00	14.5	18.71	0.00	0.71	0 00:00	0.00	0.00
72	Structure - 98	Junction	19.10	19.83	19.10	19.83	0.00	0.6	19.40	0.00	0.42	0 00:00	0.00	0.00
73	Structure - 99	Junction	12.39	19.44	12.39	19.44	0.00	15.1	18.70	0.00	0.73	0 00:00	0.00	0.00
74	Out-02	Outfall	0.00					24.5	0.00					
75	Detention-Basin	Storage Node	10.50	15.50	0.00		12634.80	23.9	12.66				0.00	0.00

$Q_{100\text{-yr Post-Total}}$

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	A1.1-Pipe	Pipe	A1.1-Structure	A1-Structure	43.57	19.10	18.23	2.0000	8.000	0.0120	0.3	1.9	0.15	3.84	0.18	0.26	0.00	Calculated
2	A10.1-Pipe	Pipe	Structure - 100	Structure - 101	34.83	19.10	18.40	2.0000	8.000	0.0120	0.6	1.9	0.31	4.68	0.26	0.38	0.00	Calculated
3	A10-Pipe	Pipe	Structure - 99	Structure - 101	91.67	12.39	11.91	0.5300	30.000	0.0150	15.1	25.9	0.58	5.47	1.37	0.55	0.00	Calculated
4	A11.1-Pipe	Pipe	Structure - 102	Structure - 103	34.86	19.10	18.40	2.0000	8.000	0.0120	0.6	1.9	0.31	4.68	0.26	0.38	0.00	Calculated
5	A11-Pipe	Pipe	Structure - 101	Structure - 103	67.33	11.91	11.59	0.4700	30.000	0.0150	15.7	24.5	0.64	5.28	1.45	0.58	0.00	Calculated
6	A12.1-Pipe	Pipe	Structure - 104	Structure - 105	39.58	19.10	18.31	2.0000	8.000	0.0150	0.4	1.5	0.27	3.62	0.24	0.36	0.00	Calculated
7	A12-Pipe	Pipe	Structure - 103	Structure - 105	100.61	11.59	11.09	0.4900	30.000	0.0150	16.2	25.0	0.65	5.41	1.47	0.59	0.00	Calculated
8	A13-Pipe	Pipe	Structure - 105	Structure - 35	63.49	11.09	10.76	0.5200	30.000	0.0150	16.6	25.7	0.64	5.57	1.46	0.58	0.00	Calculated
9	A14-Pipe	Pipe	Structure - 35	Structure - 36	37.44	10.76	10.59	0.4500	30.000	0.0150	16.6	24.0	0.69	5.26	1.53	0.61	0.00	Calculated
10	A15-Pipe	Pipe	Structure - 36	Out-1A15-Pipe	19.67	10.59	10.50	0.4600	30.000	0.0150	17.0	24.1	0.71	5.31	1.55	0.62	0.00	Calculated
11	A1-Pipe	Pipe	Structure - 39	A1-Structure	32.78	27.61	18.23	28.6100	18.000	0.0150	5.2	48.7	0.11	17.94	0.33	0.22	0.00	Calculated
12	A2.1-Pipe	Pipe	A2.1-Structure	A2-Structure	44.00	19.10	18.22	2.0000	8.000	0.0120	0.4	1.9	0.21	4.22	0.21	0.31	0.00	Calculated
13	A2-Pipe	Pipe	A1-Structure	A2-Structure	97.50	16.03	15.56	0.4800	18.000	0.0150	5.7	6.3	0.90	4.05	1.12	0.74	0.00	Calculated
14	A3-Pipe	Pipe	A2-Structure	A3-Structure	88.50	15.56	15.13	0.4900	18.000	0.0150	6.3	6.4	0.99	4.10	1.22	0.81	0.00	Calculated
15	A4.1-Pipe	Pipe	Structure - 49	A4-Structure	39.16	25.31	16.82	21.6900	18.000	0.0120	5.9	53.0	0.11	19.80	0.34	0.23	0.00	Calculated
16	A4-Pipe	Pipe	A3-Structure	A4-Structure	56.66	15.13	14.86	0.4800	30.000	0.0150	6.7	24.5	0.27	4.25	0.89	0.36	0.00	Calculated
17	A5-Pipe	Pipe	A4-Structure	A5-Structure	107.77	14.86	13.86	0.9300	30.000	0.0150	12.6	34.3	0.37	6.44	1.05	0.42	0.00	Calculated
18	A6.1-Pipe	Pipe	Structure - 91	A5-Structure	42.40	19.10	18.31	1.8700	8.000	0.0120	0.4	1.8	0.23	4.15	0.22	0.32	0.00	Calculated
19	A7.1-Pipe	Pipe	Structure - 94	Structure - 95	34.69	19.10	18.41	2.0000	8.000	0.0150	0.8	1.5	0.55	4.34	0.35	0.53	0.00	Calculated
20	A7-Pipe	Pipe	A5-Structure	Structure - 95	110.61	13.86	13.30	0.5100	30.000	0.0150	13.2	25.3	0.52	5.21	1.28	0.51	0.00	Calculated
21	A8.1-Pipe	Pipe	Structure - 96	Structure - 97	34.74	19.10	18.41	2.0000	8.000	0.0150	0.7	1.5	0.44	4.10	0.31	0.46	0.00	Calculated
22	A8-Pipe	Pipe	Structure - 95	Structure - 97	89.33	13.30	12.86	0.4900	30.000	0.0150	13.9	24.9	0.56	5.21	1.34	0.53	0.00	Calculated
23	A9.1-Pipe	Pipe	Structure - 98	Structure - 99	34.78	19.10	18.40	2.0100	8.000	0.0150	0.6	1.5	0.43	4.09	0.30	0.46	0.00	Calculated
24	A9-Pipe	Pipe	Structure - 97	Structure - 99	95.00	12.86	12.39	0.4900	30.000	0.0150	14.5	24.9	0.58	5.27	1.37	0.55	0.00	Calculated
25	B1-Pipe	Pipe	B1-Structure	Out-1B1-Pipe	19.69	12.20	10.50	8.6300	24.000	0.0150	0.5	57.6	0.01	5.50	0.13	0.06	0.00	Calculated
26	C1-Pipe	Pipe	C1-Structure	C2-Structure	44.64	19.10	18.21	2.0000	8.000	0.0120	0.4	1.9	0.21	4.22	0.21	0.31	0.00	Calculated
27	C2-Pipe	Pipe	C2-Structure	Out-1C2-Pipe	19.67	12.20	10.50	8.6400	24.000	0.0150	0.8	57.6	0.01	6.54	0.17	0.08	0.00	Calculated
28	D1-Pipe	Pipe	D1-Structure	D2-Structure	44.46	19.10	18.21	2.0000	8.000	0.0120	0.3	1.9	0.18	4.00	0.19	0.29	0.00	Calculated
29	D2-Pipe	Pipe	D2-Structure	D3-Structure	19.67	12.20	10.50	8.6400	24.000	0.0150	0.7	57.6	0.01	6.25	0.15	0.08	0.00	Calculated
30	D4-Pipe	Pipe	D4-Structure	Out-1D4-Pipe	26.30	10.63	10.50	0.4900	18.000	0.0150	4.3	6.4	0.67	3.88	0.90	0.60	0.00	Calculated
31	E10-Pipe	Pipe	E10-Structure	E11-Structure	68.72	12.29	11.95	0.5000	24.000	0.0150	3.4	13.9	0.24	3.64	0.67	0.34	0.00	Calculated
32	E11-Pipe	Pipe	E11-Structure	E13-Structure	67.31	11.95	11.61	0.5000	24.000	0.0150	3.6	13.9	0.26	3.69	0.69	0.35	0.00	Calculated
33	E12.1-Pipe	Pipe	E13.1-Structure	E13-Structure	28.75	19.10	18.52	2.0200	8.000	0.0120	0.6	1.9	0.33	4.79	0.27	0.40	0.00	Calculated
34	E13.1-Pipe	Pipe	E14.2-Structure	E14-Structure	31.82	19.10	18.46	2.0000	8.000	0.0120	0.3	1.9	0.16	3.88	0.18	0.27	0.00	Calculated
35	E13-Pipe	Pipe	E13-Structure	E14-Structure	77.56	11.61	11.22	0.5000	24.000	0.0150	4.2	13.9	0.31	3.88	0.76	0.38	0.00	Calculated
36	E14-Pipe	Pipe	E14-Structure	E15-Structure	88.49	11.22	10.79	0.4900	24.000	0.0150	4.7	13.7	0.34	3.94	0.81	0.40	0.00	Calculated
37	E15-Pipe	Pipe	E15-Structure	E16-Structure	61.58	10.79	10.62	0.2800	24.000	0.0150	5.0	10.3	0.49	3.25	0.98	0.49	0.00	Calculated
38	E16-Pipe	Pipe	E16-Structure	Out-1E16-Pipe	26.19	10.62	10.50	0.4600	24.000	0.0150	5.2	13.3	0.39	3.96	0.87	0.43	0.00	Calculated
39	E1-Pipe	Pipe	E1-Structure	E2-Structure	73.22	15.10	14.73	0.5000	18.000	0.0150	0.2	6.4	0.02	1.46	0.16	0.11	0.00	Calculated
40	E2-Pipe	Pipe	E2-Structure	E4-Structure	55.47	14.73	14.45	0.5000	18.000	0.0150	0.2	6.4	0.03	1.69	0.19	0.12	0.00	Calculated
41	E4-Pipe	Pipe	E4-Structure	E5-Structure	15.97	14.45	14.37	0.5000	18.000	0.0150	0.2	6.3	0.03	1.67	0.19	0.13	0.00	Calculated
42	E5.1-Pipe	Pipe	E4.1-Structure	E5-Structure	32.89	19.10	18.42	2.0800	8.000	0.0120	0.4	1.9	0.23	4.41	0.22	0.33	0.00	Calculated
43	E5-Pipe	Pipe	E5-Structure	E6-Structure	70.61	14.37	14.02	0.5000	18.000	0.0150	0.8	6.4	0.13	2.48	0.36	0.24	0.00	Calculated
44	E6.1-Pipe	Pipe	E7.1-Structure	E7-Structure	28.85	19.10	18.44	2.2800	8.000	0.0120	0.9	2.0	0.44	5.46	0.31	0.46	0.00	Calculated
45	E6-Pipe	Pipe	E6-Structure	E7-Structure	58.54	14.02	13.73	0.5000	18.000	0.0150	0.9	6.4	0.14	2.57	0.38	0.25	0.00	Calculated
46	E7-Pipe	Pipe	E7-Structure	E8-Structure	59.55	13.23	12.93	0.5000	24.000	0.0150	1.8	13.9	0.13	3.06	0.49	0.25	0.00	Calculated
47	E8.1-Pipe	Pipe	E9.1-Structure	E9-Structure	25.28	19.10	18.59	2.0000	8.000	0.0120	0.7	1.9	0.37	4.89	0.28	0.42	0.00	Calculated
48	E8-Pipe	Pipe	E8-Structure	E9-Structure	61.63	12.93	12.62	0.5000	24.000	0.0150	1.9	13.8	0.14	3.08	0.50	0.25	0.00	Calculated
49	E9.1-Pipe	Pipe	E10.1-Structure	E10-Structure	30.97	19.10	18.44	2.1200	8.000	0.0120	0.6	1.9	0.30	4.78	0.25	0.38	0.00	Calculated
50	E9-Pipe	Pipe	E9-Structure	E10-Structure	66.95	12.62	12.29	0.5000	24.000	0.0150	2.7	13.8	0.19	3.39	0.59	0.30	0.00	Calculated
51	Link-01	Pipe	Out-1E16-Pipe	Detention-Basin	178.44	10.50	0.00	5.8800	12.000	0.0150	5.2	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
52	Link-02	Pipe	D3-Structure	Detention-Basin	117.22	9.00	0.00	7.6800	12.000	0.0150	0.7	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
53	Link-03	Pipe	Out-1C2-Pipe	Detention-Basin	30.02	10.50	0.00	34.9800	12.000	0.0150	0.8	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
54	Link-04	Pipe	Out-1B1-Pipe	Detention-Basin	60.81	10.50	0.00	17.2700	12.000	0.0150	0.5	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
55	Link-05	Pipe	Out-1A15-Pipe	Detention-Basin	138.79	10.50	0.00	7.5700	12.000	0.0150	17.0	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
56	Link-11	Pipe	Jun-02	Jun-03	71.00	32.00	30.00	2.8200	18.000	0.0150	6.7	15.3	0.44	8.37	0.70	0.47	0.00	Calculated
57	Link-12	Pipe	Jun-03	Jun-04	417.20	0.00	0.00	0.0000	12.000	0.0150	6.7	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
58	Link-14	Pipe	Jun-05	Jun-06	128.08	0.00	0.00	0.0000	12.000	0.0150	7.8	0.0	0.44	0.00	0.70	0.47	0.00	Calculated

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
59	Link-16	Pipe	Jun-07	Out-02	317.29	0.00	0.00	0.0000	12.000	0.0150	8.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
60	Link-17	Pipe	Out-1D4-Pipe	Out-02	137.86	10.50	0.00	7.6200	0.000	0.0150	4.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
61	Link-18	Pipe	Out-1Pipe (62)	Out-02	99.47	10.50	0.00	10.5600	0.000	0.0150	4.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
62	Link-19	Pipe	Out-1Pipe (59)	Out-02	130.31	10.50	0.00	8.0600	12.000	0.0150	4.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
63	Link-20	Pipe	Out-1Pipe (53)	Out-02	191.76	10.50	0.00	5.4800	12.000	0.0150	4.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
64	Link-29	Pipe	Jun-04	Jun-08	48.58	19.20	18.82	0.7800	0.000	0.0150	7.8	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
65	Link-30	Pipe	Jun-08	Jun-05	67.00	19.20	18.20	1.4900	18.000	0.0150	7.8	11.1	0.70	6.81	0.93	0.62	0.00	Calculated
66	Link-31	Pipe	Jun-06	Jun-09	46.31	14.60	14.60	0.0000	0.000	0.0150	8.1	0.0	0.70	0.00	0.93	0.62	0.00	Calculated
67	Link-32	Pipe	Jun-09	Jun-07	64.00	14.60	13.20	2.1900	18.000	0.0150	8.1	13.5	0.60	7.95	0.84	0.56	0.00	Calculated
68	Pipe (24)	Pipe	Structure - 38	Structure - 39	45.94	28.60	28.22	0.8300	18.000	0.0150	5.2	8.3	0.62	4.94	0.86	0.57	0.00	Calculated
69	Pipe (34)	Pipe	Structure - 48	Structure - 49	46.55	26.48	25.79	1.4800	18.000	0.0120	5.9	13.9	0.43	7.54	0.69	0.46	0.00	Calculated
70	Pipe (53)	Pipe	Structure - 75	Out-1Pipe (53)	27.49	10.63	10.50	0.4700	18.000	0.0120	4.3	7.8	0.55	4.52	0.79	0.53	0.00	Calculated
71	Pipe (59)	Pipe	Structure - 83	Out-1Pipe (59)	25.67	10.63	10.50	0.5100	18.000	0.0150	4.3	6.5	0.66	3.91	0.89	0.59	0.00	Calculated
72	Pipe (62)	Pipe	Structure - 87	Out-1Pipe (62)	25.95	10.63	10.50	0.5000	18.000	0.0150	4.3	6.4	0.66	3.90	0.89	0.59	0.00	Calculated
73	Orifice-01	Orifice	Detention-Basin	Structure - 83		10.50	10.63		9.000		4.3							
74	Orifice-02	Orifice	Detention-Basin	D4-Structure		10.50	10.63		9.000		4.3							
75	Orifice-03	Orifice	Detention-Basin	Structure - 87		10.50	10.63		9.000		4.3							
76	Orifice-04	Orifice	Detention-Basin	Structure - 75		10.50	10.63		9.000		4.3							

Subbasin Hydrology

Subbasin : A01

Input Data

Area (ac)	5.17
Peak Rate Factor	484.00
Weighted Curve Number	81.40
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.37	D	98.00
Woods & grass combination, Fair	1.10	C	76.00
Woods & grass combination, Fair	0.40	C	76.00
Woods & grass combination, Fair	3.30	D	82.00
Composite Area & Weighted CN	5.17		81.40

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft²)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	8.9	0.00	0.00
2 yr, 24 hr Rainfall (in) :	3.74	0.00	0.00
Velocity (ft/sec) :	0.15	0.00	0.00
Computed Flow Time (min) :	10.93	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	933	0.00	0.00
Slope (%) :	4.8	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.53	0.00	0.00
Computed Flow Time (min) :	4.41	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	71	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft²) :	7	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	9.92	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 15.46

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	5.19
Peak Runoff (cfs)	6.74
Weighted Curve Number	81.40
Time of Concentration (days hh:mm:ss)	0 00:15:28

Subbasin : A02

Input Data

Area (ac) 4.02
Peak Rate Factor 484.00
Weighted Curve Number 81.08
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.22	D	98.00
Woods & grass combination, Fair	1.00	C	76.00
Woods & grass combination, Fair	0.20	C	76.00
Woods & grass combination, Fair	2.60	D	82.00
Composite Area & Weighted CN	4.02		81.08

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	8	0.00	0.00
2 yr, 24 hr Rainfall (in) :	3.74	0.00	0.00
Velocity (ft/sec) :	0.15	0.00	0.00
Computed Flow Time (min) :	11.41	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	925	0.00	0.00
Slope (%) :	4	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.23	0.00	0.00
Computed Flow Time (min) :	4.77	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	79	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft^2) :	7.7	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	10.57	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 16.31

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 5.15
Peak Runoff (cfs) 5.17
Weighted Curve Number 81.08
Time of Concentration (days hh:mm:ss) 0 00:16:19

Subbasin : A03

Input Data

Area (ac)	4.49
Peak Rate Factor	484.00
Weighted Curve Number	82.72
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.39	D	98.00
Woods & grass combination, Fair	0.50	C	76.00
Woods & grass combination, Fair	3.60	D	82.00
Composite Area & Weighted CN	4.49		82.72

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	7	0.00	0.00
2 yr, 24 hr Rainfall (in) :	2.85	0.00	0.00
Velocity (ft/sec) :	0.12	0.00	0.00
Computed Flow Time (min) :	13.79	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	964	0.00	0.00
Slope (%) :	4	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.23	0.00	0.00
Computed Flow Time (min) :	4.97	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	75	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft^2) :	7.74	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	10.61	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 18.88

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	5.34
Peak Runoff (cfs)	5.93
Weighted Curve Number	82.72
Time of Concentration (days hh:mm:ss)	0 00:18:53

Subbasin : B01

Input Data

Area (ac)	0.22
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.22	D	98.00
Composite Area & Weighted CN	0.22		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.40
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B02

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.41
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B03

Input Data

Area (ac) 0.33
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.33	D	98.00
Composite Area & Weighted CN	0.33		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.58
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B04

Input Data

Area (ac)	0.33
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.33	D	98.00
Composite Area & Weighted CN	0.33		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.58
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B05

Input Data

Area (ac)	0.36
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.36	D	98.00
Composite Area & Weighted CN	0.36		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.63
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B06

Input Data

Area (ac) 0.36
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.36	D	98.00
Composite Area & Weighted CN	0.36		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.65
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B07

Input Data

Area (ac) 0.46
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.46	D	98.00
Composite Area & Weighted CN	0.46		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.81
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B08

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.41
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B09

Input Data

Area (ac) 0.22
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.22	D	98.00
Composite Area & Weighted CN	0.22		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.40
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B10

Input Data

Area (ac)	0.16
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.16	D	98.00
Composite Area & Weighted CN	0.16		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.28
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B11

Input Data

Area (ac)	0.25
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.25	D	98.00
Composite Area & Weighted CN	0.25		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.44
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B12

Input Data

Area (ac) 0.49
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.49	D	98.00
Composite Area & Weighted CN	0.49		98.00

Time of Concentration

User-Defined TOC override (minutes): 6.00

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.86
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B13

Input Data

Area (ac) 0.38
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.38	D	98.00
Composite Area & Weighted CN	0.38		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.68
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B14

Input Data

Area (ac)	0.32
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.32	D	98.00
Composite Area & Weighted CN	0.32		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.58
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B15

Input Data

Area (ac) 0.35
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.35	D	98.00
Composite Area & Weighted CN	0.35		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.62
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B16

Input Data

Area (ac) 0.17
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.17	D	98.00
Composite Area & Weighted CN	0.17		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.29
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B17

Input Data

Area (ac)	0.19
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.19	D	98.00
Composite Area & Weighted CN	0.19		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.33
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B18

Input Data

Area (ac) 0.11
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.11	D	98.00
Composite Area & Weighted CN	0.11		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.19
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B19

Input Data

Area (ac)	0.21
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.21	D	98.00
Composite Area & Weighted CN	0.21		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.37
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B20

Input Data

Area (ac) 0.24
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.24	D	98.00
Composite Area & Weighted CN	0.24		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.42
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B21

Input Data

Area (ac) 0.26
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.26	D	98.00
Composite Area & Weighted CN	0.26		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.46
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B22

Input Data

Area (ac) 0.27
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.27	D	98.00
Composite Area & Weighted CN	0.27		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.48
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B23

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.41
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B24

Input Data

Area (ac)	0.14
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.14	D	98.00
Composite Area & Weighted CN	0.14		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.24
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B25

Input Data

Area (ac) 0.16
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.16	D	98.00
Composite Area & Weighted CN	0.16		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.28
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B26

Input Data

Area (ac) 0.08
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.08	D	98.00
Composite Area & Weighted CN	0.08		98.00

Time of Concentration

User-Defined TOC override (minutes): 6.00

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.15
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B27

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.07
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B28

Input Data

Area (ac) 0.08
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.08	D	98.00
Composite Area & Weighted CN	0.08		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.15
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B29

Input Data

Area (ac) 0.06
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.06	D	98.00
Composite Area & Weighted CN	0.06		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.10
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B30

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.07
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B31

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.07
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B32

Input Data

Area (ac)	0.04
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.07
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B33

Input Data

Area (ac) 0.09
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.09	D	98.00
Composite Area & Weighted CN	0.09		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.16
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B34

Input Data

Area (ac)	0.10
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.10	D	98.00
Composite Area & Weighted CN	0.10		98.00

Time of Concentration

Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft²)
1	A1.1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
2	A1-Structure	16.03	37.64	21.61	16.03	0.00	37.64	0.00	0.00
3	A2.1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
4	A2-Structure	15.56	20.55	4.99	15.56	0.00	20.55	0.00	0.00
5	A3-Structure	15.13	19.11	3.98	15.13	0.00	19.11	0.00	0.00
6	A4-Structure	14.86	20.27	5.41	14.86	0.00	20.27	0.00	0.00
7	A5-Structure	13.86	20.07	6.21	13.86	0.00	20.07	0.00	0.00
8	B1-Structure	12.20	20.13	7.93	12.20	0.00	20.13	0.00	0.00
9	C1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
10	C2-Structure	12.20	36.86	24.66	12.20	0.00	36.86	0.00	0.00
11	D1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
12	D2-Structure	12.20	38.65	26.45	12.20	0.00	38.65	0.00	0.00
13	D3-Structure	10.50	16.50	6.00	10.50	0.00	13.25	-3.25	0.00
14	D4-Structure	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
15	E10.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
16	E10-Structure	12.29	20.26	7.97	12.29	0.00	20.26	0.00	0.00
17	E11-Structure	11.95	20.26	8.31	11.95	0.00	20.26	0.00	0.00
18	E13.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
19	E13-Structure	11.61	20.26	8.65	11.61	0.00	20.26	0.00	0.00
20	E14.2-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
21	E14-Structure	11.22	20.25	9.03	11.22	0.00	20.25	0.00	0.00
22	E15-Structure	10.79	20.25	9.46	10.79	0.00	20.25	0.00	0.00
23	E16-Structure	10.62	20.13	9.51	10.62	0.00	20.13	0.00	0.00
24	E1-Structure	15.10	19.22	4.12	15.10	0.00	19.22	0.00	0.00
25	E2-Structure	14.73	20.26	5.53	14.73	0.00	20.26	0.00	0.00
26	E4.1-Structure	19.10	21.08	1.98	19.10	0.00	21.08	0.00	0.00
27	E4-Structure	14.45	20.30	5.85	14.45	0.00	20.30	0.00	0.00
28	E5-Structure	14.37	20.09	5.72	14.37	0.00	20.09	0.00	0.00
29	E6-Structure	14.02	20.20	6.18	14.02	0.00	20.20	0.00	0.00
30	E7.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
31	E7-Structure	13.23	20.26	7.03	13.23	0.00	20.26	0.00	0.00
32	E8-Structure	12.93	20.26	7.33	12.93	0.00	20.26	0.00	0.00
33	E9.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
34	E9-Structure	12.62	20.26	7.64	12.62	0.00	20.26	0.00	0.00
35	Jun-01	0.00	10.50	10.50	0.00	0.00	0.00	-10.50	0.00
36	Jun-02	0.00	6.00	6.00	0.00	0.00	6.00	0.00	0.00
37	Jun-03	0.00	6.00	6.00	0.00	0.00	6.00	0.00	0.00
38	Jun-04	19.20	6.00	-13.20	0.00	-19.20	6.00	0.00	0.00
39	Jun-05	18.20	6.00	-12.20	0.00	-18.20	6.00	0.00	0.00
40	Jun-06	14.60	6.00	-8.60	0.00	-14.60	6.00	0.00	0.00
41	Jun-07	13.20	6.00	-7.20	0.00	-13.20	6.00	0.00	0.00
42	Jun-08	19.20	6.00	-13.20	0.00	-19.20	6.00	0.00	0.00
43	Jun-09	14.60	6.00	-8.60	0.00	-14.60	0.00	-6.00	0.00
44	Out-1A15-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
45	Out-1B1-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
46	Out-1C2-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
47	Out-1D4-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
48	Out-1E16-Pipe	10.50	16.50	6.00	10.50	0.00	0.00	-16.50	0.00
49	Out-1Pipe (53)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
50	Out-1Pipe (59)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
51	Out-1Pipe (62)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
52	Structure - 100	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
53	Structure - 101	11.91	19.47	7.56	11.91	0.00	19.47	0.00	0.00
54	Structure - 102	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
55	Structure - 103	11.59	19.48	7.89	11.59	0.00	19.48	0.00	0.00
56	Structure - 104	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
57	Structure - 105	11.09	19.41	8.31	11.09	0.00	19.41	0.00	0.00
58	Structure - 35	10.76	18.50	7.74	10.76	0.00	18.50	0.00	0.00
59	Structure - 36	10.59	20.13	9.54	10.59	0.00	20.13	0.00	0.00
60	Structure - 38	28.60	31.31	2.71	28.60	0.00	31.31	0.00	0.00
61	Structure - 39	27.61	32.57	4.96	27.61	0.00	32.57	0.00	0.00
62	Structure - 48	26.48	1.78	-24.70	26.48	0.00	1.78	0.00	0.00
63	Structure - 49	25.31	29.72	4.41	25.31	0.00	29.72	0.00	0.00
64	Structure - 75	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
65	Structure - 83	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
66	Structure - 87	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
67	Structure - 91	19.10	21.10	2.00	19.10	0.00	21.10	0.00	0.00
68	Structure - 94	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
69	Structure - 95	13.30	19.40	6.10	13.30	0.00	19.40	0.00	0.00
70	Structure - 96	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
71	Structure - 97	12.86	19.42	6.56	12.86	0.00	19.42	0.00	0.00
72	Structure - 98	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
73	Structure - 99	12.39	19.44	7.04	12.39	0.00	19.44	0.00	0.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	A1.1-Structure	0.3	0.3	19.28	0.18	0.00	1.73	19.17	0.07	0 07:49	0 00:00	0.00	0.00
2	A1-Structure	5.7	0.3	18.56	2.53	0.00	19.08	18.36	2.33	0 08:02	0 00:00	0.00	0.00
3	A2.1-Structure	0.4	0.4	19.31	0.21	0.00	1.69	19.18	0.08	0 07:49	0 00:00	0.00	0.00
4	A2-Structure	6.3	0.2	18.43	2.87	0.00	2.12	18.30	2.74	0 07:50	0 00:00	0.00	0.00
5	A3-Structure	6.7	0.4	16.35	1.22	0.00	2.76	15.52	0.39	0 08:01	0 00:00	0.00	0.00
6	A4-Structure	12.6	0.0	17.16	2.30	0.00	3.11	16.95	2.09	0 08:03	0 00:00	0.00	0.00
7	A5-Structure	13.2	0.2	18.52	4.66	0.00	1.55	18.39	4.53	0 07:50	0 00:00	0.00	0.00
8	B1-Structure	0.5	0.5	12.33	0.13	0.00	7.80	12.25	0.05	0 07:50	0 00:00	0.00	0.00
9	C1-Structure	0.4	0.4	19.31	0.21	0.00	1.69	19.18	0.08	0 07:49	0 00:00	0.00	0.00
10	C2-Structure	0.8	0.4	18.42	6.22	0.00	18.44	18.29	6.09	0 07:50	0 00:00	0.00	0.00
11	D1-Structure	0.3	0.3	19.29	0.19	0.00	1.71	19.18	0.08	0 07:49	0 00:00	0.00	0.00
12	D2-Structure	0.7	0.4	18.40	6.20	0.00	20.25	18.29	6.09	0 07:50	0 00:00	0.00	0.00
13	D3-Structure	0.7	0.0	10.65	0.15	0.00	5.85	10.56	0.06	0 07:50	0 00:00	0.00	0.00
14	D4-Structure	4.3	0.0	11.53	0.90	0.00	1.57	11.00	0.37	0 08:13	0 00:00	0.00	0.00
15	E10.1-Structure	0.6	0.6	19.35	0.25	0.00	1.72	19.20	0.10	0 07:50	0 00:00	0.00	0.00
16	E10-Structure	3.4	0.2	18.70	6.41	0.00	1.56	18.54	6.25	0 07:50	0 00:00	0.00	0.00
17	E11-Structure	3.6	0.2	12.64	0.69	0.00	7.62	12.22	0.27	0 07:52	0 00:00	0.00	0.00
18	E13.1-Structure	0.6	0.6	19.37	0.27	0.00	1.70	19.20	0.10	0 07:50	0 00:00	0.00	0.00
19	E13-Structure	4.2	0.1	18.79	7.18	0.00	1.47	18.62	7.01	0 07:50	0 00:00	0.00	0.00
20	E14.2-Structure	0.3	0.3	19.28	0.18	0.00	1.79	19.17	0.07	0 07:49	0 00:00	0.00	0.00
21	E14-Structure	4.7	0.2	18.64	7.42	0.00	1.61	18.53	7.31	0 07:49	0 00:00	0.00	0.00
22	E15-Structure	5.0	0.3	11.77	0.98	0.00	8.48	11.16	0.37	0 07:52	0 00:00	0.00	0.00
23	E16-Structure	5.2	0.2	11.60	0.98	0.00	8.53	10.99	0.37	0 07:52	0 00:00	0.00	0.00
24	E1-Structure	0.2	0.2	15.26	0.16	0.00	3.96	15.16	0.06	0 07:49	0 00:00	0.00	0.00
25	E2-Structure	0.2	0.1	14.91	0.18	0.00	5.35	14.80	0.07	0 07:54	0 00:00	0.00	0.00
26	E4.1-Structure	0.4	0.4	19.32	0.22	0.00	1.76	19.19	0.09	0 07:49	0 00:00	0.00	0.00
27	E4-Structure	0.2	0.0	14.64	0.19	0.00	5.66	14.53	0.08	0 07:54	0 00:00	0.00	0.00
28	E5-Structure	0.8	0.2	18.64	4.27	0.00	1.45	18.50	4.13	0 07:50	0 00:00	0.00	0.00
29	E6-Structure	0.9	0.1	14.40	0.38	0.00	5.80	14.17	0.15	0 07:52	0 00:00	0.00	0.00
30	E7.1-Structure	0.9	0.9	19.41	0.31	0.00	1.66	19.22	0.12	0 07:50	0 00:00	0.00	0.00
31	E7-Structure	1.8	0.1	18.75	5.52	0.00	1.51	18.56	5.33	0 07:50	0 00:00	0.00	0.00
32	E8-Structure	1.9	0.1	13.43	0.50	0.00	6.83	13.13	0.20	0 07:51	0 00:00	0.00	0.00
33	E9.1-Structure	0.7	0.7	19.38	0.28	0.00	1.69	19.21	0.11	0 07:50	0 00:00	0.00	0.00
34	E9-Structure	2.7	0.1	18.87	6.25	0.00	1.39	18.70	6.08	0 07:50	0 00:00	0.00	0.00
35	Jun-01	6.4	6.4	0.00	0.00	0.00	10.50	0.00	0.00	0 00:00	0 00:00	0.00	0.00
36	Jun-02	6.7	6.7	32.70	32.70	0.00	0.80	32.25	32.25	0 08:01	0 00:00	0.00	0.00
37	Jun-03	6.7	0.0	30.70	30.70	0.00	0.80	30.25	30.25	0 08:01	0 00:00	0.00	0.00
38	Jun-04	7.8	1.1	19.20	0.00	0.00	0.00	19.20	0.00	0 00:00	0 00:00	0.00	0.00
39	Jun-05	7.8	0.0	19.13	0.93	0.00	0.57	18.51	0.31	0 08:01	0 00:00	0.00	0.00
40	Jun-06	8.1	0.3	14.60	0.00	0.00	0.00	14.60	0.00	0 00:00	0 00:00	0.00	0.00
41	Jun-07	8.3	0.3	14.04	0.84	0.00	0.66	13.49	0.29	0 08:01	0 00:00	0.00	0.00
42	Jun-08	7.8	0.0	20.13	0.93	0.00	0.57	19.51	0.31	0 08:01	0 00:00	0.00	0.00
43	Jun-09	8.1	0.0	15.44	0.84	0.00	0.66	14.89	0.29	0 08:01	0 00:00	0.00	0.00
44	Out-1A15-Pipe	17.0	0.0	12.05	1.55	0.00	4.45	11.05	0.55	0 08:02	0 00:00	0.00	0.00
45	Out-1B1-Pipe	0.5	0.0	10.63	0.13	0.00	5.87	10.55	0.05	0 07:50	0 00:00	0.00	0.00
46	Out-1C2-Pipe	0.8	0.0	10.67	0.17	0.00	5.83	10.57	0.07	0 07:50	0 00:00	0.00	0.00
47	Out-1D4-Pipe	4.3	0.0	11.40	0.90	0.00	5.10	10.87	0.37	0 08:13	0 00:00	0.00	0.00
48	Out-1E16-Pipe	5.2	0.0	11.37	0.87	0.00	5.13	10.83	0.33	0 07:52	0 00:00	0.00	0.00
49	Out-1Pipe (53)	4.3	0.0	11.29	0.79	0.00	5.21	10.83	0.33	0 08:13	0 00:00	0.00	0.00
50	Out-1Pipe (59)	4.3	0.0	11.39	0.89	0.00	5.11	10.86	0.36	0 08:13	0 00:00	0.00	0.00
51	Out-1Pipe (62)	4.3	0.0	11.39	0.89	0.00	5.11	10.87	0.37	0 08:13	0 00:00	0.00	0.00
52	Structure - 100	0.6	0.6	19.36	0.26	0.00	0.47	19.20	0.10	0 07:50	0 00:00	0.00	0.00
53	Structure - 101	15.7	0.0	18.66	6.75	0.00	0.81	18.50	6.59	0 07:50	0 00:00	0.00	0.00
54	Structure - 102	0.6	0.6	19.36	0.26	0.00	0.47	19.20	0.10	0 07:50	0 00:00	0.00	0.00
55	Structure - 103	16.2	0.0	18.66	7.07	0.00	0.82	18.50	6.91	0 07:50	0 00:00	0.00	0.00
56	Structure - 104	0.4	0.4	19.34	0.24	0.00	0.49	19.19	0.09	0 07:49	0 00:00	0.00	0.00
57	Structure - 105	16.6	0.0	18.55	7.46	0.00	0.86	18.40	7.31	0 07:50	0 00:00	0.00	0.00
58	Structure - 35	16.6	0.0	12.29	1.53	0.00	6.21	11.31	0.55	0 08:01	0 00:00	0.00	0.00
59	Structure - 36	17.0	0.5	12.14	1.55	0.00	7.99	11.14	0.55	0 08:01	0 00:00	0.00	0.00
60	Structure - 38	5.2	5.2	29.46	0.86	0.00	1.85	28.89	0.29	0 08:01	0 00:00	0.00	0.00
61	Structure - 39	5.2	0.0	29.08	1.47	0.00	3.49	28.51	0.90	0 08:02	0 00:00	0.00	0.00
62	Structure - 48	5.9	5.9	27.17	0.69	0.00	0.81	26.73	0.25	0 08:03	0 00:00	0.00	0.00
63	Structure - 49	5.9	0.0	26.48	1.17	0.00	3.24	26.04	0.73	0 08:03	0 00:00	0.00	0.00
64	Structure - 75	4.3	0.0	11.42	0.79	0.00	1.68	10.96	0.33	0 08:13	0 00:00	0.00	0.00
65	Structure - 83	4.3	0.0	11.52	0.89	0.00	1.58	10.99	0.36	0 08:13	0 00:00	0.00	0.00
66	Structure - 87	4.3	0.0	11.52	0.89	0.00	1.58	11.00	0.37	0 08:13	0 00:00	0.00	0.00
67	Structure - 91	0.4	0.4	19.32	0.22	0.00	1.78	19.19	0.09	0 07:49	0 00:00	0.00	0.00
68	Structure - 94	0.8	0.8	19.45	0.35	0.00	0.37	19.23	0.13	0 07:50	0 00:00	0.00	0.00
69	Structure - 95	13.9	0.0	18.76	5.46	0.00	0.64	18.54	5.24	0 07:51	0 00:00	0.00	0.00
70	Structure - 96	0.7	0.7	19.41	0.31	0.00	0.42	19.22	0.12	0 07:50	0 00:00	0.00	0.00
71	Structure - 97	14.5	0.0	18.71	5.85	0.00	0.71	18.52	5.66	0 07:50	0 00:00	0.00	0.00
72	Structure - 98	0.6	0.6	19.40	0.30	0.00	0.42	19.22	0.12	0 07:50	0 00:00	0.00	0.00
73	Structure - 99	15.1	0.0	18.70	6.31	0.00	0.73	18.52	6.13	0 07:51	0 00:00	0.00	0.00

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Flap Gate	No. of Barrels
1	A1.1-Pipe	43.57	19.10	18.23	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
2	A10.1-Pipe	34.83	19.10	18.40	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
3	A10-Pipe	91.67	12.39	11.91	0.5300	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
4	A11.1-Pipe	34.86	19.10	18.40	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
5	A11-Pipe	67.33	11.91	11.59	0.4700	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
6	A12.1-Pipe	39.58	19.10	18.31	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
7	A12-Pipe	100.61	11.59	11.09	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
8	A13-Pipe	63.49	11.09	10.76	0.5200	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
9	A14-Pipe	37.44	10.76	10.59	0.4500	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
10	A15-Pipe	19.67	10.59	10.50	0.4600	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
11	A1-Pipe	32.78	27.61	18.23	28.6100	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
12	A2.1-Pipe	44.00	19.10	18.22	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
13	A2-Pipe	97.50	16.03	15.56	0.4800	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
14	A3-Pipe	88.50	15.56	15.13	0.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
15	A4.1-Pipe	39.16	25.31	16.82	21.6900	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
16	A4-Pipe	56.66	15.13	14.86	0.4800	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
17	A5-Pipe	107.77	14.86	13.86	0.9300	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
18	A6.1-Pipe	42.40	19.10	18.31	1.8700	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
19	A7.1-Pipe	34.69	19.10	18.41	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
20	A7-Pipe	110.61	13.86	13.30	0.5100	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
21	A8.1-Pipe	34.74	19.10	18.41	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
22	A8-Pipe	89.33	13.30	12.86	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
23	A9.1-Pipe	34.78	19.10	18.40	2.0100	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
24	A9-Pipe	95.00	12.86	12.39	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
25	B1-Pipe	19.69	12.20	10.50	8.6300	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
26	C1-Pipe	44.64	19.10	18.21	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
27	C2-Pipe	19.67	12.20	10.50	8.6400	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
28	D1-Pipe	44.46	19.10	18.21	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
29	D2-Pipe	19.67	12.20	10.50	8.6400	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
30	D4-Pipe	26.30	10.63	10.50	0.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
31	E10-Pipe	68.72	12.29	11.95	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
32	E11-Pipe	67.31	11.95	11.61	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
33	E12.1-Pipe	28.75	19.10	18.52	2.0200	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
34	E13.1-Pipe	31.82	19.10	18.46	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
35	E13-Pipe	77.56	11.61	11.22	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
36	E14-Pipe	88.49	11.22	10.79	0.4900	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
37	E15-Pipe	61.58	10.79	10.62	0.2800	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
38	E16-Pipe	26.19	10.62	10.50	0.4600	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
39	E1-Pipe	73.22	15.10	14.73	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
40	E2-Pipe	55.47	14.73	14.45	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
41	E4-Pipe	15.97	14.45	14.37	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
42	E5.1-Pipe	32.89	19.10	18.42	2.0800	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
43	E5-Pipe	70.61	14.37	14.02	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
44	E6.1-Pipe	28.85	19.10	18.44	2.2800	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
45	E6-Pipe	58.54	14.02	13.73	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
46	E7-Pipe	59.55	13.23	12.93	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
47	E8.1-Pipe	25.28	19.10	18.59	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
48	E8-Pipe	61.63	12.93	12.62	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
49	E9.1-Pipe	30.97	19.10	18.44	2.1200	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
50	E9-Pipe	66.95	12.62	12.29	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
51	Link-01	178.44	10.50	0.00	5.8800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
52	Link-02	117.22	9.00	0.00	7.6800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
53	Link-03	30.02	10.50	0.00	34.9800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
54	Link-04	60.81	10.50	0.00	17.2700	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
55	Link-05	138.79	10.50	0.00	7.5700	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
56	Link-11	71.00	32.00	30.00	2.8200	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
57	Link-12	417.20	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
58	Link-14	128.08	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
59	Link-16	317.29	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
60	Link-17	137.86	10.50	0.00	7.6200	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
61	Link-18	99.47	10.50	0.00	10.5600	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
62	Link-19	130.31	10.50	0.00	8.0600	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
63	Link-20	191.76	10.50	0.00	5.4800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
64	Link-29	48.58	19.20	18.82	0.7800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
65	Link-30	67.00	19.20	18.20	1.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
66	Link-31	46.31	14.60	14.60	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
67	Link-32	64.00	14.60	13.20	2.1900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
68	Pipe (24)	45.94	28.60	28.22	0.8300	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
69	Pipe (34)	46.55	26.48	25.79	1.4800	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
70	Pipe (53)	27.49	10.63	10.50	0.4700	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
71	Pipe (59)	25.67	10.63	10.50	0.5100	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
72	Pipe (62)	25.95	10.63	10.50	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1

Pipe Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Froude Number	Reported Condition
1	A1.1-Pipe	0.3	0 07:50	1.9	0.15	3.84	0.19	0.18	0.26	0.00		Calculated
2	A10.1-Pipe	0.6	0 07:50	1.9	0.31	4.68	0.12	0.26	0.38	0.00		Calculated
3	A10-Pipe	15.1	0 08:02	25.9	0.58	5.47	0.28	1.37	0.55	0.00		Calculated
4	A11.1-Pipe	0.6	0 07:50	1.9	0.31	4.68	0.12	0.26	0.38	0.00		Calculated
5	A11-Pipe	15.7	0 08:02	24.5	0.64	5.28	0.21	1.45	0.58	0.00		Calculated
6	A12.1-Pipe	0.4	0 07:50	1.5	0.27	3.62	0.18	0.24	0.36	0.00		Calculated
7	A12-Pipe	16.2	0 08:02	25.0	0.65	5.41	0.31	1.47	0.59	0.00		Calculated
8	A13-Pipe	16.6	0 08:01	25.7	0.64	5.57	0.19	1.46	0.58	0.00		Calculated
9	A14-Pipe	16.6	0 08:02	24.0	0.69	5.26	0.12	1.53	0.61	0.00		Calculated
10	A15-Pipe	17.0	0 08:02	24.1	0.71	5.31	0.06	1.55	0.62	0.00		Calculated
11	A1-Pipe	5.2	0 08:02	48.7	0.11	17.94	0.03	0.33	0.22	0.00		Calculated
12	A2.1-Pipe	0.4	0 07:50	1.9	0.21	4.22	0.17	0.21	0.31	0.00		Calculated
13	A2-Pipe	5.7	0 08:02	6.3	0.90	4.05	0.40	1.12	0.74	0.00		Calculated
14	A3-Pipe	6.3	0 08:01	6.4	0.99	4.10	0.36	1.22	0.81	0.00		Calculated
15	A4.1-Pipe	5.9	0 08:03	53.0	0.11	19.80	0.03	0.34	0.23	0.00		Calculated
16	A4-Pipe	6.7	0 08:01	24.5	0.27	4.25	0.22	0.89	0.36	0.00		Calculated
17	A5-Pipe	12.6	0 08:02	34.3	0.37	6.44	0.28	1.05	0.42	0.00		Calculated
18	A6.1-Pipe	0.4	0 07:50	1.8	0.23	4.15	0.17	0.22	0.32	0.00		Calculated
19	A7.1-Pipe	0.8	0 07:51	1.5	0.55	4.34	0.13	0.35	0.53	0.00		Calculated
20	A7-Pipe	13.2	0 08:02	25.3	0.52	5.21	0.35	1.28	0.51	0.00		Calculated
21	A8.1-Pipe	0.7	0 07:50	1.5	0.44	4.10	0.14	0.31	0.46	0.00		Calculated
22	A8-Pipe	13.9	0 08:02	24.9	0.56	5.21	0.29	1.34	0.53	0.00		Calculated
23	A9.1-Pipe	0.6	0 07:51	1.5	0.43	4.09	0.14	0.30	0.46	0.00		Calculated
24	A9-Pipe	14.5	0 08:02	24.9	0.58	5.27	0.30	1.37	0.55	0.00		Calculated
25	B1-Pipe	0.5	0 07:50	57.6	0.01	5.50	0.06	0.13	0.06	0.00		Calculated
26	C1-Pipe	0.4	0 07:50	1.9	0.21	4.22	0.18	0.21	0.31	0.00		Calculated
27	C2-Pipe	0.8	0 07:50	57.6	0.01	6.54	0.05	0.17	0.08	0.00		Calculated
28	D1-Pipe	0.3	0 07:50	1.9	0.18	4.00	0.19	0.19	0.29	0.00		Calculated
29	D2-Pipe	0.7	0 07:50	57.6	0.01	6.25	0.05	0.15	0.08	0.00		Calculated
30	D4-Pipe	4.3	0 08:13	6.4	0.67	3.88	0.11	0.90	0.60	0.00		Calculated
31	E10-Pipe	3.4	0 07:52	13.9	0.24	3.64	0.31	0.67	0.34	0.00		Calculated
32	E11-Pipe	3.6	0 07:52	13.9	0.26	3.69	0.30	0.69	0.35	0.00		Calculated
33	E12.1-Pipe	0.6	0 07:50	1.9	0.33	4.79	0.10	0.27	0.40	0.00		Calculated
34	E13.1-Pipe	0.3	0 07:49	1.9	0.16	3.88	0.14	0.18	0.27	0.00		Calculated
35	E13-Pipe	4.2	0 07:52	13.9	0.31	3.88	0.33	0.76	0.38	0.00		Calculated
36	E14-Pipe	4.7	0 07:52	13.7	0.34	3.94	0.37	0.81	0.40	0.00		Calculated
37	E15-Pipe	5.0	0 07:52	10.3	0.49	3.25	0.32	0.98	0.49	0.00		Calculated
38	E16-Pipe	5.2	0 07:52	13.3	0.39	3.96	0.11	0.87	0.43	0.00		Calculated
39	E1-Pipe	0.2	0 07:54	6.4	0.02	1.46	0.84	0.16	0.11	0.00		Calculated
40	E2-Pipe	0.2	0 07:54	6.4	0.03	1.69	0.55	0.19	0.12	0.00		Calculated
41	E4-Pipe	0.2	0 07:53	6.3	0.03	1.67	0.16	0.19	0.13	0.00		Calculated
42	E5.1-Pipe	0.4	0 07:50	1.9	0.23	4.41	0.12	0.22	0.33	0.00		Calculated
43	E5-Pipe	0.8	0 07:52	6.4	0.13	2.48	0.47	0.36	0.24	0.00		Calculated
44	E6.1-Pipe	0.9	0 07:50	2.0	0.44	5.46	0.09	0.31	0.46	0.00		Calculated
45	E6-Pipe	0.9	0 07:52	6.4	0.14	2.57	0.38	0.38	0.25	0.00		Calculated
46	E7-Pipe	1.8	0 07:51	13.9	0.13	3.06	0.32	0.49	0.25	0.00		Calculated
47	E8.1-Pipe	0.7	0 07:50	1.9	0.37	4.89	0.09	0.28	0.42	0.00		Calculated
48	E8-Pipe	1.9	0 07:51	13.8	0.14	3.08	0.33	0.50	0.25	0.00		Calculated
49	E9.1-Pipe	0.6	0 07:50	1.9	0.30	4.78	0.11	0.25	0.38	0.00		Calculated
50	E9-Pipe	2.7	0 07:51	13.8	0.19	3.39	0.33	0.59	0.30	0.00		Calculated
51	Link-01	5.2	0 07:52	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
52	Link-02	0.7	0 07:50	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
53	Link-03	0.8	0 07:50	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
54	Link-04	0.5	0 07:50	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
55	Link-05	17.0	0 08:02	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
56	Link-11	6.7	0 08:01	15.3	0.44	8.37	0.14	0.70	0.47	0.00		Calculated
57	Link-12	6.7	0 08:01	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
58	Link-14	7.8	0 08:01	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
59	Link-16	8.3	0 08:01	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
60	Link-17	4.3	0 08:13	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
61	Link-18	4.3	0 08:13	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
62	Link-19	4.3	0 08:13	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
63	Link-20	4.3	0 08:13	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
64	Link-29	7.8	0 08:01	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
65	Link-30	7.8	0 08:01	11.1	0.70	6.81	0.16	0.93	0.62	0.00		Calculated
66	Link-31	8.1	0 08:01	0.0	0.70	0.00		0.93	0.62	0.00		Calculated
67	Link-32	8.1	0 08:01	13.5	0.60	7.95	0.13	0.84	0.56	0.00		Calculated
68	Pipe (24)	5.2	0 08:02	8.3	0.62	4.94	0.15	0.86	0.57	0.00		Calculated
69	Pipe (34)	5.9	0 08:03	13.9	0.43	7.54	0.10	0.69	0.46	0.00		Calculated
70	Pipe (53)	4.3	0 08:13	7.8	0.55	4.52	0.10	0.79	0.53	0.00		Calculated
71	Pipe (59)	4.3	0 08:13	6.5	0.66	3.91	0.11	0.89	0.59	0.00		Calculated
72	Pipe (62)	4.3	0 08:13	6.4	0.66	3.90	0.11	0.89	0.59	0.00		Calculated

Storage Nodes

Storage Node : Detention-Basin

Input Data

Invert Elevation (ft)	10.50
Max (Rim) Elevation (ft)	15.50
Max (Rim) Offset (ft)	5.00
Initial Water Elevation (ft)	0.00
Initial Water Depth (ft)	-10.50
Ponded Area (ft²)	12634.80
Evaporation Loss	0.00

Infiltration/Exfiltration

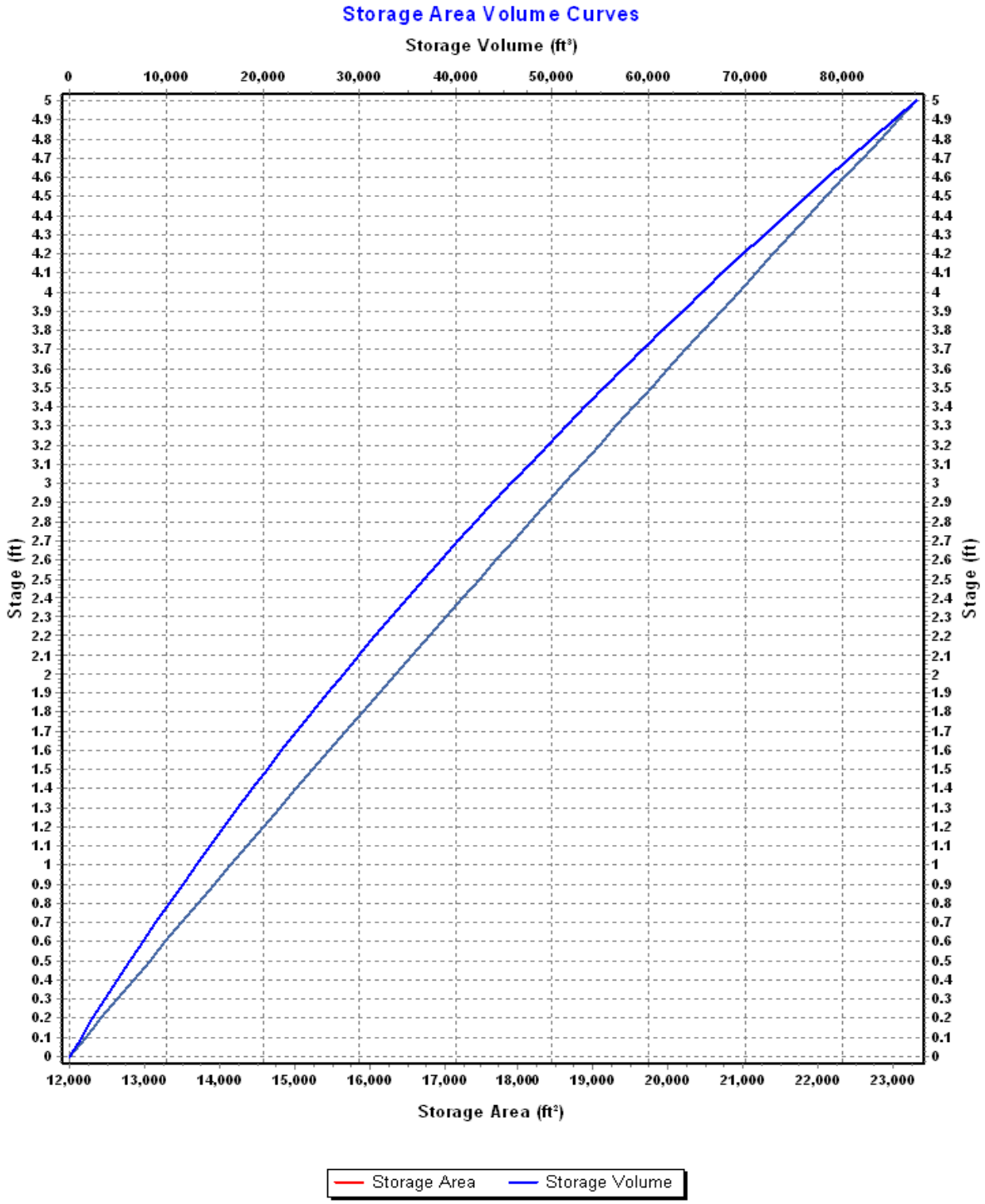
Exfiltration Rate (in/hr)	0.0900

Storage Area Volume Curves

Storage Curve : Storage-01

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	11997.07	0.000
0.1	12209.57	1210.33
0.2	12422.63	2441.94
0.3	12636.25	3694.88
0.4	12850.44	4969.21
0.5	13065.18	6264.99
0.6	13280.49	7582.27
0.7	13496.37	8921.11
0.8	13712.80	10281.57
0.9	13929.80	11663.70
1	14147.36	13067.56
1.1	14365.48	14493.20
1.2	14584.17	15940.68
1.3	14803.41	17410.06
1.4	15023.22	18901.39
1.5	15243.59	20414.73
1.6	15464.53	21950.14
1.7	15686.02	23507.67
1.8	15908.08	25087.38
1.9	16130.71	26689.32
2	16353.89	28313.55
2.1	16577.64	29960.13
2.2	16801.95	31629.11
2.3	17026.82	33320.55
2.4	17252.25	35034.50
2.5	17478.25	36771.03
2.6	17704.81	38530.18
2.7	17931.93	40312.02
2.8	18159.61	42116.60
2.9	18387.86	43943.97
3	18616.66	45794.20
3.1	18846.04	47667.34
3.2	19075.97	49563.44
3.3	19306.46	51482.56
3.4	19537.52	53424.76
3.5	19769.14	55390.09
3.6	20001.33	57378.61
3.7	20234.07	59390.38
3.8	20467.38	61425.45
3.9	20701.25	63483.88
4	20935.68	65565.73
4.1	21170.68	67671.05
4.2	21406.24	69799.90
4.3	21642.36	71952.33
4.4	21879.04	74128.40
4.5	22116.28	76328.17
4.6	22354.09	78551.69
4.7	22592.46	80799.02
4.8	22831.39	83070.21
4.9	23070.89	85365.32
5	23310.95	87684.41

MAX VOLUME = 30,930 FT^3


Storage Area Volume Curves
Storage Volume (ft³)
0
10,000
20,000
30,000
40,000
50,000
60,000
70,000
80,000
Stage (ft)
Stage (ft)
12,000
13,000
14,000
15,000
16,000
17,000
18,000
19,000
20,000
21,000
22,000
23,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Detention-Basin (continued)

Outflow Orifices

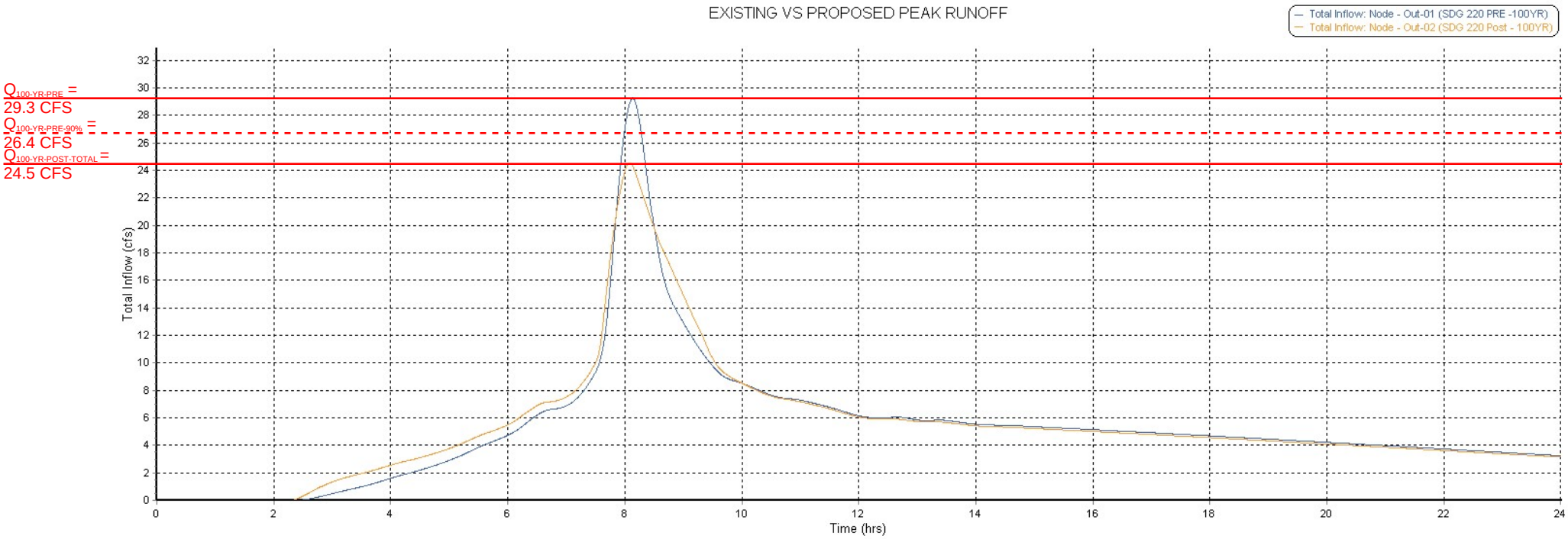
SN	Element ID	Orifice Type	Orifice Shape	Flap Gate	Circular Orifice Diameter (in)	Rectangular Orifice Height (in)	Rectangular Orifice Width (in)	Orifice Invert Elevation (ft)	Orifice Coefficient
1	Orifice-01	Side	Rectangular	No		9.00	12.00	11.00	0.63
2	Orifice-02	Side	Rectangular	No		9.00	12.00	11.00	0.63
3	Orifice-03	Side	Rectangular	No		9.00	12.00	11.00	0.63
4	Orifice-04	Side	Rectangular	No		9.00	12.00	11.00	0.63

FOUR (4) ORIFICES 9" x 12" @ 11.00'

Output Summary Results

$Q_{100\text{-YR-POST DETAINED}}$

Peak Inflow (cfs)	23.85
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	17.07
Peak Exfiltration Flow Rate (cfm)	2.10
Max HGL Elevation Attained (ft)	12.66
Max HGL Depth Attained (ft)	2.16
Average HGL Elevation Attained (ft)	11.38
Average HGL Depth Attained (ft)	0.88
Time of Max HGL Occurrence (days hh:mm)	0 08:13
Total Exfiltration Volume (1000-ft³)	2.470
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00


EXISTING VS PROPOSED PEAK RUNOFF
Total Inflow: Node - Out-01 (SDG 220 PRE -100YR)
Total Inflow: Node - Out-02 (SDG 220 Post - 100YR)
Q100-YR-PRE = 29.3 CFS
Q100-YR-PRE-90% = 26.4 CFS
Q100-YR-POST-TOTAL = 24.5 CFS
Total Inflow (cfs)
Time (hrs)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32

HYDRAULIC CALCULATIONS

For

SDG Commerce 220 Distribution Center
American Canyon, CA

Prepared for:

SDG Commerce 220, LLC
413 W. Yosemite Ave, Suite 105
Madera, Ca 93637



Project No. 4122068.0
September 29, 2023

1515 Fourth Street, Napa, CA 94559 www.rsacivil.com 707.252.3301.v 707.252.4966.f

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1. ON-SITE HYDRAULIC CALCULATIONS
2. 10-YEAR HGL ANALYSIS
3. 10-YEAR HGL PIPE PROFILES

I. Introduction

This report demonstrates that the proposed on-site storm drains, drop inlets, and spillways have sufficient capacity to convey stormwater, as intended, for the SDG Commerce 220 Distribution Center project.

II. Off Site Stormwater Run-on

Stormwater run-on to the site is generated by 12.7 acres of up-slope tributary east of the project site. The area is undeveloped with slopes ranging from 5 - 20%. Three existing culverts convey run-on across Commerce Boulevard. Approximately 1/3 of the project run-on will follow existing drainage paths through a series of mapped wetlands and will not be treated or detained in the detention pond. This portion of the run-on will be routed and discharged towards the northwest corner of the property. The remaining 2/3 of the run-on will be routed through the on-site storm drain system to the detention pond. The runoff is ultimately conveyed to the North Slough.

III. Methodology

Hydraulic calculations are included for all stormwater conveyance systems on the proposed site. The storm drain pipe network & conveyance systems have been designed for the 10-year design storm event without surcharge per City of American Canyon standards. Drain inlets, outlets, and spillways are designed for the 100-year design storm. The storm drain network was modeled using Storm & Sanitary Analysis (SSA) while the capacity of the other structures were determined using hydraulic equations pertaining to that structure. A time of concentration of 6 minutes has been assumed for all developed areas, see On-site Hydraulic Calculation in Attachment 1. Additionally, a hydraulic grade line analysis has been performed for all storm drains during the 10-year, 24-hour storm event, see 10-year HGL Analysis in Attachment 2. The maximum water elevation for the 10-year storm in the Detention Pond was used as the tailwater for the storm drain system. There was no tailwater elevation for the outfall conditions to the west to the property.

Refer to Use Permit Plans for grading and drainage design. See Proposed Conditions Hydrology Exhibit and schematic maps attached in On-site Hydraulic Calculation in Attachment 1.

IV. Storm Drain Hydraulics

The sites storm drains range from 8 to 30 inches. All storm drains flow by gravity to their designated outfalls. Each storm drain is designed to convey the 10-year and 100-year storm event for the area captured by the storm drain. Autodesk SSA was used to model the storm drain network and determine the capacity of proposed storm drain system.

Mannings Equation: $Q = VA = [(k/n)(R_h^{2/3})(S^{1/2})](A)$

k = 1.49 n = 0.012 (Smooth Walled Corrugated Polyethylene Pipe)

R_h = Varies S = Varies

A = Varies

The SSA model produced profiles of the hydraulic grade line (HGL) for the 10-year design storm event. The profile of the HGL shows the system is adequately sized for the 10-year storm event, see 10-year HGL Analysis in Attachment 2.

V. DI Hydraulics

The drop inlets will capture sheet flow runoff from paved areas around the site. The drop inlets are 36-inch by 36-inch and 48-inch by 48-inch. The peak flows from the areas flowing to each drop inlet were modeled in Autodesk SSA and have been included in Attachment 2. Based on the attached weir hydraulics and the 100-yr peak flows, none of the drain inlets are calculated to exceed one (1) inch of head on the inlets during the 100-yr peak flows.

Weir Equation: $Q = 3.3P(h^{1.5}) \rightarrow h = [Q/(3.3P)]^{2/3}$

$Q_{max\ 36x36}$ = 0.50 cfs (from subbasin B21)

$Q_{max\ 48x48}$ = 0.50 cfs (from subbasin B22)

P = 77% of total grate perimeter

VI. Spillway Hydraulics

The detention pond will require a spillway for emergency overflows and an overland release route for the detention pond. The Ogee Spillway calculation was used to determine the spillway flow rates. The maximum capacity of a 15' wide, 1.8' high spillway (height based on spillway elevation to top of pond) is 142.2 cfs. The peak flows from the 100-yr storm are calculated to be 23.9 cfs. Therefore, the spillway would have sufficient capacity for overland release of the 100-yr peak flows.

Ogee Spillway Equation: $Q = C_d(2g)^{1/2}(H_d)^{3/2}$

C_d = From attached chart $g = 32.2\ ft/sec^2$ H_d = 1.8 ft

$Q_{100\text{-}yr\ Post\text{-}Detained}$ = 23.9 cfs

VII. Level Spreader Hydraulics

There are five 24" diameter, 20' long level spreaders that inlet to the detention pond. Each inflow level spreader has sufficient hydraulic capacity for the calculated flows, which were modeled in Autodesk SSA. The total inflow into the detention pond is 23.9 cfs.

There are four 24" diameter, 60' long level spreaders proposed for the detention pond overflow structures. Each overflow level spreader receives 4.3 cfs from the detention pond and has sufficient hydraulic capacity for the calculated flows, which were also modeled in Autodesk SSA. The total outflow from the detention pond is 17.07 cfs. Refer to the Level Spreader Hydraulics in Attachment 2 for a summary of flows to each level spreader.

The Francis formula was used to determine the level spreader outflow rates.

Francis Formula

Rectangular Weir Equation: $Q = 3.33\ (b-0.2h)(h)^{3/2}$

b = width of weir h= height of water above weir

VIII. Run-on Hydraulics

The run-on from the upslope tributary area, east of Commerce Boulevard is collected will be capture by swales and conveyed under Commerce Boulevard by three existing concrete culverts. Approximately 1/3 of the project run-on will be routed through the north undisturbed area of the site via surface flow and will not be treated or detained in the detention pond. This portion of the run-on will be routed and discharged towards the northwest corner of the property. Two (2) 18" storm drain pipes route this run-on. The hydraulic grade line analysis has been performed for the storm drains during the 10-year, 24-hour storm event, see 10-year HGL Analysis in Attachment 2.

IX. Conclusion

The stormwater conveyance systems for the SDG Commerce 220 Distribution Center have been designed to satisfy the City of American Canyon ESPS. All stormwater structures and conveyance systems have been designed to accommodate flows during the 10-yr design storm event. Additionally , the project provides appropriate overland release routes where the storm drain system has not been designed to accommodate the 100-year flows.

ATTACHMENT 1

ON-SITE HYDRAULIC CALCULATIONS

SDG COMMERCE 220 DISTRIBUTION CENTER

V I C I N I T Y M A P

AMERICAN CANYON CALIFORNIA



VICINITY MAP

SCALE: 1" = 3000'

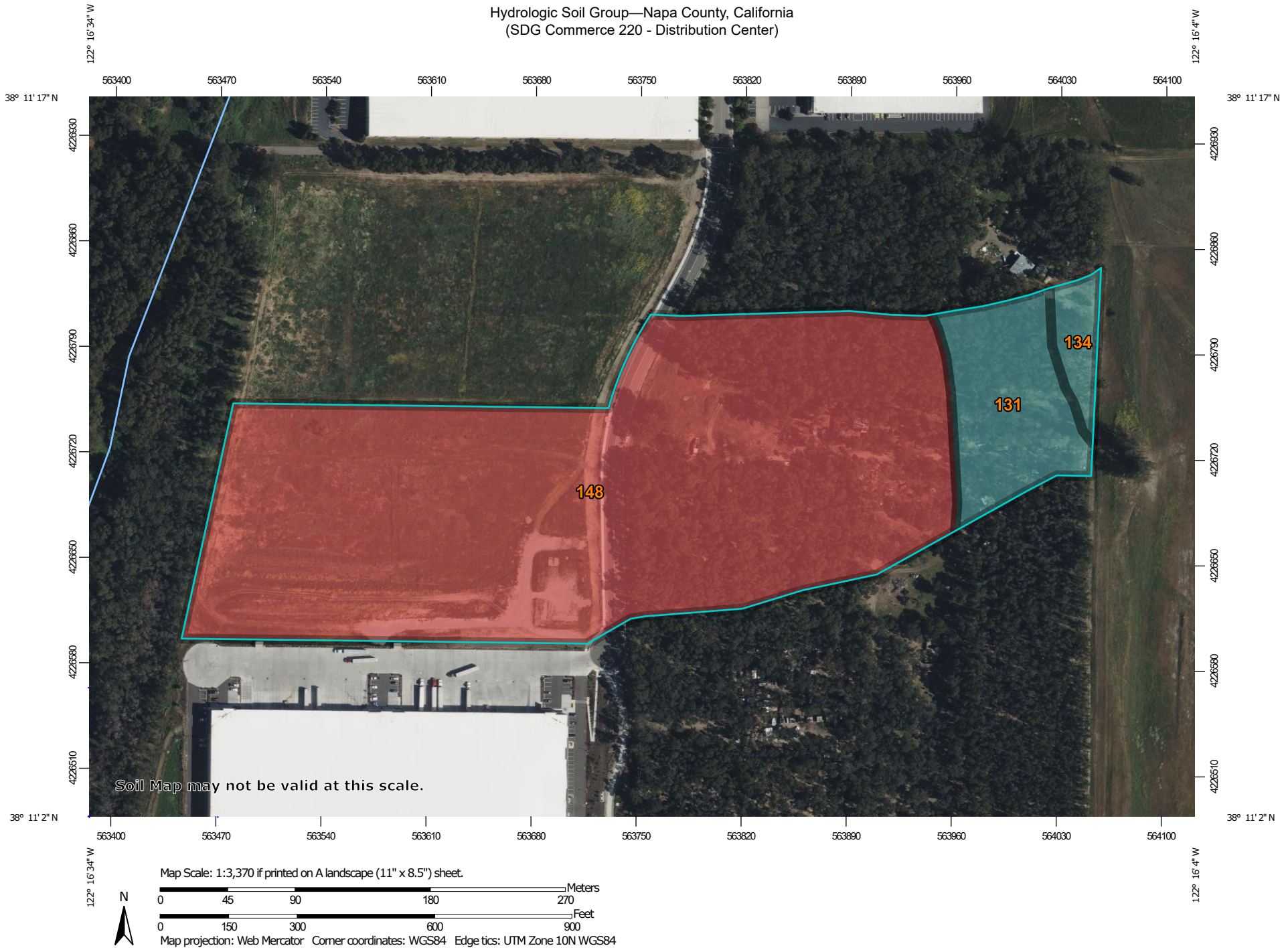
RSA+

1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE|707|252.3301
+ www.RSAcivil.com +

RSA+| CONSULTING CIVIL ENGINEERS + SURVEYORS + est. 1980

JUL. 20, 2023 4122068.0 Exh-Vic Map.dwg

Hydrologic Soil Group—Napa County, California
(SDG Commerce 220 - Distribution Center)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 15, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2022—Apr 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
131	Fagan clay loam, 5 to 15 percent slopes	C	2.6	10.9%
134	Fagan clay loam, 30 to 50 percent slopes, slipped	C	0.6	2.6%
148	Haire clay loam, 2 to 9 percent slopes	D	20.6	86.5%
Totals for Area of Interest			**23.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

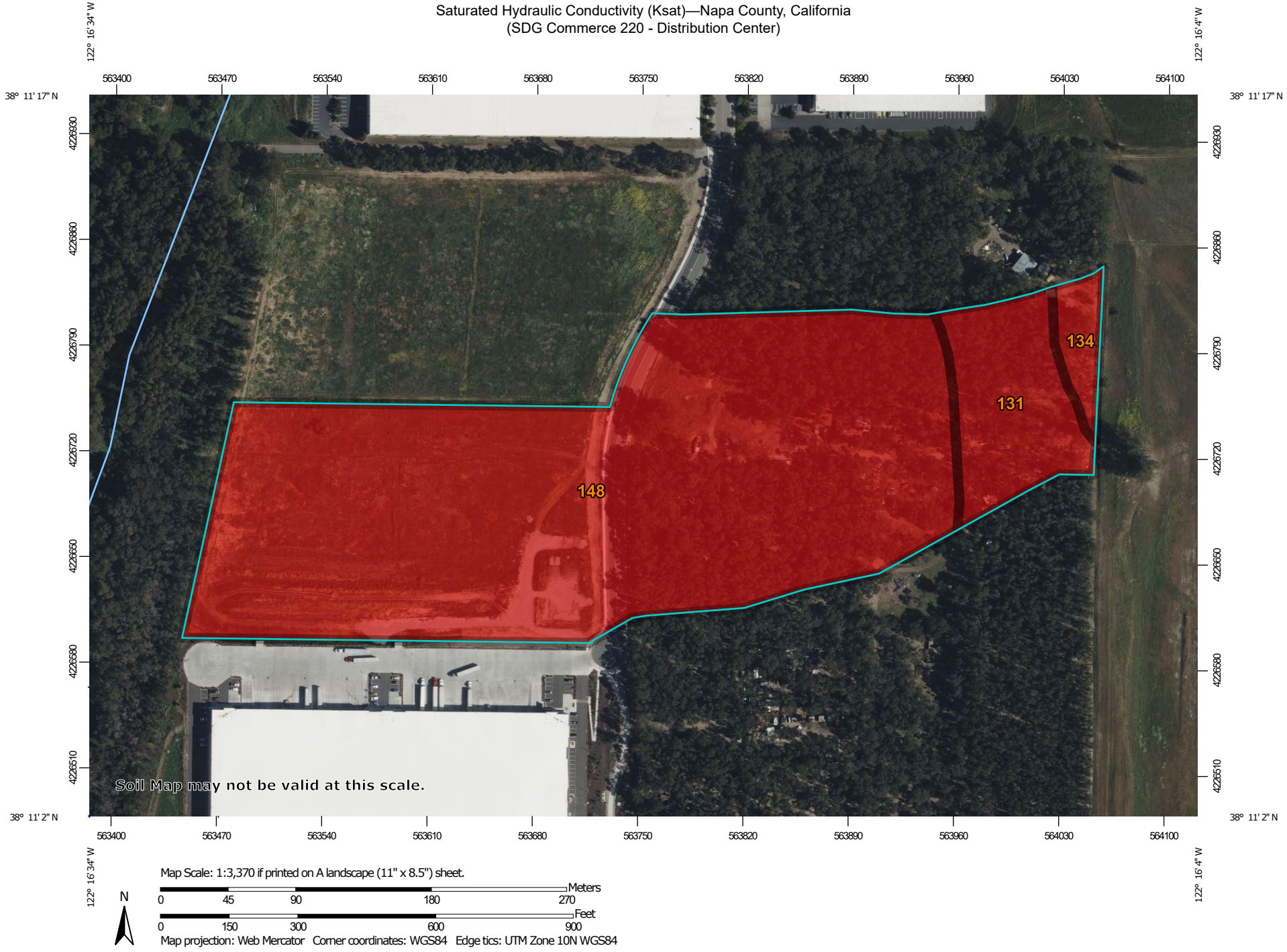
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Saturated Hydraulic Conductivity (Ksat)—Napa County, California
(SDG Commerce 220 - Distribution Center)



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

= 2.7000

Not rated or not available

Soil Rating Lines

= 2.7000

Not rated or not available

Soil Rating Points

= 2.7000

Not rated or not available

Water Features

Streams and Canals

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Major Roads

Local Roads

Background

Aerial Photography

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The soil surveys that comprise your AOI were mapped at 1:24,000.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

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Survey Area Data: Version 15, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2022—Apr 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Saturated Hydraulic Conductivity (Ksat)

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
131	Fagan clay loam, 5 to 15 percent slopes	2.7000	2.6	10.9%
134	Fagan clay loam, 30 to 50 percent slopes, slipped	2.7000	0.6	2.6%
148	Haire clay loam, 2 to 9 percent slopes	2.7000	20.6	86.5%
Totals for Area of Interest			**23.8**	**100.0%**

Description

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Rating Options

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

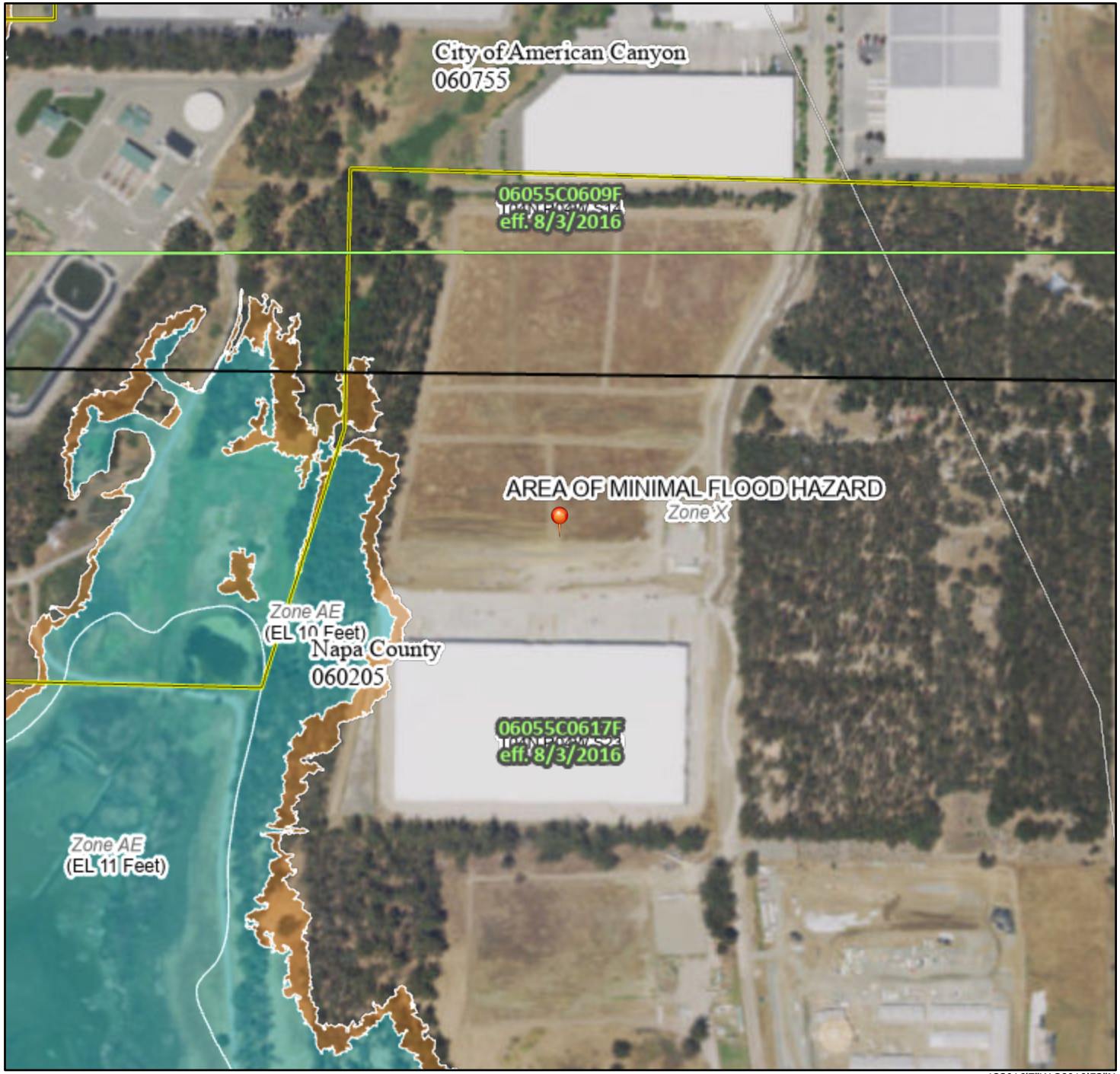
Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

National Flood Hazard Layer FIRMette

FEMA

122°16'44"W 38°11'22"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

122°16'7"W 38°10'53"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/16/2022 at 2:41 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used f regulatory purposes.

2896

NOAA Atlas 14, Volume 6, Version 2
Location name: American Canyon, California, USA*
Latitude: 38.1854°, Longitude: -122.2702°
Elevation: 30.98 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.116 (0.103-0.132)	0.145 (0.129-0.165)	0.185 (0.164-0.210)	0.218 (0.191-0.250)	0.265 (0.224-0.316)	0.302 (0.249-0.370)	0.341 (0.273-0.430)	0.383 (0.297-0.499)	0.442 (0.327-0.604)	0.489 (0.348-0.695)
10-min	0.166 (0.148-0.189)	0.208 (0.185-0.236)	0.264 (0.235-0.301)	0.312 (0.274-0.359)	0.379 (0.320-0.454)	0.433 (0.357-0.531)	0.489 (0.392-0.617)	0.549 (0.426-0.715)	0.633 (0.468-0.865)	0.701 (0.499-0.996)
15-min	0.201 (0.179-0.228)	0.251 (0.224-0.286)	0.320 (0.284-0.364)	0.377 (0.331-0.434)	0.459 (0.387-0.549)	0.524 (0.432-0.642)	0.592 (0.474-0.746)	0.664 (0.515-0.865)	0.766 (0.566-1.05)	0.848 (0.603-1.20)
30-min	0.281 (0.250-0.318)	0.350 (0.312-0.398)	0.446 (0.395-0.508)	0.526 (0.462-0.605)	0.639 (0.540-0.764)	0.730 (0.601-0.894)	0.825 (0.661-1.04)	0.926 (0.718-1.20)	1.07 (0.789-1.46)	1.18 (0.840-1.68)
60-min	0.398 (0.355-0.452)	0.498 (0.443-0.565)	0.633 (0.561-0.721)	0.747 (0.656-0.859)	0.908 (0.767-1.09)	1.04 (0.854-1.27)	1.17 (0.938-1.48)	1.32 (1.02-1.71)	1.52 (1.12-2.07)	1.68 (1.19-2.38)
2-hr	0.592 (0.528-0.672)	0.734 (0.653-0.834)	0.925 (0.820-1.05)	1.08 (0.952-1.25)	1.31 (1.10-1.56)	1.48 (1.22-1.81)	1.66 (1.33-2.09)	1.85 (1.44-2.41)	2.12 (1.56-2.89)	2.32 (1.65-3.30)
3-hr	0.750 (0.668-0.850)	0.929 (0.826-1.06)	1.17 (1.04-1.33)	1.37 (1.20-1.57)	1.64 (1.38-1.96)	1.86 (1.53-2.27)	2.08 (1.66-2.62)	2.31 (1.79-3.01)	2.63 (1.94-3.59)	2.88 (2.05-4.09)
6-hr	1.08 (0.964-1.23)	1.35 (1.20-1.53)	1.70 (1.51-1.94)	1.99 (1.74-2.28)	2.38 (2.01-2.85)	2.69 (2.22-3.29)	3.00 (2.40-3.78)	3.33 (2.58-4.33)	3.77 (2.79-5.15)	4.12 (2.93-5.85)
12-hr	1.44 (1.28-1.63)	1.83 (1.63-2.08)	2.35 (2.08-2.68)	2.77 (2.43-3.18)	3.34 (2.82-3.99)	3.78 (3.12-4.63)	4.22 (3.38-5.33)	4.68 (3.63-6.10)	5.31 (3.92-7.25)	5.79 (4.12-8.23)
24-hr	1.92 (1.73-2.18)	2.52 (2.26-2.85)	3.28 (2.95-3.74)	3.90 (3.48-4.47)	4.74 (4.11-5.58)	5.38 (4.59-6.44)	6.02 (5.03-7.36)	6.68 (5.46-8.36)	7.57 (5.97-9.81)	8.26 (6.32-11.0)
2-day	2.44 (2.19-2.76)	3.19 (2.87-3.62)	4.17 (3.74-4.74)	4.96 (4.42-5.68)	6.02 (5.22-7.08)	6.82 (5.82-8.17)	7.63 (6.38-9.32)	8.46 (6.90-10.6)	9.57 (7.54-12.4)	10.4 (7.98-13.9)
3-day	2.82 (2.54-3.20)	3.70 (3.33-4.20)	4.83 (4.33-5.49)	5.73 (5.11-6.56)	6.94 (6.02-8.17)	7.86 (6.70-9.41)	8.78 (7.33-10.7)	9.71 (7.93-12.1)	11.0 (8.64-14.2)	11.9 (9.13-15.9)
4-day	3.14 (2.83-3.56)	4.12 (3.70-4.67)	5.38 (4.82-6.11)	6.38 (5.68-7.30)	7.71 (6.69-9.07)	8.71 (7.43-10.4)	9.72 (8.12-11.9)	10.7 (8.76-13.4)	12.1 (9.52-15.6)	13.1 (10.0-17.5)
7-day	3.88 (3.50-4.40)	5.14 (4.62-5.83)	6.72 (6.03-7.64)	7.96 (7.10-9.11)	9.58 (8.31-11.3)	10.8 (9.19-12.9)	12.0 (9.99-14.6)	13.1 (10.7-16.4)	14.7 (11.6-19.0)	15.8 (12.1-21.1)
10-day	4.39 (3.95-4.97)	5.83 (5.24-6.62)	7.63 (6.84-8.67)	9.02 (8.04-10.3)	10.8 (9.39-12.7)	12.1 (10.4-14.5)	13.4 (11.2-16.4)	14.7 (12.0-18.4)	16.3 (12.9-21.2)	17.5 (13.4-23.4)
20-day	5.72 (5.15-6.48)	7.60 (6.83-8.62)	9.90 (8.88-11.3)	11.7 (10.4-13.4)	13.9 (12.1-16.4)	15.5 (13.2-18.6)	17.0 (14.2-20.8)	18.5 (15.1-23.2)	20.4 (16.1-26.5)	21.8 (16.7-29.1)
30-day	6.90 (6.21-7.82)	9.11 (8.19-10.3)	11.8 (10.6-13.4)	13.8 (12.3-15.8)	16.4 (14.2-19.3)	18.2 (15.5-21.8)	20.0 (16.7-24.4)	21.6 (17.7-27.0)	23.7 (18.7-30.7)	25.2 (19.3-33.6)
45-day	8.51 (7.66-9.64)	11.1 (9.96-12.6)	14.2 (12.7-16.1)	16.5 (14.7-18.9)	19.5 (16.9-22.9)	21.5 (18.4-25.8)	23.5 (19.6-28.7)	25.4 (20.7-31.7)	27.7 (21.8-35.8)	29.3 (22.5-39.1)
60-day	10.2 (9.20-11.6)	13.1 (11.8-14.9)	16.6 (14.9-18.9)	19.2 (17.1-22.0)	22.5 (19.5-26.4)	24.8 (21.1-29.7)	26.9 (22.5-32.9)	29.0 (23.7-36.3)	31.6 (24.9-40.9)	33.4 (25.5-44.5)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

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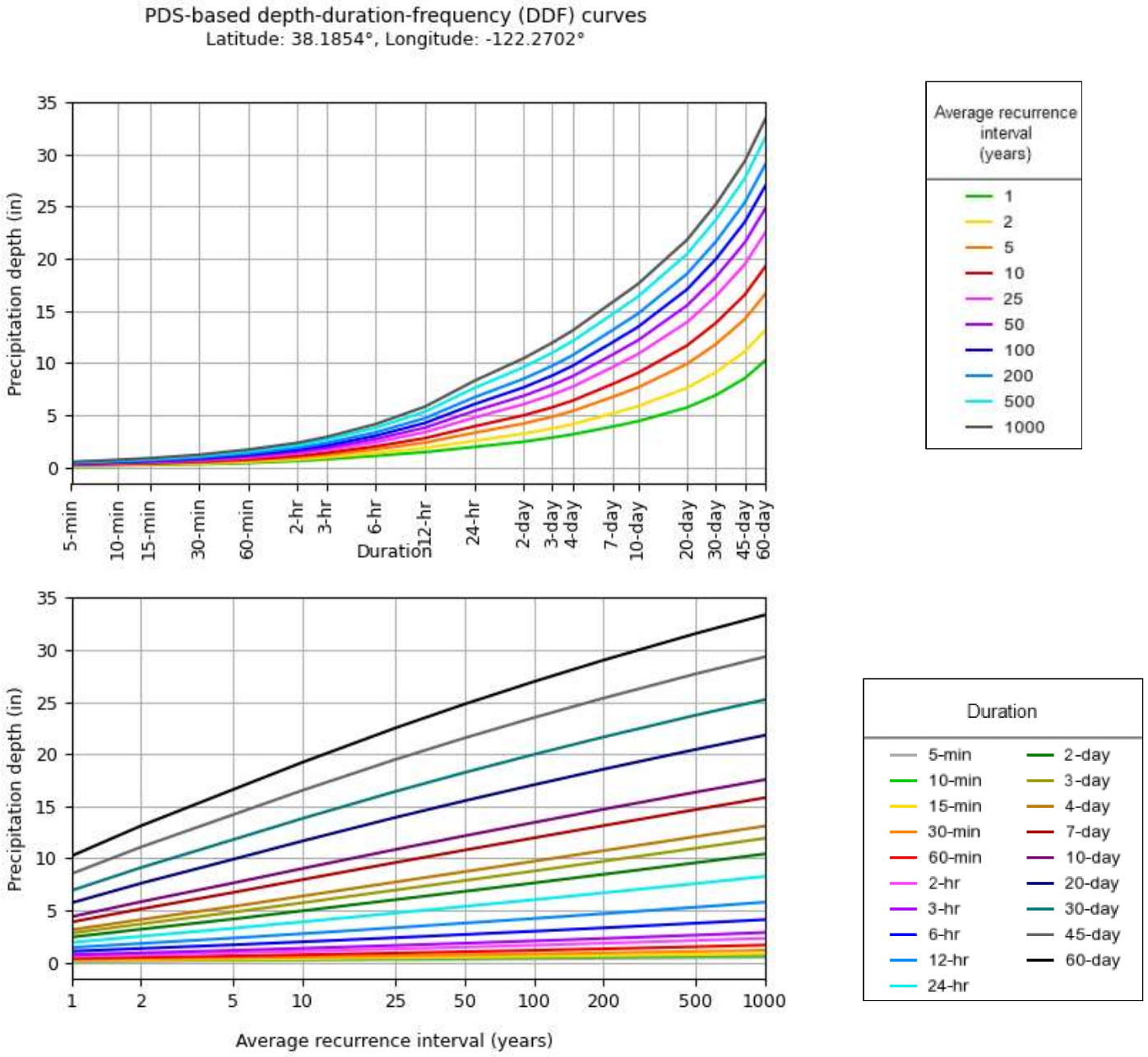
PF graphical



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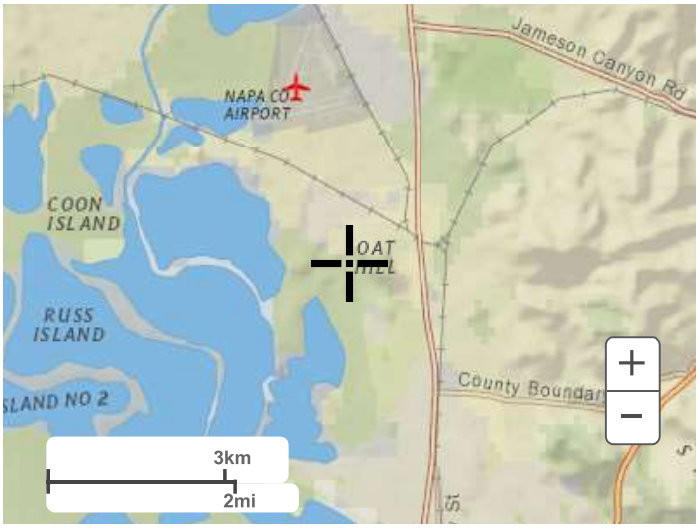
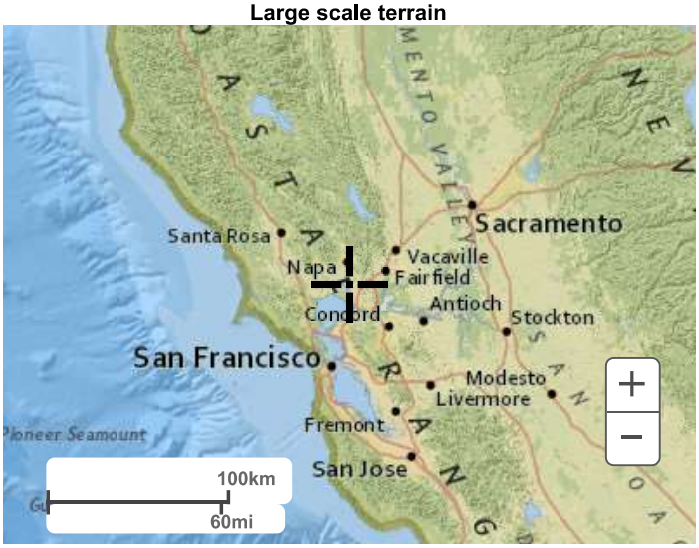
Maps & aerials

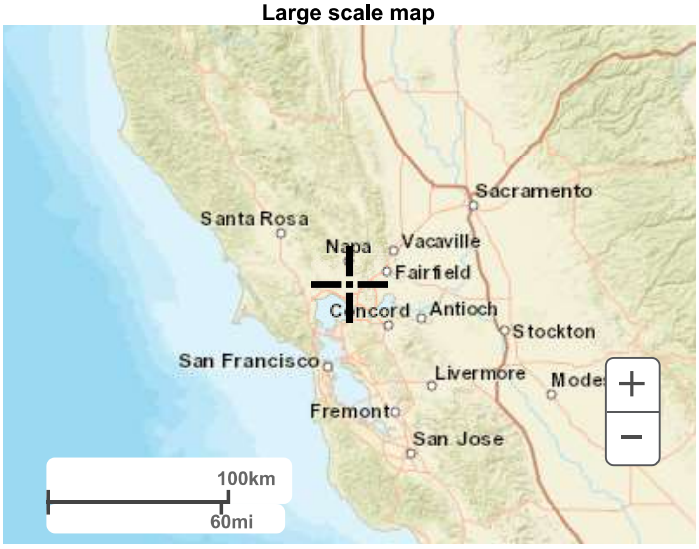
Small scale terrain



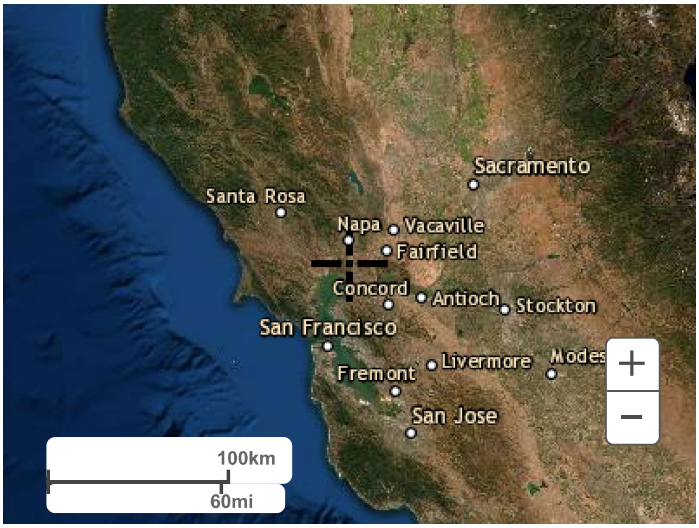
Large scale terrain



Large scale map



Large scale aerial



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National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

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Location name: American Canyon, California, USA*
Latitude: 38.1857°, Longitude: -122.2732°
Elevation: m/ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.39 (1.24-1.57)	1.73 (1.54-1.97)	2.21 (1.96-2.51)	2.59 (2.28-2.99)	3.16 (2.66-3.78)	3.60 (2.96-4.42)	4.07 (3.26-5.14)	4.57 (3.54-5.95)	5.27 (3.90-7.20)	5.83 (4.14-8.29)
10-min	0.996 (0.888-1.13)	1.24 (1.10-1.41)	1.58 (1.40-1.80)	1.86 (1.63-2.14)	2.26 (1.91-2.71)	2.58 (2.13-3.16)	2.92 (2.34-3.68)	3.28 (2.54-4.27)	3.77 (2.79-5.16)	4.18 (2.97-5.94)
15-min	0.800 (0.716-0.908)	1.00 (0.892-1.14)	1.27 (1.13-1.45)	1.50 (1.32-1.73)	1.82 (1.54-2.18)	2.08 (1.72-2.55)	2.35 (1.88-2.96)	2.64 (2.05-3.44)	3.04 (2.25-4.16)	3.37 (2.40-4.79)
30-min	0.558 (0.498-0.632)	0.696 (0.620-0.792)	0.886 (0.786-1.01)	1.04 (0.918-1.20)	1.27 (1.07-1.52)	1.45 (1.19-1.78)	1.64 (1.31-2.06)	1.84 (1.43-2.39)	2.12 (1.57-2.89)	2.35 (1.67-3.33)
60-min	0.396 (0.353-0.450)	0.495 (0.440-0.562)	0.629 (0.558-0.717)	0.742 (0.652-0.853)	0.902 (0.762-1.08)	1.03 (0.848-1.26)	1.16 (0.932-1.47)	1.31 (1.01-1.70)	1.51 (1.11-2.06)	1.67 (1.18-2.37)
2-hr	0.294 (0.262-0.334)	0.365 (0.324-0.414)	0.460 (0.408-0.524)	0.538 (0.473-0.619)	0.648 (0.548-0.775)	0.735 (0.606-0.900)	0.824 (0.660-1.04)	0.919 (0.713-1.20)	1.05 (0.776-1.43)	1.15 (0.820-1.64)
3-hr	0.248 (0.221-0.281)	0.307 (0.273-0.349)	0.386 (0.342-0.440)	0.452 (0.397-0.519)	0.542 (0.458-0.648)	0.613 (0.505-0.751)	0.686 (0.550-0.865)	0.763 (0.592-0.994)	0.869 (0.642-1.19)	0.952 (0.677-1.35)
6-hr	0.180 (0.160-0.204)	0.223 (0.199-0.254)	0.281 (0.249-0.320)	0.329 (0.289-0.378)	0.394 (0.333-0.472)	0.445 (0.367-0.545)	0.497 (0.398-0.627)	0.551 (0.427-0.717)	0.624 (0.462-0.853)	0.682 (0.485-0.969)
12-hr	0.118 (0.105-0.134)	0.151 (0.134-0.171)	0.193 (0.171-0.220)	0.228 (0.200-0.262)	0.275 (0.232-0.329)	0.311 (0.256-0.381)	0.347 (0.278-0.438)	0.385 (0.299-0.501)	0.436 (0.323-0.596)	0.476 (0.338-0.676)
24-hr	0.079 (0.072-0.090)	0.104 (0.093-0.118)	0.136 (0.122-0.154)	0.161 (0.144-0.184)	0.196 (0.170-0.230)	0.222 (0.189-0.266)	0.248 (0.207-0.304)	0.276 (0.225-0.345)	0.312 (0.246-0.404)	0.341 (0.261-0.454)
2-day	0.050 (0.045-0.057)	0.066 (0.059-0.075)	0.086 (0.077-0.098)	0.102 (0.091-0.117)	0.124 (0.108-0.146)	0.141 (0.120-0.168)	0.157 (0.131-0.192)	0.174 (0.142-0.218)	0.197 (0.155-0.255)	0.215 (0.164-0.286)
3-day	0.039 (0.035-0.044)	0.051 (0.046-0.058)	0.066 (0.060-0.075)	0.079 (0.070-0.090)	0.095 (0.083-0.112)	0.108 (0.092-0.129)	0.121 (0.101-0.147)	0.133 (0.109-0.167)	0.151 (0.119-0.195)	0.164 (0.125-0.218)
4-day	0.032 (0.029-0.037)	0.042 (0.038-0.048)	0.055 (0.050-0.063)	0.066 (0.059-0.075)	0.079 (0.069-0.094)	0.090 (0.077-0.108)	0.100 (0.084-0.122)	0.111 (0.090-0.138)	0.124 (0.098-0.161)	0.135 (0.103-0.180)
7-day	0.023 (0.021-0.026)	0.030 (0.027-0.034)	0.040 (0.036-0.045)	0.047 (0.042-0.054)	0.056 (0.049-0.066)	0.064 (0.054-0.076)	0.070 (0.059-0.086)	0.077 (0.063-0.097)	0.086 (0.068-0.112)	0.093 (0.071-0.124)
10-day	0.018 (0.016-0.021)	0.024 (0.022-0.027)	0.031 (0.028-0.036)	0.037 (0.033-0.043)	0.045 (0.039-0.053)	0.050 (0.043-0.060)	0.055 (0.046-0.068)	0.061 (0.049-0.076)	0.067 (0.053-0.087)	0.072 (0.055-0.096)
20-day	0.012 (0.011-0.013)	0.016 (0.014-0.018)	0.020 (0.018-0.023)	0.024 (0.021-0.028)	0.029 (0.025-0.034)	0.032 (0.027-0.038)	0.035 (0.029-0.043)	0.038 (0.031-0.048)	0.042 (0.033-0.055)	0.045 (0.034-0.060)
30-day	0.009 (0.009-0.011)	0.013 (0.011-0.014)	0.016 (0.015-0.018)	0.019 (0.017-0.022)	0.023 (0.020-0.027)	0.025 (0.021-0.030)	0.027 (0.023-0.034)	0.030 (0.024-0.037)	0.033 (0.026-0.042)	0.035 (0.027-0.046)
45-day	0.008 (0.007-0.009)	0.010 (0.009-0.012)	0.013 (0.012-0.015)	0.015 (0.014-0.017)	0.018 (0.015-0.021)	0.020 (0.017-0.024)	0.022 (0.018-0.026)	0.023 (0.019-0.029)	0.025 (0.020-0.033)	0.027 (0.021-0.036)
60-day	0.007 (0.006-0.008)	0.009 (0.008-0.010)	0.011 (0.010-0.013)	0.013 (0.012-0.015)	0.015 (0.013-0.018)	0.017 (0.015-0.020)	0.019 (0.016-0.023)	0.020 (0.016-0.025)	0.022 (0.017-0.028)	0.023 (0.018-0.031)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

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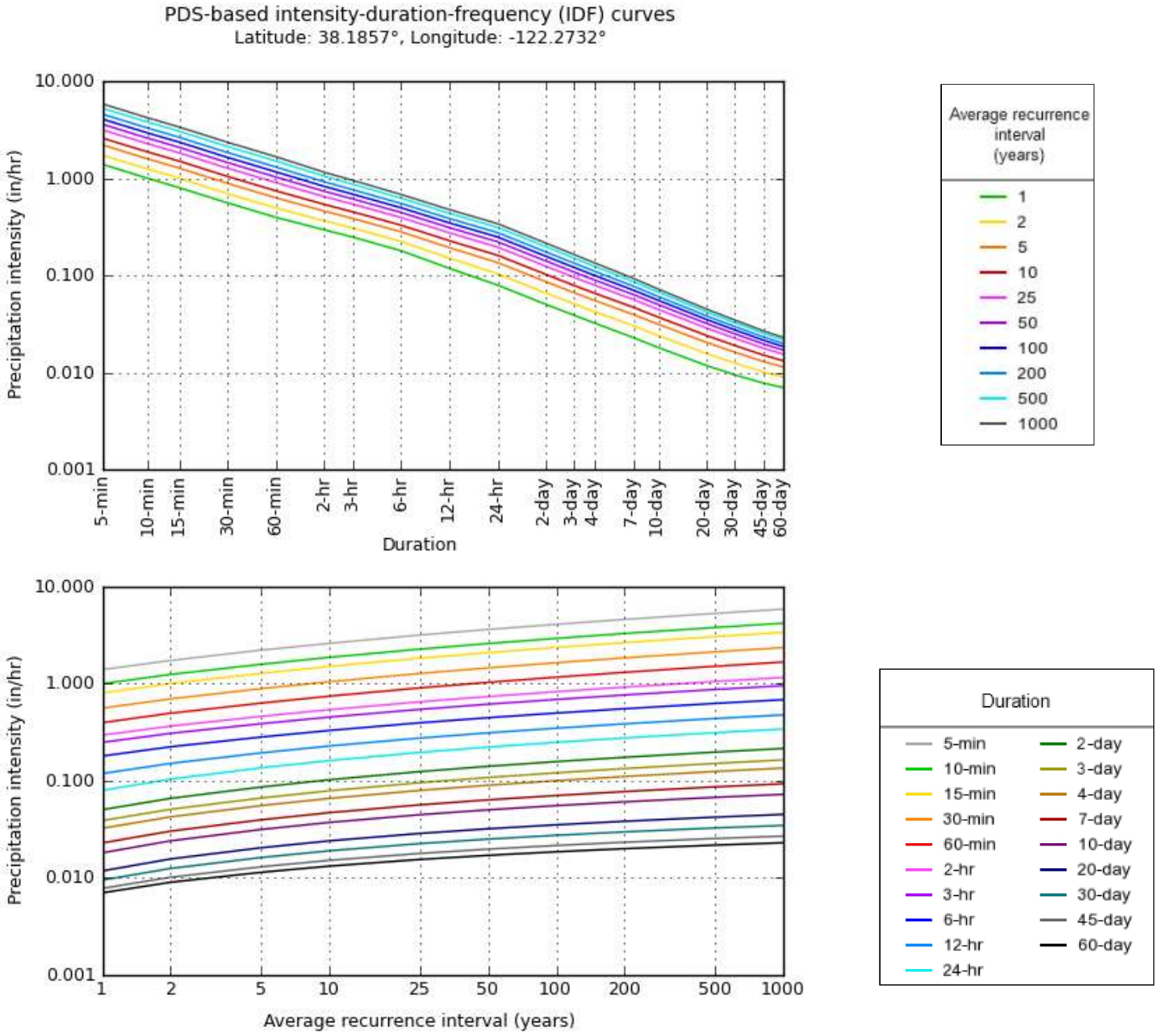
PF graphical



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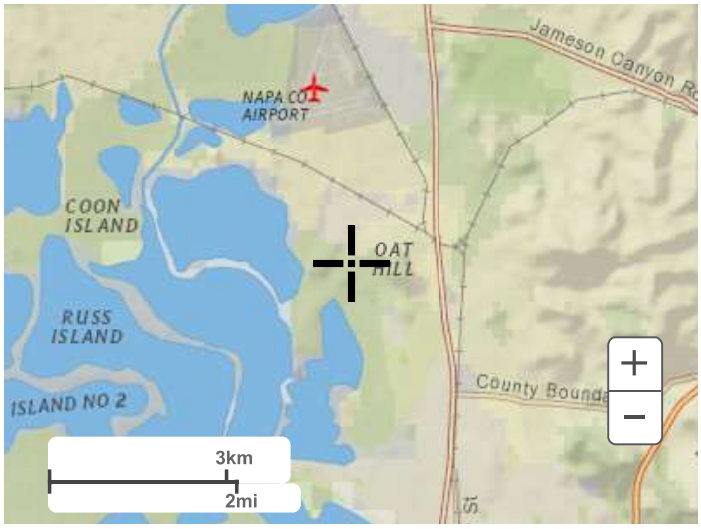
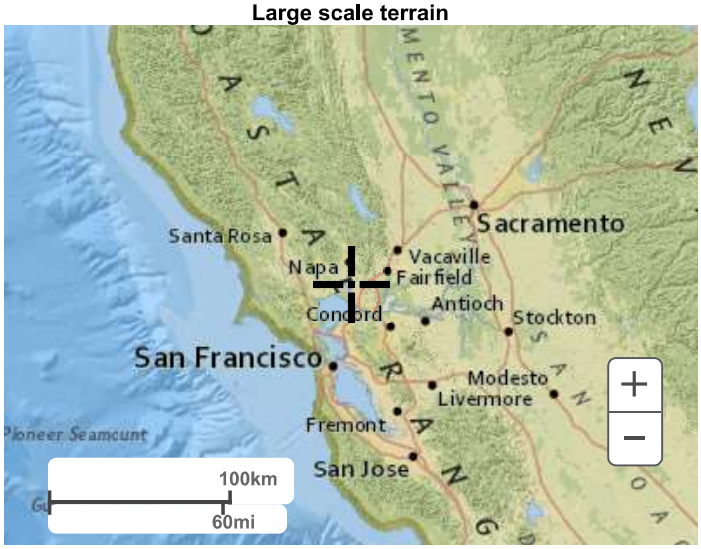
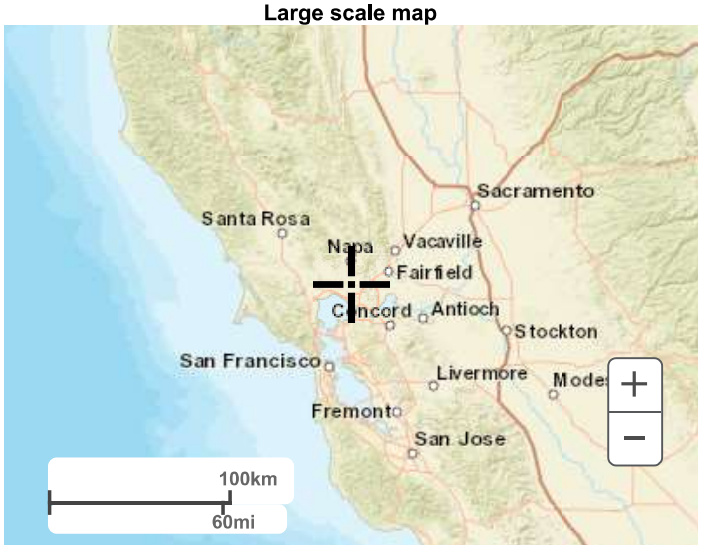
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



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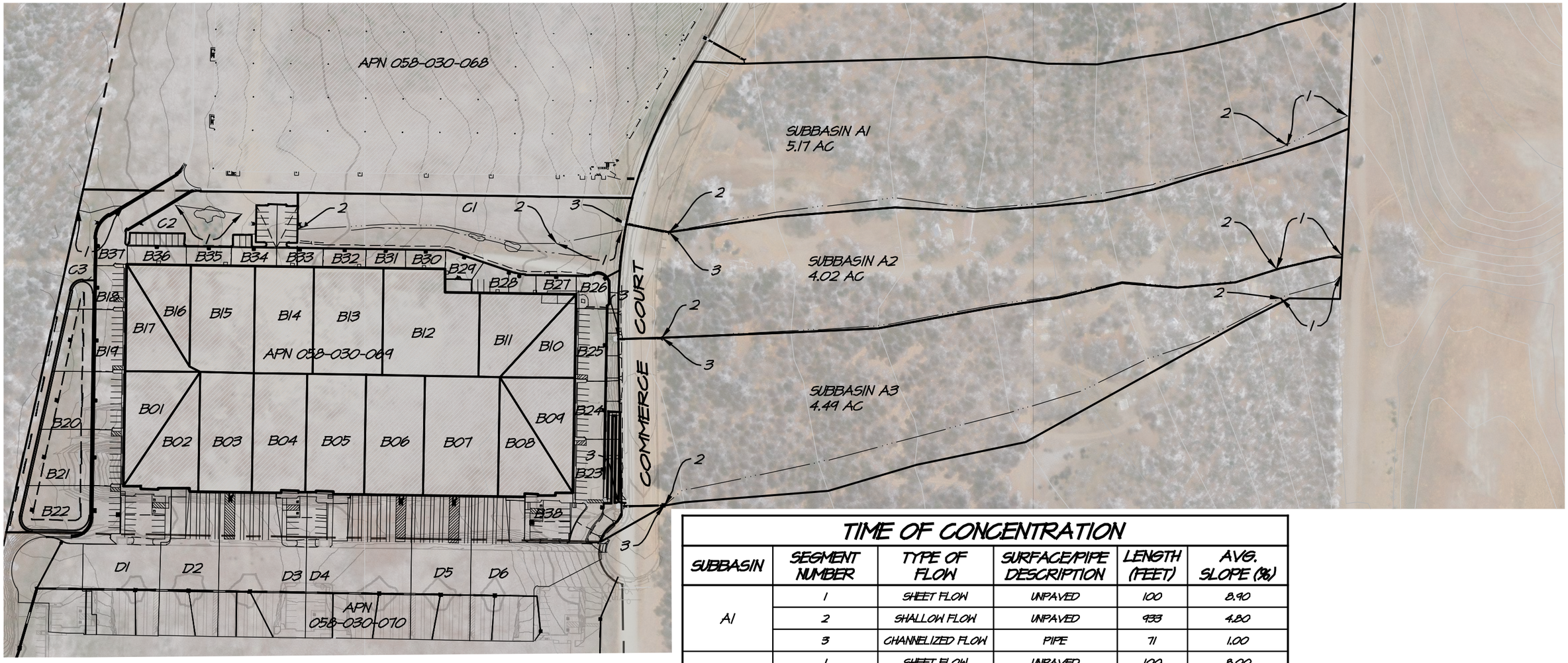
PROPOSED CONDITIONS HYDROLOGY EXHIBIT

AMERICAN CANYON CALIFORNIA



NOTES

MINIMUM TC FOR TR-55 IS 6 MINUTES

TIME OF CONCENTRATION

SUBBASIN	SEGMENT NUMBER	TYPE OF FLOW	SURFACE/PIPE DESCRIPTION	LENGTH (FEET)	AVG. SLOPE (%)
A1	1	SHEET FLOW	UNPAVED	100	8.90
	2	SHALLOW FLOW	UNPAVED	933	4.80
	3	CHANNELIZED FLOW	PIPE	71	1.00
A2	1	SHEET FLOW	UNPAVED	100	8.00
	2	SHALLOW FLOW	UNPAVED	925	4.00
	3	CHANNELIZED FLOW	PIPE	79	1.00
A3	1	SHEET FLOW	UNPAVED	100	7.00
	2	SHALLOW FLOW	UNPAVED	964	4.00
	3	CHANNELIZED FLOW	PIPE	75	1.00
B_{1-25}	ROOF TO DOWNSPOUT = 6 MIN (ASSUMED)*				
C1	1	SHEET FLOW	UNPAVED	100	4.30
	2	SHALLOW FLOW	UNPAVED	390	1.64
C2	1	SHEET FLOW	UNPAVED	100	0.60
C3	1	SHEET FLOW	UNPAVED	100	2.39
$D_{(OFF-SITE)}$	TC ESTIMATED ON SDG COMMERCE 220 HYDROLOGY REPORT**				

GRAPHIC SCALE

150 0 150 300

(IN FEET)
1 inch = 150 FT

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2905

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AMERICAN CANYON, CALIFORNIA

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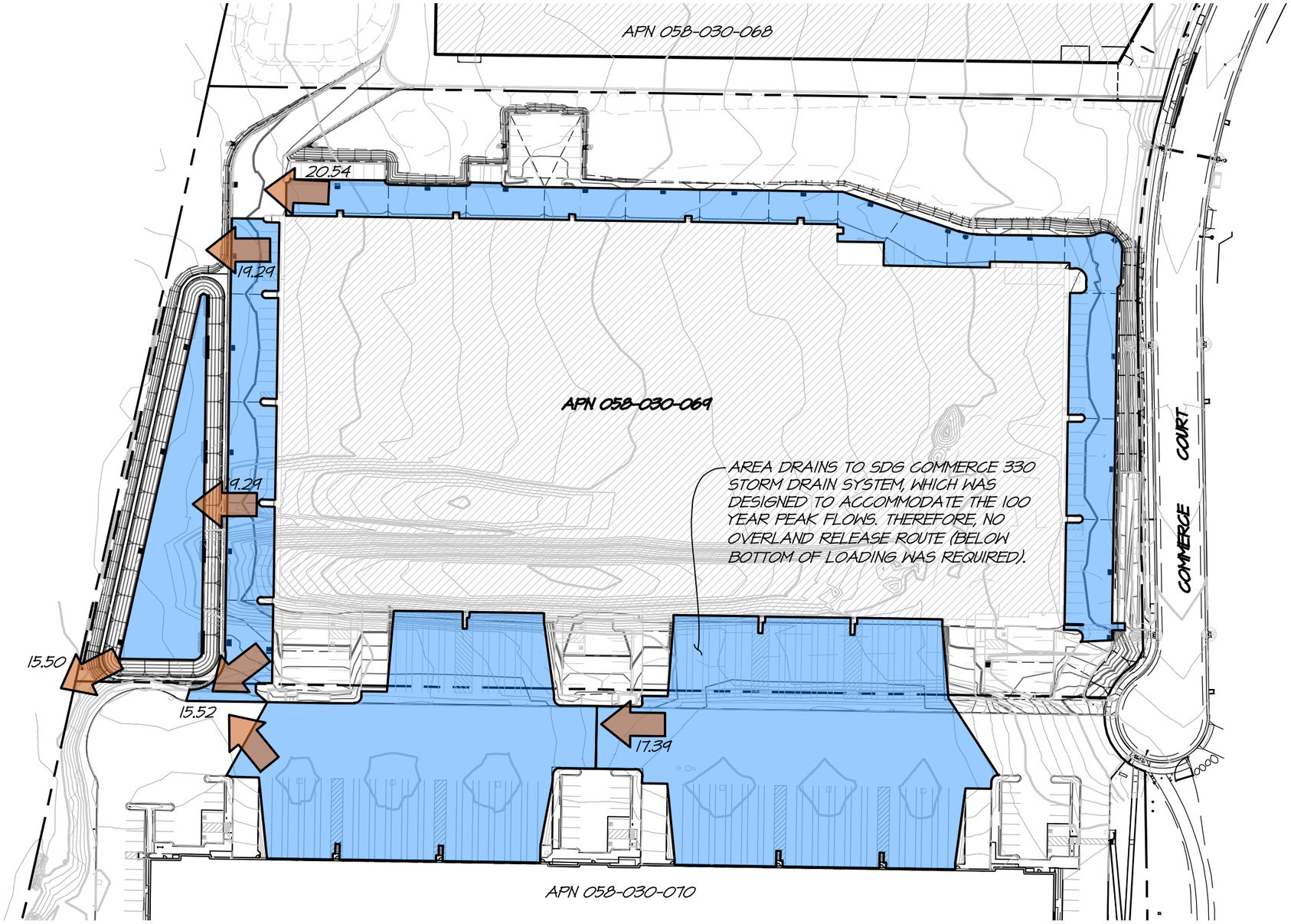
OVERLAND RELEASE ROUTE (ELEVATION NOTED)

XX.XX



GRAPHIC SCALE

100 0 100 200

(IN FEET)
1 inch = 100 FT

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Table 2-2a Runoff curve numbers for urban areas [1]

Cover description: Cover type and hydrologic condition	Average percent impervious area [2]	Curve numbers for hydrologic soil group: A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.) [3]:					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) [4]		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas (pervious areas only, no vegetation) [5]		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

[1] Average runoff condition, and $I_a = 0.2S$.

[2] The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

[3] CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

[4] Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

[5] Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

Table 2-2c Runoff curve numbers for other agricultural lands [1]

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition	A	B	C	D
Pasture, grassland, or range—continuous forage for grazing. [2]	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element. [3]	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	30 [4]	48	65	73
Woods—grass combination (orchard or tree farm). [5]	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods. [6]	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	30 [4]	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

1 Average runoff condition, and $I_a = 0.2S$.

2 *Poor:* <50%) ground cover or heavily grazed with no mulch.
Fair: 50 to 75% ground cover and not heavily grazed.
Good: > 75% ground cover and lightly or only occasionally grazed.

3 *Poor:* <50% ground cover.
Fair: 50 to 75% ground cover.
Good: >75% ground cover.

4 Actual curve number is less than 30; use CN = 30 for runoff computations.

5 CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

6 *Poor:* Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.
Fair: Woods are grazed but not burned, and some forest litter covers the soil.
Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

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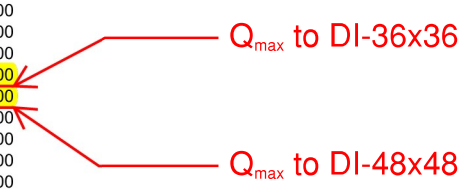
100-Year DI Hydraulics

$Q_{capacity} = 3.3P(h^{1.5})$	
P	77% of Total Perimeter (ft)
h	Weir Flow Height (ft)

DI Hydraulics						
Length (in)	**Width (in)**	**Grate Perimeter (ft^2)**	**Q_{100} (cfs)**	**Head On Grate (in)**	**Head On Grate (ft)**	**$Q_{capacity}$ (cfs)**
36	36	12	0.5	1	0.08	0.73
				2	0.17	2.07
				3	0.25	3.81
48	48	16	0.5	1	0.08	0.98
				2	0.17	2.77
				3	0.25	5.08

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A01	5.17	484.00	81	7.36	5.19	26.80	6.7	0 00:15:27
2	A02	4.02	484.00	81	7.36	5.15	20.70	5.2	0 00:16:18
3	A03	4.49	484.00	83	7.36	5.34	23.96	5.9	0 00:18:52
4	B01	0.22	484.00	98	7.36	7.12	1.57	0.4	0 00:06:00
5	B02	0.23	484.00	98	7.36	7.12	1.62	0.4	0 00:06:00
6	B03	0.33	484.00	98	7.36	7.12	2.34	0.6	0 00:06:00
7	B04	0.33	484.00	98	7.36	7.12	2.32	0.6	0 00:06:00
8	B05	0.36	484.00	98	7.36	7.12	2.55	0.6	0 00:06:00
9	B06	0.36	484.00	98	7.36	7.12	2.57	0.7	0 00:06:00
10	B07	0.46	484.00	98	7.36	7.12	3.28	0.8	0 00:06:00
11	B08	0.23	484.00	98	7.36	7.12	1.64	0.4	0 00:06:00
12	B09	0.22	484.00	98	7.36	7.12	1.57	0.4	0 00:06:00
13	B10	0.16	484.00	98	7.36	7.12	1.14	0.3	0 00:06:00
14	B11	0.25	484.00	98	7.36	7.12	1.80	0.4	0 00:06:00
15	B12	0.49	484.00	98	7.36	7.12	3.47	0.9	0 00:06:00
16	B13	0.38	484.00	98	7.36	7.12	2.72	0.7	0 00:06:00
17	B14	0.32	484.00	98	7.36	7.12	2.30	0.6	0 00:06:00
18	B15	0.35	484.00	98	7.36	7.12	2.50	0.6	0 00:06:00
19	B16	0.17	484.00	98	7.36	7.12	1.19	0.3	0 00:06:00
20	B17	0.19	484.00	98	7.36	7.12	1.33	0.3	0 00:06:00
21	B18	0.11	484.00	98	7.36	7.12	0.77	0.2	0 00:06:00
22	B19	0.21	484.00	98	7.36	7.12	1.51	0.4	0 00:06:00
23	B20	0.24	484.00	98	7.36	7.12	1.68	0.4	0 00:06:00
24	B21	0.26	484.00	98	7.36	7.12	1.87	0.5	0 00:06:00
25	B22	0.27	484.00	98	7.36	7.12	1.93	0.5	0 00:06:00
26	B23	0.23	484.00	98	7.36	7.12	1.65	0.4	0 00:06:00
27	B24	0.14	484.00	98	7.36	7.12	0.97	0.2	0 00:06:00
28	B25	0.16	484.00	98	7.36	7.12	1.14	0.3	0 00:06:00
29	B26	0.08	484.00	98	7.36	7.12	0.57	0.2	0 00:06:00
30	B27	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
31	B28	0.08	484.00	98	7.36	7.12	0.57	0.2	0 00:06:00
32	B29	0.06	484.00	98	7.36	7.12	0.43	0.1	0 00:06:00
33	B30	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
34	B31	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
35	B32	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
36	B33	0.09	484.00	98	7.36	7.12	0.64	0.2	0 00:06:00
37	B34	0.10	484.00	98	7.36	7.12	0.70	0.2	0 00:06:00
38	B35	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
39	B36	0.09	484.00	98	7.36	7.12	0.65	0.2	0 00:06:00
40	B37	0.17	484.00	98	7.36	7.12	1.21	0.3	0 00:06:00
41	B38	0.13	484.00	98	7.36	7.12	0.91	0.2	0 00:06:00
42	C01	1.09	484.00	72	7.36	4.14	4.51	1.1	0 00:05:00
43	C02	0.28	484.00	72	7.36	4.14	1.16	0.3	0 00:29:07
44	C03	0.29	484.00	72	7.36	4.14	1.19	0.3	0 00:16:48
45	D01	0.48	484.00	98	7.36	7.12	3.45	0.9	0 00:06:00
46	D02	0.41	484.00	98	7.36	7.12	2.94	0.7	0 00:06:00
47	D03	0.65	484.00	98	7.36	7.12	4.62	1.1	0 00:06:00
48	D04	0.78	484.00	98	7.36	7.12	5.55	1.4	0 00:06:00
49	D05	0.44	484.00	98	7.36	7.12	3.14	0.8	0 00:06:00
50	D06	0.56	484.00	98	7.36	7.12	3.97	1.0	0 00:06:00
51	D07	0.29	484.00	98	7.36	7.12	2.06	0.5	0 00:06:00



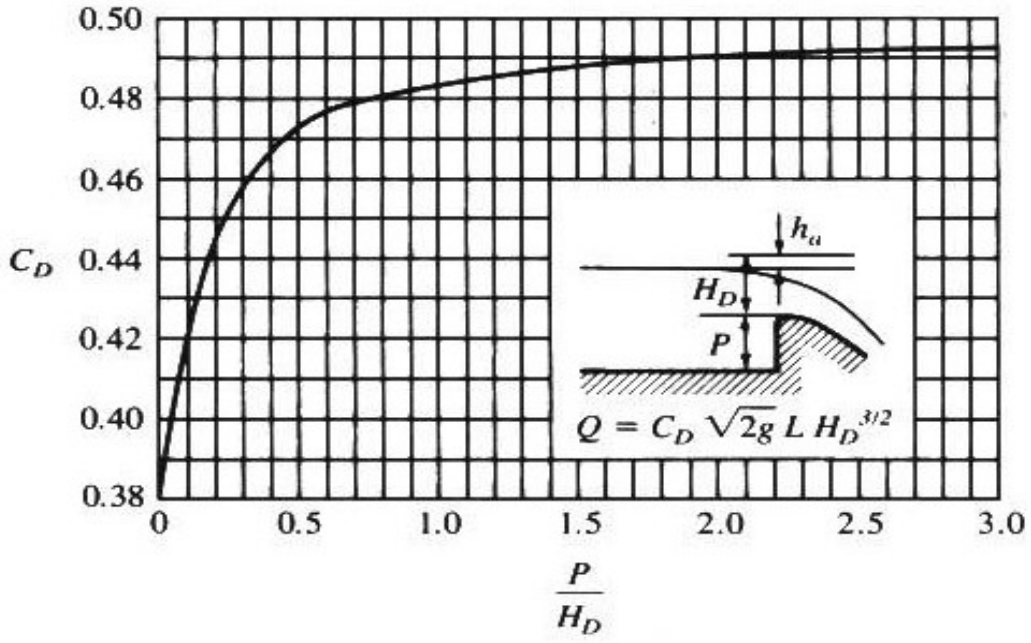
SDG COMMERCE 220 DISTRIBUTION CENTER
100-Year Spillway Hydraulics

$$Q = C_D\sqrt{2g}LH_D{}^{3/2}$$

g	32.2	(ft/sec^2)

Spillway Hydraulics						
Spillway	Length (ft)	H_D (ft)	P (ft)	C_D	$Q_{capacity}$ (cfs)	Q_{actual} (cfs)*
1	15	1.8	3.2	0.489	142.15	23.90

* Flow rate from Detention Hydrographs



SDG COMMERCE 220 DISTRIBUTION CENTER

100-Year Level Spread Calcs

100-Year Level Spreader Calcs

Sharp-Crested Weir
Q=3.33(b-0.2h)h^3/2

b= width of weir = D

Location		LS Diameter (in)	LS Length (ft)	D (in)	Number of Weir Openings	Q (cfs)	h (in)	$h_{opening}$ (in)
BRB Inflow 1	Out-1E16-Pipe	24	20	24	3	5.20	5.00	16
BRB Inflow 2	D3-Structure	24	20	24	3	0.70	1.30	16
BRB Inflow 3	Out-1C2-Pipe	24	20	24	3	0.80	1.40	16
BRB Inflow 4	Out-1B1-Pipe	24	20	24	3	0.50	1.00	16
BRB Inflow 5	Out-1A15-Pipe	24	20	24	3	17.00	11.50	16
BRB Overflow 1	Out-1D4-Pipe	24	60	24	13	4.30	1.65	16
BRB Overflow 2	Out-1Pipe (53)	24	60	24	13	4.30	1.65	16
BRB Overflow 3	Out-1Pipe (59)	24	60	24	13	4.30	1.65	16
BRB Overflow 4	Out-1Pipe (62)	24	60	24	13	4.30	1.65	16

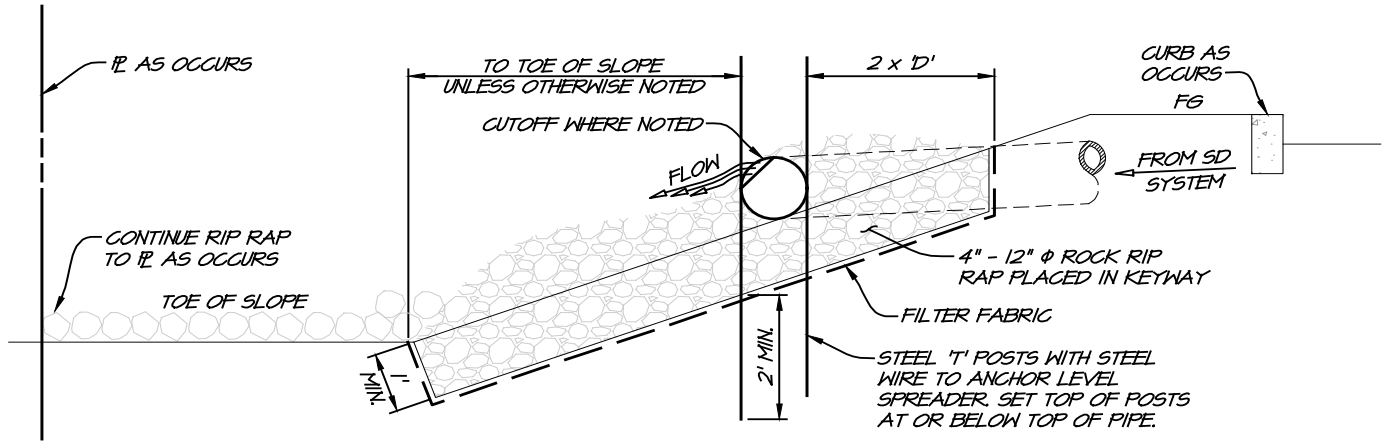
Assumptions:

-Width of weir is equal to the diameter of Level Spreader(LS)

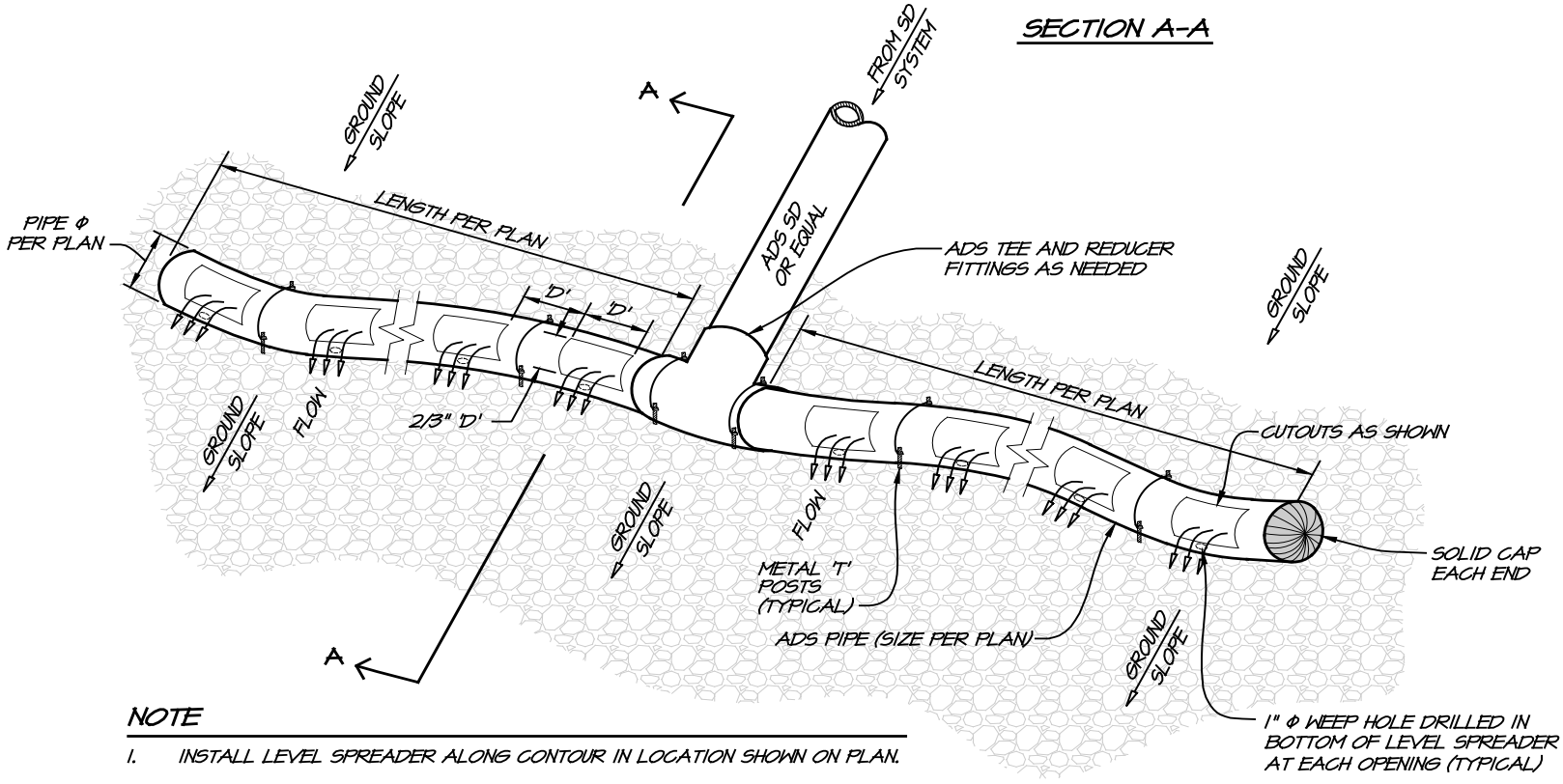
-Spacing between weirs is equal to the diameter of LS

-Height of weir is equal to 2/3 the diameter of LS

-Maximum # of weir openings account for Tee fitting from inlet pipe of same size as level spreader. Remaining length is used at the ends.



SECTION A-A



NOTE

1. INSTALL LEVEL SPREADER ALONG CONTOUR IN LOCATION SHOWN ON PLAN.
2. D - DIAMETER OF LEVEL SPREADER.

STORM DRAIN LEVEL SPREADER DETAIL

ATTACHMENT 2

10-YEAR HGL ANALYSIS

Project Description

File Name ..... SDG 220 Post.SPF

Project Options

Flow Units ..... CFS
Elevation Type ..... Elevation
Hydrology Method ..... SCS TR-55
Time of Concentration (TOC) Method ..... SCS TR-55
Link Routing Method ..... Kinematic Wave
Enable Overflow Ponding at Nodes ..... YES
Skip Steady State Analysis Time Periods ... YES

Analysis Options

Start Analysis On ..... Mar 13, 2023 00:00:00
End Analysis On ..... Mar 14, 2023 00:00:00
Start Reporting On ..... Mar 13, 2023 00:00:00
Antecedent Dry Days ..... 0 days
Runoff (Dry Weather) Time Step ..... 0 01:00:00 days hh:mm:ss
Runoff (Wet Weather) Time Step ..... 0 00:05:00 days hh:mm:ss
Reporting Time Step ..... 0 00:00:30 days hh:mm:ss
Routing Time Step ..... 30 seconds

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1		Time Series	TS- 100yr	Cumulative	inches	None	None	100	7.36	SCS Type IA 24-hr

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A01	5.17	484.00	81	4.47	2.56	13.22	3.2	0 00:15:27
2	A02	4.02	484.00	81	4.47	2.53	10.17	2.4	0 00:16:18
3	A03	4.49	484.00	83	4.47	2.67	12.01	2.8	0 00:18:52
4	B01	0.22	484.00	98	4.47	4.23	0.94	0.2	0 00:06:00
5	B02	0.23	484.00	98	4.47	4.23	0.96	0.3	0 00:06:00
6	B03	0.33	484.00	98	4.47	4.23	1.39	0.4	0 00:06:00
7	B04	0.33	484.00	98	4.47	4.23	1.38	0.4	0 00:06:00
8	B05	0.36	484.00	98	4.47	4.23	1.52	0.4	0 00:06:00
9	B06	0.36	484.00	98	4.47	4.23	1.53	0.4	0 00:06:00
10	B07	0.46	484.00	98	4.47	4.23	1.95	0.5	0 00:06:00
11	B08	0.23	484.00	98	4.47	4.23	0.98	0.3	0 00:06:00
12	B09	0.22	484.00	98	4.47	4.23	0.94	0.2	0 00:06:00
13	B10	0.16	484.00	98	4.47	4.23	0.68	0.2	0 00:06:00
14	B11	0.25	484.00	98	4.47	4.23	1.07	0.3	0 00:06:00
15	B12	0.49	484.00	98	4.47	4.23	2.06	0.5	0 00:06:00
16	B13	0.38	484.00	98	4.47	4.23	1.62	0.4	0 00:06:00
17	B14	0.32	484.00	98	4.47	4.23	1.37	0.4	0 00:06:00
18	B15	0.35	484.00	98	4.47	4.23	1.49	0.4	0 00:06:00
19	B16	0.17	484.00	98	4.47	4.23	0.71	0.2	0 00:06:00
20	B17	0.19	484.00	98	4.47	4.23	0.79	0.2	0 00:06:00
21	B18	0.11	484.00	98	4.47	4.23	0.46	0.1	0 00:06:00
22	B19	0.21	484.00	98	4.47	4.23	0.90	0.2	0 00:06:00
23	B20	0.24	484.00	98	4.47	4.23	1.00	0.3	0 00:06:00
24	B21	0.26	484.00	98	4.47	4.23	1.11	0.3	0 00:06:00
25	B22	0.27	484.00	98	4.47	4.23	1.15	0.3	0 00:06:00
26	B23	0.23	484.00	98	4.47	4.23	0.98	0.3	0 00:06:00
27	B24	0.14	484.00	98	4.47	4.23	0.58	0.1	0 00:06:00
28	B25	0.16	484.00	98	4.47	4.23	0.68	0.2	0 00:06:00
29	B26	0.08	484.00	98	4.47	4.23	0.34	0.1	0 00:06:00
30	B27	0.04	484.00	98	4.47	4.23	0.17	0.0	0 00:06:00
31	B28	0.08	484.00	98	4.47	4.23	0.34	0.1	0 00:06:00
32	B29	0.06	484.00	98	4.47	4.23	0.25	0.1	0 00:06:00
33	B30	0.04	484.00	98	4.47	4.23	0.17	0.0	0 00:06:00
34	B31	0.04	484.00	98	4.47	4.23	0.17	0.0	0 00:06:00
35	B32	0.04	484.00	98	4.47	4.23	0.17	0.0	0 00:06:00
36	B33	0.09	484.00	98	4.47	4.23	0.38	0.1	0 00:06:00
37	B34	0.10	484.00	98	4.47	4.23	0.41	0.1	0 00:06:00
38	B35	0.04	484.00	98	4.47	4.23	0.17	0.0	0 00:06:00
39	B36	0.09	484.00	98	4.47	4.23	0.39	0.1	0 00:06:00
40	B37	0.17	484.00	98	4.47	4.23	0.72	0.2	0 00:06:00
41	B38	0.13	484.00	98	4.47	4.23	0.54	0.1	0 00:06:00
42	C01	1.09	484.00	72	4.47	1.80	1.96	0.4	0 00:05:00
43	C02	0.28	484.00	72	4.47	1.80	0.50	0.1	0 00:29:07
44	C03	0.29	484.00	72	4.47	1.80	0.52	0.1	0 00:16:48
45	D01	0.48	484.00	98	4.47	4.23	2.05	0.5	0 00:06:00
46	D02	0.41	484.00	98	4.47	4.23	1.75	0.4	0 00:06:00
47	D03	0.65	484.00	98	4.47	4.23	2.75	0.7	0 00:06:00
48	D04	0.78	484.00	98	4.47	4.23	3.30	0.8	0 00:06:00
49	D05	0.44	484.00	98	4.47	4.23	1.87	0.5	0 00:06:00
50	D06	0.56	484.00	98	4.47	4.23	2.36	0.6	0 00:06:00
51	D07	0.29	484.00	98	4.47	4.23	1.23	0.3	0 00:06:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	A1.1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.2	19.24	0.00	1.77	0 00:00	0.00	0.00
2	A1-Structure	Junction	16.03	37.64	16.03	37.64	0.00	2.7	18.46	0.00	19.18	0 00:00	0.00	0.00
3	A2.1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.2	19.26	0.00	1.74	0 00:00	0.00	0.00
4	A2-Structure	Junction	15.56	20.55	15.56	20.55	0.00	3.1	18.38	0.00	2.16	0 00:00	0.00	0.00
5	A3-Structure	Junction	15.13	19.11	15.13	19.11	0.00	3.3	15.87	0.00	3.25	0 00:00	0.00	0.00
6	A4-Structure	Junction	14.86	20.27	14.86	20.27	0.00	6.1	17.05	0.00	3.22	0 00:00	0.00	0.00
7	A5-Structure	Junction	13.86	20.07	13.86	20.07	0.00	6.5	18.47	0.00	1.60	0 00:00	0.00	0.00
8	B1-Structure	Junction	12.20	20.13	12.20	20.13	0.00	0.3	12.30	0.00	7.83	0 00:00	0.00	0.00
9	C1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.2	19.26	0.00	1.74	0 00:00	0.00	0.00
10	C2-Structure	Junction	12.20	36.86	12.20	36.86	0.00	0.5	18.37	0.00	18.49	0 00:00	0.00	0.00
11	D1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.2	19.25	0.00	1.76	0 00:00	0.00	0.00
12	D2-Structure	Junction	12.20	38.65	12.20	38.65	0.00	0.4	18.36	0.00	20.29	0 00:00	0.00	0.00
13	D3-Structure	Junction	10.50	16.50	10.50	13.25	0.00	0.4	10.62	0.00	5.88	0 00:00	0.00	0.00
14	D4-Structure	Junction	10.63	13.10	10.63	14.00	0.00	2.7	11.30	0.00	1.80	0 00:00	0.00	0.00
15	E10.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.4	19.29	0.00	1.78	0 00:00	0.00	0.00
16	E10-Structure	Junction	12.29	20.26	12.29	20.26	0.00	2.0	18.64	0.00	1.62	0 00:00	0.00	0.00
17	E11-Structure	Junction	11.95	20.26	11.95	20.26	0.00	2.1	12.48	0.00	7.78	0 00:00	0.00	0.00
18	E13.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.4	19.30	0.00	1.77	0 00:00	0.00	0.00
19	E13-Structure	Junction	11.61	20.26	11.61	20.26	0.00	2.6	18.72	0.00	1.54	0 00:00	0.00	0.00
20	E14.2-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.2	19.24	0.00	1.83	0 00:00	0.00	0.00
21	E14-Structure	Junction	11.22	20.25	11.22	20.25	0.00	2.8	18.60	0.00	1.65	0 00:00	0.00	0.00
22	E15-Structure	Junction	10.79	20.25	10.79	20.25	0.00	3.0	11.53	0.00	8.72	0 00:00	0.00	0.00
23	E16-Structure	Junction	10.62	20.13	10.62	20.13	0.00	3.1	11.36	0.00	8.77	0 00:00	0.00	0.00
24	E1-Structure	Junction	15.10	19.22	15.10	19.22	0.00	0.1	15.22	0.00	4.00	0 00:00	0.00	0.00
25	E2-Structure	Junction	14.73	20.26	14.73	20.26	0.00	0.1	14.88	0.00	5.38	0 00:00	0.00	0.00
26	E4.1-Structure	Junction	19.10	21.08	19.10	21.08	0.00	0.3	19.27	0.00	1.81	0 00:00	0.00	0.00
27	E4-Structure	Junction	14.45	20.30	14.45	20.30	0.00	0.1	14.60	0.00	5.70	0 00:00	0.00	0.00
28	E5-Structure	Junction	14.37	20.09	14.37	20.09	0.00	0.5	18.59	0.00	1.50	0 00:00	0.00	0.00
29	E6-Structure	Junction	14.02	20.20	14.02	20.20	0.00	0.6	14.32	0.00	5.88	0 00:00	0.00	0.00
30	E7.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.5	19.33	0.00	1.74	0 00:00	0.00	0.00
31	E7-Structure	Junction	13.23	20.26	13.23	20.26	0.00	1.1	18.68	0.00	1.58	0 00:00	0.00	0.00
32	E8-Structure	Junction	12.93	20.26	12.93	20.26	0.00	1.2	13.32	0.00	6.94	0 00:00	0.00	0.00
33	E9.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.4	19.31	0.00	1.76	0 00:00	0.00	0.00
34	E9-Structure	Junction	12.62	20.26	12.62	20.26	0.00	1.6	18.81	0.00	1.45	0 00:00	0.00	0.00
35	Jun-01	Junction	0.00	10.50	0.00	0.00	0.00	3.9	0.00	0.00	10.50	0 00:00	0.00	0.00
36	Jun-02	Junction	0.00	6.00	0.00	6.00	0.00	3.2	32.46	0.00	1.04	0 00:00	0.00	0.00
37	Jun-03	Junction	0.00	6.00	0.00	6.00	0.00	3.2	30.46	0.00	1.04	0 00:00	0.00	0.00
38	Jun-04	Junction	19.20	6.00	0.00	6.00	0.00	3.6	19.20	0.00	0.00	0 00:00	0.00	0.00
39	Jun-05	Junction	18.20	6.00	0.00	6.00	0.00	3.6	18.78	0.00	0.92	0 00:00	0.00	0.00
40	Jun-06	Junction	14.60	6.00	0.00	6.00	0.00	3.7	14.60	0.00	0.00	0 00:00	0.00	0.00
41	Jun-07	Junction	13.20	6.00	0.00	6.00	0.00	3.8	13.73	0.00	0.97	0 00:00	0.00	0.00
42	Jun-08	Junction	19.20	6.00	0.00	6.00	0.00	3.6	19.78	0.00	0.92	0 00:00	0.00	0.00
43	Jun-09	Junction	14.60	6.00	0.00	0.00	0.00	3.7	15.13	0.00	0.97	0 00:00	0.00	0.00
44	Out-1A15-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	8.8	11.54	0.00	4.96	0 00:00	0.00	0.00
45	Out-1B1-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	0.3	10.60	0.00	5.90	0 00:00	0.00	0.00
46	Out-1C2-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	0.5	10.63	0.00	5.87	0 00:00	0.00	0.00
47	Out-1D4-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	2.7	11.17	0.00	5.33	0 00:00	0.00	0.00
48	Out-1E16-Pipe	Junction	10.50	16.50	10.50	0.00	0.00	3.1	11.16	0.00	5.34	0 00:00	0.00	0.00
49	Out-1Pipe (53)	Junction	10.50	16.50	10.50	16.50	0.00	2.7	11.10	0.00	5.40	0 00:00	0.00	0.00
50	Out-1Pipe (59)	Junction	10.50	16.50	10.50	16.50	0.00	2.7	11.17	0.00	5.33	0 00:00	0.00	0.00
51	Out-1Pipe (62)	Junction	10.50	16.50	10.50	16.50	0.00	2.7	11.17	0.00	5.33	0 00:00	0.00	0.00
52	Structure - 100	Junction	19.10	19.83	19.10	19.83	0.00	0.4	19.30	0.00	0.53	0 00:00	0.00	0.00
53	Structure - 101	Junction	11.91	19.47	11.91	19.47	0.00	8.0	18.60	0.00	0.87	0 00:00	0.00	0.00
54	Structure - 102	Junction	19.10	19.83	19.10	19.83	0.00	0.4	19.30	0.00	0.53	0 00:00	0.00	0.00
55	Structure - 103	Junction	11.59	19.48	11.59	19.48	0.00	8.3	18.60	0.00	0.88	0 00:00	0.00	0.00
56	Structure - 104	Junction	19.10	19.83	19.10	19.83	0.00	0.3	19.28	0.00	0.54	0 00:00	0.00	0.00
57	Structure - 105	Junction	11.09	19.41	11.09	19.41	0.00	8.5	18.49	0.00	0.91	0 00:00	0.00	0.00
58	Structure - 35	Junction	10.76	18.50	10.76	18.50	0.00	8.5	11.79	0.00	6.72	0 00:00	0.00	0.00
59	Structure - 36	Junction	10.59	20.13	10.59	20.13	0.00	8.8	11.63	0.00	8.50	0 00:00	0.00	0.00
60	Structure - 38	Junction	28.60	31.31	28.60	31.31	0.00	2.4	29.15	0.00	2.16	0 00:00	0.00	0.00
61	Structure - 39	Junction	27.61	32.57	27.61	32.57	0.00	2.4	28.77	0.00	3.79	0 00:00	0.00	0.00
62	Structure - 48	Junction	26.48	1.78	26.48	1.78	0.00	2.8	26.94	0.00	1.04	0 00:00	0.00	0.00
63	Structure - 49	Junction	25.31	29.72	25.31	29.72	0.00	2.8	26.25	0.00	3.47	0 00:00	0.00	0.00
64	Structure - 75	Junction	10.63	13.10	10.63	14.00	0.00	2.7	11.23	0.00	1.87	0 00:00	0.00	0.00
65	Structure - 83	Junction	10.63	13.10	10.63	14.00	0.00	2.7	11.30	0.00	1.80	0 00:00	0.00	0.00
66	Structure - 87	Junction	10.63	13.10	10.63	14.00	0.00	2.7	11.30	0.00	1.80	0 00:00	0.00	0.00
67	Structure - 91	Junction	19.10	21.10	19.10	21.10	0.00	0.3	19.27	0.00	1.83	0 00:00	0.00	0.00
68	Structure - 94	Junction	19.10	19.83	19.10	19.83	0.00	0.5	19.36	0.00	0.46	0 00:00	0.00	0.00
69	Structure - 95	Junction	13.30	19.40	13.30	19.40	0.00	6.9	18.67	0.00	0.73	0 00:00	0.00	0.00
70	Structure - 96	Junction	19.10	19.83	19.10	19.83	0.00	0.4	19.33	0.00	0.49	0 00:00	0.00	0.00
71	Structure - 97	Junction	12.86	19.42	12.86	19.42	0.00	7.3	18.64	0.00	0.78	0 00:00	0.00	0.00
72	Structure - 98	Junction	19.10	19.83	19.10	19.83	0.00	0.4	19.33	0.00	0.50	0 00:00	0.00	0.00
73	Structure - 99	Junction	12.39	19.44	12.39	19.44	0.00	7.6	18.63	0.00	0.81	0 00:00	0.00	0.00
74	Out-02	Outfall	0.00					14.2	0.00					
75	Detention-Basin	Storage Node	10.50	15.50	0.00		12634.80	12.9	11.87				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	A1.1-Pipe	Pipe	A1.1-Structure	A1-Structure	43.57	19.10	18.23	2.0000	8.000	0.0120	0.2	1.9	0.09	3.32	0.14	0.21	0.00	Calculated
2	A10.1-Pipe	Pipe	Structure - 100	Structure - 101	34.83	19.10	18.40	2.0000	8.000	0.0120	0.4	1.9	0.19	4.07	0.20	0.29	0.00	Calculated
3	A10-Pipe	Pipe	Structure - 99	Structure - 101	91.67	12.39	11.91	0.5300	30.000	0.0150	7.6	25.9	0.29	4.59	0.93	0.37	0.00	Calculated
4	A11.1-Pipe	Pipe	Structure - 102	Structure - 103	34.86	19.10	18.40	2.0000	8.000	0.0120	0.4	1.9	0.19	4.07	0.20	0.29	0.00	Calculated
5	A11-Pipe	Pipe	Structure - 101	Structure - 103	67.33	11.91	11.59	0.4700	30.000	0.0150	8.0	24.5	0.32	4.45	0.98	0.39	0.00	Calculated
6	A12.1-Pipe	Pipe	Structure - 104	Structure - 105	39.58	19.10	18.31	2.0000	8.000	0.0150	0.3	1.5	0.17	3.14	0.18	0.28	0.00	Calculated
7	A12-Pipe	Pipe	Structure - 103	Structure - 105	100.61	11.59	11.09	0.4900	30.000	0.0150	8.3	25.0	0.33	4.56	0.99	0.40	0.00	Calculated
8	A13-Pipe	Pipe	Structure - 105	Structure - 35	63.49	11.09	10.76	0.5200	30.000	0.0150	8.5	25.7	0.33	4.70	0.99	0.40	0.00	Calculated
9	A14-Pipe	Pipe	Structure - 35	Structure - 36	37.44	10.76	10.59	0.4500	30.000	0.0150	8.5	24.0	0.35	4.46	1.03	0.41	0.00	Calculated
10	A15-Pipe	Pipe	Structure - 36	Out-1A15-Pipe	19.67	10.59	10.50	0.4600	30.000	0.0150	8.8	24.1	0.36	4.51	1.04	0.42	0.00	Calculated
11	A1-Pipe	Pipe	Structure - 39	A1-Structure	32.78	27.61	18.23	28.6100	18.000	0.0150	2.4	48.7	0.05	14.33	0.23	0.15	0.00	Calculated
12	A2.1-Pipe	Pipe	A2.1-Structure	A2-Structure	44.00	19.10	18.22	2.0000	8.000	0.0120	0.2	1.9	0.13	3.66	0.16	0.24	0.00	Calculated
13	A2-Pipe	Pipe	A1-Structure	A2-Structure	97.50	16.03	15.56	0.4800	18.000	0.0150	2.7	6.3	0.43	3.44	0.69	0.46	0.00	Calculated
14	A3-Pipe	Pipe	A2-Structure	A3-Structure	88.50	15.56	15.13	0.4900	18.000	0.0150	3.1	6.4	0.48	3.56	0.74	0.49	0.00	Calculated
15	A4.1-Pipe	Pipe	Structure - 49	A4-Structure	39.16	25.31	16.82	21.6900	18.000	0.0120	2.8	53.0	0.05	15.95	0.24	0.16	0.00	Calculated
16	A4-Pipe	Pipe	A3-Structure	A4-Structure	56.66	15.13	14.86	0.4800	30.000	0.0150	3.3	24.5	0.13	3.49	0.62	0.25	0.00	Calculated
17	A5-Pipe	Pipe	A4-Structure	A5-Structure	107.77	14.86	13.86	0.9300	30.000	0.0150	6.1	34.3	0.18	5.27	0.72	0.29	0.00	Calculated
18	A6.1-Pipe	Pipe	Structure - 91	A5-Structure	42.40	19.10	18.31	1.8700	8.000	0.0120	0.3	1.8	0.14	3.60	0.17	0.25	0.00	Calculated
19	A7.1-Pipe	Pipe	Structure - 94	Structure - 95	34.69	19.10	18.41	2.0000	8.000	0.0150	0.5	1.5	0.33	3.81	0.26	0.40	0.00	Calculated
20	A7-Pipe	Pipe	A5-Structure	Structure - 95	110.61	13.86	13.30	0.5100	30.000	0.0150	6.5	25.3	0.26	4.31	0.86	0.34	0.00	Calculated
21	A8.1-Pipe	Pipe	Structure - 96	Structure - 97	34.74	19.10	18.41	2.0000	8.000	0.0150	0.4	1.5	0.26	3.58	0.23	0.35	0.00	Calculated
22	A8-Pipe	Pipe	Structure - 95	Structure - 97	89.33	13.30	12.86	0.4900	30.000	0.0150	6.9	24.9	0.28	4.34	0.90	0.36	0.00	Calculated
23	A9.1-Pipe	Pipe	Structure - 98	Structure - 99	34.78	19.10	18.40	2.0100	8.000	0.0150	0.4	1.5	0.26	3.57	0.23	0.35	0.00	Calculated
24	A9-Pipe	Pipe	Structure - 97	Structure - 99	95.00	12.86	12.39	0.4900	30.000	0.0150	7.3	24.9	0.29	4.40	0.93	0.37	0.00	Calculated
25	B1-Pipe	Pipe	B1-Structure	Out-1B1-Pipe	19.69	12.20	10.50	8.6300	24.000	0.0150	0.3	57.6	0.00	4.67	0.10	0.05	0.00	Calculated
26	C1-Pipe	Pipe	C1-Structure	C2-Structure	44.64	19.10	18.21	2.0000	8.000	0.0120	0.2	1.9	0.13	3.66	0.16	0.24	0.00	Calculated
27	C2-Pipe	Pipe	C2-Structure	Out-1C2-Pipe	19.67	12.20	10.50	8.6400	24.000	0.0150	0.5	57.6	0.01	5.59	0.13	0.07	0.00	Calculated
28	D1-Pipe	Pipe	D1-Structure	D2-Structure	44.46	19.10	18.21	2.0000	8.000	0.0120	0.2	1.9	0.11	3.46	0.15	0.22	0.00	Calculated
29	D2-Pipe	Pipe	D2-Structure	D3-Structure	19.67	12.20	10.50	8.6400	24.000	0.0150	0.4	57.6	0.01	5.37	0.12	0.06	0.00	Calculated
30	D4-Pipe	Pipe	D4-Structure	Out-1D4-Pipe	26.30	10.63	10.50	0.4900	18.000	0.0150	2.7	6.4	0.41	3.45	0.67	0.45	0.00	Calculated
31	E10-Pipe	Pipe	E10-Structure	E11-Structure	68.72	12.29	11.95	0.5000	24.000	0.0150	2.0	13.9	0.15	3.16	0.52	0.26	0.00	Calculated
32	E11-Pipe	Pipe	E11-Structure	E13-Structure	67.31	11.95	11.61	0.5000	24.000	0.0150	2.1	13.9	0.15	3.20	0.53	0.27	0.00	Calculated
33	E12.1-Pipe	Pipe	E13.1-Structure	E13-Structure	28.75	19.10	18.52	2.0200	8.000	0.0120	0.4	1.9	0.20	4.17	0.20	0.30	0.00	Calculated
34	E13.1-Pipe	Pipe	E14.2-Structure	E14-Structure	31.82	19.10	18.46	2.0000	8.000	0.0120	0.2	1.9	0.10	3.35	0.14	0.21	0.00	Calculated
35	E13-Pipe	Pipe	E13-Structure	E14-Structure	77.56	11.61	11.22	0.5000	24.000	0.0150	2.6	13.9	0.18	3.36	0.58	0.29	0.00	Calculated
36	E14-Pipe	Pipe	E14-Structure	E15-Structure	88.49	11.22	10.79	0.4900	24.000	0.0150	2.8	13.7	0.21	3.43	0.62	0.31	0.00	Calculated
37	E15-Pipe	Pipe	E15-Structure	E16-Structure	61.58	10.79	10.62	0.2800	24.000	0.0150	3.0	10.3	0.29	2.85	0.74	0.37	0.00	Calculated
38	E16-Pipe	Pipe	E16-Structure	Out-1E16-Pipe	26.19	10.62	10.50	0.4600	24.000	0.0150	3.1	13.3	0.24	3.45	0.66	0.33	0.00	Calculated
39	E1-Pipe	Pipe	E1-Structure	E2-Structure	73.22	15.10	14.73	0.5000	18.000	0.0150	0.1	6.4	0.01	1.29	0.12	0.08	0.00	Calculated
40	E2-Pipe	Pipe	E2-Structure	E4-Structure	55.47	14.73	14.45	0.5000	18.000	0.0150	0.1	6.4	0.02	1.43	0.15	0.10	0.00	Calculated
41	E4-Pipe	Pipe	E4-Structure	E5-Structure	15.97	14.45	14.37	0.5000	18.000	0.0150	0.1	6.3	0.02	1.41	0.15	0.10	0.00	Calculated
42	E5.1-Pipe	Pipe	E4.1-Structure	E5-Structure	32.89	19.10	18.42	2.0800	8.000	0.0120	0.3	1.9	0.14	3.82	0.17	0.25	0.00	Calculated
43	E5-Pipe	Pipe	E5-Structure	E6-Structure	70.61	14.37	14.02	0.5000	18.000	0.0150	0.5	6.4	0.08	2.14	0.28	0.19	0.00	Calculated
44	E6.1-Pipe	Pipe	E7.1-Structure	E7-Structure	28.85	19.10	18.44	2.2800	8.000	0.0120	0.5	2.0	0.26	4.77	0.23	0.35	0.00	Calculated
45	E6-Pipe	Pipe	E6-Structure	E7-Structure	58.54	14.02	13.73	0.5000	18.000	0.0150	0.6	6.4	0.08	2.22	0.30	0.20	0.00	Calculated
46	E7-Pipe	Pipe	E7-Structure	E8-Structure	59.55	13.23	12.93	0.5000	24.000	0.0150	1.1	13.9	0.08	2.64	0.38	0.19	0.00	Calculated
47	E8.1-Pipe	Pipe	E9.1-Structure	E9-Structure	25.28	19.10	18.59	2.0000	8.000	0.0120	0.4	1.9	0.22	4.26	0.21	0.32	0.00	Calculated
48	E8-Pipe	Pipe	E8-Structure	E9-Structure	61.63	12.93	12.62	0.5000	24.000	0.0150	1.2	13.8	0.08	2.66	0.39	0.20	0.00	Calculated
49	E9.1-Pipe	Pipe	E10.1-Structure	E10-Structure	30.97	19.10	18.44	2.1200	8.000	0.0120	0.4	1.9	0.18	4.15	0.19	0.29	0.00	Calculated
50	E9-Pipe	Pipe	E9-Structure	E10-Structure	66.95	12.62	12.29	0.5000	24.000	0.0150	1.6	13.8	0.12	2.92	0.46	0.23	0.00	Calculated
51	Link-01	Pipe	Out-1E16-Pipe	Detention-Basin	178.44	10.50	0.00	5.8800	12.000	0.0150	3.1	0.0	0.12	0.00	0.46	0.23	0.00	Calculated
52	Link-02	Pipe	D3-Structure	Detention-Basin	117.22	9.00	0.00	7.6800	12.000	0.0150	0.4	0.0	0.12	0.00	0.46	0.23	0.00	Calculated
53	Link-03	Pipe	Out-1C2-Pipe	Detention-Basin	30.02	10.50	0.00	34.9800	12.000	0.0150	0.5	0.0	0.12	0.00	0.46	0.23	0.00	Calculated
54	Link-04	Pipe	Out-1B1-Pipe	Detention-Basin	60.81	10.50	0.00	17.2700	12.000	0.0150	0.3	0.0	0.12	0.00	0.46	0.23	0.00	Calculated
55	Link-05	Pipe	Out-1A15-Pipe	Detention-Basin	138.79	10.50	0.00	7.5700	12.000	0.0150	8.8	0.0	0.12	0.00	0.46	0.23	0.00	Calculated
56	Link-11	Pipe	Jun-02	Jun-03	71.00	32.00	30.00	2.8200	18.000	0.0150	3.2	15.3	0.21	6.81	0.46	0.31	0.00	Calculated
57	Link-12	Pipe	Jun-03	Jun-04	417.20	0.00	0.00	0.0000	12.000	0.0150	3.2	0.0	0.21	0.00	0.46	0.31	0.00	Calculated
58	Link-14	Pipe	Jun-05	Jun-06	128.08	0.00	0.00	0.0000	12.000	0.0150	3.6	0.0	0.21	0.00	0.46	0.31	0.00	Calculated

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
59	Link-16	Pipe	Jun-07	Out-02	317.29	0.00	0.00	0.0000	12.000	0.0150	3.8	0.0	0.21	0.00	0.46	0.31	0.00	Calculated
60	Link-17	Pipe	Out-1D4-Pipe	Out-02	137.86	10.50	0.00	7.6200	0.000	0.0150	2.7	0.0	0.21	0.00	0.46	0.31	0.00	Calculated
61	Link-18	Pipe	Out-1Pipe (62)	Out-02	99.47	10.50	0.00	10.5600	0.000	0.0150	2.7	0.0	0.21	0.00	0.46	0.31	0.00	Calculated
62	Link-19	Pipe	Out-1Pipe (59)	Out-02	130.31	10.50	0.00	8.0600	12.000	0.0150	2.7	0.0	0.21	0.00	0.46	0.31	0.00	Calculated
63	Link-20	Pipe	Out-1Pipe (53)	Out-02	191.76	10.50	0.00	5.4800	12.000	0.0150	2.7	0.0	0.21	0.00	0.46	0.31	0.00	Calculated
64	Link-29	Pipe	Jun-04	Jun-08	48.58	19.20	18.82	0.7800	0.000	0.0150	3.6	0.0	0.21	0.00	0.46	0.31	0.00	Calculated
65	Link-30	Pipe	Jun-08	Jun-05	67.00	19.20	18.20	1.4900	18.000	0.0150	3.6	11.1	0.32	5.60	0.58	0.39	0.00	Calculated
66	Link-31	Pipe	Jun-06	Jun-09	46.31	14.60	14.60	0.0000	0.000	0.0150	3.7	0.0	0.32	0.00	0.58	0.39	0.00	Calculated
67	Link-32	Pipe	Jun-09	Jun-07	64.00	14.60	13.20	2.1900	18.000	0.0150	3.7	13.5	0.27	6.48	0.53	0.36	0.00	Calculated
68	Pipe (24)	Pipe	Structure - 38	Structure - 39	45.94	28.60	28.22	0.8300	18.000	0.0150	2.4	8.3	0.29	4.06	0.55	0.37	0.00	Calculated
69	Pipe (34)	Pipe	Structure - 48	Structure - 49	46.55	26.48	25.79	1.4800	18.000	0.0120	2.8	13.9	0.20	6.16	0.46	0.31	0.00	Calculated
70	Pipe (53)	Pipe	Structure - 75	Out-1Pipe (53)	27.49	10.63	10.50	0.4700	18.000	0.0120	2.7	7.8	0.34	4.00	0.60	0.40	0.00	Calculated
71	Pipe (59)	Pipe	Structure - 83	Out-1Pipe (59)	25.67	10.63	10.50	0.5100	18.000	0.0150	2.7	6.5	0.41	3.48	0.67	0.45	0.00	Calculated
72	Pipe (62)	Pipe	Structure - 87	Out-1Pipe (62)	25.95	10.63	10.50	0.5000	18.000	0.0150	2.7	6.4	0.41	3.47	0.67	0.45	0.00	Calculated
73	Orifice-01	Orifice	Detention-Basin	Structure - 83		10.50	10.63		9.000		2.7							
74	Orifice-02	Orifice	Detention-Basin	D4-Structure		10.50	10.63		9.000		2.7							
75	Orifice-03	Orifice	Detention-Basin	Structure - 87		10.50	10.63		9.000		2.7							
76	Orifice-04	Orifice	Detention-Basin	Structure - 75		10.50	10.63		9.000		2.7							

Subbasin Hydrology

Subbasin : A01

Input Data

Area (ac)	5.17
Peak Rate Factor	484.00
Weighted Curve Number	81.40
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.37	D	98.00
Woods & grass combination, Fair	1.10	C	76.00
Woods & grass combination, Fair	0.40	C	76.00
Woods & grass combination, Fair	3.30	D	82.00
Composite Area & Weighted CN	5.17		81.40

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft²)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	8.9	0.00	0.00
2 yr, 24 hr Rainfall (in) :	3.74	0.00	0.00
Velocity (ft/sec) :	0.15	0.00	0.00
Computed Flow Time (min) :	10.93	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	933	0.00	0.00
Slope (%) :	4.8	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.53	0.00	0.00
Computed Flow Time (min) :	4.41	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	71	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft²) :	7	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	9.92	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 15.46

Subbasin Runoff Results

Total Rainfall (in)	4.47
Total Runoff (in)	2.56
Peak Runoff (cfs)	3.15
Weighted Curve Number	81.40
Time of Concentration (days hh:mm:ss)	0 00:15:28

Subbasin : A02

Input Data

Area (ac) 4.02
Peak Rate Factor 484.00
Weighted Curve Number 81.08
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.22	D	98.00
Woods & grass combination, Fair	1.00	C	76.00
Woods & grass combination, Fair	0.20	C	76.00
Woods & grass combination, Fair	2.60	D	82.00
Composite Area & Weighted CN	4.02		81.08

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	8	0.00	0.00
2 yr, 24 hr Rainfall (in) :	3.74	0.00	0.00
Velocity (ft/sec) :	0.15	0.00	0.00
Computed Flow Time (min) :	11.41	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	925	0.00	0.00
Slope (%) :	4	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.23	0.00	0.00
Computed Flow Time (min) :	4.77	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	79	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft^2) :	7.7	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	10.57	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 16.31

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 2.53
Peak Runoff (cfs) 2.40
Weighted Curve Number 81.08
Time of Concentration (days hh:mm:ss) 0 00:16:19

Subbasin : A03

Input Data

Area (ac) 4.49
Peak Rate Factor 484.00
Weighted Curve Number 82.72
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.39	D	98.00
Woods & grass combination, Fair	0.50	C	76.00
Woods & grass combination, Fair	3.60	D	82.00
Composite Area & Weighted CN	4.49		82.72

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	7	0.00	0.00
2 yr, 24 hr Rainfall (in) :	2.85	0.00	0.00
Velocity (ft/sec) :	0.12	0.00	0.00
Computed Flow Time (min) :	13.79	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	964	0.00	0.00
Slope (%) :	4	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.23	0.00	0.00
Computed Flow Time (min) :	4.97	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	75	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft^2) :	7.74	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	10.61	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 18.88

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 2.67
Peak Runoff (cfs) 2.84
Weighted Curve Number 82.72
Time of Concentration (days hh:mm:ss) 0 00:18:53

Subbasin : B01

Input Data

Area (ac) 0.22
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.22	D	98.00
Composite Area & Weighted CN	0.22		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.24
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B02

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.25
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B03

Input Data

Area (ac) 0.33
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.33	D	98.00
Composite Area & Weighted CN	0.33		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.35
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B04

Input Data

Area (ac) 0.33
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.33	D	98.00
Composite Area & Weighted CN	0.33		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.35
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B05

Input Data

Area (ac) 0.36
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.36	D	98.00
Composite Area & Weighted CN	0.36		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.38
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B06

Input Data

Area (ac) 0.36
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.36	D	98.00
Composite Area & Weighted CN	0.36		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.39
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B07

Input Data

Area (ac) 0.46
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.46	D	98.00
Composite Area & Weighted CN	0.46		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.49
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B08

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.25
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B09

Input Data

Area (ac) 0.22
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.22	D	98.00
Composite Area & Weighted CN	0.22		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.24
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B10

Input Data

Area (ac) 0.16
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.16	D	98.00
Composite Area & Weighted CN	0.16		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.17
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B11

Input Data

Area (ac)	0.25
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.25	D	98.00
Composite Area & Weighted CN	0.25		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	4.47
Total Runoff (in)	4.23
Peak Runoff (cfs)	0.27
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B12

Input Data

Area (ac) 0.49
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.49	D	98.00
Composite Area & Weighted CN	0.49		98.00

Time of Concentration

User-Defined TOC override (minutes): 6.00

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.52
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B13

Input Data

Area (ac) 0.38
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.38	D	98.00
Composite Area & Weighted CN	0.38		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.41
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B14

Input Data

Area (ac) 0.32
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.32	D	98.00
Composite Area & Weighted CN	0.32		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.35
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B15

Input Data

Area (ac) 0.35
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.35	D	98.00
Composite Area & Weighted CN	0.35		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.38
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B16

Input Data

Area (ac) 0.17
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.17	D	98.00
Composite Area & Weighted CN	0.17		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.18
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B17

Input Data

Area (ac) 0.19
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.19	D	98.00
Composite Area & Weighted CN	0.19		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.20
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B18

Input Data

Area (ac) 0.11
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.11	D	98.00
Composite Area & Weighted CN	0.11		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.12
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B19

Input Data

Area (ac) 0.21
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.21	D	98.00
Composite Area & Weighted CN	0.21		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.23
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B20

Input Data

Area (ac) 0.24
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.24	D	98.00
Composite Area & Weighted CN	0.24		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.25
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B21

Input Data

Area (ac)	0.26
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.26	D	98.00
Composite Area & Weighted CN	0.26		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	4.47
Total Runoff (in)	4.23
Peak Runoff (cfs)	0.28
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B22

Input Data

Area (ac) 0.27
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.27	D	98.00
Composite Area & Weighted CN	0.27		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.29
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B23

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.25
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B24

Input Data

Area (ac) 0.14
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.14	D	98.00
Composite Area & Weighted CN	0.14		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.14
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B25

Input Data

Area (ac) 0.16
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.16	D	98.00
Composite Area & Weighted CN	0.16		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.17
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B26

Input Data

Area (ac) 0.08
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.08	D	98.00
Composite Area & Weighted CN	0.08		98.00

Time of Concentration

User-Defined TOC override (minutes): 6.00

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.09
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B27

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.04
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B28

Input Data

Area (ac) 0.08
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.08	D	98.00
Composite Area & Weighted CN	0.08		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.09
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B29

Input Data

Area (ac) 0.06
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.06	D	98.00
Composite Area & Weighted CN	0.06		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.06
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B30

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.04
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B31

Input Data

Area (ac)	0.04
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	4.47
Total Runoff (in)	4.23
Peak Runoff (cfs)	0.04
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B32

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.04
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B33

Input Data

Area (ac) 0.09
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.09	D	98.00
Composite Area & Weighted CN	0.09		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 4.47
Total Runoff (in) 4.23
Peak Runoff (cfs) 0.10
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B34

Input Data

Area (ac)	0.10
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.10	D	98.00
Composite Area & Weighted CN	0.10		98.00

Time of Concentration

Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft²)
1	A1.1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
2	A1-Structure	16.03	37.64	21.61	16.03	0.00	37.64	0.00	0.00
3	A2.1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
4	A2-Structure	15.56	20.55	4.99	15.56	0.00	20.55	0.00	0.00
5	A3-Structure	15.13	19.11	3.98	15.13	0.00	19.11	0.00	0.00
6	A4-Structure	14.86	20.27	5.41	14.86	0.00	20.27	0.00	0.00
7	A5-Structure	13.86	20.07	6.21	13.86	0.00	20.07	0.00	0.00
8	B1-Structure	12.20	20.13	7.93	12.20	0.00	20.13	0.00	0.00
9	C1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
10	C2-Structure	12.20	36.86	24.66	12.20	0.00	36.86	0.00	0.00
11	D1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
12	D2-Structure	12.20	38.65	26.45	12.20	0.00	38.65	0.00	0.00
13	D3-Structure	10.50	16.50	6.00	10.50	0.00	13.25	-3.25	0.00
14	D4-Structure	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
15	E10.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
16	E10-Structure	12.29	20.26	7.97	12.29	0.00	20.26	0.00	0.00
17	E11-Structure	11.95	20.26	8.31	11.95	0.00	20.26	0.00	0.00
18	E13.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
19	E13-Structure	11.61	20.26	8.65	11.61	0.00	20.26	0.00	0.00
20	E14.2-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
21	E14-Structure	11.22	20.25	9.03	11.22	0.00	20.25	0.00	0.00
22	E15-Structure	10.79	20.25	9.46	10.79	0.00	20.25	0.00	0.00
23	E16-Structure	10.62	20.13	9.51	10.62	0.00	20.13	0.00	0.00
24	E1-Structure	15.10	19.22	4.12	15.10	0.00	19.22	0.00	0.00
25	E2-Structure	14.73	20.26	5.53	14.73	0.00	20.26	0.00	0.00
26	E4.1-Structure	19.10	21.08	1.98	19.10	0.00	21.08	0.00	0.00
27	E4-Structure	14.45	20.30	5.85	14.45	0.00	20.30	0.00	0.00
28	E5-Structure	14.37	20.09	5.72	14.37	0.00	20.09	0.00	0.00
29	E6-Structure	14.02	20.20	6.18	14.02	0.00	20.20	0.00	0.00
30	E7.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
31	E7-Structure	13.23	20.26	7.03	13.23	0.00	20.26	0.00	0.00
32	E8-Structure	12.93	20.26	7.33	12.93	0.00	20.26	0.00	0.00
33	E9.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
34	E9-Structure	12.62	20.26	7.64	12.62	0.00	20.26	0.00	0.00
35	Jun-01	0.00	10.50	10.50	0.00	0.00	0.00	-10.50	0.00
36	Jun-02	0.00	6.00	6.00	0.00	0.00	6.00	0.00	0.00
37	Jun-03	0.00	6.00	6.00	0.00	0.00	6.00	0.00	0.00
38	Jun-04	19.20	6.00	-13.20	0.00	-19.20	6.00	0.00	0.00
39	Jun-05	18.20	6.00	-12.20	0.00	-18.20	6.00	0.00	0.00
40	Jun-06	14.60	6.00	-8.60	0.00	-14.60	6.00	0.00	0.00
41	Jun-07	13.20	6.00	-7.20	0.00	-13.20	6.00	0.00	0.00
42	Jun-08	19.20	6.00	-13.20	0.00	-19.20	6.00	0.00	0.00
43	Jun-09	14.60	6.00	-8.60	0.00	-14.60	0.00	-6.00	0.00
44	Out-1A15-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
45	Out-1B1-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
46	Out-1C2-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
47	Out-1D4-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
48	Out-1E16-Pipe	10.50	16.50	6.00	10.50	0.00	0.00	-16.50	0.00
49	Out-1Pipe (53)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
50	Out-1Pipe (59)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
51	Out-1Pipe (62)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
52	Structure - 100	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
53	Structure - 101	11.91	19.47	7.56	11.91	0.00	19.47	0.00	0.00
54	Structure - 102	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
55	Structure - 103	11.59	19.48	7.89	11.59	0.00	19.48	0.00	0.00
56	Structure - 104	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
57	Structure - 105	11.09	19.41	8.31	11.09	0.00	19.41	0.00	0.00
58	Structure - 35	10.76	18.50	7.74	10.76	0.00	18.50	0.00	0.00
59	Structure - 36	10.59	20.13	9.54	10.59	0.00	20.13	0.00	0.00
60	Structure - 38	28.60	31.31	2.71	28.60	0.00	31.31	0.00	0.00
61	Structure - 39	27.61	32.57	4.96	27.61	0.00	32.57	0.00	0.00
62	Structure - 48	26.48	1.78	-24.70	26.48	0.00	1.78	0.00	0.00
63	Structure - 49	25.31	29.72	4.41	25.31	0.00	29.72	0.00	0.00
64	Structure - 75	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
65	Structure - 83	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
66	Structure - 87	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
67	Structure - 91	19.10	21.10	2.00	19.10	0.00	21.10	0.00	0.00
68	Structure - 94	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
69	Structure - 95	13.30	19.40	6.10	13.30	0.00	19.40	0.00	0.00
70	Structure - 96	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
71	Structure - 97	12.86	19.42	6.56	12.86	0.00	19.42	0.00	0.00
72	Structure - 98	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
73	Structure - 99	12.39	19.44	7.04	12.39	0.00	19.44	0.00	0.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	A1.1-Structure	0.2	0.2	19.24	0.14	0.00	1.77	19.15	0.05	0 07:50	0 00:00	0.00	0.00
2	A1-Structure	2.7	0.2	18.46	2.43	0.00	19.18	18.32	2.29	0 08:03	0 00:00	0.00	0.00
3	A2.1-Structure	0.2	0.2	19.26	0.16	0.00	1.74	19.16	0.06	0 07:50	0 00:00	0.00	0.00
4	A2-Structure	3.1	0.1	18.38	2.82	0.00	2.16	18.28	2.72	0 07:50	0 00:00	0.00	0.00
5	A3-Structure	3.3	0.3	15.87	0.74	0.00	3.25	15.40	0.27	0 08:02	0 00:00	0.00	0.00
6	A4-Structure	6.1	0.0	17.05	2.19	0.00	3.22	16.91	2.05	0 08:04	0 00:00	0.00	0.00
7	A5-Structure	6.5	0.1	18.47	4.61	0.00	1.60	18.37	4.51	0 07:51	0 00:00	0.00	0.00
8	B1-Structure	0.3	0.3	12.30	0.10	0.00	7.83	12.24	0.04	0 07:50	0 00:00	0.00	0.00
9	C1-Structure	0.2	0.2	19.26	0.16	0.00	1.74	19.16	0.06	0 07:50	0 00:00	0.00	0.00
10	C2-Structure	0.5	0.3	18.37	6.17	0.00	18.49	18.27	6.07	0 07:50	0 00:00	0.00	0.00
11	D1-Structure	0.2	0.2	19.25	0.15	0.00	1.76	19.16	0.06	0 07:49	0 00:00	0.00	0.00
12	D2-Structure	0.4	0.2	18.36	6.16	0.00	20.29	18.27	6.07	0 07:50	0 00:00	0.00	0.00
13	D3-Structure	0.4	0.0	10.62	0.12	0.00	5.88	10.55	0.05	0 07:50	0 00:00	0.00	0.00
14	D4-Structure	2.7	0.0	11.30	0.67	0.00	1.80	10.89	0.26	0 08:08	0 00:00	0.00	0.00
15	E10.1-Structure	0.4	0.4	19.29	0.19	0.00	1.78	19.18	0.08	0 07:49	0 00:00	0.00	0.00
16	E10-Structure	2.0	0.1	18.64	6.35	0.00	1.62	18.52	6.23	0 07:50	0 00:00	0.00	0.00
17	E11-Structure	2.1	0.1	12.48	0.53	0.00	7.78	12.16	0.21	0 07:52	0 00:00	0.00	0.00
18	E13.1-Structure	0.4	0.4	19.30	0.20	0.00	1.77	19.18	0.08	0 07:49	0 00:00	0.00	0.00
19	E13-Structure	2.6	0.0	18.72	7.11	0.00	1.54	18.60	6.99	0 07:50	0 00:00	0.00	0.00
20	E14.2-Structure	0.2	0.2	19.24	0.14	0.00	1.83	19.16	0.06	0 07:49	0 00:00	0.00	0.00
21	E14-Structure	2.8	0.1	18.60	7.38	0.00	1.65	18.52	7.30	0 07:49	0 00:00	0.00	0.00
22	E15-Structure	3.0	0.2	11.53	0.74	0.00	8.72	11.07	0.28	0 07:52	0 00:00	0.00	0.00
23	E16-Structure	3.1	0.1	11.36	0.74	0.00	8.77	10.90	0.28	0 07:53	0 00:00	0.00	0.00
24	E1-Structure	0.1	0.1	15.22	0.12	0.00	4.00	15.15	0.05	0 07:49	0 00:00	0.00	0.00
25	E2-Structure	0.1	0.0	14.88	0.15	0.00	5.38	14.79	0.06	0 07:52	0 00:00	0.00	0.00
26	E4.1-Structure	0.3	0.3	19.27	0.17	0.00	1.81	19.17	0.07	0 07:49	0 00:00	0.00	0.00
27	E4-Structure	0.1	0.0	14.60	0.15	0.00	5.70	14.51	0.06	0 07:52	0 00:00	0.00	0.00
28	E5-Structure	0.5	0.1	18.59	4.22	0.00	1.50	18.48	4.11	0 07:50	0 00:00	0.00	0.00
29	E6-Structure	0.6	0.1	14.32	0.30	0.00	5.88	14.14	0.12	0 07:52	0 00:00	0.00	0.00
30	E7.1-Structure	0.5	0.5	19.33	0.23	0.00	1.74	19.19	0.09	0 07:50	0 00:00	0.00	0.00
31	E7-Structure	1.1	0.0	18.68	5.45	0.00	1.58	18.53	5.30	0 07:50	0 00:00	0.00	0.00
32	E8-Structure	1.2	0.0	13.32	0.39	0.00	6.94	13.08	0.15	0 07:52	0 00:00	0.00	0.00
33	E9.1-Structure	0.4	0.4	19.31	0.21	0.00	1.76	19.18	0.08	0 07:50	0 00:00	0.00	0.00
34	E9-Structure	1.6	0.0	18.81	6.19	0.00	1.45	18.68	6.06	0 07:50	0 00:00	0.00	0.00
35	Jun-01	3.9	3.9	0.00	0.00	0.00	10.50	0.00	0.00	0 00:00	0 00:00	0.00	0.00
36	Jun-02	3.2	3.2	32.46	32.46	0.00	1.04	32.17	32.17	0 08:02	0 00:00	0.00	0.00
37	Jun-03	3.2	0.0	30.46	30.46	0.00	1.04	30.17	30.17	0 08:02	0 00:00	0.00	0.00
38	Jun-04	3.6	0.4	19.20	0.00	0.00	0.00	19.20	0.00	0 00:00	0 00:00	0.00	0.00
39	Jun-05	3.6	0.0	18.78	0.58	0.00	0.92	18.41	0.21	0 08:01	0 00:00	0.00	0.00
40	Jun-06	3.7	0.1	14.60	0.00	0.00	0.00	14.60	0.00	0 00:00	0 00:00	0.00	0.00
41	Jun-07	3.8	0.1	13.73	0.53	0.00	0.97	13.40	0.20	0 08:02	0 00:00	0.00	0.00
42	Jun-08	3.6	0.0	19.78	0.58	0.00	0.92	19.41	0.21	0 08:01	0 00:00	0.00	0.00
43	Jun-09	3.7	0.0	15.13	0.53	0.00	0.97	14.80	0.20	0 08:02	0 00:00	0.00	0.00
44	Out-1A15-Pipe	8.8	0.0	11.54	1.04	0.00	4.96	10.90	0.40	0 08:02	0 00:00	0.00	0.00
45	Out-1B1-Pipe	0.3	0.0	10.60	0.10	0.00	5.90	10.54	0.04	0 07:51	0 00:00	0.00	0.00
46	Out-1C2-Pipe	0.5	0.0	10.63	0.13	0.00	5.87	10.55	0.05	0 07:50	0 00:00	0.00	0.00
47	Out-1D4-Pipe	2.7	0.0	11.17	0.67	0.00	5.33	10.76	0.26	0 08:08	0 00:00	0.00	0.00
48	Out-1E16-Pipe	3.1	0.0	11.16	0.66	0.00	5.34	10.75	0.25	0 07:53	0 00:00	0.00	0.00
49	Out-1Pipe (53)	2.7	0.0	11.10	0.60	0.00	5.40	10.74	0.24	0 08:08	0 00:00	0.00	0.00
50	Out-1Pipe (59)	2.7	0.0	11.17	0.67	0.00	5.33	10.76	0.26	0 08:08	0 00:00	0.00	0.00
51	Out-1Pipe (62)	2.7	0.0	11.17	0.67	0.00	5.33	10.76	0.26	0 08:08	0 00:00	0.00	0.00
52	Structure - 100	0.4	0.4	19.30	0.20	0.00	0.53	19.18	0.08	0 07:50	0 00:00	0.00	0.00
53	Structure - 101	8.0	0.0	18.60	6.69	0.00	0.87	18.48	6.57	0 07:50	0 00:00	0.00	0.00
54	Structure - 102	0.4	0.4	19.30	0.20	0.00	0.53	19.18	0.08	0 07:50	0 00:00	0.00	0.00
55	Structure - 103	8.3	0.0	18.60	7.01	0.00	0.88	18.48	6.89	0 07:50	0 00:00	0.00	0.00
56	Structure - 104	0.3	0.3	19.28	0.18	0.00	0.54	19.17	0.07	0 07:50	0 00:00	0.00	0.00
57	Structure - 105	8.5	0.0	18.49	7.40	0.00	0.91	18.38	7.29	0 07:51	0 00:00	0.00	0.00
58	Structure - 35	8.5	0.0	11.79	1.03	0.00	6.72	11.16	0.40	0 08:02	0 00:00	0.00	0.00
59	Structure - 36	8.8	0.3	11.63	1.04	0.00	8.50	10.99	0.40	0 08:02	0 00:00	0.00	0.00
60	Structure - 38	2.4	2.4	29.15	0.55	0.00	2.16	28.80	0.20	0 08:03	0 00:00	0.00	0.00
61	Structure - 39	2.4	0.0	28.77	1.16	0.00	3.79	28.42	0.81	0 08:03	0 00:00	0.00	0.00
62	Structure - 48	2.8	2.8	26.94	0.46	0.00	1.04	26.65	0.17	0 08:04	0 00:00	0.00	0.00
63	Structure - 49	2.8	0.0	26.25	0.94	0.00	3.47	25.96	0.65	0 08:04	0 00:00	0.00	0.00
64	Structure - 75	2.7	0.0	11.23	0.60	0.00	1.87	10.87	0.24	0 08:08	0 00:00	0.00	0.00
65	Structure - 83	2.7	0.0	11.30	0.67	0.00	1.80	10.89	0.26	0 08:08	0 00:00	0.00	0.00
66	Structure - 87	2.7	0.0	11.30	0.67	0.00	1.80	10.89	0.26	0 08:08	0 00:00	0.00	0.00
67	Structure - 91	0.3	0.3	19.27	0.17	0.00	1.83	19.17	0.07	0 07:50	0 00:00	0.00	0.00
68	Structure - 94	0.5	0.5	19.36	0.26	0.00	0.46	19.20	0.10	0 07:50	0 00:00	0.00	0.00
69	Structure - 95	6.9	0.0	18.67	5.37	0.00	0.73	18.51	5.21	0 07:50	0 00:00	0.00	0.00
70	Structure - 96	0.4	0.4	19.33	0.23	0.00	0.49	19.19	0.09	0 07:50	0 00:00	0.00	0.00
71	Structure - 97	7.3	0.0	18.64	5.78	0.00	0.78	18.49	5.63	0 07:50	0 00:00	0.00	0.00
72	Structure - 98	0.4	0.4	19.33	0.23	0.00	0.50	19.19	0.09	0 07:50	0 00:00	0.00	0.00
73	Structure - 99	7.6	0.0	18.63	6.24	0.00	0.81	18.49	6.10	0 07:50	0 00:00	0.00	0.00

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Flap Gate	No. of Barrels
1	A1.1-Pipe	43.57	19.10	18.23	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
2	A10.1-Pipe	34.83	19.10	18.40	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
3	A10-Pipe	91.67	12.39	11.91	0.5300	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
4	A11.1-Pipe	34.86	19.10	18.40	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
5	A11-Pipe	67.33	11.91	11.59	0.4700	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
6	A12.1-Pipe	39.58	19.10	18.31	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
7	A12-Pipe	100.61	11.59	11.09	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
8	A13-Pipe	63.49	11.09	10.76	0.5200	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
9	A14-Pipe	37.44	10.76	10.59	0.4500	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
10	A15-Pipe	19.67	10.59	10.50	0.4600	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
11	A1-Pipe	32.78	27.61	18.23	28.6100	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
12	A2.1-Pipe	44.00	19.10	18.22	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
13	A2-Pipe	97.50	16.03	15.56	0.4800	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
14	A3-Pipe	88.50	15.56	15.13	0.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
15	A4.1-Pipe	39.16	25.31	16.82	21.6900	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
16	A4-Pipe	56.66	15.13	14.86	0.4800	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
17	A5-Pipe	107.77	14.86	13.86	0.9300	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
18	A6.1-Pipe	42.40	19.10	18.31	1.8700	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
19	A7.1-Pipe	34.69	19.10	18.41	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
20	A7-Pipe	110.61	13.86	13.30	0.5100	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
21	A8.1-Pipe	34.74	19.10	18.41	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
22	A8-Pipe	89.33	13.30	12.86	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
23	A9.1-Pipe	34.78	19.10	18.40	2.0100	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
24	A9-Pipe	95.00	12.86	12.39	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
25	B1-Pipe	19.69	12.20	10.50	8.6300	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
26	C1-Pipe	44.64	19.10	18.21	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
27	C2-Pipe	19.67	12.20	10.50	8.6400	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
28	D1-Pipe	44.46	19.10	18.21	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
29	D2-Pipe	19.67	12.20	10.50	8.6400	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
30	D4-Pipe	26.30	10.63	10.50	0.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
31	E10-Pipe	68.72	12.29	11.95	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
32	E11-Pipe	67.31	11.95	11.61	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
33	E12.1-Pipe	28.75	19.10	18.52	2.0200	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
34	E13.1-Pipe	31.82	19.10	18.46	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
35	E13-Pipe	77.56	11.61	11.22	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
36	E14-Pipe	88.49	11.22	10.79	0.4900	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
37	E15-Pipe	61.58	10.79	10.62	0.2800	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
38	E16-Pipe	26.19	10.62	10.50	0.4600	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
39	E1-Pipe	73.22	15.10	14.73	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
40	E2-Pipe	55.47	14.73	14.45	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
41	E4-Pipe	15.97	14.45	14.37	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
42	E5.1-Pipe	32.89	19.10	18.42	2.0800	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
43	E5-Pipe	70.61	14.37	14.02	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
44	E6.1-Pipe	28.85	19.10	18.44	2.2800	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
45	E6-Pipe	58.54	14.02	13.73	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
46	E7-Pipe	59.55	13.23	12.93	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
47	E8.1-Pipe	25.28	19.10	18.59	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
48	E8-Pipe	61.63	12.93	12.62	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
49	E9.1-Pipe	30.97	19.10	18.44	2.1200	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
50	E9-Pipe	66.95	12.62	12.29	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
51	Link-01	178.44	10.50	0.00	5.8800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
52	Link-02	117.22	9.00	0.00	7.6800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
53	Link-03	30.02	10.50	0.00	34.9800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
54	Link-04	60.81	10.50	0.00	17.2700	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
55	Link-05	138.79	10.50	0.00	7.5700	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
56	Link-11	71.00	32.00	30.00	2.8200	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
57	Link-12	417.20	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
58	Link-14	128.08	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
59	Link-16	317.29	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
60	Link-17	137.86	10.50	0.00	7.6200	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
61	Link-18	99.47	10.50	0.00	10.5600	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
62	Link-19	130.31	10.50	0.00	8.0600	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
63	Link-20	191.76	10.50	0.00	5.4800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
64	Link-29	48.58	19.20	18.82	0.7800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
65	Link-30	67.00	19.20	18.20	1.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
66	Link-31	46.31	14.60	14.60	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
67	Link-32	64.00	14.60	13.20	2.1900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
68	Pipe (24)	45.94	28.60	28.22	0.8300	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
69	Pipe (34)	46.55	26.48	25.79	1.4800	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
70	Pipe (53)	27.49	10.63	10.50	0.4700	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
71	Pipe (59)	25.67	10.63	10.50	0.5100	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
72	Pipe (62)	25.95	10.63	10.50	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1

Pipe Results

SN	Element ID	Peak Flow	Time of Peak Flow Occurrence	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Travel Time	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Froude Number	Reported Condition
		(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)		
1	A1.1-Pipe	0.2	0 07:51	1.9	0.09	3.32	0.22	0.14	0.21	0.00		Calculated
2	A10.1-Pipe	0.4	0 07:50	1.9	0.19	4.07	0.14	0.20	0.29	0.00		Calculated
3	A10-Pipe	7.6	0 08:02	25.9	0.29	4.59	0.33	0.93	0.37	0.00		Calculated
4	A11.1-Pipe	0.4	0 07:50	1.9	0.19	4.07	0.14	0.20	0.29	0.00		Calculated
5	A11-Pipe	8.0	0 08:02	24.5	0.32	4.45	0.25	0.98	0.39	0.00		Calculated
6	A12.1-Pipe	0.3	0 07:51	1.5	0.17	3.14	0.21	0.18	0.28	0.00		Calculated
7	A12-Pipe	8.3	0 08:02	25.0	0.33	4.56	0.37	0.99	0.40	0.00		Calculated
8	A13-Pipe	8.5	0 08:02	25.7	0.33	4.70	0.23	0.99	0.40	0.00		Calculated
9	A14-Pipe	8.5	0 08:02	24.0	0.35	4.46	0.14	1.03	0.41	0.00		Calculated
10	A15-Pipe	8.8	0 08:02	24.1	0.36	4.51	0.07	1.04	0.42	0.00		Calculated
11	A1-Pipe	2.4	0 08:03	48.7	0.05	14.33	0.04	0.23	0.15	0.00		Calculated
12	A2.1-Pipe	0.2	0 07:50	1.9	0.13	3.66	0.20	0.16	0.24	0.00		Calculated
13	A2-Pipe	2.7	0 08:02	6.3	0.43	3.44	0.47	0.69	0.46	0.00		Calculated
14	A3-Pipe	3.1	0 08:02	6.4	0.48	3.56	0.41	0.74	0.49	0.00		Calculated
15	A4.1-Pipe	2.8	0 08:04	53.0	0.05	15.95	0.04	0.24	0.16	0.00		Calculated
16	A4-Pipe	3.3	0 08:02	24.5	0.13	3.49	0.27	0.62	0.25	0.00		Calculated
17	A5-Pipe	6.1	0 08:02	34.3	0.18	5.27	0.34	0.72	0.29	0.00		Calculated
18	A6.1-Pipe	0.3	0 07:51	1.8	0.14	3.60	0.20	0.17	0.25	0.00		Calculated
19	A7.1-Pipe	0.5	0 07:50	1.5	0.33	3.81	0.15	0.26	0.40	0.00		Calculated
20	A7-Pipe	6.5	0 08:02	25.3	0.26	4.31	0.43	0.86	0.34	0.00		Calculated
21	A8.1-Pipe	0.4	0 07:50	1.5	0.26	3.58	0.16	0.23	0.35	0.00		Calculated
22	A8-Pipe	6.9	0 08:02	24.9	0.28	4.34	0.34	0.90	0.36	0.00		Calculated
23	A9.1-Pipe	0.4	0 07:50	1.5	0.26	3.57	0.16	0.23	0.35	0.00		Calculated
24	A9-Pipe	7.3	0 08:02	24.9	0.29	4.40	0.36	0.93	0.37	0.00		Calculated
25	B1-Pipe	0.3	0 07:51	57.6	0.00	4.67	0.07	0.10	0.05	0.00		Calculated
26	C1-Pipe	0.2	0 07:50	1.9	0.13	3.66	0.20	0.16	0.24	0.00		Calculated
27	C2-Pipe	0.5	0 07:50	57.6	0.01	5.59	0.06	0.13	0.07	0.00		Calculated
28	D1-Pipe	0.2	0 07:50	1.9	0.11	3.46	0.21	0.15	0.22	0.00		Calculated
29	D2-Pipe	0.4	0 07:50	57.6	0.01	5.37	0.06	0.12	0.06	0.00		Calculated
30	D4-Pipe	2.7	0 08:08	6.4	0.41	3.45	0.13	0.67	0.45	0.00		Calculated
31	E10-Pipe	2.0	0 07:52	13.9	0.15	3.16	0.36	0.52	0.26	0.00		Calculated
32	E11-Pipe	2.1	0 07:52	13.9	0.15	3.20	0.35	0.53	0.27	0.00		Calculated
33	E12.1-Pipe	0.4	0 07:50	1.9	0.20	4.17	0.11	0.20	0.30	0.00		Calculated
34	E13.1-Pipe	0.2	0 07:49	1.9	0.10	3.35	0.16	0.14	0.21	0.00		Calculated
35	E13-Pipe	2.6	0 07:52	13.9	0.18	3.36	0.38	0.58	0.29	0.00		Calculated
36	E14-Pipe	2.8	0 07:52	13.7	0.21	3.43	0.43	0.62	0.31	0.00		Calculated
37	E15-Pipe	3.0	0 07:53	10.3	0.29	2.85	0.36	0.74	0.37	0.00		Calculated
38	E16-Pipe	3.1	0 07:53	13.3	0.24	3.45	0.13	0.66	0.33	0.00		Calculated
39	E1-Pipe	0.1	0 07:52	6.4	0.01	1.29	0.95	0.12	0.08	0.00		Calculated
40	E2-Pipe	0.1	0 07:52	6.4	0.02	1.43	0.65	0.15	0.10	0.00		Calculated
41	E4-Pipe	0.1	0 07:53	6.3	0.02	1.41	0.19	0.15	0.10	0.00		Calculated
42	E5.1-Pipe	0.3	0 07:50	1.9	0.14	3.82	0.14	0.17	0.25	0.00		Calculated
43	E5-Pipe	0.5	0 07:52	6.4	0.08	2.14	0.55	0.28	0.19	0.00		Calculated
44	E6.1-Pipe	0.5	0 07:50	2.0	0.26	4.77	0.10	0.23	0.35	0.00		Calculated
45	E6-Pipe	0.6	0 07:52	6.4	0.08	2.22	0.44	0.30	0.20	0.00		Calculated
46	E7-Pipe	1.1	0 07:52	13.9	0.08	2.64	0.38	0.38	0.19	0.00		Calculated
47	E8.1-Pipe	0.4	0 07:50	1.9	0.22	4.26	0.10	0.21	0.32	0.00		Calculated
48	E8-Pipe	1.2	0 07:52	13.8	0.08	2.66	0.39	0.39	0.20	0.00		Calculated
49	E9.1-Pipe	0.4	0 07:50	1.9	0.18	4.15	0.12	0.19	0.29	0.00		Calculated
50	E9-Pipe	1.6	0 07:52	13.8	0.12	2.92	0.38	0.46	0.23	0.00		Calculated
51	Link-01	3.1	0 07:53	0.0	0.12	0.00		0.46	0.23	0.00		Calculated
52	Link-02	0.4	0 07:50	0.0	0.12	0.00		0.46	0.23	0.00		Calculated
53	Link-03	0.5	0 07:50	0.0	0.12	0.00		0.46	0.23	0.00		Calculated
54	Link-04	0.3	0 07:51	0.0	0.12	0.00		0.46	0.23	0.00		Calculated
55	Link-05	8.8	0 08:02	0.0	0.12	0.00		0.46	0.23	0.00		Calculated
56	Link-11	3.2	0 08:02	15.3	0.21	6.81	0.17	0.46	0.31	0.00		Calculated
57	Link-12	3.2	0 08:02	0.0	0.21	0.00		0.46	0.31	0.00		Calculated
58	Link-14	3.6	0 08:01	0.0	0.21	0.00		0.46	0.31	0.00		Calculated
59	Link-16	3.8	0 08:02	0.0	0.21	0.00		0.46	0.31	0.00		Calculated
60	Link-17	2.7	0 08:08	0.0	0.21	0.00		0.46	0.31	0.00		Calculated
61	Link-18	2.7	0 08:08	0.0	0.21	0.00		0.46	0.31	0.00		Calculated
62	Link-19	2.7	0 08:08	0.0	0.21	0.00		0.46	0.31	0.00		Calculated
63	Link-20	2.7	0 08:08	0.0	0.21	0.00		0.46	0.31	0.00		Calculated
64	Link-29	3.6	0 08:01	0.0	0.21	0.00		0.46	0.31	0.00		Calculated
65	Link-30	3.6	0 08:01	11.1	0.32	5.60	0.20	0.58	0.39	0.00		Calculated
66	Link-31	3.7	0 08:02	0.0	0.32	0.00		0.58	0.39	0.00		Calculated
67	Link-32	3.7	0 08:02	13.5	0.27	6.48	0.16	0.53	0.36	0.00		Calculated
68	Pipe (24)	2.4	0 08:03	8.3	0.29	4.06	0.19	0.55	0.37	0.00		Calculated
69	Pipe (34)	2.8	0 08:04	13.9	0.20	6.16	0.13	0.46	0.31	0.00		Calculated
70	Pipe (53)	2.7	0 08:08	7.8	0.34	4.00	0.11	0.60	0.40	0.00		Calculated
71	Pipe (59)	2.7	0 08:08	6.5	0.41	3.48	0.12	0.67	0.45	0.00		Calculated
72	Pipe (62)	2.7	0 08:08	6.4	0.41	3.47	0.12	0.67	0.45	0.00		Calculated

Storage Nodes

Storage Node : Detention-Basin

Input Data

Invert Elevation (ft) 10.50
Max (Rim) Elevation (ft) 15.50
Max (Rim) Offset (ft) 5.00
Initial Water Elevation (ft) 0.00
Initial Water Depth (ft) ..... -10.50
Ponded Area (ft²) 12634.80
Evaporation Loss 0.00

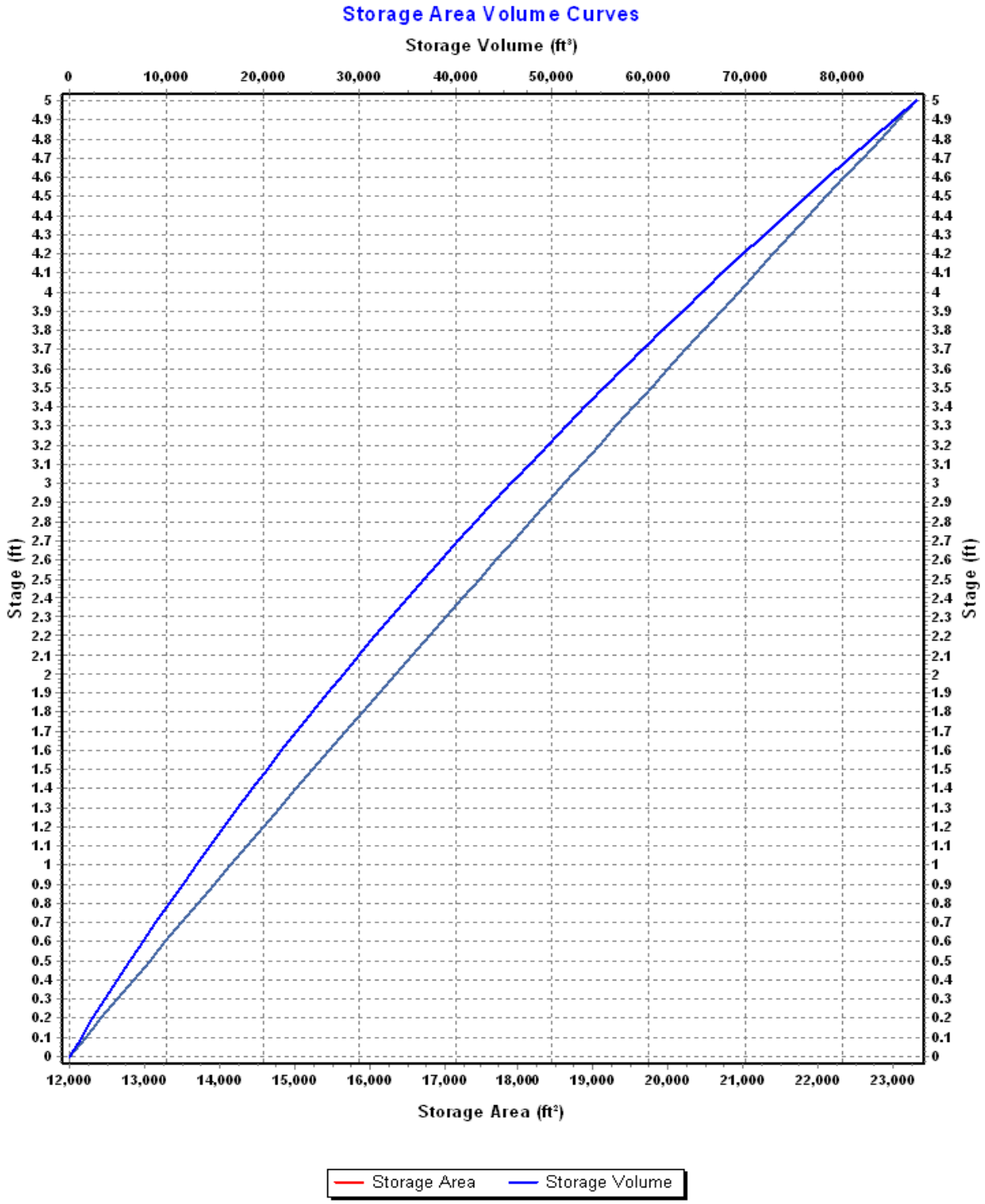
Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.0900

Storage Area Volume Curves

Storage Curve : Storage-01

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	11997.07	0.000
0.1	12209.57	1210.33
0.2	12422.63	2441.94
0.3	12636.25	3694.88
0.4	12850.44	4969.21
0.5	13065.18	6264.99
0.6	13280.49	7582.27
0.7	13496.37	8921.11
0.8	13712.80	10281.57
0.9	13929.80	11663.70
1	14147.36	13067.56
1.1	14365.48	14493.20
1.2	14584.17	15940.68
1.3	14803.41	17410.06
1.4	15023.22	18901.39
1.5	15243.59	20414.73
1.6	15464.53	21950.14
1.7	15686.02	23507.67
1.8	15908.08	25087.38
1.9	16130.71	26689.32
2	16353.89	28313.55
2.1	16577.64	29960.13
2.2	16801.95	31629.11
2.3	17026.82	33320.55
2.4	17252.25	35034.50
2.5	17478.25	36771.03
2.6	17704.81	38530.18
2.7	17931.93	40312.02
2.8	18159.61	42116.60
2.9	18387.86	43943.97
3	18616.66	45794.20
3.1	18846.04	47667.34
3.2	19075.97	49563.44
3.3	19306.46	51482.56
3.4	19537.52	53424.76
3.5	19769.14	55390.09
3.6	20001.33	57378.61
3.7	20234.07	59390.38
3.8	20467.38	61425.45
3.9	20701.25	63483.88
4	20935.68	65565.73
4.1	21170.68	67671.05
4.2	21406.24	69799.90
4.3	21642.36	71952.33
4.4	21879.04	74128.40
4.5	22116.28	76328.17
4.6	22354.09	78551.69
4.7	22592.46	80799.02
4.8	22831.39	83070.21
4.9	23070.89	85365.32
5	23310.95	87684.41


Storage Area Volume Curves
Storage Volume (ft³)
0
10,000
20,000
30,000
40,000
50,000
60,000
70,000
80,000
Stage (ft)
Stage (ft)
5
4.9
4.8
4.7
4.6
4.5
4.4
4.3
4.2
4.1
4
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
12,000
13,000
14,000
15,000
16,000
17,000
18,000
19,000
20,000
21,000
22,000
23,000
Storage Area (ft²)
Storage Area
Storage Volume

Storage Node : Detention-Basin (continued)

Outflow Orifices

SN	Element ID	Orifice Type	Orifice Shape	Flap Gate	Circular Orifice Diameter (in)	Rectangular Orifice Height (in)	Rectangular Orifice Width (in)	Orifice Invert Elevation (ft)	Orifice Coefficient
1	Orifice-01	Side	Rectangular	No		9.00	12.00	11.00	0.63
2	Orifice-02	Side	Rectangular	No		9.00	12.00	11.00	0.63
3	Orifice-03	Side	Rectangular	No		9.00	12.00	11.00	0.63
4	Orifice-04	Side	Rectangular	No		9.00	12.00	11.00	0.63

Output Summary Results

Peak Inflow (cfs)	12.87
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	10.61
Peak Exfiltration Flow Rate (cfm)	1.88
Max HGL Elevation Attained (ft)	11.87
Max HGL Depth Attained (ft)	1.37
Average HGL Elevation Attained (ft)	11.21
Average HGL Depth Attained (ft)	0.71
Time of Max HGL Occurrence (days hh:mm)	0 08:08
Total Exfiltration Volume (1000-ft³)	2.374
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00

Project Description

File Name ..... SDG 220 Post.SPF

Project Options

Flow Units ..... CFS
Elevation Type ..... Elevation
Hydrology Method ..... SCS TR-55
Time of Concentration (TOC) Method ..... SCS TR-55
Link Routing Method ..... Kinematic Wave
Enable Overflow Ponding at Nodes ..... YES
Skip Steady State Analysis Time Periods ... YES

Analysis Options

Start Analysis On ..... Mar 13, 2023 00:00:00
End Analysis On ..... Mar 14, 2023 00:00:00
Start Reporting On ..... Mar 13, 2023 00:00:00
Antecedent Dry Days ..... 0 days
Runoff (Dry Weather) Time Step ..... 0 01:00:00 days hh:mm:ss
Runoff (Wet Weather) Time Step ..... 0 00:05:00 days hh:mm:ss
Reporting Time Step ..... 0 00:00:30 days hh:mm:ss
Routing Time Step ..... 30 seconds

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1		Time Series	TS- 100yr	Cumulative	inches	None	None	100	7.36	SCS Type IA 24-hr

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	A01	5.17	484.00	81	7.36	5.19	26.80	6.7	0 00:15:27
2	A02	4.02	484.00	81	7.36	5.15	20.70	5.2	0 00:16:18
3	A03	4.49	484.00	83	7.36	5.34	23.96	5.9	0 00:18:52
4	B01	0.22	484.00	98	7.36	7.12	1.57	0.4	0 00:06:00
5	B02	0.23	484.00	98	7.36	7.12	1.62	0.4	0 00:06:00
6	B03	0.33	484.00	98	7.36	7.12	2.34	0.6	0 00:06:00
7	B04	0.33	484.00	98	7.36	7.12	2.32	0.6	0 00:06:00
8	B05	0.36	484.00	98	7.36	7.12	2.55	0.6	0 00:06:00
9	B06	0.36	484.00	98	7.36	7.12	2.57	0.7	0 00:06:00
10	B07	0.46	484.00	98	7.36	7.12	3.28	0.8	0 00:06:00
11	B08	0.23	484.00	98	7.36	7.12	1.64	0.4	0 00:06:00
12	B09	0.22	484.00	98	7.36	7.12	1.57	0.4	0 00:06:00
13	B10	0.16	484.00	98	7.36	7.12	1.14	0.3	0 00:06:00
14	B11	0.25	484.00	98	7.36	7.12	1.80	0.4	0 00:06:00
15	B12	0.49	484.00	98	7.36	7.12	3.47	0.9	0 00:06:00
16	B13	0.38	484.00	98	7.36	7.12	2.72	0.7	0 00:06:00
17	B14	0.32	484.00	98	7.36	7.12	2.30	0.6	0 00:06:00
18	B15	0.35	484.00	98	7.36	7.12	2.50	0.6	0 00:06:00
19	B16	0.17	484.00	98	7.36	7.12	1.19	0.3	0 00:06:00
20	B17	0.19	484.00	98	7.36	7.12	1.33	0.3	0 00:06:00
21	B18	0.11	484.00	98	7.36	7.12	0.77	0.2	0 00:06:00
22	B19	0.21	484.00	98	7.36	7.12	1.51	0.4	0 00:06:00
23	B20	0.24	484.00	98	7.36	7.12	1.68	0.4	0 00:06:00
24	B21	0.26	484.00	98	7.36	7.12	1.87	0.5	0 00:06:00
25	B22	0.27	484.00	98	7.36	7.12	1.93	0.5	0 00:06:00
26	B23	0.23	484.00	98	7.36	7.12	1.65	0.4	0 00:06:00
27	B24	0.14	484.00	98	7.36	7.12	0.97	0.2	0 00:06:00
28	B25	0.16	484.00	98	7.36	7.12	1.14	0.3	0 00:06:00
29	B26	0.08	484.00	98	7.36	7.12	0.57	0.2	0 00:06:00
30	B27	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
31	B28	0.08	484.00	98	7.36	7.12	0.57	0.2	0 00:06:00
32	B29	0.06	484.00	98	7.36	7.12	0.43	0.1	0 00:06:00
33	B30	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
34	B31	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
35	B32	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
36	B33	0.09	484.00	98	7.36	7.12	0.64	0.2	0 00:06:00
37	B34	0.10	484.00	98	7.36	7.12	0.70	0.2	0 00:06:00
38	B35	0.04	484.00	98	7.36	7.12	0.28	0.1	0 00:06:00
39	B36	0.09	484.00	98	7.36	7.12	0.65	0.2	0 00:06:00
40	B37	0.17	484.00	98	7.36	7.12	1.21	0.3	0 00:06:00
41	B38	0.13	484.00	98	7.36	7.12	0.91	0.2	0 00:06:00
42	C01	1.09	484.00	72	7.36	4.14	4.51	1.1	0 00:05:00
43	C02	0.28	484.00	72	7.36	4.14	1.16	0.3	0 00:29:07
44	C03	0.29	484.00	72	7.36	4.14	1.19	0.3	0 00:16:48
45	D01	0.48	484.00	98	7.36	7.12	3.45	0.9	0 00:06:00
46	D02	0.41	484.00	98	7.36	7.12	2.94	0.7	0 00:06:00
47	D03	0.65	484.00	98	7.36	7.12	4.62	1.1	0 00:06:00
48	D04	0.78	484.00	98	7.36	7.12	5.55	1.4	0 00:06:00
49	D05	0.44	484.00	98	7.36	7.12	3.14	0.8	0 00:06:00
50	D06	0.56	484.00	98	7.36	7.12	3.97	1.0	0 00:06:00
51	D07	0.29	484.00	98	7.36	7.12	2.06	0.5	0 00:06:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	A1.1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.3	19.28	0.00	1.73	0 00:00	0.00	0.00
2	A1-Structure	Junction	16.03	37.64	16.03	37.64	0.00	5.7	18.56	0.00	19.08	0 00:00	0.00	0.00
3	A2.1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.4	19.31	0.00	1.69	0 00:00	0.00	0.00
4	A2-Structure	Junction	15.56	20.55	15.56	20.55	0.00	6.3	18.43	0.00	2.12	0 00:00	0.00	0.00
5	A3-Structure	Junction	15.13	19.11	15.13	19.11	0.00	6.7	16.35	0.00	2.76	0 00:00	0.00	0.00
6	A4-Structure	Junction	14.86	20.27	14.86	20.27	0.00	12.6	17.16	0.00	3.11	0 00:00	0.00	0.00
7	A5-Structure	Junction	13.86	20.07	13.86	20.07	0.00	13.2	18.52	0.00	1.55	0 00:00	0.00	0.00
8	B1-Structure	Junction	12.20	20.13	12.20	20.13	0.00	0.5	12.33	0.00	7.80	0 00:00	0.00	0.00
9	C1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.4	19.31	0.00	1.69	0 00:00	0.00	0.00
10	C2-Structure	Junction	12.20	36.86	12.20	36.86	0.00	0.8	18.42	0.00	18.44	0 00:00	0.00	0.00
11	D1-Structure	Junction	19.10	21.00	19.10	21.00	0.00	0.3	19.29	0.00	1.71	0 00:00	0.00	0.00
12	D2-Structure	Junction	12.20	38.65	12.20	38.65	0.00	0.7	18.40	0.00	20.25	0 00:00	0.00	0.00
13	D3-Structure	Junction	10.50	16.50	10.50	13.25	0.00	0.7	10.65	0.00	5.85	0 00:00	0.00	0.00
14	D4-Structure	Junction	10.63	13.10	10.63	14.00	0.00	4.3	11.53	0.00	1.57	0 00:00	0.00	0.00
15	E10.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.6	19.35	0.00	1.72	0 00:00	0.00	0.00
16	E10-Structure	Junction	12.29	20.26	12.29	20.26	0.00	3.4	18.70	0.00	1.56	0 00:00	0.00	0.00
17	E11-Structure	Junction	11.95	20.26	11.95	20.26	0.00	3.6	12.64	0.00	7.62	0 00:00	0.00	0.00
18	E13.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.6	19.37	0.00	1.70	0 00:00	0.00	0.00
19	E13-Structure	Junction	11.61	20.26	11.61	20.26	0.00	4.2	18.79	0.00	1.47	0 00:00	0.00	0.00
20	E14.2-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.3	19.28	0.00	1.79	0 00:00	0.00	0.00
21	E14-Structure	Junction	11.22	20.25	11.22	20.25	0.00	4.7	18.64	0.00	1.61	0 00:00	0.00	0.00
22	E15-Structure	Junction	10.79	20.25	10.79	20.25	0.00	5.0	11.77	0.00	8.48	0 00:00	0.00	0.00
23	E16-Structure	Junction	10.62	20.13	10.62	20.13	0.00	5.2	11.60	0.00	8.53	0 00:00	0.00	0.00
24	E1-Structure	Junction	15.10	19.22	15.10	19.22	0.00	0.2	15.26	0.00	3.96	0 00:00	0.00	0.00
25	E2-Structure	Junction	14.73	20.26	14.73	20.26	0.00	0.2	14.91	0.00	5.35	0 00:00	0.00	0.00
26	E4.1-Structure	Junction	19.10	21.08	19.10	21.08	0.00	0.4	19.32	0.00	1.76	0 00:00	0.00	0.00
27	E4-Structure	Junction	14.45	20.30	14.45	20.30	0.00	0.2	14.64	0.00	5.66	0 00:00	0.00	0.00
28	E5-Structure	Junction	14.37	20.09	14.37	20.09	0.00	0.8	18.64	0.00	1.45	0 00:00	0.00	0.00
29	E6-Structure	Junction	14.02	20.20	14.02	20.20	0.00	0.9	14.40	0.00	5.80	0 00:00	0.00	0.00
30	E7.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.9	19.41	0.00	1.66	0 00:00	0.00	0.00
31	E7-Structure	Junction	13.23	20.26	13.23	20.26	0.00	1.8	18.75	0.00	1.51	0 00:00	0.00	0.00
32	E8-Structure	Junction	12.93	20.26	12.93	20.26	0.00	1.9	13.43	0.00	6.83	0 00:00	0.00	0.00
33	E9.1-Structure	Junction	19.10	21.07	19.10	21.07	0.00	0.7	19.38	0.00	1.69	0 00:00	0.00	0.00
34	E9-Structure	Junction	12.62	20.26	12.62	20.26	0.00	2.7	18.87	0.00	1.39	0 00:00	0.00	0.00
35	Jun-01	Junction	0.00	10.50	0.00	0.00	0.00	6.4	0.00	0.00	10.50	0 00:00	0.00	0.00
36	Jun-02	Junction	0.00	6.00	0.00	6.00	0.00	6.7	32.70	0.00	0.80	0 00:00	0.00	0.00
37	Jun-03	Junction	0.00	6.00	0.00	6.00	0.00	6.7	30.70	0.00	0.80	0 00:00	0.00	0.00
38	Jun-04	Junction	19.20	6.00	0.00	6.00	0.00	7.8	19.20	0.00	0.00	0 00:00	0.00	0.00
39	Jun-05	Junction	18.20	6.00	0.00	6.00	0.00	7.8	19.13	0.00	0.57	0 00:00	0.00	0.00
40	Jun-06	Junction	14.60	6.00	0.00	6.00	0.00	8.1	14.60	0.00	0.00	0 00:00	0.00	0.00
41	Jun-07	Junction	13.20	6.00	0.00	6.00	0.00	8.3	14.04	0.00	0.66	0 00:00	0.00	0.00
42	Jun-08	Junction	19.20	6.00	0.00	6.00	0.00	7.8	20.13	0.00	0.57	0 00:00	0.00	0.00
43	Jun-09	Junction	14.60	6.00	0.00	0.00	0.00	8.1	15.44	0.00	0.66	0 00:00	0.00	0.00
44	Out-1A15-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	17.0	12.05	0.00	4.45	0 00:00	0.00	0.00
45	Out-1B1-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	0.5	10.63	0.00	5.87	0 00:00	0.00	0.00
46	Out-1C2-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	0.8	10.67	0.00	5.83	0 00:00	0.00	0.00
47	Out-1D4-Pipe	Junction	10.50	16.50	10.50	16.50	0.00	4.3	11.40	0.00	5.10	0 00:00	0.00	0.00
48	Out-1E16-Pipe	Junction	10.50	16.50	10.50	0.00	0.00	5.2	11.37	0.00	5.13	0 00:00	0.00	0.00
49	Out-1Pipe (53)	Junction	10.50	16.50	10.50	16.50	0.00	4.3	11.29	0.00	5.21	0 00:00	0.00	0.00
50	Out-1Pipe (59)	Junction	10.50	16.50	10.50	16.50	0.00	4.3	11.39	0.00	5.11	0 00:00	0.00	0.00
51	Out-1Pipe (62)	Junction	10.50	16.50	10.50	16.50	0.00	4.3	11.39	0.00	5.11	0 00:00	0.00	0.00
52	Structure - 100	Junction	19.10	19.83	19.10	19.83	0.00	0.6	19.36	0.00	0.47	0 00:00	0.00	0.00
53	Structure - 101	Junction	11.91	19.47	11.91	19.47	0.00	15.7	18.66	0.00	0.81	0 00:00	0.00	0.00
54	Structure - 102	Junction	19.10	19.83	19.10	19.83	0.00	0.6	19.36	0.00	0.47	0 00:00	0.00	0.00
55	Structure - 103	Junction	11.59	19.48	11.59	19.48	0.00	16.2	18.66	0.00	0.82	0 00:00	0.00	0.00
56	Structure - 104	Junction	19.10	19.83	19.10	19.83	0.00	0.4	19.34	0.00	0.49	0 00:00	0.00	0.00
57	Structure - 105	Junction	11.09	19.41	11.09	19.41	0.00	16.6	18.55	0.00	0.86	0 00:00	0.00	0.00
58	Structure - 35	Junction	10.76	18.50	10.76	18.50	0.00	16.6	12.29	0.00	6.21	0 00:00	0.00	0.00
59	Structure - 36	Junction	10.59	20.13	10.59	20.13	0.00	17.0	12.14	0.00	7.99	0 00:00	0.00	0.00
60	Structure - 38	Junction	28.60	31.31	28.60	31.31	0.00	5.2	29.46	0.00	1.85	0 00:00	0.00	0.00
61	Structure - 39	Junction	27.61	32.57	27.61	32.57	0.00	5.2	29.08	0.00	3.49	0 00:00	0.00	0.00
62	Structure - 48	Junction	26.48	1.78	26.48	1.78	0.00	5.9	27.17	0.00	0.81	0 00:00	0.00	0.00
63	Structure - 49	Junction	25.31	29.72	25.31	29.72	0.00	5.9	26.48	0.00	3.24	0 00:00	0.00	0.00
64	Structure - 75	Junction	10.63	13.10	10.63	14.00	0.00	4.3	11.42	0.00	1.68	0 00:00	0.00	0.00
65	Structure - 83	Junction	10.63	13.10	10.63	14.00	0.00	4.3	11.52	0.00	1.58	0 00:00	0.00	0.00
66	Structure - 87	Junction	10.63	13.10	10.63	14.00	0.00	4.3	11.52	0.00	1.58	0 00:00	0.00	0.00
67	Structure - 91	Junction	19.10	21.10	19.10	21.10	0.00	0.4	19.32	0.00	1.78	0 00:00	0.00	0.00
68	Structure - 94	Junction	19.10	19.83	19.10	19.83	0.00	0.8	19.45	0.00	0.37	0 00:00	0.00	0.00
69	Structure - 95	Junction	13.30	19.40	13.30	19.40	0.00	13.9	18.76	0.00	0.64	0 00:00	0.00	0.00
70	Structure - 96	Junction	19.10	19.83	19.10	19.83	0.00	0.7	19.41	0.00	0.42	0 00:00	0.00	0.00
71	Structure - 97	Junction	12.86	19.42	12.86	19.42	0.00	14.5	18.71	0.00	0.71	0 00:00	0.00	0.00
72	Structure - 98	Junction	19.10	19.83	19.10	19.83	0.00	0.6	19.40	0.00	0.42	0 00:00	0.00	0.00
73	Structure - 99	Junction	12.39	19.44	12.39	19.44	0.00	15.1	18.70	0.00	0.73	0 00:00	0.00	0.00
74	Out-02	Outfall	0.00					24.5	0.00					
75	Detention-Basin	Storage Node	10.50	15.50	0.00		12634.80	23.9	12.66				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	A1.1-Pipe	Pipe	A1.1-Structure	A1-Structure	43.57	19.10	18.23	2.0000	8.000	0.0120	0.3	1.9	0.15	3.84	0.18	0.26	0.00	Calculated
2	A10.1-Pipe	Pipe	Structure - 100	Structure - 101	34.83	19.10	18.40	2.0000	8.000	0.0120	0.6	1.9	0.31	4.68	0.26	0.38	0.00	Calculated
3	A10-Pipe	Pipe	Structure - 99	Structure - 101	91.67	12.39	11.91	0.5300	30.000	0.0150	15.1	25.9	0.58	5.47	1.37	0.55	0.00	Calculated
4	A11.1-Pipe	Pipe	Structure - 102	Structure - 103	34.86	19.10	18.40	2.0000	8.000	0.0120	0.6	1.9	0.31	4.68	0.26	0.38	0.00	Calculated
5	A11-Pipe	Pipe	Structure - 101	Structure - 103	67.33	11.91	11.59	0.4700	30.000	0.0150	15.7	24.5	0.64	5.28	1.45	0.58	0.00	Calculated
6	A12.1-Pipe	Pipe	Structure - 104	Structure - 105	39.58	19.10	18.31	2.0000	8.000	0.0150	0.4	1.5	0.27	3.62	0.24	0.36	0.00	Calculated
7	A12-Pipe	Pipe	Structure - 103	Structure - 105	100.61	11.59	11.09	0.4900	30.000	0.0150	16.2	25.0	0.65	5.41	1.47	0.59	0.00	Calculated
8	A13-Pipe	Pipe	Structure - 105	Structure - 35	63.49	11.09	10.76	0.5200	30.000	0.0150	16.6	25.7	0.64	5.57	1.46	0.58	0.00	Calculated
9	A14-Pipe	Pipe	Structure - 35	Structure - 36	37.44	10.76	10.59	0.4500	30.000	0.0150	16.6	24.0	0.69	5.26	1.53	0.61	0.00	Calculated
10	A15-Pipe	Pipe	Structure - 36	Out-1A15-Pipe	19.67	10.59	10.50	0.4600	30.000	0.0150	17.0	24.1	0.71	5.31	1.55	0.62	0.00	Calculated
11	A1-Pipe	Pipe	Structure - 39	A1-Structure	32.78	27.61	18.23	28.6100	18.000	0.0150	5.2	48.7	0.11	17.94	0.33	0.22	0.00	Calculated
12	A2.1-Pipe	Pipe	A2.1-Structure	A2-Structure	44.00	19.10	18.22	2.0000	8.000	0.0120	0.4	1.9	0.21	4.22	0.21	0.31	0.00	Calculated
13	A2-Pipe	Pipe	A1-Structure	A2-Structure	97.50	16.03	15.56	0.4800	18.000	0.0150	5.7	6.3	0.90	4.05	1.12	0.74	0.00	Calculated
14	A3-Pipe	Pipe	A2-Structure	A3-Structure	88.50	15.56	15.13	0.4900	18.000	0.0150	6.3	6.4	0.99	4.10	1.22	0.81	0.00	Calculated
15	A4.1-Pipe	Pipe	Structure - 49	A4-Structure	39.16	25.31	16.82	21.6900	18.000	0.0120	5.9	53.0	0.11	19.80	0.34	0.23	0.00	Calculated
16	A4-Pipe	Pipe	A3-Structure	A4-Structure	56.66	15.13	14.86	0.4800	30.000	0.0150	6.7	24.5	0.27	4.25	0.89	0.36	0.00	Calculated
17	A5-Pipe	Pipe	A4-Structure	A5-Structure	107.77	14.86	13.86	0.9300	30.000	0.0150	12.6	34.3	0.37	6.44	1.05	0.42	0.00	Calculated
18	A6.1-Pipe	Pipe	Structure - 91	A5-Structure	42.40	19.10	18.31	1.8700	8.000	0.0120	0.4	1.8	0.23	4.15	0.22	0.32	0.00	Calculated
19	A7.1-Pipe	Pipe	Structure - 94	Structure - 95	34.69	19.10	18.41	2.0000	8.000	0.0150	0.8	1.5	0.55	4.34	0.35	0.53	0.00	Calculated
20	A7-Pipe	Pipe	A5-Structure	Structure - 95	110.61	13.86	13.30	0.5100	30.000	0.0150	13.2	25.3	0.52	5.21	1.28	0.51	0.00	Calculated
21	A8.1-Pipe	Pipe	Structure - 96	Structure - 97	34.74	19.10	18.41	2.0000	8.000	0.0150	0.7	1.5	0.44	4.10	0.31	0.46	0.00	Calculated
22	A8-Pipe	Pipe	Structure - 95	Structure - 97	89.33	13.30	12.86	0.4900	30.000	0.0150	13.9	24.9	0.56	5.21	1.34	0.53	0.00	Calculated
23	A9.1-Pipe	Pipe	Structure - 98	Structure - 99	34.78	19.10	18.40	2.0100	8.000	0.0150	0.6	1.5	0.43	4.09	0.30	0.46	0.00	Calculated
24	A9-Pipe	Pipe	Structure - 97	Structure - 99	95.00	12.86	12.39	0.4900	30.000	0.0150	14.5	24.9	0.58	5.27	1.37	0.55	0.00	Calculated
25	B1-Pipe	Pipe	B1-Structure	Out-1B1-Pipe	19.69	12.20	10.50	8.6300	24.000	0.0150	0.5	57.6	0.01	5.50	0.13	0.06	0.00	Calculated
26	C1-Pipe	Pipe	C1-Structure	C2-Structure	44.64	19.10	18.21	2.0000	8.000	0.0120	0.4	1.9	0.21	4.22	0.21	0.31	0.00	Calculated
27	C2-Pipe	Pipe	C2-Structure	Out-1C2-Pipe	19.67	12.20	10.50	8.6400	24.000	0.0150	0.8	57.6	0.01	6.54	0.17	0.08	0.00	Calculated
28	D1-Pipe	Pipe	D1-Structure	D2-Structure	44.46	19.10	18.21	2.0000	8.000	0.0120	0.3	1.9	0.18	4.00	0.19	0.29	0.00	Calculated
29	D2-Pipe	Pipe	D2-Structure	D3-Structure	19.67	12.20	10.50	8.6400	24.000	0.0150	0.7	57.6	0.01	6.25	0.15	0.08	0.00	Calculated
30	D4-Pipe	Pipe	D4-Structure	Out-1D4-Pipe	26.30	10.63	10.50	0.4900	18.000	0.0150	4.3	6.4	0.67	3.88	0.90	0.60	0.00	Calculated
31	E10-Pipe	Pipe	E10-Structure	E11-Structure	68.72	12.29	11.95	0.5000	24.000	0.0150	3.4	13.9	0.24	3.64	0.67	0.34	0.00	Calculated
32	E11-Pipe	Pipe	E11-Structure	E13-Structure	67.31	11.95	11.61	0.5000	24.000	0.0150	3.6	13.9	0.26	3.69	0.69	0.35	0.00	Calculated
33	E12.1-Pipe	Pipe	E13.1-Structure	E13-Structure	28.75	19.10	18.52	2.0200	8.000	0.0120	0.6	1.9	0.33	4.79	0.27	0.40	0.00	Calculated
34	E13.1-Pipe	Pipe	E14.2-Structure	E14-Structure	31.82	19.10	18.46	2.0000	8.000	0.0120	0.3	1.9	0.16	3.88	0.18	0.27	0.00	Calculated
35	E13-Pipe	Pipe	E13-Structure	E14-Structure	77.56	11.61	11.22	0.5000	24.000	0.0150	4.2	13.9	0.31	3.88	0.76	0.38	0.00	Calculated
36	E14-Pipe	Pipe	E14-Structure	E15-Structure	88.49	11.22	10.79	0.4900	24.000	0.0150	4.7	13.7	0.34	3.94	0.81	0.40	0.00	Calculated
37	E15-Pipe	Pipe	E15-Structure	E16-Structure	61.58	10.79	10.62	0.2800	24.000	0.0150	5.0	10.3	0.49	3.25	0.98	0.49	0.00	Calculated
38	E16-Pipe	Pipe	E16-Structure	Out-1E16-Pipe	26.19	10.62	10.50	0.4600	24.000	0.0150	5.2	13.3	0.39	3.96	0.87	0.43	0.00	Calculated
39	E1-Pipe	Pipe	E1-Structure	E2-Structure	73.22	15.10	14.73	0.5000	18.000	0.0150	0.2	6.4	0.02	1.46	0.16	0.11	0.00	Calculated
40	E2-Pipe	Pipe	E2-Structure	E4-Structure	55.47	14.73	14.45	0.5000	18.000	0.0150	0.2	6.4	0.03	1.69	0.19	0.12	0.00	Calculated
41	E4-Pipe	Pipe	E4-Structure	E5-Structure	15.97	14.45	14.37	0.5000	18.000	0.0150	0.2	6.3	0.03	1.67	0.19	0.13	0.00	Calculated
42	E5.1-Pipe	Pipe	E4.1-Structure	E5-Structure	32.89	19.10	18.42	2.0800	8.000	0.0120	0.4	1.9	0.23	4.41	0.22	0.33	0.00	Calculated
43	E5-Pipe	Pipe	E5-Structure	E6-Structure	70.61	14.37	14.02	0.5000	18.000	0.0150	0.8	6.4	0.13	2.48	0.36	0.24	0.00	Calculated
44	E6.1-Pipe	Pipe	E7.1-Structure	E7-Structure	28.85	19.10	18.44	2.2800	8.000	0.0120	0.9	2.0	0.44	5.46	0.31	0.46	0.00	Calculated
45	E6-Pipe	Pipe	E6-Structure	E7-Structure	58.54	14.02	13.73	0.5000	18.000	0.0150	0.9	6.4	0.14	2.57	0.38	0.25	0.00	Calculated
46	E7-Pipe	Pipe	E7-Structure	E8-Structure	59.55	13.23	12.93	0.5000	24.000	0.0150	1.8	13.9	0.13	3.06	0.49	0.25	0.00	Calculated
47	E8.1-Pipe	Pipe	E9.1-Structure	E9-Structure	25.28	19.10	18.59	2.0000	8.000	0.0120	0.7	1.9	0.37	4.89	0.28	0.42	0.00	Calculated
48	E8-Pipe	Pipe	E8-Structure	E9-Structure	61.63	12.93	12.62	0.5000	24.000	0.0150	1.9	13.8	0.14	3.08	0.50	0.25	0.00	Calculated
49	E9.1-Pipe	Pipe	E10.1-Structure	E10-Structure	30.97	19.10	18.44	2.1200	8.000	0.0120	0.6	1.9	0.30	4.78	0.25	0.38	0.00	Calculated
50	E9-Pipe	Pipe	E9-Structure	E10-Structure	66.95	12.62	12.29	0.5000	24.000	0.0150	2.7	13.8	0.19	3.39	0.59	0.30	0.00	Calculated
51	Link-01	Pipe	Out-1E16-Pipe	Detention-Basin	178.44	10.50	0.00	5.8800	12.000	0.0150	5.2	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
52	Link-02	Pipe	D3-Structure	Detention-Basin	117.22	9.00	0.00	7.6800	12.000	0.0150	0.7	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
53	Link-03	Pipe	Out-1C2-Pipe	Detention-Basin	30.02	10.50	0.00	34.9800	12.000	0.0150	0.8	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
54	Link-04	Pipe	Out-1B1-Pipe	Detention-Basin	60.81	10.50	0.00	17.2700	12.000	0.0150	0.5	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
55	Link-05	Pipe	Out-1A15-Pipe	Detention-Basin	138.79	10.50	0.00	7.5700	12.000	0.0150	17.0	0.0	0.19	0.00	0.59	0.30	0.00	Calculated
56	Link-11	Pipe	Jun-02	Jun-03	71.00	32.00	30.00	2.8200	18.000	0.0150	6.7	15.3	0.44	8.37	0.70	0.47	0.00	Calculated
57	Link-12	Pipe	Jun-03	Jun-04	417.20	0.00	0.00	0.0000	12.000	0.0150	6.7	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
58	Link-14	Pipe	Jun-05	Jun-06	128.08	0.00	0.00	0.0000	12.000	0.0150	7.8	0.0	0.44	0.00	0.70	0.47	0.00	Calculated

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
59	Link-16	Pipe	Jun-07	Out-02	317.29	0.00	0.00	0.0000	12.000	0.0150	8.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
60	Link-17	Pipe	Out-1D4-Pipe	Out-02	137.86	10.50	0.00	7.6200	0.000	0.0150	4.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
61	Link-18	Pipe	Out-1Pipe (62)	Out-02	99.47	10.50	0.00	10.5600	0.000	0.0150	4.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
62	Link-19	Pipe	Out-1Pipe (59)	Out-02	130.31	10.50	0.00	8.0600	12.000	0.0150	4.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
63	Link-20	Pipe	Out-1Pipe (53)	Out-02	191.76	10.50	0.00	5.4800	12.000	0.0150	4.3	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
64	Link-29	Pipe	Jun-04	Jun-08	48.58	19.20	18.82	0.7800	0.000	0.0150	7.8	0.0	0.44	0.00	0.70	0.47	0.00	Calculated
65	Link-30	Pipe	Jun-08	Jun-05	67.00	19.20	18.20	1.4900	18.000	0.0150	7.8	11.1	0.70	6.81	0.93	0.62	0.00	Calculated
66	Link-31	Pipe	Jun-06	Jun-09	46.31	14.60	14.60	0.0000	0.000	0.0150	8.1	0.0	0.70	0.00	0.93	0.62	0.00	Calculated
67	Link-32	Pipe	Jun-09	Jun-07	64.00	14.60	13.20	2.1900	18.000	0.0150	8.1	13.5	0.60	7.95	0.84	0.56	0.00	Calculated
68	Pipe (24)	Pipe	Structure - 38	Structure - 39	45.94	28.60	28.22	0.8300	18.000	0.0150	5.2	8.3	0.62	4.94	0.86	0.57	0.00	Calculated
69	Pipe (34)	Pipe	Structure - 48	Structure - 49	46.55	26.48	25.79	1.4800	18.000	0.0120	5.9	13.9	0.43	7.54	0.69	0.46	0.00	Calculated
70	Pipe (53)	Pipe	Structure - 75	Out-1Pipe (53)	27.49	10.63	10.50	0.4700	18.000	0.0120	4.3	7.8	0.55	4.52	0.79	0.53	0.00	Calculated
71	Pipe (59)	Pipe	Structure - 83	Out-1Pipe (59)	25.67	10.63	10.50	0.5100	18.000	0.0150	4.3	6.5	0.66	3.91	0.89	0.59	0.00	Calculated
72	Pipe (62)	Pipe	Structure - 87	Out-1Pipe (62)	25.95	10.63	10.50	0.5000	18.000	0.0150	4.3	6.4	0.66	3.90	0.89	0.59	0.00	Calculated
73	Orifice-01	Orifice	Detention-Basin	Structure - 83		10.50	10.63		9.000		4.3							
74	Orifice-02	Orifice	Detention-Basin	D4-Structure		10.50	10.63		9.000		4.3							
75	Orifice-03	Orifice	Detention-Basin	Structure - 87		10.50	10.63		9.000		4.3							
76	Orifice-04	Orifice	Detention-Basin	Structure - 75		10.50	10.63		9.000		4.3							

Subbasin Hydrology

Subbasin : A01

Input Data

Area (ac)	5.17
Peak Rate Factor	484.00
Weighted Curve Number	81.40
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.37	D	98.00
Woods & grass combination, Fair	1.10	C	76.00
Woods & grass combination, Fair	0.40	C	76.00
Woods & grass combination, Fair	3.30	D	82.00
Composite Area & Weighted CN	5.17		81.40

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Where :

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
R = Hydraulic Radius (ft)
Aq = Flow Area (ft²)
Wp = Wetted Perimeter (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)
n = Manning's roughness

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	8.9	0.00	0.00
2 yr, 24 hr Rainfall (in) :	3.74	0.00	0.00
Velocity (ft/sec) :	0.15	0.00	0.00
Computed Flow Time (min) :	10.93	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	933	0.00	0.00
Slope (%) :	4.8	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.53	0.00	0.00
Computed Flow Time (min) :	4.41	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	71	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft²) :	7	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	9.92	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 15.46

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	5.19
Peak Runoff (cfs)	6.74
Weighted Curve Number	81.40
Time of Concentration (days hh:mm:ss)	0 00:15:28

Subbasin : A02

Input Data

Area (ac) 4.02
Peak Rate Factor 484.00
Weighted Curve Number 81.08
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.22	D	98.00
Woods & grass combination, Fair	1.00	C	76.00
Woods & grass combination, Fair	0.20	C	76.00
Woods & grass combination, Fair	2.60	D	82.00
Composite Area & Weighted CN	4.02		81.08

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	8	0.00	0.00
2 yr, 24 hr Rainfall (in) :	3.74	0.00	0.00
Velocity (ft/sec) :	0.15	0.00	0.00
Computed Flow Time (min) :	11.41	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	925	0.00	0.00
Slope (%) :	4	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.23	0.00	0.00
Computed Flow Time (min) :	4.77	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	79	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft^2) :	7.7	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	10.57	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 16.31

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 5.15
Peak Runoff (cfs) 5.17
Weighted Curve Number 81.08
Time of Concentration (days hh:mm:ss) 0 00:16:19

Subbasin : A03

Input Data

Area (ac) 4.49
Peak Rate Factor 484.00
Weighted Curve Number 82.72
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved roads with curbs & sewers	0.39	D	98.00
Woods & grass combination, Fair	0.50	C	76.00
Woods & grass combination, Fair	3.60	D	82.00
Composite Area & Weighted CN	4.49		82.72

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.4	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	7	0.00	0.00
2 yr, 24 hr Rainfall (in) :	2.85	0.00	0.00
Velocity (ft/sec) :	0.12	0.00	0.00
Computed Flow Time (min) :	13.79	0.00	0.00

Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	964	0.00	0.00
Slope (%) :	4	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	3.23	0.00	0.00
Computed Flow Time (min) :	4.97	0.00	0.00

Channel Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	0.012	0.00	0.00
Flow Length (ft) :	75	0.00	0.00
Channel Slope (%) :	1	0.00	0.00
Cross Section Area (ft^2) :	7.74	0.00	0.00
Wetted Perimeter (ft) :	9.8	0.00	0.00
Velocity (ft/sec) :	10.61	0.00	0.00
Computed Flow Time (min) :	0.12	0.00	0.00

Total TOC (min) 18.88

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 5.34
Peak Runoff (cfs) 5.93
Weighted Curve Number 82.72
Time of Concentration (days hh:mm:ss) 0 00:18:53

Subbasin : B01

Input Data

Area (ac)	0.22
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.22	D	98.00
Composite Area & Weighted CN	0.22		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.40
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B02

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.41
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B03

Input Data

Area (ac) 0.33
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.33	D	98.00
Composite Area & Weighted CN	0.33		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.58
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B04

Input Data

Area (ac) 0.33
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.33	D	98.00
Composite Area & Weighted CN	0.33		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.58
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B05

Input Data

Area (ac) 0.36
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.36	D	98.00
Composite Area & Weighted CN	0.36		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.63
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B06

Input Data

Area (ac) 0.36
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.36	D	98.00
Composite Area & Weighted CN	0.36		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.65
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B07

Input Data

Area (ac) 0.46
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.46	D	98.00
Composite Area & Weighted CN	0.46		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.81
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B08

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.41
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B09

Input Data

Area (ac) 0.22
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.22	D	98.00
Composite Area & Weighted CN	0.22		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.40
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B10

Input Data

Area (ac) 0.16
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.16	D	98.00
Composite Area & Weighted CN	0.16		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.28
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B11

Input Data

Area (ac)	0.25
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.25	D	98.00
Composite Area & Weighted CN	0.25		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.44
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B12

Input Data

Area (ac)	0.49
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.49	D	98.00
Composite Area & Weighted CN	0.49		98.00

Time of Concentration

User-Defined TOC override (minutes): 6.00

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.86
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B13

Input Data

Area (ac) 0.38
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.38	D	98.00
Composite Area & Weighted CN	0.38		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.68
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B14

Input Data

Area (ac) 0.32
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.32	D	98.00
Composite Area & Weighted CN	0.32		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.58
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B15

Input Data

Area (ac) 0.35
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.35	D	98.00
Composite Area & Weighted CN	0.35		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.62
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B16

Input Data

Area (ac) 0.17
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.17	D	98.00
Composite Area & Weighted CN	0.17		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.29
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B17

Input Data

Area (ac) 0.19
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.19	D	98.00
Composite Area & Weighted CN	0.19		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.33
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B18

Input Data

Area (ac) 0.11
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.11	D	98.00
Composite Area & Weighted CN	0.11		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.19
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B19

Input Data

Area (ac) 0.21
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.21	D	98.00
Composite Area & Weighted CN	0.21		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.37
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B20

Input Data

Area (ac)	0.24
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.24	D	98.00
Composite Area & Weighted CN	0.24		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.42
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B21

Input Data

Area (ac)	0.26
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.26	D	98.00
Composite Area & Weighted CN	0.26		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in)	7.36
Total Runoff (in)	7.12
Peak Runoff (cfs)	0.46
Weighted Curve Number	98.00
Time of Concentration (days hh:mm:ss)	0 00:06:00

Subbasin : B22

Input Data

Area (ac) 0.27
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.27	D	98.00
Composite Area & Weighted CN	0.27		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.48
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B23

Input Data

Area (ac) 0.23
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.23	D	98.00
Composite Area & Weighted CN	0.23		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.41
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B24

Input Data

Area (ac) 0.14
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.14	D	98.00
Composite Area & Weighted CN	0.14		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.24
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B25

Input Data

Area (ac) 0.16
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.16	D	98.00
Composite Area & Weighted CN	0.16		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.28
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B26

Input Data

Area (ac) 0.08
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.08	D	98.00
Composite Area & Weighted CN	0.08		98.00

Time of Concentration

User-Defined TOC override (minutes): 6.00

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.15
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B27

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.07
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B28

Input Data

Area (ac) 0.08
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.08	D	98.00
Composite Area & Weighted CN	0.08		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.15
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B29

Input Data

Area (ac) 0.06
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.06	D	98.00
Composite Area & Weighted CN	0.06		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.10
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B30

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.07
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B31

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.07
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B32

Input Data

Area (ac) 0.04
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.04	D	98.00
Composite Area & Weighted CN	0.04		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.07
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B33

Input Data

Area (ac) 0.09
Peak Rate Factor 484.00
Weighted Curve Number 98.00
Rain Gage ID ..... Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.09	D	98.00
Composite Area & Weighted CN	0.09		98.00

Time of Concentration

User-Defined TOC override (minutes): 6

Subbasin Runoff Results

Total Rainfall (in) 7.36
Total Runoff (in) 7.12
Peak Runoff (cfs) 0.16
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:00

Subbasin : B34

Input Data

Area (ac)	0.10
Peak Rate Factor	484.00
Weighted Curve Number	98.00
Rain Gage ID	Rain Gage-02

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.10	D	98.00
Composite Area & Weighted CN	0.10		98.00

Time of Concentration

Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft²)
1	A1.1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
2	A1-Structure	16.03	37.64	21.61	16.03	0.00	37.64	0.00	0.00
3	A2.1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
4	A2-Structure	15.56	20.55	4.99	15.56	0.00	20.55	0.00	0.00
5	A3-Structure	15.13	19.11	3.98	15.13	0.00	19.11	0.00	0.00
6	A4-Structure	14.86	20.27	5.41	14.86	0.00	20.27	0.00	0.00
7	A5-Structure	13.86	20.07	6.21	13.86	0.00	20.07	0.00	0.00
8	B1-Structure	12.20	20.13	7.93	12.20	0.00	20.13	0.00	0.00
9	C1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
10	C2-Structure	12.20	36.86	24.66	12.20	0.00	36.86	0.00	0.00
11	D1-Structure	19.10	21.00	1.90	19.10	0.00	21.00	0.00	0.00
12	D2-Structure	12.20	38.65	26.45	12.20	0.00	38.65	0.00	0.00
13	D3-Structure	10.50	16.50	6.00	10.50	0.00	13.25	-3.25	0.00
14	D4-Structure	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
15	E10.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
16	E10-Structure	12.29	20.26	7.97	12.29	0.00	20.26	0.00	0.00
17	E11-Structure	11.95	20.26	8.31	11.95	0.00	20.26	0.00	0.00
18	E13.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
19	E13-Structure	11.61	20.26	8.65	11.61	0.00	20.26	0.00	0.00
20	E14.2-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
21	E14-Structure	11.22	20.25	9.03	11.22	0.00	20.25	0.00	0.00
22	E15-Structure	10.79	20.25	9.46	10.79	0.00	20.25	0.00	0.00
23	E16-Structure	10.62	20.13	9.51	10.62	0.00	20.13	0.00	0.00
24	E1-Structure	15.10	19.22	4.12	15.10	0.00	19.22	0.00	0.00
25	E2-Structure	14.73	20.26	5.53	14.73	0.00	20.26	0.00	0.00
26	E4.1-Structure	19.10	21.08	1.98	19.10	0.00	21.08	0.00	0.00
27	E4-Structure	14.45	20.30	5.85	14.45	0.00	20.30	0.00	0.00
28	E5-Structure	14.37	20.09	5.72	14.37	0.00	20.09	0.00	0.00
29	E6-Structure	14.02	20.20	6.18	14.02	0.00	20.20	0.00	0.00
30	E7.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
31	E7-Structure	13.23	20.26	7.03	13.23	0.00	20.26	0.00	0.00
32	E8-Structure	12.93	20.26	7.33	12.93	0.00	20.26	0.00	0.00
33	E9.1-Structure	19.10	21.07	1.97	19.10	0.00	21.07	0.00	0.00
34	E9-Structure	12.62	20.26	7.64	12.62	0.00	20.26	0.00	0.00
35	Jun-01	0.00	10.50	10.50	0.00	0.00	0.00	-10.50	0.00
36	Jun-02	0.00	6.00	6.00	0.00	0.00	6.00	0.00	0.00
37	Jun-03	0.00	6.00	6.00	0.00	0.00	6.00	0.00	0.00
38	Jun-04	19.20	6.00	-13.20	0.00	-19.20	6.00	0.00	0.00
39	Jun-05	18.20	6.00	-12.20	0.00	-18.20	6.00	0.00	0.00
40	Jun-06	14.60	6.00	-8.60	0.00	-14.60	6.00	0.00	0.00
41	Jun-07	13.20	6.00	-7.20	0.00	-13.20	6.00	0.00	0.00
42	Jun-08	19.20	6.00	-13.20	0.00	-19.20	6.00	0.00	0.00
43	Jun-09	14.60	6.00	-8.60	0.00	-14.60	0.00	-6.00	0.00
44	Out-1A15-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
45	Out-1B1-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
46	Out-1C2-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
47	Out-1D4-Pipe	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
48	Out-1E16-Pipe	10.50	16.50	6.00	10.50	0.00	0.00	-16.50	0.00
49	Out-1Pipe (53)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
50	Out-1Pipe (59)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
51	Out-1Pipe (62)	10.50	16.50	6.00	10.50	0.00	16.50	0.00	0.00
52	Structure - 100	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
53	Structure - 101	11.91	19.47	7.56	11.91	0.00	19.47	0.00	0.00
54	Structure - 102	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
55	Structure - 103	11.59	19.48	7.89	11.59	0.00	19.48	0.00	0.00
56	Structure - 104	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
57	Structure - 105	11.09	19.41	8.31	11.09	0.00	19.41	0.00	0.00
58	Structure - 35	10.76	18.50	7.74	10.76	0.00	18.50	0.00	0.00
59	Structure - 36	10.59	20.13	9.54	10.59	0.00	20.13	0.00	0.00
60	Structure - 38	28.60	31.31	2.71	28.60	0.00	31.31	0.00	0.00
61	Structure - 39	27.61	32.57	4.96	27.61	0.00	32.57	0.00	0.00
62	Structure - 48	26.48	1.78	-24.70	26.48	0.00	1.78	0.00	0.00
63	Structure - 49	25.31	29.72	4.41	25.31	0.00	29.72	0.00	0.00
64	Structure - 75	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
65	Structure - 83	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
66	Structure - 87	10.63	13.10	2.47	10.63	0.00	14.00	0.90	0.00
67	Structure - 91	19.10	21.10	2.00	19.10	0.00	21.10	0.00	0.00
68	Structure - 94	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
69	Structure - 95	13.30	19.40	6.10	13.30	0.00	19.40	0.00	0.00
70	Structure - 96	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
71	Structure - 97	12.86	19.42	6.56	12.86	0.00	19.42	0.00	0.00
72	Structure - 98	19.10	19.83	0.73	19.10	0.00	19.83	0.00	0.00
73	Structure - 99	12.39	19.44	7.04	12.39	0.00	19.44	0.00	0.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	A1.1-Structure	0.3	0.3	19.28	0.18	0.00	1.73	19.17	0.07	0 07:49	0 00:00	0.00	0.00
2	A1-Structure	5.7	0.3	18.56	2.53	0.00	19.08	18.36	2.33	0 08:02	0 00:00	0.00	0.00
3	A2.1-Structure	0.4	0.4	19.31	0.21	0.00	1.69	19.18	0.08	0 07:49	0 00:00	0.00	0.00
4	A2-Structure	6.3	0.2	18.43	2.87	0.00	2.12	18.30	2.74	0 07:50	0 00:00	0.00	0.00
5	A3-Structure	6.7	0.4	16.35	1.22	0.00	2.76	15.52	0.39	0 08:01	0 00:00	0.00	0.00
6	A4-Structure	12.6	0.0	17.16	2.30	0.00	3.11	16.95	2.09	0 08:03	0 00:00	0.00	0.00
7	A5-Structure	13.2	0.2	18.52	4.66	0.00	1.55	18.39	4.53	0 07:50	0 00:00	0.00	0.00
8	B1-Structure	0.5	0.5	12.33	0.13	0.00	7.80	12.25	0.05	0 07:50	0 00:00	0.00	0.00
9	C1-Structure	0.4	0.4	19.31	0.21	0.00	1.69	19.18	0.08	0 07:49	0 00:00	0.00	0.00
10	C2-Structure	0.8	0.4	18.42	6.22	0.00	18.44	18.29	6.09	0 07:50	0 00:00	0.00	0.00
11	D1-Structure	0.3	0.3	19.29	0.19	0.00	1.71	19.18	0.08	0 07:49	0 00:00	0.00	0.00
12	D2-Structure	0.7	0.4	18.40	6.20	0.00	20.25	18.29	6.09	0 07:50	0 00:00	0.00	0.00
13	D3-Structure	0.7	0.0	10.65	0.15	0.00	5.85	10.56	0.06	0 07:50	0 00:00	0.00	0.00
14	D4-Structure	4.3	0.0	11.53	0.90	0.00	1.57	11.00	0.37	0 08:13	0 00:00	0.00	0.00
15	E10.1-Structure	0.6	0.6	19.35	0.25	0.00	1.72	19.20	0.10	0 07:50	0 00:00	0.00	0.00
16	E10-Structure	3.4	0.2	18.70	6.41	0.00	1.56	18.54	6.25	0 07:50	0 00:00	0.00	0.00
17	E11-Structure	3.6	0.2	12.64	0.69	0.00	7.62	12.22	0.27	0 07:52	0 00:00	0.00	0.00
18	E13.1-Structure	0.6	0.6	19.37	0.27	0.00	1.70	19.20	0.10	0 07:50	0 00:00	0.00	0.00
19	E13-Structure	4.2	0.1	18.79	7.18	0.00	1.47	18.62	7.01	0 07:50	0 00:00	0.00	0.00
20	E14.2-Structure	0.3	0.3	19.28	0.18	0.00	1.79	19.17	0.07	0 07:49	0 00:00	0.00	0.00
21	E14-Structure	4.7	0.2	18.64	7.42	0.00	1.61	18.53	7.31	0 07:49	0 00:00	0.00	0.00
22	E15-Structure	5.0	0.3	11.77	0.98	0.00	8.48	11.16	0.37	0 07:52	0 00:00	0.00	0.00
23	E16-Structure	5.2	0.2	11.60	0.98	0.00	8.53	10.99	0.37	0 07:52	0 00:00	0.00	0.00
24	E1-Structure	0.2	0.2	15.26	0.16	0.00	3.96	15.16	0.06	0 07:49	0 00:00	0.00	0.00
25	E2-Structure	0.2	0.1	14.91	0.18	0.00	5.35	14.80	0.07	0 07:54	0 00:00	0.00	0.00
26	E4.1-Structure	0.4	0.4	19.32	0.22	0.00	1.76	19.19	0.09	0 07:49	0 00:00	0.00	0.00
27	E4-Structure	0.2	0.0	14.64	0.19	0.00	5.66	14.53	0.08	0 07:54	0 00:00	0.00	0.00
28	E5-Structure	0.8	0.2	18.64	4.27	0.00	1.45	18.50	4.13	0 07:50	0 00:00	0.00	0.00
29	E6-Structure	0.9	0.1	14.40	0.38	0.00	5.80	14.17	0.15	0 07:52	0 00:00	0.00	0.00
30	E7.1-Structure	0.9	0.9	19.41	0.31	0.00	1.66	19.22	0.12	0 07:50	0 00:00	0.00	0.00
31	E7-Structure	1.8	0.1	18.75	5.52	0.00	1.51	18.56	5.33	0 07:50	0 00:00	0.00	0.00
32	E8-Structure	1.9	0.1	13.43	0.50	0.00	6.83	13.13	0.20	0 07:51	0 00:00	0.00	0.00
33	E9.1-Structure	0.7	0.7	19.38	0.28	0.00	1.69	19.21	0.11	0 07:50	0 00:00	0.00	0.00
34	E9-Structure	2.7	0.1	18.87	6.25	0.00	1.39	18.70	6.08	0 07:50	0 00:00	0.00	0.00
35	Jun-01	6.4	6.4	0.00	0.00	0.00	10.50	0.00	0.00	0 00:00	0 00:00	0.00	0.00
36	Jun-02	6.7	6.7	32.70	32.70	0.00	0.80	32.25	32.25	0 08:01	0 00:00	0.00	0.00
37	Jun-03	6.7	0.0	30.70	30.70	0.00	0.80	30.25	30.25	0 08:01	0 00:00	0.00	0.00
38	Jun-04	7.8	1.1	19.20	0.00	0.00	0.00	19.20	0.00	0 00:00	0 00:00	0.00	0.00
39	Jun-05	7.8	0.0	19.13	0.93	0.00	0.57	18.51	0.31	0 08:01	0 00:00	0.00	0.00
40	Jun-06	8.1	0.3	14.60	0.00	0.00	0.00	14.60	0.00	0 00:00	0 00:00	0.00	0.00
41	Jun-07	8.3	0.3	14.04	0.84	0.00	0.66	13.49	0.29	0 08:01	0 00:00	0.00	0.00
42	Jun-08	7.8	0.0	20.13	0.93	0.00	0.57	19.51	0.31	0 08:01	0 00:00	0.00	0.00
43	Jun-09	8.1	0.0	15.44	0.84	0.00	0.66	14.89	0.29	0 08:01	0 00:00	0.00	0.00
44	Out-1A15-Pipe	17.0	0.0	12.05	1.55	0.00	4.45	11.05	0.55	0 08:02	0 00:00	0.00	0.00
45	Out-1B1-Pipe	0.5	0.0	10.63	0.13	0.00	5.87	10.55	0.05	0 07:50	0 00:00	0.00	0.00
46	Out-1C2-Pipe	0.8	0.0	10.67	0.17	0.00	5.83	10.57	0.07	0 07:50	0 00:00	0.00	0.00
47	Out-1D4-Pipe	4.3	0.0	11.40	0.90	0.00	5.10	10.87	0.37	0 08:13	0 00:00	0.00	0.00
48	Out-1E16-Pipe	5.2	0.0	11.37	0.87	0.00	5.13	10.83	0.33	0 07:52	0 00:00	0.00	0.00
49	Out-1Pipe (53)	4.3	0.0	11.29	0.79	0.00	5.21	10.83	0.33	0 08:13	0 00:00	0.00	0.00
50	Out-1Pipe (59)	4.3	0.0	11.39	0.89	0.00	5.11	10.86	0.36	0 08:13	0 00:00	0.00	0.00
51	Out-1Pipe (62)	4.3	0.0	11.39	0.89	0.00	5.11	10.87	0.37	0 08:13	0 00:00	0.00	0.00
52	Structure - 100	0.6	0.6	19.36	0.26	0.00	0.47	19.20	0.10	0 07:50	0 00:00	0.00	0.00
53	Structure - 101	15.7	0.0	18.66	6.75	0.00	0.81	18.50	6.59	0 07:50	0 00:00	0.00	0.00
54	Structure - 102	0.6	0.6	19.36	0.26	0.00	0.47	19.20	0.10	0 07:50	0 00:00	0.00	0.00
55	Structure - 103	16.2	0.0	18.66	7.07	0.00	0.82	18.50	6.91	0 07:50	0 00:00	0.00	0.00
56	Structure - 104	0.4	0.4	19.34	0.24	0.00	0.49	19.19	0.09	0 07:49	0 00:00	0.00	0.00
57	Structure - 105	16.6	0.0	18.55	7.46	0.00	0.86	18.40	7.31	0 07:50	0 00:00	0.00	0.00
58	Structure - 35	16.6	0.0	12.29	1.53	0.00	6.21	11.31	0.55	0 08:01	0 00:00	0.00	0.00
59	Structure - 36	17.0	0.5	12.14	1.55	0.00	7.99	11.14	0.55	0 08:01	0 00:00	0.00	0.00
60	Structure - 38	5.2	5.2	29.46	0.86	0.00	1.85	28.89	0.29	0 08:01	0 00:00	0.00	0.00
61	Structure - 39	5.2	0.0	29.08	1.47	0.00	3.49	28.51	0.90	0 08:02	0 00:00	0.00	0.00
62	Structure - 48	5.9	5.9	27.17	0.69	0.00	0.81	26.73	0.25	0 08:03	0 00:00	0.00	0.00
63	Structure - 49	5.9	0.0	26.48	1.17	0.00	3.24	26.04	0.73	0 08:03	0 00:00	0.00	0.00
64	Structure - 75	4.3	0.0	11.42	0.79	0.00	1.68	10.96	0.33	0 08:13	0 00:00	0.00	0.00
65	Structure - 83	4.3	0.0	11.52	0.89	0.00	1.58	10.99	0.36	0 08:13	0 00:00	0.00	0.00
66	Structure - 87	4.3	0.0	11.52	0.89	0.00	1.58	11.00	0.37	0 08:13	0 00:00	0.00	0.00
67	Structure - 91	0.4	0.4	19.32	0.22	0.00	1.78	19.19	0.09	0 07:49	0 00:00	0.00	0.00
68	Structure - 94	0.8	0.8	19.45	0.35	0.00	0.37	19.23	0.13	0 07:50	0 00:00	0.00	0.00
69	Structure - 95	13.9	0.0	18.76	5.46	0.00	0.64	18.54	5.24	0 07:51	0 00:00	0.00	0.00
70	Structure - 96	0.7	0.7	19.41	0.31	0.00	0.42	19.22	0.12	0 07:50	0 00:00	0.00	0.00
71	Structure - 97	14.5	0.0	18.71	5.85	0.00	0.71	18.52	5.66	0 07:50	0 00:00	0.00	0.00
72	Structure - 98	0.6	0.6	19.40	0.30	0.00	0.42	19.22	0.12	0 07:50	0 00:00	0.00	0.00
73	Structure - 99	15.1	0.0	18.70	6.31	0.00	0.73	18.52	6.13	0 07:51	0 00:00	0.00	0.00

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Flap Gate	No. of Barrels
1	A1.1-Pipe	43.57	19.10	18.23	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
2	A10.1-Pipe	34.83	19.10	18.40	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
3	A10-Pipe	91.67	12.39	11.91	0.5300	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
4	A11.1-Pipe	34.86	19.10	18.40	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
5	A11-Pipe	67.33	11.91	11.59	0.4700	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
6	A12.1-Pipe	39.58	19.10	18.31	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
7	A12-Pipe	100.61	11.59	11.09	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
8	A13-Pipe	63.49	11.09	10.76	0.5200	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
9	A14-Pipe	37.44	10.76	10.59	0.4500	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
10	A15-Pipe	19.67	10.59	10.50	0.4600	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
11	A1-Pipe	32.78	27.61	18.23	28.6100	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
12	A2.1-Pipe	44.00	19.10	18.22	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
13	A2-Pipe	97.50	16.03	15.56	0.4800	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
14	A3-Pipe	88.50	15.56	15.13	0.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
15	A4.1-Pipe	39.16	25.31	16.82	21.6900	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
16	A4-Pipe	56.66	15.13	14.86	0.4800	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
17	A5-Pipe	107.77	14.86	13.86	0.9300	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
18	A6.1-Pipe	42.40	19.10	18.31	1.8700	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
19	A7.1-Pipe	34.69	19.10	18.41	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
20	A7-Pipe	110.61	13.86	13.30	0.5100	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
21	A8.1-Pipe	34.74	19.10	18.41	2.0000	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
22	A8-Pipe	89.33	13.30	12.86	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
23	A9.1-Pipe	34.78	19.10	18.40	2.0100	CIRCULAR	8.040	8.040	0.0150	0.5000	0.5000	0.0000	No	1
24	A9-Pipe	95.00	12.86	12.39	0.4900	CIRCULAR	30.000	30.000	0.0150	0.5000	0.5000	0.0000	No	1
25	B1-Pipe	19.69	12.20	10.50	8.6300	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
26	C1-Pipe	44.64	19.10	18.21	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
27	C2-Pipe	19.67	12.20	10.50	8.6400	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
28	D1-Pipe	44.46	19.10	18.21	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
29	D2-Pipe	19.67	12.20	10.50	8.6400	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
30	D4-Pipe	26.30	10.63	10.50	0.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
31	E10-Pipe	68.72	12.29	11.95	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
32	E11-Pipe	67.31	11.95	11.61	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
33	E12.1-Pipe	28.75	19.10	18.52	2.0200	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
34	E13.1-Pipe	31.82	19.10	18.46	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
35	E13-Pipe	77.56	11.61	11.22	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
36	E14-Pipe	88.49	11.22	10.79	0.4900	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
37	E15-Pipe	61.58	10.79	10.62	0.2800	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
38	E16-Pipe	26.19	10.62	10.50	0.4600	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
39	E1-Pipe	73.22	15.10	14.73	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
40	E2-Pipe	55.47	14.73	14.45	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
41	E4-Pipe	15.97	14.45	14.37	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
42	E5.1-Pipe	32.89	19.10	18.42	2.0800	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
43	E5-Pipe	70.61	14.37	14.02	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
44	E6.1-Pipe	28.85	19.10	18.44	2.2800	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
45	E6-Pipe	58.54	14.02	13.73	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
46	E7-Pipe	59.55	13.23	12.93	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
47	E8.1-Pipe	25.28	19.10	18.59	2.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
48	E8-Pipe	61.63	12.93	12.62	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
49	E9.1-Pipe	30.97	19.10	18.44	2.1200	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	No	1
50	E9-Pipe	66.95	12.62	12.29	0.5000	CIRCULAR	24.000	24.000	0.0150	0.5000	0.5000	0.0000	No	1
51	Link-01	178.44	10.50	0.00	5.8800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
52	Link-02	117.22	9.00	0.00	7.6800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
53	Link-03	30.02	10.50	0.00	34.9800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
54	Link-04	60.81	10.50	0.00	17.2700	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
55	Link-05	138.79	10.50	0.00	7.5700	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
56	Link-11	71.00	32.00	30.00	2.8200	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
57	Link-12	417.20	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
58	Link-14	128.08	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
59	Link-16	317.29	0.00	0.00	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
60	Link-17	137.86	10.50	0.00	7.6200	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
61	Link-18	99.47	10.50	0.00	10.5600	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
62	Link-19	130.31	10.50	0.00	8.0600	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
63	Link-20	191.76	10.50	0.00	5.4800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
64	Link-29	48.58	19.20	18.82	0.7800	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
65	Link-30	67.00	19.20	18.20	1.4900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
66	Link-31	46.31	14.60	14.60	0.0000	Dummy	0.000	0.000	0.0150	0.5000	0.5000	0.0000	No	1
67	Link-32	64.00	14.60	13.20	2.1900	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
68	Pipe (24)	45.94	28.60	28.22	0.8300	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
69	Pipe (34)	46.55	26.48	25.79	1.4800	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
70	Pipe (53)	27.49	10.63	10.50	0.4700	CIRCULAR	18.000	18.000	0.0120	0.5000	0.5000	0.0000	No	1
71	Pipe (59)	25.67	10.63	10.50	0.5100	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1
72	Pipe (62)	25.95	10.63	10.50	0.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	No	1

Pipe Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Froude Number	Reported Condition
1	A1.1-Pipe	0.3	0 07:50	1.9	0.15	3.84	0.19	0.18	0.26	0.00		Calculated
2	A10.1-Pipe	0.6	0 07:50	1.9	0.31	4.68	0.12	0.26	0.38	0.00		Calculated
3	A10-Pipe	15.1	0 08:02	25.9	0.58	5.47	0.28	1.37	0.55	0.00		Calculated
4	A11.1-Pipe	0.6	0 07:50	1.9	0.31	4.68	0.12	0.26	0.38	0.00		Calculated
5	A11-Pipe	15.7	0 08:02	24.5	0.64	5.28	0.21	1.45	0.58	0.00		Calculated
6	A12.1-Pipe	0.4	0 07:50	1.5	0.27	3.62	0.18	0.24	0.36	0.00		Calculated
7	A12-Pipe	16.2	0 08:02	25.0	0.65	5.41	0.31	1.47	0.59	0.00		Calculated
8	A13-Pipe	16.6	0 08:01	25.7	0.64	5.57	0.19	1.46	0.58	0.00		Calculated
9	A14-Pipe	16.6	0 08:02	24.0	0.69	5.26	0.12	1.53	0.61	0.00		Calculated
10	A15-Pipe	17.0	0 08:02	24.1	0.71	5.31	0.06	1.55	0.62	0.00		Calculated
11	A1-Pipe	5.2	0 08:02	48.7	0.11	17.94	0.03	0.33	0.22	0.00		Calculated
12	A2.1-Pipe	0.4	0 07:50	1.9	0.21	4.22	0.17	0.21	0.31	0.00		Calculated
13	A2-Pipe	5.7	0 08:02	6.3	0.90	4.05	0.40	1.12	0.74	0.00		Calculated
14	A3-Pipe	6.3	0 08:01	6.4	0.99	4.10	0.36	1.22	0.81	0.00		Calculated
15	A4.1-Pipe	5.9	0 08:03	53.0	0.11	19.80	0.03	0.34	0.23	0.00		Calculated
16	A4-Pipe	6.7	0 08:01	24.5	0.27	4.25	0.22	0.89	0.36	0.00		Calculated
17	A5-Pipe	12.6	0 08:02	34.3	0.37	6.44	0.28	1.05	0.42	0.00		Calculated
18	A6.1-Pipe	0.4	0 07:50	1.8	0.23	4.15	0.17	0.22	0.32	0.00		Calculated
19	A7.1-Pipe	0.8	0 07:51	1.5	0.55	4.34	0.13	0.35	0.53	0.00		Calculated
20	A7-Pipe	13.2	0 08:02	25.3	0.52	5.21	0.35	1.28	0.51	0.00		Calculated
21	A8.1-Pipe	0.7	0 07:50	1.5	0.44	4.10	0.14	0.31	0.46	0.00		Calculated
22	A8-Pipe	13.9	0 08:02	24.9	0.56	5.21	0.29	1.34	0.53	0.00		Calculated
23	A9.1-Pipe	0.6	0 07:51	1.5	0.43	4.09	0.14	0.30	0.46	0.00		Calculated
24	A9-Pipe	14.5	0 08:02	24.9	0.58	5.27	0.30	1.37	0.55	0.00		Calculated
25	B1-Pipe	0.5	0 07:50	57.6	0.01	5.50	0.06	0.13	0.06	0.00		Calculated
26	C1-Pipe	0.4	0 07:50	1.9	0.21	4.22	0.18	0.21	0.31	0.00		Calculated
27	C2-Pipe	0.8	0 07:50	57.6	0.01	6.54	0.05	0.17	0.08	0.00		Calculated
28	D1-Pipe	0.3	0 07:50	1.9	0.18	4.00	0.19	0.19	0.29	0.00		Calculated
29	D2-Pipe	0.7	0 07:50	57.6	0.01	6.25	0.05	0.15	0.08	0.00		Calculated
30	D4-Pipe	4.3	0 08:13	6.4	0.67	3.88	0.11	0.90	0.60	0.00		Calculated
31	E10-Pipe	3.4	0 07:52	13.9	0.24	3.64	0.31	0.67	0.34	0.00		Calculated
32	E11-Pipe	3.6	0 07:52	13.9	0.26	3.69	0.30	0.69	0.35	0.00		Calculated
33	E12.1-Pipe	0.6	0 07:50	1.9	0.33	4.79	0.10	0.27	0.40	0.00		Calculated
34	E13.1-Pipe	0.3	0 07:49	1.9	0.16	3.88	0.14	0.18	0.27	0.00		Calculated
35	E13-Pipe	4.2	0 07:52	13.9	0.31	3.88	0.33	0.76	0.38	0.00		Calculated
36	E14-Pipe	4.7	0 07:52	13.7	0.34	3.94	0.37	0.81	0.40	0.00		Calculated
37	E15-Pipe	5.0	0 07:52	10.3	0.49	3.25	0.32	0.98	0.49	0.00		Calculated
38	E16-Pipe	5.2	0 07:52	13.3	0.39	3.96	0.11	0.87	0.43	0.00		Calculated
39	E1-Pipe	0.2	0 07:54	6.4	0.02	1.46	0.84	0.16	0.11	0.00		Calculated
40	E2-Pipe	0.2	0 07:54	6.4	0.03	1.69	0.55	0.19	0.12	0.00		Calculated
41	E4-Pipe	0.2	0 07:53	6.3	0.03	1.67	0.16	0.19	0.13	0.00		Calculated
42	E5.1-Pipe	0.4	0 07:50	1.9	0.23	4.41	0.12	0.22	0.33	0.00		Calculated
43	E5-Pipe	0.8	0 07:52	6.4	0.13	2.48	0.47	0.36	0.24	0.00		Calculated
44	E6.1-Pipe	0.9	0 07:50	2.0	0.44	5.46	0.09	0.31	0.46	0.00		Calculated
45	E6-Pipe	0.9	0 07:52	6.4	0.14	2.57	0.38	0.38	0.25	0.00		Calculated
46	E7-Pipe	1.8	0 07:51	13.9	0.13	3.06	0.32	0.49	0.25	0.00		Calculated
47	E8.1-Pipe	0.7	0 07:50	1.9	0.37	4.89	0.09	0.28	0.42	0.00		Calculated
48	E8-Pipe	1.9	0 07:51	13.8	0.14	3.08	0.33	0.50	0.25	0.00		Calculated
49	E9.1-Pipe	0.6	0 07:50	1.9	0.30	4.78	0.11	0.25	0.38	0.00		Calculated
50	E9-Pipe	2.7	0 07:51	13.8	0.19	3.39	0.33	0.59	0.30	0.00		Calculated
51	Link-01	5.2	0 07:52	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
52	Link-02	0.7	0 07:50	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
53	Link-03	0.8	0 07:50	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
54	Link-04	0.5	0 07:50	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
55	Link-05	17.0	0 08:02	0.0	0.19	0.00		0.59	0.30	0.00		Calculated
56	Link-11	6.7	0 08:01	15.3	0.44	8.37	0.14	0.70	0.47	0.00		Calculated
57	Link-12	6.7	0 08:01	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
58	Link-14	7.8	0 08:01	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
59	Link-16	8.3	0 08:01	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
60	Link-17	4.3	0 08:13	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
61	Link-18	4.3	0 08:13	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
62	Link-19	4.3	0 08:13	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
63	Link-20	4.3	0 08:13	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
64	Link-29	7.8	0 08:01	0.0	0.44	0.00		0.70	0.47	0.00		Calculated
65	Link-30	7.8	0 08:01	11.1	0.70	6.81	0.16	0.93	0.62	0.00		Calculated
66	Link-31	8.1	0 08:01	0.0	0.70	0.00		0.93	0.62	0.00		Calculated
67	Link-32	8.1	0 08:01	13.5	0.60	7.95	0.13	0.84	0.56	0.00		Calculated
68	Pipe (24)	5.2	0 08:02	8.3	0.62	4.94	0.15	0.86	0.57	0.00		Calculated
69	Pipe (34)	5.9	0 08:03	13.9	0.43	7.54	0.10	0.69	0.46	0.00		Calculated
70	Pipe (53)	4.3	0 08:13	7.8	0.55	4.52	0.10	0.79	0.53	0.00		Calculated
71	Pipe (59)	4.3	0 08:13	6.5	0.66	3.91	0.11	0.89	0.59	0.00		Calculated
72	Pipe (62)	4.3	0 08:13	6.4	0.66	3.90	0.11	0.89	0.59	0.00		Calculated

Storage Nodes

Storage Node : Detention-Basin

Input Data

Invert Elevation (ft) 10.50
Max (Rim) Elevation (ft) 15.50
Max (Rim) Offset (ft) 5.00
Initial Water Elevation (ft) 0.00
Initial Water Depth (ft) ..... -10.50
Ponded Area (ft²) 12634.80
Evaporation Loss 0.00

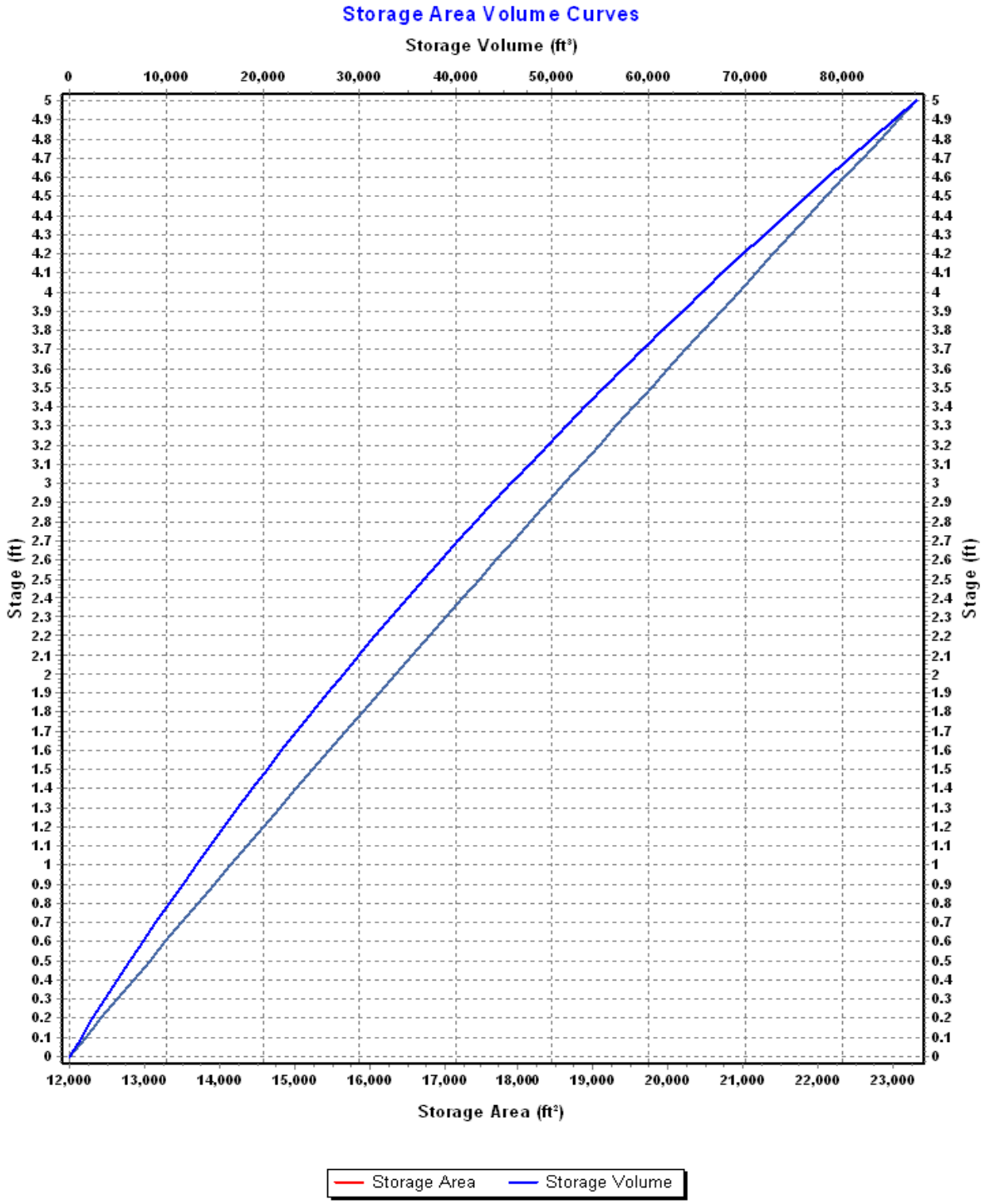
Infiltration/Exfiltration

Exfiltration Rate (in/hr) 0.0900

Storage Area Volume Curves

Storage Curve : Storage-01

Stage (ft)	Storage Area (ft²)	Storage Volume (ft³)
0	11997.07	0.000
0.1	12209.57	1210.33
0.2	12422.63	2441.94
0.3	12636.25	3694.88
0.4	12850.44	4969.21
0.5	13065.18	6264.99
0.6	13280.49	7582.27
0.7	13496.37	8921.11
0.8	13712.80	10281.57
0.9	13929.80	11663.70
1	14147.36	13067.56
1.1	14365.48	14493.20
1.2	14584.17	15940.68
1.3	14803.41	17410.06
1.4	15023.22	18901.39
1.5	15243.59	20414.73
1.6	15464.53	21950.14
1.7	15686.02	23507.67
1.8	15908.08	25087.38
1.9	16130.71	26689.32
2	16353.89	28313.55
2.1	16577.64	29960.13
2.2	16801.95	31629.11
2.3	17026.82	33320.55
2.4	17252.25	35034.50
2.5	17478.25	36771.03
2.6	17704.81	38530.18
2.7	17931.93	40312.02
2.8	18159.61	42116.60
2.9	18387.86	43943.97
3	18616.66	45794.20
3.1	18846.04	47667.34
3.2	19075.97	49563.44
3.3	19306.46	51482.56
3.4	19537.52	53424.76
3.5	19769.14	55390.09
3.6	20001.33	57378.61
3.7	20234.07	59390.38
3.8	20467.38	61425.45
3.9	20701.25	63483.88
4	20935.68	65565.73
4.1	21170.68	67671.05
4.2	21406.24	69799.90
4.3	21642.36	71952.33
4.4	21879.04	74128.40
4.5	22116.28	76328.17
4.6	22354.09	78551.69
4.7	22592.46	80799.02
4.8	22831.39	83070.21
4.9	23070.89	85365.32
5	23310.95	87684.41


Storage Area Volume Curves
Storage Volume (ft³)
0
10,000
20,000
30,000
40,000
50,000
60,000
70,000
80,000
Stage (ft)
Stage (ft)
12,000
13,000
14,000
15,000
16,000
17,000
18,000
19,000
20,000
21,000
22,000
23,000
Storage Area (ft²)
Storage Area
Storage Volume

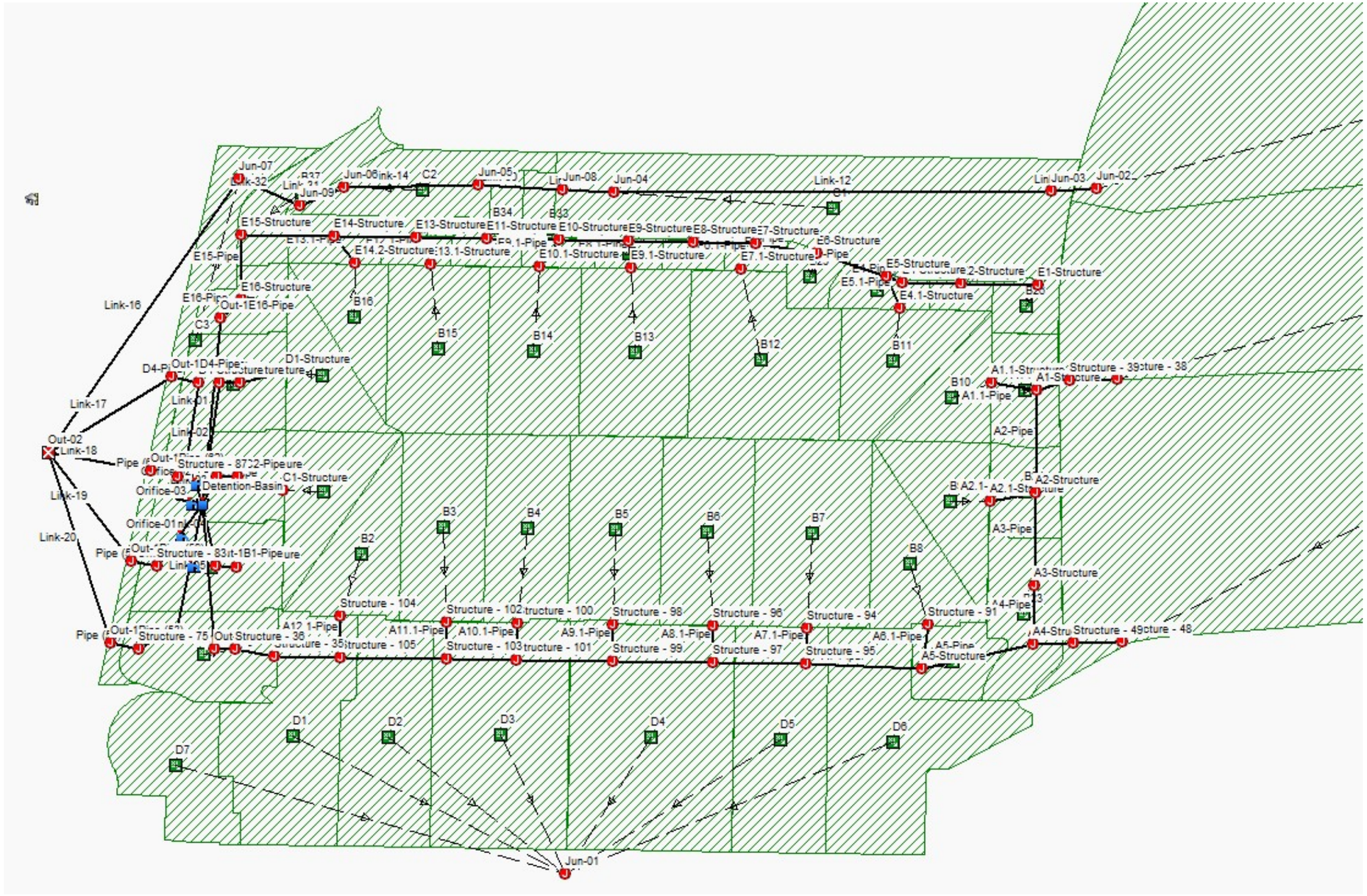
Storage Node : Detention-Basin (continued)

Outflow Orifices

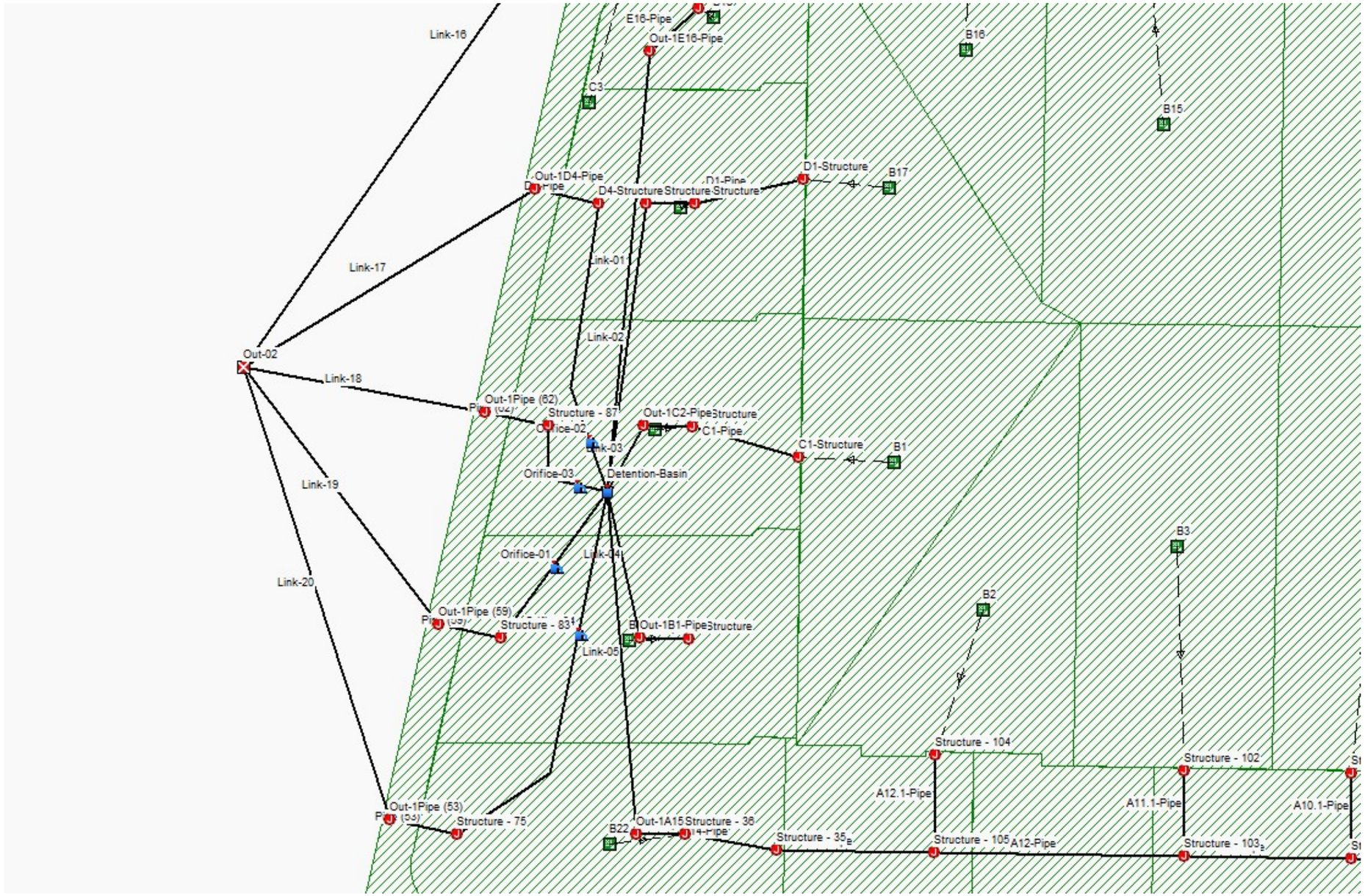
SN	Element ID	Orifice Type	Orifice Shape	Flap Gate	Circular Orifice Diameter (in)	Rectangular Orifice Height (in)	Rectangular Orifice Width (in)	Orifice Invert Elevation (ft)	Orifice Coefficient
1	Orifice-01	Side	Rectangular	No		9.00	12.00	11.00	0.63
2	Orifice-02	Side	Rectangular	No		9.00	12.00	11.00	0.63
3	Orifice-03	Side	Rectangular	No		9.00	12.00	11.00	0.63
4	Orifice-04	Side	Rectangular	No		9.00	12.00	11.00	0.63

Output Summary Results

Peak Inflow (cfs)	23.85
Peak Lateral Inflow (cfs)	0.00
Peak Outflow (cfs)	17.07
Peak Exfiltration Flow Rate (cfm)	2.10
Max HGL Elevation Attained (ft)	12.66
Max HGL Depth Attained (ft)	2.16
Average HGL Elevation Attained (ft)	11.38
Average HGL Depth Attained (ft)	0.88
Time of Max HGL Occurrence (days hh:mm)	0 08:13
Total Exfiltration Volume (1000-ft³)	2.470
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0.00



Autodesk Storm and Sanitary Analysis

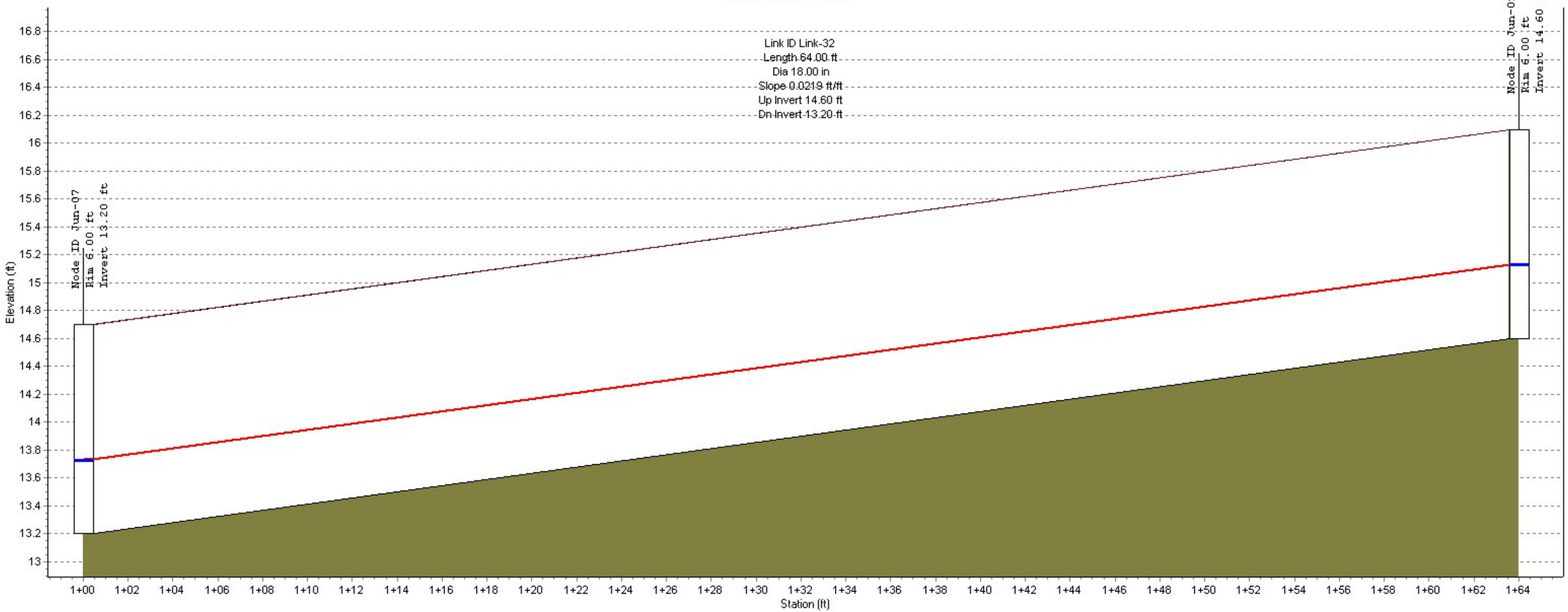

Link-16
E16-Pipe
Out-1E16-Pipe
B16
C3
B15
Out-1D4-Pipe
D4-Structure
D1-Pipe
D1-Structure
B17
Link-17
Link-01
Link-02
Out-02
Link-18
Out-1Pipe (62)
Structure - 87
Out-1C2-Pipe
C1-Pipe
C1-Structure
B1
Orifice-02
Orifice-03
Detention-Basin
Link-19
Orifice-01
Link-04
B3
Link-20
B2
Out-1Pipe (59)
Structure - 83
Out-1B1-Pipe
Link-05
Structure - 104
Structure - 102
A12.1-Pipe
A11.1-Pipe
A10.1-Pipe
Out-1Pipe (53)
Structure - 75
B22
Out-1A15
Structure - 36
Structure - 35
Structure - 105
A12-Pipe
Structure - 103

ATTACHMENT 3

10-Year HGL PIPE PROFILE

Profile Plot

Main Street Storm Sewer

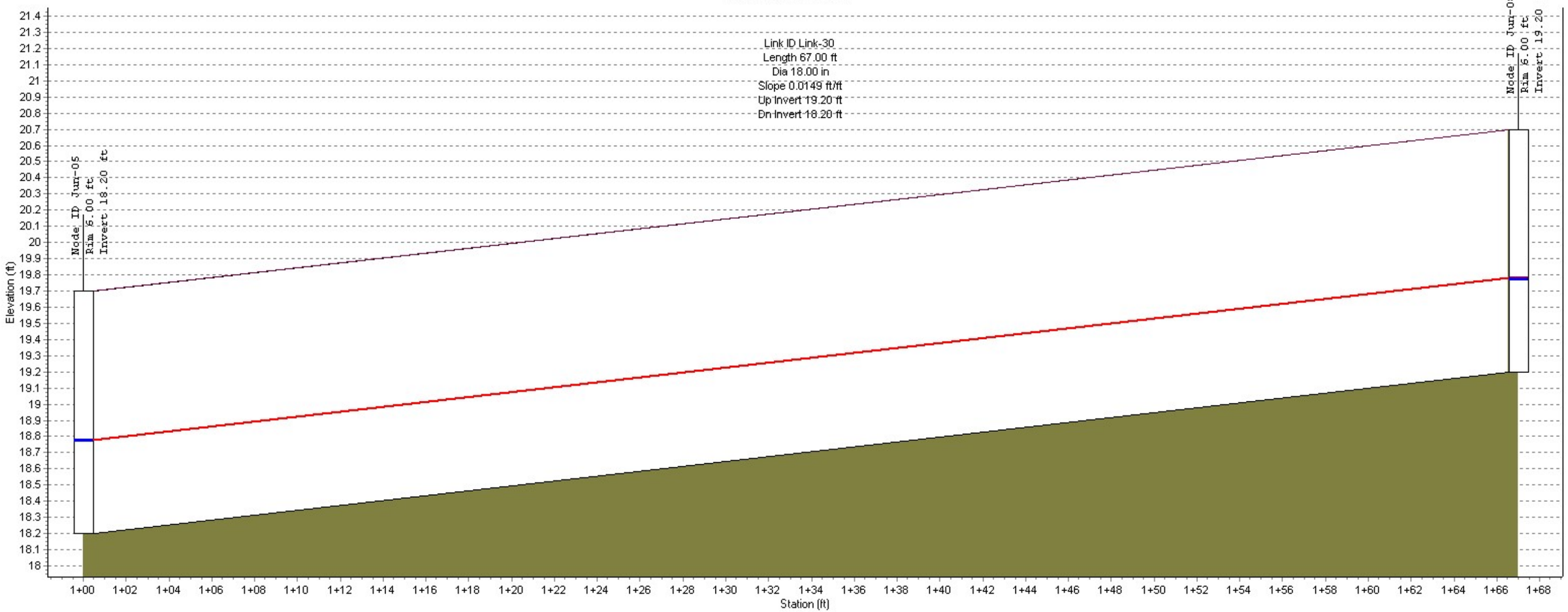


Node ID:	Jun-07	Jun-09
Rim (ft):	6.00	6.00
Invert (ft):	13.20	14.60
Min Pipe Cover (ft):	0.00	0.00
Max HGL (ft):	13.73	15.13

Link ID:	Link-32
Length (ft):	64.00
Dia (in):	18.00
Slope (ft/ft):	0.0219
Up Invert (ft):	14.60
Dn Invert (ft):	13.20
Max Q (cfs):	3.65
Max Vel (ft/s):	6.48
Max Depth (ft):	0.53

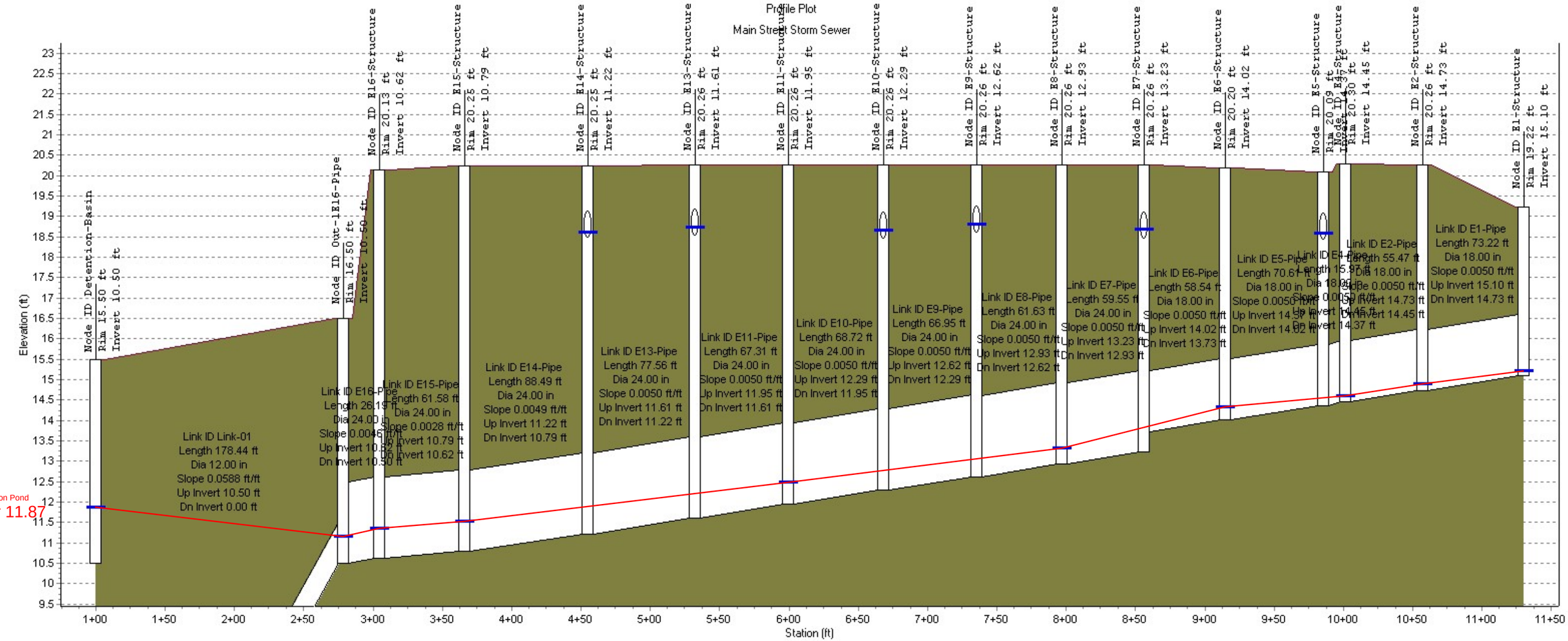
Profile Plot

Main Street Storm Sewer



Node ID:	Jun-05	Jun-08
Rim (ft):	6.00	6.00
Invert (ft):	18.20	19.20
Min Pipe Cover (ft):	0.00	0.00
Max HGL (ft):	18.78	19.78

Link ID:	Link-30
Length (ft):	67.00
Dia (in):	18.00
Slope (ft/ft):	0.0149
Up Invert (ft):	19.20
Dn Invert (ft):	18.20
Max Q (cfs):	3.57
Max Vel (ft/s):	5.60
Max Depth (ft):	0.58

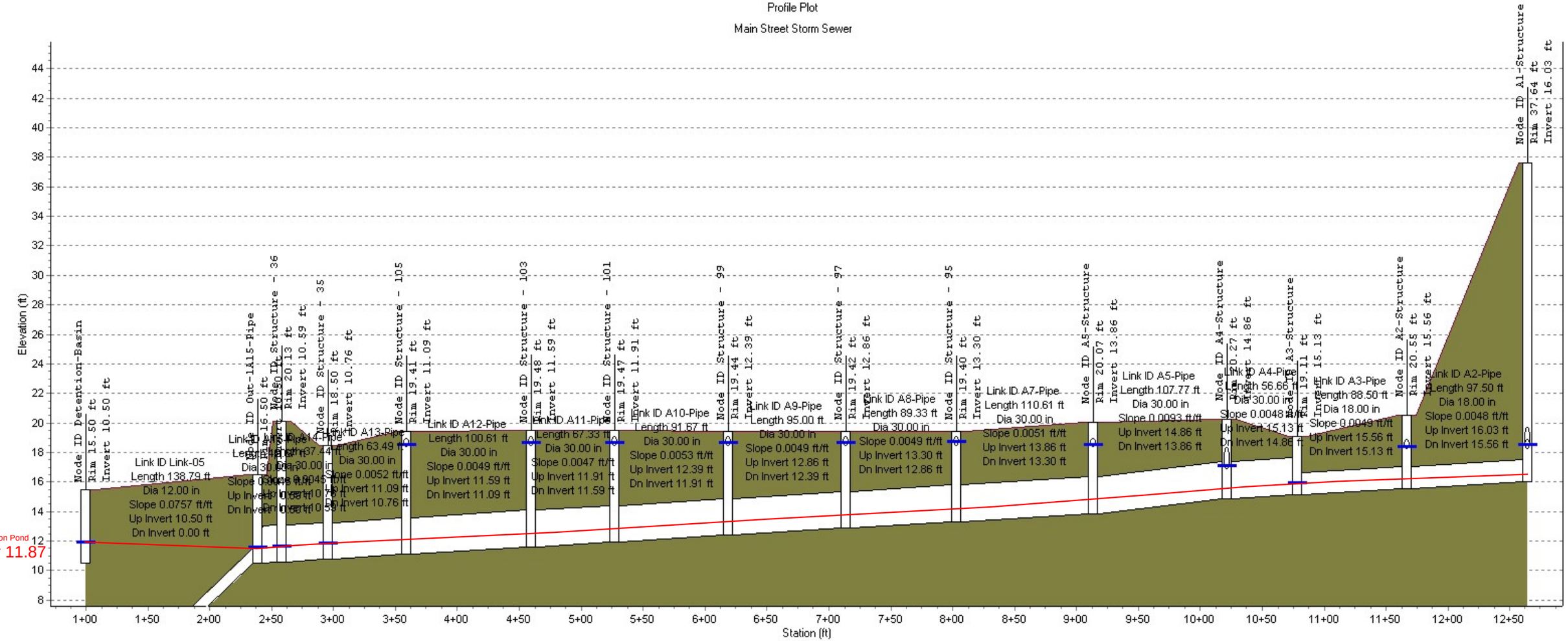


Node ID:		Out-1E16-Pipe	E16-Structure	E15-Structure	E14-Structure	E13-Structure	E11-Structure	E10-Structure	E9-Structure	E8-Structure	E7-Structure	E6-Structure	E5-Structure	E4-Structure	E2-Structure	E1-Structure
Rim (ft):	15.50	16.50	20.13	20.25	20.25	20.26	20.26	20.26	20.26	20.26	20.26	20.20	20.09	20.30	20.26	19.22
Invert (ft):	10.50	10.50	10.62	10.79	11.22	11.61	11.95	12.29	12.62	12.93	13.23	14.02	14.37	14.45	14.73	15.10
Min Pipe Cover (ft):		4.00	7.51	7.46	1.12	1.07	6.31	1.15	1.00	5.33	1.15	4.68	1.01	4.35	4.03	2.62
Max HGL (ft):	11.87	11.16	11.36	11.53	18.60	18.72	12.48	18.64	18.81	13.32	18.68	14.32	18.59	14.60	14.88	15.22

Link ID:	Link-01	E16-Pipe	E15-Pipe	E14-Pipe	E13-Pipe	E11-Pipe	E10-Pipe	E9-Pipe	E8-Pipe	E7-Pipe	E6-Pipe	E5-Pipe	E4-Pipe	E2-Pipe	E1-Pipe
Length (ft):	178.44	26.19	61.58	88.49	77.56	67.31	68.72	66.95	61.63	59.55	58.54	70.61	15.97	55.47	73.22
Dia (in):	12.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	18.00	18.00	18.00	18.00	18.00
Slope (ft/ft):	0.0588	0.0046	0.0028	0.0049	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
Up Invert (ft):	10.50	10.62	10.79	11.22	11.61	11.95	12.29	12.62	12.93	13.23	14.02	14.37	14.45	14.73	15.10
Dn Invert (ft):	0.00	10.50	10.62	10.79	11.22	11.61	11.95	12.29	12.62	12.93	13.73	14.02	14.37	14.45	14.73
Max Q (cfs):	0.00	3.13	3.01	2.83	2.56	2.14	2.04	1.60	1.15	1.10	0.55	0.48	0.13	0.13	0.09
Max Vel (ft/s):	0.00	3.45	2.85	3.43	3.36	3.20	3.16	2.92	2.66	2.64	2.22	2.14	1.41	1.43	1.29
Max Depth (ft):	0.00	0.66	0.74	0.62	0.58	0.53	0.52	0.46	0.39	0.38	0.30	0.28	0.15	0.15	0.12

Profile Plot

Main Street Storm Sewer



Node ID:		Out-1A15-Pipe	Structure - 36	Structure - 35	Structure - 105	Structure - 103	Structure - 101	Structure - 99	Structure - 97	Structure - 95	A5-Structure	A4-Structure	A3-Structure	A2-Structure	A1-Structure
Rim (ft):	15.50	16.50	20.13	18.50	19.41	19.48	19.47	19.44	19.42	19.40	20.07	20.27	19.11	20.55	37.64
Invert (ft):	10.50	10.50	10.59	10.76	11.09	11.59	11.91	12.39	12.86	13.30	13.86	14.86	15.13	15.56	16.03
Min Pipe Cover (ft):		3.50	7.04	5.24	0.43	0.41	0.40	0.37	0.35	0.33	1.10	1.95	1.48	1.66	17.91
Max HGL (ft):	11.87	11.54	11.63	11.79	18.49	18.60	18.60	18.63	18.64	18.67	18.47	17.05	15.87	18.38	18.46

Link ID:	Link-05	A15-Pipe	A14-Pipe	A13-Pipe	A12-Pipe	A11-Pipe	A10-Pipe	A9-Pipe	A8-Pipe	A7-Pipe	A5-Pipe	A4-Pipe	A3-Pipe	A2-Pipe
Length (ft):	138.79	19.67	37.44	63.49	100.61	67.33	91.67	95.00	89.33	110.61	107.77	56.66	88.50	97.50
Dia (in):	12.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	18.00	18.00
Slope (ft/ft):	0.0757	0.0046	0.0045	0.0052	0.0049	0.0047	0.0053	0.0049	0.0049	0.0051	0.0093	0.0048	0.0049	0.0048
Up Invert (ft):	10.50	10.59	10.76	11.09	11.59	11.91	12.39	12.86	13.30	13.86	14.86	15.13	15.56	16.03
Dn Invert (ft):	0.00	10.50	10.59	10.76	11.09	11.59	11.91	12.39	12.86	13.30	13.86	14.86	15.13	15.56
Max Q (cfs):	0.00	8.76	8.50	8.50	8.27	7.95	7.63	7.28	6.92	6.47	6.12	3.30	3.07	2.72
Max Vel (ft/s):	0.00	4.51	4.46	4.70	4.56	4.45	4.59	4.40	4.34	4.31	5.27	3.49	3.56	3.44
Max Depth (ft):	0.00	1.04	1.03	0.99	0.99	0.98	0.93	0.93	0.90	0.86	0.72	0.62	0.74	0.69

STORMWATER CONTROL PLAN FOR A REGULATED PROJECT

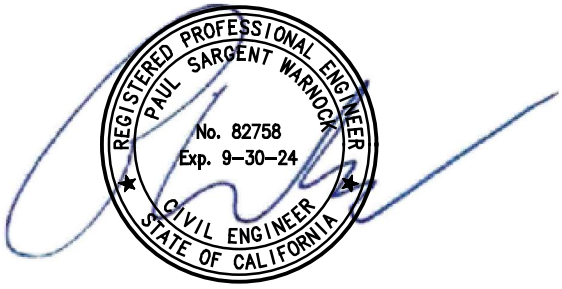
For

Commerce 220 Distribution Center
American Canyon, CA

THIS REPORT WAS PREPARED IN CONJUNCTION WITH THE INSTRUCTIONS, CRITERIA, AND MINIMUM REQUIREMENTS IN THE BAY AREA STORMWATER MANAGEMENT AGENCIES ASSOCIATION'S (BASMAA'S) POST CONSTRUCTION MANUAL.

Prepared for:

SDG Commerce 220, LLC
413 W. Yosemite Avenue, Suite 105
Madera, CA 93637



Project No. 4122068.0

July 21, 2023

1515 Fourth Street, Napa, CA 94559 www.rsacivil.com (707) 252-3301 v. (707) 252-4966 f.

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Table 10. Construction Plan C.3 Checklist

ATTACHMENTS

1. Vicinity Map, FIRMETTE, Hydrologic Soil Group Map
2. Stormwater Control Plan

I. Project Data

Table 1. Project Data Form

Project Name/Number	Commerce 220 Distribution Center (4122068.0)
Application Submittal Date	March 17, 2023
Project Location	1055 Commerce Ct. American Canyon, California 94503 APN: 058-030-069
Project Phase	Conditional Use Permit
Project Type and Description	New warehouse
Total Project Site Area (acres)	10.2 Acres
Total New and Replaced Impervious Surface Area	346,605 sq. ft
Total Pre-Project Impervious Surface Area	0 sq. ft
Total Post-Project Impervious Surface Area	346,605 sq. ft

II. Setting

II.A. Project Location and Description

The Commerce 220 Distribution Center project is located on Commerce Ct. in American Canyon, California 94503. The APN is 058-030-069. Refer to Attachment 1 for the Vicinity Map. The parcel is zoned as Commercial Recreation (CR) by the City of American Canyon and is currently undeveloped. The project will include the construction of a new warehouse and parking area. The warehouse will function as a distribution center. This project will not be phased and will be built in a single phase of construction. Refer to Attachment 2 for Site Stormwater Control Plan.

The proposed area to be disturbed is greater than 1 acre, so a Stormwater Pollution Prevention Plan will be prepared and a Notice of Intent (NOI) will be obtained prior to the beginning of construction.

II.B. Existing Site Features and Conditions

The existing site is currently an undeveloped grassy field. Access to the parcel is off of Commerce Ct. Features of the site include grasses and shrubs and a gravel road along the eastern side of the parcel. The site is bounded by undeveloped parcels to the east and west, a commercial warehouse to the south and a commercial warehouse currently under construction to the north.

The predominant soil type in the project area is Haire clay loam, which is of the Hydraulic Soil Group D. Refer to Attachment 1 for the Soils Map. The project area is relatively flat with gentle slopes to the west. Stormwater is ultimately conveyed to the Napa River.

II.C. Opportunities and Constraints for Stormwater Control

Stormwater treatment facilities have been integrated into the planning, design, construction, operation, and maintenance of the proposed development. The following potential opportunities and constraints were considered in determining the best stormwater control design for this development.

Opportunities for the site include landscaped areas to the west of the building. A bioretention basin will be installed in this area to treat stormwater runoff prior to discharge from the site. Runoff will be conveyed to the bioretention basin via surface flows and an on-site storm drain network.

Constraints include the site location and existing grades. The site is generally flat and is not located near an existing storm drain system. To accommodate this, the warehouse was designed at a finished floor elevation so that stormwater could flow into the bioretention basin, and the subsequent outflow from this basin would outfall onto nearby fields along existing drainage patterns.

III. Low Impact Development Design Strategies

III.A. Optimization of Site Layout

1. Limitation of development envelope

   The shallow slopes of the site make the chosen development areas suitable for development.

2. Preservation of natural drainage features

   Natural existing drainage features include mapped wetlands on-site as well as gently sloping terrain that allows stormwater runoff to remain as predominantly sheet flow. A bioretention/detention basin has been proposed for the project to treat and detain storm water before it leaves the site. Level spreaders are proposed at the outfall of the proposed bioretention/detention basin to allow post-development stormwater runoff to be returned to sheet flow.

3. Minimization of imperviousness

   Walkways and parking areas are designed to the minimum widths necessary without compromising public safety and a walkable environment.

4. Use of drainage as a design element

   A bioretention/detention basin is incorporated into the aesthetic landscape design of the site.

III.B. Use of Permeable Pavements

Permeable pavements are not proposed at this time.

III.C. Dispersal of Runoff to Pervious Areas

Stormwater runoff will be directed to the bioretention/detention basin.

III.D. Stormwater Control Measures

A bioretention basin has been incorporated as a stormwater control measure. The bioretention basin will collect and treat onsite stormwater as well as from portions of Commerce Boulevard. Refer to Attachment 2 for Stormwater Control Plan.

IV. Documentation of Drainage

IV.A Drainage Management Areas

Table 2. Drainage Management Areas

DMA Name	Impervious Area (square feet)	Pervious Area (square feet)	Total Area (square feet)
DMA 1	297,608	11,720	309,328
DMA 2	0	12,083	12,083
DMA 3	48,997	1,744	50,741

Drainage Management Area Description

DMA 1 consists of the warehouse roof area, the parking areas, and drive aisles. Stormwater is conveyed via storm drains to Bioretention Facility 1 on the west side of the property.

DMA 2 consists of the landscaped area within the proposed bioretention/detention basin west of the warehouse and parking areas. This area will drain to Bioretention Facility 1.

DMA 3 consists of the parking lot and landscaped area south of the warehouse. This area will drain to the south via sheet flow and storm drains to neighboring Bioretention Facility located on Commerce 330 Distribution Center. The Commerce 330 Bioretention Facility was designed to accommodate up to 56,200 SF of new impervious area from the Commerce 220 parcel.

STA 1 is a Self-Treating area that does not receive stormwater runoff from the proposed improvements and consists of grassy areas on the west side of the parcel that drains directly off-site.

STA 2 is a Self-Treating area that does not receive stormwater runoff from the proposed improvements and consists of grassy areas and mapped wetlands on the north side of the parcel that drains directly off-site.

IV.B. Tabulation and Sizing Calculations

Table 3. Information Summary for Bioretention Basin and Alternate BMP Design

DMA	Total Project Area (Square Feet)
DMA 1	309,328
DMA 2	12,083

Table 4. Self-Treating Areas

DMA	Total Project Area (Square Feet)
STA 1	14,747
STA 2	62,066

Table 5. Self-Retaining Areas

There are no Self-Retaining Areas.

Table 6. Areas Draining to Self-Retaining Areas

There are no impervious areas draining to Self-Retaining Areas.

Table 7. Areas Draining to Bioretention Basins

DMA Name	DMA Area (Square Feet)	Post-project surface type	DMA Runoff Factor	DMA Area x Runoff Factor	Basin Name		
					Bioretention Facility 1		
DMA 1	297,608	Impervious	1	297,608	Sizing Factor	Minimum Basin size	Proposed Basin
DMA 1	11,720	Pervious	0.1	1,172			
DMA 2	0	Impervious	1	0			
DMA 2	12,083	Pervious	0.1	1,208			
Total>				299,988	0.04	12,000	12,638

Table 8. Alternate BMPs

There are no Alternate BMPs.

V. Source Control Measures

V.A. Site activities and potential sources of pollutants

The site activities and potential sources of pollutants for the Commerce 220 Distribution Center project are listed in table 9, below:

Table 9. Control Table

Potential Sources of Runoff Pollutants	Permanent Source Control BMPs	Operational Source Control BMPs
A. On-site storm drain inlets (unauthorized non-stormwater discharges and accidental spills or leaks)	▪ Mark all inlets with the words “No Dumping! Flows to River” or similar.	▪ Maintain and periodically repaint or replace inlet markings. ▪ Provide stormwater pollution prevention information to new site owners, lessees, or operators. ▪ See applicable operational BMPs in Fact Sheet SC-74, “Drainage System Maintenance.” ▪ Include the following in lease agreements: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."

Potential Sources of Runoff Pollutants	Permanent Source Control BMPs	Operational Source Control BMPs
B. Interior floor drains and elevator shaft sump pumps	▪ Interior floor drains will be plumbed to the sanitary sewer.	▪ Inspect and maintain drains to prevent blockages and overflow.
C. Interior parking garages	N/A	N/A
D_1. Need for future indoor & structural pest control	▪ Building design shall incorporate features that discourage entry of pests.	▪ Provide Integrated Pest Management information to owners, lessees, and operators.
D_2. Landscape / outdoor pesticide use / building and grounds maintenance	▪ Final landscape plans will accomplish all of the following: ▪ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ▪ Minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. ▪ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ▪ Use pest-resistant plants, especially adjacent to hardscape. ▪ To ensure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	▪ Maintain landscaping using minimum or no pesticides. ▪ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance." ▪ Provide IPM information to new owners, lessees and operators.
E. Pools, spas, ponds, decorative fountains, and other water features	N/A	N/A
F. Food service	N/A	N/A
G. Refuse areas	▪ Refuse areas shall be paved with an impervious surface, designed not to allow run-on from adjoining areas, and screened to prevent off-site transport of trash. ▪ Refuse areas shall contain a roof to minimize direct precipitation. ▪ Refuse areas will consist of shared trash enclosures with the Commerce 330 Distribution Center. These do not have connections to the sanitary sewer and will	▪ Provide adequate number of receptacles. ▪ Inspect receptacles regularly; repair or replace leaky receptacles. ▪ Keep receptacles covered. ▪ Prohibit/prevent dumping of liquid or hazardous wastes. ▪ Post "no hazardous materials" signs. ▪ Inspect and pick up litter daily and clean up spills immediately. ▪ Keep spill control materials available on-site.

Potential Sources of Runoff Pollutants	Permanent Source Control BMPs	Operational Source Control BMPs
	continue to be cleaned and dry swept as necessary.	▪ Clean by dry-sweeping only, or with wet/dry vacuum. ▪ See Fact Sheet SC-34, "Waste Handling and Disposal"
H. Industrial processes	N/A	N/A
I. Outdoor Storage of Equipment or Materials	N/A	N/A
J. Vehicle / equipment cleaning	N/A	N/A
K. Vehicle / equipment repair and maintenance	N/A	N/A
L. Fuel dispensing areas	N/A	N/A
M. Loading docks	▪ Loading docks utilize a dock seal at each dock to prevent spills and leaks from reaching exterior storm drain system.	▪ Clean up spills prior to disconnecting trucks from loading docks.
N. Fire sprinkler test water	▪ Fire sprinkler test water shall be discharged to the sanitary sewer.	▪ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance"
O. Miscellaneous drain or wash water or other sources • Boiler drain lines • Condensate drain lines • Rooftop equipment • Drainage sumps • Roofing, gutters, and trim • Other sources	▪ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain. ▪ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ▪ Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ▪ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water.	▪ If architectural copper is used, implement the following BMPs for management of rinse water during installation: ▪ If possible, purchase copper materials that have been pre-patinated at the factory. ▪ If patination is done on-site, prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site. ▪ Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. ▪ Implement the following BMPs during routine maintenance: ▪ Prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site.
P. Plazas, sidewalks, and parking lots		▪ Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect wash water containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

V.B. Features, Materials, and Methods of Construction of Source Control BMPs

Source control BMPs will be designed and implemented per construction specifications and CASQA BMP fact sheets.

VI. Stormwater Facility Maintenance

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

The applicant accepts responsibility for interim operation and maintenance of stormwater treatment and flow-control facilities until such time as this responsibility is formally transferred to a subsequent owner.

The owner shall execute a Post-Construction BMP Maintenance Agreement with the City of American Canyon upon request.

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

The site incorporates one bioretention facility. The bioretention facility requires as-needed maintenance for any damage that may occur. Semi-annual inspections are required for possible erosion, damaged vegetation, debris, and health of any trees or shrubs. These inspections usually occur at the beginning of the wet season and end of the wet season. Any dead or diseased vegetation should be removed and replaced during the inspection. An annual inspection is required to complete the annual report for the bioretention basin. During this inspection mulch may be added, and tree stakes and wires replaced.

VII. Construction Checklist

Table 10. Construction Checklist

Stormwater Control Plan Page #	Source Control or Treatment Control Measure	Sheet
3	Bioretention Basin	DMA, UP3.0, UP3.3
4	A. On-site storm drain inlets	UP3.0, UP3.1, UP4.0
4	B. Interior floor drains and elevator shaft sump pumps	See Architectural Plan
4	D1. Need for future indoor & structural pest control	See Architectural Plan
4 & 5	D2. Landscape/ outdoor pesticide use/ building and ground maintenance	See Landscape Plan
5	G. Refuse areas	See Architectural Plan
6	M. Loading docks	See Architectural Plan
6	N. Fire sprinkler test water	See Architectural Plan
6	O. Miscellaneous drain or wash	See Architectural Plan
6	P. Plazas, sidewalks, and parking lots	UP3.0, UP3.1

VIII. Certifications

The preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this Stormwater Control Plan are in accordance with the current edition of the BASMAA Post-Construction Manual.

ATTACHMENT 1

Vicinity Map, FEMA FIRMette, Hydrologic Soil Group Map

SDG COMMERCE 220 DISTRIBUTION CENTER

V I C I N I T Y M A P

AMERICAN CANYON CALIFORNIA



VICINITY MAP

SCALE: 1" = 3000'

RSA+

1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE|707|252.3301
+ www.RSAcivil.com +

RSA+| CONSULTING CIVIL ENGINEERS + SURVEYORS + est. 1980

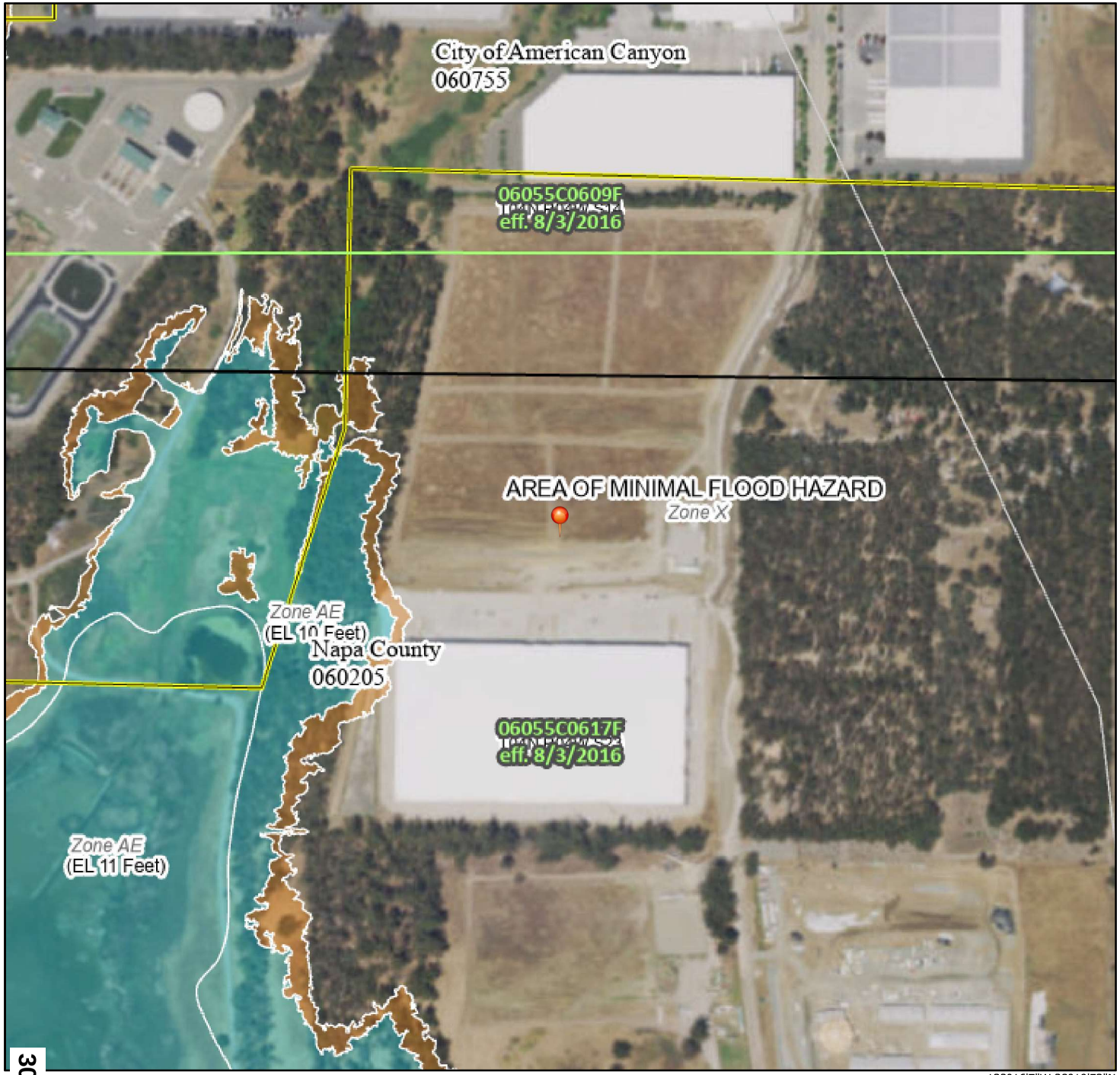
JUL. 20, 2023 4122068.0 Exh-Vic Map.dwg

3034

National Flood Hazard Layer FIRMette

FEMA

122°16'44"W 38°11'22"N



3035

0 250 500 1,000 1,500 2,000 Feet 1:6,000

122°16'7"W 38°10'53"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/9/2023 at 12:16 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Hydrologic Soil Group—Napa County, California
(SDG Commerce 220 - Distribution Center)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 15, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2022—Apr 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
148	Haire clay loam, 2 to 9 percent slopes	D	10.2	100.0%
Totals for Area of Interest			**10.2**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

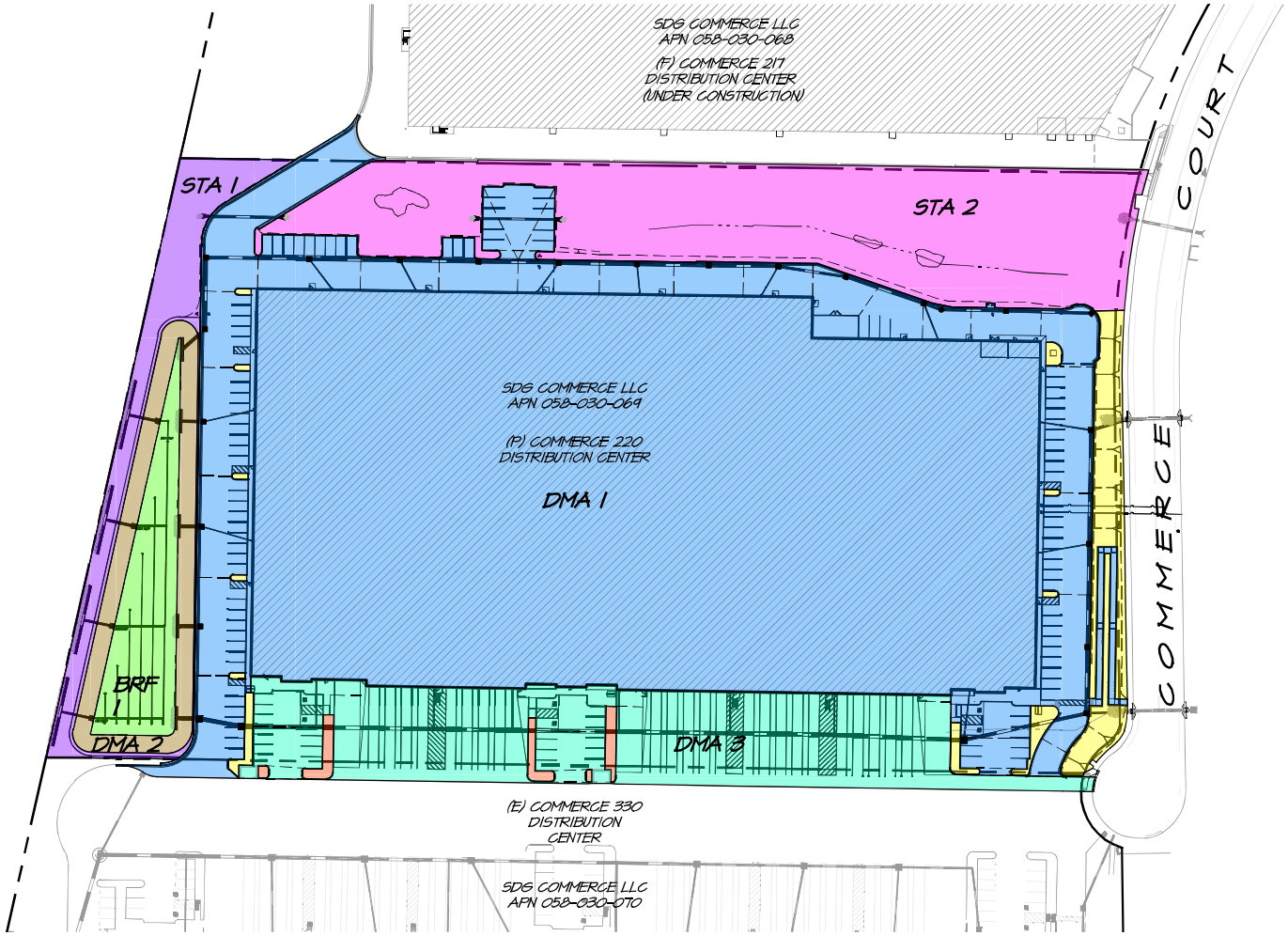
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

ATTACHMENT 2

Stormwater Control Plan

SDG COMMERCE 220 DISTRIBUTION CENTER
STORMWATER CONTROL PLAN
AMERICAN CANYON CALIFORNIA



DRAINAGE MANAGEMENT AREAS		
DMA	IMPERVIOUS	PERVIOUS
DMA 1	297,608 SF	11,720 SF
DMA 2	0 SF	12,083 SF
DMA 3	48,997 SF	1,744 SF
STA 1	0 SF	14,747 SF
STA 2	0 SF	62,066 SF
BRF 1	0 SF	12,638 SF

NOTES
DMA 3 DRAINS TO BIORETENTION/DETENTION POND ON COMMERCE 330 DISTRIBUTION CENTER PARCEL TO THE SOUTH. THE COMMERCE 330 BIORETENTION FACILITY WAS DESIGNED TO ACCOMMODATE UP TO 56,200 SF OF NEW IMPERVIOUS AREA FROM THE COMMERCE 220 PARCEL.

GRAPHIC SCALE

100 0 100 200

(IN FEET)
1 inch = 100 FT

RSA+
1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE|707|252.3301
+ www.RSAcivil.com +

RSA+| CONSULTING CIVIL ENGINEERS + SURVEYORS + est 1980

JULY 21, 2023 4122068.0 Exh-SCP.dwg

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Appendix H:
Noise Supporting Information

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Mobile Construction Activity Noise Calculation

Receptor:	Receiving school facility	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
		Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)		
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Backhoe	85	1	40	1200	1	3	54.4	36.6	4585.917802
2	Front End Loader	85	1	40	1230	1	3	54.2	36.3	4258.48057
3	Scraper	85	1	40	1280	1	3	53.8	35.8	3778.67983
4	Rubber Tired Dozer	85	1	40	1330	1	3	53.5	35.3	3368.333475
5	Front End Loader	85	1	40	1380	1	3	53.2	34.8	3015.315396
6										
7										
8										
9										
10										
							Lmax[4]	54	Leq	43

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
Night	12:00 AM	0.0	10.0	1	10
	1:00 AM	0.0	10.0	1	10
	2:00 AM	0.0	10.0	1	10
	3:00 AM	0.0	10.0	1	10
	4:00 AM	0.0	10.0	1	10
	5:00 AM	0.0	10.0	1	10
	6:00 AM	0.0	10.0	1	10
Day	7:00 AM	42.8	42.8	4.278907339	19006.72707
	8:00 AM	42.8	42.8	4.278907339	19006.72707
	9:00 AM	42.8	42.8	4.278907339	19006.72707
	10:00 AM	42.8	42.8	4.278907339	19006.72707
	11:00 AM	42.8	42.8	4.278907339	19006.72707
	12:00 PM	42.8	42.8	4.278907339	19006.72707
	1:00 PM	42.8	42.8	4.278907339	19006.72707
	2:00 PM	42.8	42.8	4.278907339	19006.72707
	3:00 PM	42.8	42.8	4.278907339	19006.72707
	4:00 PM	42.8	42.8	4.278907339	19006.72707
	5:00 PM	42.8	42.8	4.278907339	19006.72707
	6:00 PM	42.8	42.8	4.278907339	19006.72707
	7:00 PM	0.0	0.0	0	1
	8:00 PM	0.0	0.0	0	1
	9:00 PM	0.0	0.0	0	1
Night	10:00 PM	0.0	10.0	1	10
	11:00 PM	0.0	10.0	1	10
			Sum		228173.7249
			Sum/24		9507.238536
			Log10(Sum/24)		3.97805439
			10*Log10(Sum/24)		39.7805439
			24 Hour Ldn		40

Mobile Construction Activity Noise Calculation

Receptor:	Receiving residence east of the project site	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
		Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)		
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Backhoe	85	1	40	900	1	5	54.9	38.4	6858.710562
2	Front End Loader	85	1	40	950	1	5	54.4	37.7	5831.7539
3	Scraper	85	1	40	950	1	5	54.4	37.7	5831.7539
4	Rubber Tired Dozer	85	1	40	1000	1	5	54.0	37.0	5000
5	Front End Loader	85	1	40	1000	1	5	54.0	37.0	5000
6										
7										
8										
9										
10										
							Lmax[4]	55	Leq	45

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
Night	12:00 AM	0.0	10.0	1	10
	1:00 AM	0.0	10.0	1	10
	2:00 AM	0.0	10.0	1	10
	3:00 AM	0.0	10.0	1	10
	4:00 AM	0.0	10.0	1	10
	5:00 AM	0.0	10.0	1	10
	6:00 AM	0.0	10.0	1	10
Day	7:00 AM	44.6	44.6	4.4551833	28522.21836
	8:00 AM	44.6	44.6	4.4551833	28522.21836
	9:00 AM	44.6	44.6	4.4551833	28522.21836
	10:00 AM	44.6	44.6	4.4551833	28522.21836
	11:00 AM	44.6	44.6	4.4551833	28522.21836
	12:00 PM	44.6	44.6	4.4551833	28522.21836
	1:00 PM	44.6	44.6	4.4551833	28522.21836
	2:00 PM	44.6	44.6	4.4551833	28522.21836
	3:00 PM	44.6	44.6	4.4551833	28522.21836
	4:00 PM	44.6	44.6	4.4551833	28522.21836
	5:00 PM	44.6	44.6	4.4551833	28522.21836
	6:00 PM	44.6	44.6	4.4551833	28522.21836
	7:00 PM	0.0	0.0	0	1
	8:00 PM	0.0	0.0	0	1
	9:00 PM	0.0	0.0	0	1
Night	10:00 PM	0.0	10.0	1	10
	11:00 PM	0.0	10.0	1	10
			Sum		342359.6203
			Sum/24		14264.98418
			Log10(Sum/24)		4.154271294
			10*Log10(Sum/24)		41.54271294
			24 Hour Ldn		42

Parking Lot Activity Noise Calculation

Receptor:	Receiving Couch Residence (east of site)									
		Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)		
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	parking lot activity	70	4	10	900	1	3	41.9	25.4	343.7498173
2	parking lot activity	70	6	10	920	1	3	41.7	26.8	482.722766
3	parking lot activity	70	6	10	920	1	3	41.7	26.8	482.722766
4										
5										
6										
7										
8										
9										
10										
							Lmax[4]	42	Leq	31

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
Night	12:00 AM	31.2	41.2	4.117004454	13091.95349
	1:00 AM	31.2	41.2	4.117004454	13091.95349
	2:00 AM	31.2	41.2	4.117004454	13091.95349
	3:00 AM	31.2	41.2	4.117004454	13091.95349
	4:00 AM	31.2	41.2	4.117004454	13091.95349
	5:00 AM	31.2	41.2	4.117004454	13091.95349
	6:00 AM	31.2	41.2	4.117004454	13091.95349
Day	7:00 AM	31.2	31.2	3.117004454	1309.195349
	8:00 AM	31.2	31.2	3.117004454	1309.195349
	9:00 AM	31.2	31.2	3.117004454	1309.195349
	10:00 AM	31.2	31.2	3.117004454	1309.195349
	11:00 AM	31.2	31.2	3.117004454	1309.195349
	12:00 PM	31.2	31.2	3.117004454	1309.195349
	1:00 PM	31.2	31.2	3.117004454	1309.195349
	2:00 PM	31.2	31.2	3.117004454	1309.195349
	3:00 PM	31.2	31.2	3.117004454	1309.195349
	4:00 PM	31.2	31.2	3.117004454	1309.195349
	5:00 PM	31.2	31.2	3.117004454	1309.195349
	6:00 PM	31.2	31.2	3.117004454	1309.195349
	7:00 PM	31.2	31.2	3.117004454	1309.195349
	8:00 PM	31.2	31.2	3.117004454	1309.195349
	9:00 PM	31.2	31.2	3.117004454	1309.195349
Night	10:00 PM	31.2	41.2	4.117004454	13091.95349
	11:00 PM	31.2	41.2	4.117004454	13091.95349
			Sum		137465.5117
			Sum/24		5727.729653
			Log10(Sum/24)		3.757982511
			10*Log10(Sum/24)		37.57982511
			24 Hour Ldn		38

Parking Lot Activity Noise Calculation

Receptor:	Receiving school facility									
		Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)		
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	parking lot activity	70	4	10	1200	1	3	39.4	21.6	145.0194542
2	parking lot activity	70	6	10	1225	1	3	39.2	23.1	204.4810174
3	parking lot activity	70	6	10	1250	1	3	39.0	22.8	192.4558977
4										
5										
6										
7										
8										
9										
10										
							Lmax[4]	39	Leq	27

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
Night	12:00 AM	27.3	37.3	3.733964325	5419.563693
	1:00 AM	27.3	37.3	3.733964325	5419.563693
	2:00 AM	27.3	37.3	3.733964325	5419.563693
	3:00 AM	27.3	37.3	3.733964325	5419.563693
	4:00 AM	27.3	37.3	3.733964325	5419.563693
	5:00 AM	27.3	37.3	3.733964325	5419.563693
	6:00 AM	27.3	37.3	3.733964325	5419.563693
Day	7:00 AM	27.3	27.3	2.733964325	541.9563693
	8:00 AM	27.3	27.3	2.733964325	541.9563693
	9:00 AM	27.3	27.3	2.733964325	541.9563693
	10:00 AM	27.3	27.3	2.733964325	541.9563693
	11:00 AM	27.3	27.3	2.733964325	541.9563693
	12:00 PM	27.3	27.3	2.733964325	541.9563693
	1:00 PM	27.3	27.3	2.733964325	541.9563693
	2:00 PM	27.3	27.3	2.733964325	541.9563693
	3:00 PM	27.3	27.3	2.733964325	541.9563693
	4:00 PM	27.3	27.3	2.733964325	541.9563693
	5:00 PM	27.3	27.3	2.733964325	541.9563693
	6:00 PM	27.3	27.3	2.733964325	541.9563693
	7:00 PM	27.3	27.3	2.733964325	541.9563693
	8:00 PM	27.3	27.3	2.733964325	541.9563693
	9:00 PM	27.3	27.3	2.733964325	541.9563693
Night	10:00 PM	27.3	37.3	3.733964325	5419.563693
	11:00 PM	27.3	37.3	3.733964325	5419.563693
			Sum		56905.41877
			Sum/24		2371.059116
			Log10(Sum/24)		3.374942382
			10*Log10(Sum/24)		33.74942382
			24 Hour Ldn		34

Mechanical Equipment Noise Calculation

Receptor:	Receiving Couch Residence (east of site)	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
		Reference (dBA) 25 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)		
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Commercial grade mechanical ventilation equipment	60	4	100	900	1	3	25.9	16.3	42.96872716
2										
3										
4										
5										
6										
7										
8										
9										
10										
									Leq	16

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to rooftop parapet and soundwall shielding

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
Night	12:00 AM	16.3	26.3	2.633152489	429.6872716
	1:00 AM	16.3	26.3	2.633152489	429.6872716
	2:00 AM	16.3	26.3	2.633152489	429.6872716
	3:00 AM	16.3	26.3	2.633152489	429.6872716
	4:00 AM	16.3	26.3	2.633152489	429.6872716
	5:00 AM	16.3	26.3	2.633152489	429.6872716
	6:00 AM	16.3	26.3	2.633152489	429.6872716
Day	7:00 AM	16.3	16.3	1.633152489	42.96872716
	8:00 AM	16.3	16.3	1.633152489	42.96872716
	9:00 AM	16.3	16.3	1.633152489	42.96872716
	10:00 AM	16.3	16.3	1.633152489	42.96872716
	11:00 AM	16.3	16.3	1.633152489	42.96872716
	12:00 PM	16.3	16.3	1.633152489	42.96872716
	1:00 PM	16.3	16.3	1.633152489	42.96872716
	2:00 PM	16.3	16.3	1.633152489	42.96872716
	3:00 PM	16.3	16.3	1.633152489	42.96872716
	4:00 PM	16.3	16.3	1.633152489	42.96872716
	5:00 PM	16.3	16.3	1.633152489	42.96872716
	6:00 PM	16.3	16.3	1.633152489	42.96872716
	7:00 PM	16.3	16.3	1.633152489	42.96872716
	8:00 PM	16.3	16.3	1.633152489	42.96872716
	9:00 PM	16.3	16.3	1.633152489	42.96872716
Night	10:00 PM	16.3	26.3	2.633152489	429.6872716
	11:00 PM	16.3	26.3	2.633152489	429.6872716
			Sum		4511.716352
			Sum/24		187.9881813
			Log10(Sum/24)		2.274130546
			10*Log10(Sum/24)		22.74130546
			24 Hour Ldn		23

Mechanical Equipment Noise Calculation

Receptor:	Receiving school facility	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
		Reference (dBA) 25 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)		
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Commercial grade mechanical ventilation equipment	60	4	100	1265	1	3	22.9	11.9	15.47420838
2										
3										
4										
5										
6										
7										
8										
9										
10										
									Leq	12

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to rooftop parapet and soundwall shielding

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
Night	12:00 AM	11.9	21.9	2.189608441	154.7420838
	1:00 AM	11.9	21.9	2.189608441	154.7420838
	2:00 AM	11.9	21.9	2.189608441	154.7420838
	3:00 AM	11.9	21.9	2.189608441	154.7420838
	4:00 AM	11.9	21.9	2.189608441	154.7420838
	5:00 AM	11.9	21.9	2.189608441	154.7420838
	6:00 AM	11.9	21.9	2.189608441	154.7420838
Day	7:00 AM	11.9	11.9	1.189608441	15.47420838
	8:00 AM	11.9	11.9	1.189608441	15.47420838
	9:00 AM	11.9	11.9	1.189608441	15.47420838
	10:00 AM	11.9	11.9	1.189608441	15.47420838
	11:00 AM	11.9	11.9	1.189608441	15.47420838
	12:00 PM	11.9	11.9	1.189608441	15.47420838
	1:00 PM	11.9	11.9	1.189608441	15.47420838
	2:00 PM	11.9	11.9	1.189608441	15.47420838
	3:00 PM	11.9	11.9	1.189608441	15.47420838
	4:00 PM	11.9	11.9	1.189608441	15.47420838
	5:00 PM	11.9	11.9	1.189608441	15.47420838
	6:00 PM	11.9	11.9	1.189608441	15.47420838
	7:00 PM	11.9	11.9	1.189608441	15.47420838
	8:00 PM	11.9	11.9	1.189608441	15.47420838
	9:00 PM	11.9	11.9	1.189608441	15.47420838
Night	10:00 PM	11.9	21.9	2.189608441	154.7420838
	11:00 PM	11.9	21.9	2.189608441	154.7420838
			Sum		1624.79188
			Sum/24		67.69966165
			Log10(Sum/24)		1.830586498
			10*Log10(Sum/24)		18.30586498
			24 Hour Ldn		18

Loading/Unloading Noise Calculation

Receptor:	Receiving school facility	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements							
		Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Loading/Unloading Noise Calculation	70	2	25	1030	1	6	37.7	21.6	143.6707448
2	Loading/Unloading Noise Calculation	70	2	25	1050	1	6	37.6	21.3	135.6163714
3	Loading/Unloading Noise Calculation	70	2	25	1070	1	6	37.4	21.1	128.1529726
4	Loading/Unloading Noise Calculation	70	2	25	1090	1	6	37.2	20.8	121.2273254
5	Loading/Unloading Noise Calculation	70	2	25	1210	1	6	36.3	19.5	88.61840037
6	Loading/Unloading Noise Calculation	70	2	25	1230	1	6	36.2	19.3	84.36546081
7										
8										
9										
10										
							Lmax[4]	38	Leq	28

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
Night	12:00 AM	28.5	38.5	3.846121319	7016.512754
	1:00 AM	28.5	38.5	3.846121319	7016.512754
	2:00 AM	28.5	38.5	3.846121319	7016.512754
	3:00 AM	28.5	38.5	3.846121319	7016.512754
	4:00 AM	28.5	38.5	3.846121319	7016.512754
	5:00 AM	28.5	38.5	3.846121319	7016.512754
	6:00 AM	28.5	38.5	3.846121319	7016.512754
Day	7:00 AM	28.5	28.5	2.846121319	701.6512754
	8:00 AM	28.5	28.5	2.846121319	701.6512754
	9:00 AM	28.5	28.5	2.846121319	701.6512754
	10:00 AM	28.5	28.5	2.846121319	701.6512754
	11:00 AM	28.5	28.5	2.846121319	701.6512754
	12:00 PM	28.5	28.5	2.846121319	701.6512754
	1:00 PM	28.5	28.5	2.846121319	701.6512754
	2:00 PM	28.5	28.5	2.846121319	701.6512754
	3:00 PM	28.5	28.5	2.846121319	701.6512754
	4:00 PM	28.5	28.5	2.846121319	701.6512754
	5:00 PM	28.5	28.5	2.846121319	701.6512754
	6:00 PM	28.5	28.5	2.846121319	701.6512754
	7:00 PM	28.5	28.5	2.846121319	701.6512754
	8:00 PM	28.5	28.5	2.846121319	701.6512754
	9:00 PM	28.5	28.5	2.846121319	701.6512754
Night	10:00 PM	28.5	38.5	3.846121319	7016.512754
	11:00 PM	28.5	38.5	3.846121319	7016.512754
			Sum		73673.38391
			Sum/24		3069.72433
			Log10(Sum/24)		3.487099376
			10*Log10(Sum/24)		34.87099376
			24 Hour Ldn		35

Loading/Unloading Noise Calculation

Receptor:	Receiving school facility	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements							
		Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Loading/Unloading Noise Calculation	70	2	25	1280	1	3	38.8	21.7	149.3654351
2	Loading/Unloading Noise Calculation	70	2	25	1300	1	6	35.7	18.5	71.45785251
3	Loading/Unloading Noise Calculation	70	2	25	1320	1	6	35.6	18.3	68.25873315
4	Loading/Unloading Noise Calculation	70	2	25	1340	1	6	35.4	18.1	65.24776234
5	Loading/Unloading Noise Calculation	70	2	25	1360	1	6	35.3	18.0	62.41130911
6	Loading/Unloading Noise Calculation	70	2	25	1380	1	6	35.2	17.8	59.73691054
7										
8										
9										
10										
							Lmax[4]	39	Leq	27

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
Night	12:00 AM	26.8	36.8	3.678042856	4764.780028
	1:00 AM	26.8	36.8	3.678042856	4764.780028
	2:00 AM	26.8	36.8	3.678042856	4764.780028
	3:00 AM	26.8	36.8	3.678042856	4764.780028
	4:00 AM	26.8	36.8	3.678042856	4764.780028
	5:00 AM	26.8	36.8	3.678042856	4764.780028
	6:00 AM	26.8	36.8	3.678042856	4764.780028
Day	7:00 AM	26.8	26.8	2.678042856	476.4780028
	8:00 AM	26.8	26.8	2.678042856	476.4780028
	9:00 AM	26.8	26.8	2.678042856	476.4780028
	10:00 AM	26.8	26.8	2.678042856	476.4780028
	11:00 AM	26.8	26.8	2.678042856	476.4780028
	12:00 PM	26.8	26.8	2.678042856	476.4780028
	1:00 PM	26.8	26.8	2.678042856	476.4780028
	2:00 PM	26.8	26.8	2.678042856	476.4780028
	3:00 PM	26.8	26.8	2.678042856	476.4780028
	4:00 PM	26.8	26.8	2.678042856	476.4780028
	5:00 PM	26.8	26.8	2.678042856	476.4780028
	6:00 PM	26.8	26.8	2.678042856	476.4780028
	7:00 PM	26.8	26.8	2.678042856	476.4780028
	8:00 PM	26.8	26.8	2.678042856	476.4780028
	9:00 PM	26.8	26.8	2.678042856	476.4780028
Night	10:00 PM	26.8	36.8	3.678042856	4764.780028
	11:00 PM	26.8	36.8	3.678042856	4764.780028
			Sum		50030.19029
			Sum/24		2084.591262
			Log10(Sum/24)		3.319020913
			10*Log10(Sum/24)		33.19020913
			24 Hour Ldn		33

Appendix I:
Transportation Supporting Information

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RESOLUTION NO. 2023-72

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON, CALIFORNIA APPROVING A CITYWIDE POLICY ESTABLISHING VEHICLE MILES TRAVELED (VMT) AS THE STANDARD OF MEASUREMENT FOR POTENTIAL VEHICLE TRAFFIC IMPACTS CONSISTENT WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

WHEREAS, the California Environmental Quality Act (CEQA) was enacted by the State of California in 1970 to ensure the long-term protection of the environment and requires public agencies to analyze and disclose the effects of their actions on the environment; and

WHEREAS, in spite of more than 50 years of CEQA regulation, climate change caused in part by policies that favor the single occupant automobile represents a growing danger to human health, safety, economic prosperity, basic services, and natural resources; and

WHEREAS, the State of California as a whole, and Napa County residents, the economy, and environment have experienced adverse effects associated with climate change, such as a prolonged wildfire seasons and firestorms, rising temperatures, mudslides, severe droughts, property destruction and damage to infrastructure; and

WHEREAS, American Canyon has a long history of supporting policies to protect the environment. In 2013, American Canyon's Energy Efficiency Climate Action Plan (EECAP) was the first Climate Action Plan adopted in Napa County; and

WHEREAS, on June 18, 2019, the City Council approved a Countywide Commitment to Address Climate Change Proclamation declaring the City's support of local actions to address climate change including joining the Napa Countywide Climate Action Committee (CAC); and

WHEREAS, in July 2019, the City approved the Broadway District Specific Plan, which furthers the intent of SB743 by promoting integrated land uses that facilitate transportation through many forms, such as bicycle, walking, transit, and carpooling; and

WHEREAS, on November 16, 2021, the City Council approved a Climate Emergency Proclamation; and

WHEREAS, on February 1, 2022, the City Council approved a Climate Emergency Resolution; and

WHEREAS, public agencies in California have historically attempted to combat traffic congestion by relying on a metric known as "Level of Service" (LOS) standards. Developed in the post-war US specifically for highway travel, the LOS standard assesses the relationship between traffic speed, volume and density, putting a priority on how well automobiles flow through a street network; and

WHEREAS, the LOS standard fails to combat congestion in the long run because it considers all vehicles equally: a single person in a car counts as much as 50 people in a bus, even though 50 people in a single vehicle contribute far less to congestion than 50 people in 50 vehicles. The convenience of a short term free-flowing roadway only encourages more single occupant automobiles. Thus, measuring only the vehicles on a crowded roadway misses the fact that some of those vehicles are causing a real problem; and

WHEREAS, policies, such as LOS that prioritize use of the single occupant automobile result in expensive road improvements and encourage urban sprawl to the detriment of other mobility alternatives, such as walking, biking, and transit; and

WHEREAS, according to the California Air Resources Board (CARB), emphasis on prioritizing single-occupant automobile convenience has resulted in transportation as the leading source of GHG pollution in California of which passenger vehicles represent the largest single source of transportation GHG emissions in California; and

WHEREAS, in 2013, the State of California Legislature passed, and Governor Brown signed Senate Bill (SB) 743 (Steinberg). SB 743 helps reduce greenhouse gas (GHG) emissions overall by promoting integrated land uses that facilitate transportation through many forms, such as bicycle, walking, transit, and carpooling; and

WHEREAS, in furtherance of its intent, Senate Bill 743 directs OPR to produce CEQA guidance for cities to reduce automobile travel by replacing LOS from transportation analysis under CEQA with Vehicle Miles Traveled ("VMT"), or another measure that "promote(s) greenhouse gas emissions reduction, development of multimodal transportation networks, and a diversity of land uses"; and

WHEREAS, the California Office of Planning and Research (OPR) develops CEQA Guidelines to interpret CEQA statutes and published court decisions, including several appendices to the CEQA Guidelines that contain forms and guidance for lead agencies when performing environmental review; and

WHEREAS, public agencies are encouraged to develop standards and procedures to implement CEQA Guidelines, such as replacing LOS from transportation analysis under CEQA with VMT by adopting local CEQA thresholds of significance; and

WHEREAS, California cities, as of July 1, 2020, began implementing the new law on applicable projects.; and

WHEREAS, State law allows lead agencies to set VMT thresholds of significance based either on local or regional per capita averages; and

WHEREAS, effective October 1, 2018, the California Air Resources Board (CARB) target for the nine-county San Francisco Bay Area region is a 19 percent reduction in per capita greenhouse gas emissions from passenger vehicles by 2035, when compared to 2005; and

WHEREAS, when a public agency develops a local threshold of significance, CEQA Guidelines require the threshold of significance be adopted through a public review process and supported by substantial evidence; and

WHEREAS, establishing a VMT standard will further accomplish SB 743 by measuring mobility at a "holistic" level, such as the amount and distance people drive, taking the number of passengers within a vehicle into account; and

WHEREAS, General Plan Goal 1U directs the City to "Conduct decisive near-term action to reduce greenhouse gas emissions in American Canyon"; and

WHEREAS, General Plan Policy 1.37.4 directs the City to "Reduce vehicle miles travelled by encouraging future land uses that feature a compact mixed-use urban form connected with pedestrian and bicycle trails"; and

WHEREAS, adopting a VMT policy will fulfill General Plan goals and policies to reduce GHG emissions and bring the City of American Canyon's transportation analysis methodology in line with State and City goals pursuant to Senate Bill 743 and the General Plan; and

WHEREAS, CEQA Guidelines Section 15064.7(b) directs the City to adopt thresholds of significance based on substantial evidence by ordinance, resolution, rule or regulation through a public process; and

WHEREAS, on behalf of the City, GHD prepared a Technical Memorandum that provides supporting documentation for appropriate VMT Thresholds in the City of American Canyon; and

WHEREAS, the GHD Technical Memorandum would establish the City follow the framework suggested by the Governor's Office of Planning and Research (OPR) in its Technical Advisory on Evaluating Transportation Impacts in CEQA; and

WHEREAS, the City's Traffic Model, as prepared by GHD, calculates the existing rate of residential VMT per capita is estimated to be 16.6 miles and the existing daily rate of VMT per employee is estimated to be 34.1 miles; and

WHEREAS, on August 24, 2023, the City of American Canyon Planning Commission unanimously recommended approval of the VMT policy; and

WHEREAS, on September 5, 2023, the City Council considered the VMT policy, at which time all those in attendance were given the opportunity to speak on this proposal, and all comments were reviewed and considered.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of American Canyon accepts the Technical Memorandum prepared by GHD that provides supporting documentation for appropriate VMT Thresholds in the City of American Canyon. A copy of the Technical Memorandum is incorporated into this Resolution as Exhibit A.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council of the City of American Canyon approves a Senate Bill (SB) 743 California Environmental Quality Act (CEQA) VMT Policy as follows:

SECTION 1: CEQA FINDINGS

The VMT Policy is exempt from review under the California Environmental Quality Act ("CEQA") pursuant to Public Resources Code Section 21065 (definition of a CEQA "project"), CEQA Guidelines Section 15064.7 (requirements for adopting thresholds of significance), and CEQA Guidelines Section 15061(b)(3) (commonsense exemption), CEQA Guidelines Section 15307 Actions by Regulatory Agencies for Protection of Natural Resources, and CEQA Guidelines Section 15308 Actions by Regulatory Agencies for Protection of the Environment. CEQA Guidelines Section 15307 and 15308 are applicable because the proposed VMT Policy will fulfill the City's implementation of SB 743 which is intended to address climate change impacts that pose an immediate and growing threat to California's economy, environment, and public health.

SECTION 2: BASELINE VEHICLE MILES TRAVELLED (VMT)

The VMT for the General Plan, long-range plans, discretionary development applications, and transportation projects shall be evaluated in relation to the City of American Canyon Average VMT which is 16.6 miles per resident and 34.1 miles per employee.

SECTION 3. CEQA VMT THRESHOLDS

The VMT threshold of significance shall be 19% below the Citywide average. Unless exempt as described in this Resolution, this VMT threshold standard shall apply to all General Plan amendments, long-range plans, discretionary development applications, and transportation projects.

SECTION 4. CEQA LAND USE VMT SCREENING CRITERIA EXEMPTIONS

The following screening criteria shall exempt General Plan, long-range plans, and discretionary development applications from a VMT analysis:

TYPE	SCREENING CRITERIA
CEQA Exemption	Any project exempt from CEQA.
Development Agreement	Any project entitled under the terms of a Development Agreement currently in effect.
Program Environmental Impact Report (EIR)	Any project consistent with a Program EIR for which a VMT analysis has been conducted.
Near transit station	Any Project located within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor (CEQA Guidelines section 15064.3(b)(1)) (OPR Technical Advisory)
Affordable Housing	Housing affordable to residents earning up to 120% of the Napa County Area Median Income (AMI) shall be presumed to have a less-than-significant impact. (OPR Technical Advisory)
Local-Serving Retail/Service/Recreational Land Use	A local-serving retail/service or recreational project with a documented trade area up to 6 miles. (OPR Technical Advisory)
Mixed-Use Projects	Evaluate each mixed-use component independently and apply the significance threshold for each project type (residential /retail). An off-site trip reduction may be calculated using the Institute of Transportation Engineer's (ITE's) internal capture methodology. (OPR Technical Advisory)

SECTION 5. CEQA LAND USE VMT SCREENING CRITERIA EXEMPTIONS

The following screening criteria shall exempt City-initiated Transportation projects from a VMT analysis:

TYPE
• Projects addressed at a programmatic level, such as in a Regional Transportation Plan EIR, whose impacts have been mitigated to less-than-significant. (CEQA Guidelines Section 15064.3(b))
• Rehabilitation, maintenance, replacement, safety, and repair projects on existing transportation assets (e.g., highways; roadways; bridges; culverts; Transportation Management System field elements such as cameras, message signs, detection, or signals; tunnels; transit systems; and assets that serve bicycle and pedestrian facilities) that do not add additional motor vehicle capacity.
• Roadside safety devices or hardware installation such as median barriers and guardrails.
• Roadway shoulder enhancements to provide "breakdown space," dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes.
• Auxiliary lane additions to improve roadway safety if less than one mile in length.
• Traffic lane installation, removal, or reconfiguration not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes.
• Roadway capacity addition on local or collector streets when the project substantially improves pedestrian, cyclist, and, if applicable, transit conditions.
• General-purpose lane (including ramps) conversion to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel.
• Addition of a new permanently restricted transit vehicle lane.
• Reduction in number of through lanes.
• Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g., HOV, HOT, or trucks) from general vehicles.
• Traffic control device installation, removal, or reconfiguration, including Transit Signal Priority (TSP) features.
• Traffic metering system installation, detection systems, cameras, changeable message signs and other electronics designed to optimize vehicle, bicycle, or pedestrian flow.
• Signal timing to optimize vehicle, bicycle, or pedestrian flow.
• Roundabout or traffic circle installation.
• Traffic calming device installation or reconfiguration.
• Adoption of or increase in tolls.
• Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase.
• New transit service initiation.
• Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes.
• Off-street or on-street parking space removal or relocation.
• On-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs) adoption or modification.

TYPE
• Traffic wayfinding signage. • Rehabilitation and maintenance projects that do not add motor vehicle capacity. • Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way. • Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel. • Installation of publicly available alternative fuel/charging infrastructure. • Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas that do not increase overall vehicle capacity along the corridor.

SECTION 6. AMENDMENTS TO CEQA LAND USE VMT SCREENING CRITERIA EXEMPTIONS
The VMT CEQA Screening Criteria exemptions listed in Section 4 and 5 of this Resolution are intended to identify most, but not all potential exemptions.

Interpretation for General Plan, Long-range Plans, and Discretionary Development Applications: Interpretation of VMT exemptions for project types not specifically listed above shall be conducted by the Community Development Director or designee, consistent with the process codified in American Canyon Municipal Code Section 19.01.120 Interpretation.

Interpretation for City-Initiated Transportation Projects: Interpretation of VMT exemptions for project types not specifically listed above shall be conducted by the Public Works Director or designee consistent with the process codified in American Canyon Municipal Code Section 19.01.120 Interpretation.

Administrative Modification: Amendments to VMT Screening Criteria exemptions by State Law, including but not limited to the California Environmental Quality Act (Public Resources Code *§§21000 et seq.*) shall be incorporated into the VMT Screening Exemption Resolution by reference.

SECTION 7. SEVERABILITY. If any section, sentence, clause or phrase of this Resolution is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution. The City Council declares that it would have passed this Resolution and adopted this Resolution and each section, sentence, clause or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the City Council of the City of American Canyon held on the 5th day of September, 2023, by the following vote:

AYES: **Councilmembers Aboudamous, Joseph, Oro, Vice Mayor Washington, and Mayor Garcia**
NOES: **None**
ABSTAIN: **None**
ABSENT: **None**

Leon Garcia

Leon Garcia, Mayor

ATTEST:

Taresa Geilfuss, CMC, City Clerk

APPROVED AS TO FORM:

William D. Ross, City Attorney

EXHIBITS

A. Technical Memorandum Supporting Documentation for VMT Thresholds Resolution

EXHIBIT A

DRAFT Technical Memorandum

July 18, 2023

To	Brent Cooper, City of American Canyon	**Email**	bcooper@cityofamericancanyon.org
From	Don Hubbard and Colin Burgett, GHD	**Project No.**	11207243
Project Name	American Canyon General Plan Update		
Subject	Supporting Documentation for VMT Thresholds Resolution		

1. Introduction

SB 743 changed the way that transportation impacts are to be evaluated under CEQA. The key change was that vehicle delay, as measured using vehicular level-of-service (LOS), is no longer considered an impact under CEQA. It has been replaced as a metric with vehicle-miles traveled (VMT), with increases in VMT being considered a significant impact under CEQA.

The change in how transportation impacts are to be assessed has triggered a need for the City to develop thresholds of significance compatible with the new system. The consulting team has worked with City staff to develop these thresholds. The purpose of this memo is to document the key elements of the thresholds.

2. State Reduction Targets

SB 375 assigned the task of setting regional targets for greenhouse gas (GHG) emission reductions from passenger vehicles to the California Air Resources Board (CARB). These targets are based on extensive analysis by CARB on what actions are needed for different sectors (transportation, energy generation, building energy use, etc.) for the state to reach its GHG reduction goals. CARB has set a target reduction for GHGs from passenger vehicles in the MTC/ABAG region at a 19% reduction by 2035[1]. Based on the substantial evidence provided by CARB, we can assume that if future developments in American Canyon generate 19% fewer VMT/unit than the corresponding existing units, then those developments will have a less-than-significant VMT impact.

3. Analysis of VMT Impacts of Residential, Office and Industrial Developments

The choice of which baseline to use for VMT evaluation is left to the lead agency. The VMT generated by new projects could, for example, be compared to the existing regional average, or the existing county-wide average, or the existing local (city-wide) average. In this case we recommend that new

[1] See: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets

developments in American Canyon be compared to existing developments in American Canyon. The recommendation to use a local average is based on the fact that the community character and physical characteristics of American Canyon are so different from the most populous parts of the MTC region (San Jose, San Francisco, Oakland, etc.) that using a regional average dominated by the largest jurisdictions would not be an apples-to-apples comparison. Moreover, so long as each jurisdiction in the region makes a 19% reduction from its existing uses, the aggregate result for the region as a whole would meet the State's goals. Regarding the development types being evaluated, we recommend that the City follow the framework suggested by the Governor's Office of Planning and Research (OPR) in its Technical Advisory on Evaluating Transportation Impacts in CEQA[2]:

- Residential developments should be evaluated using VMT/capita as the metric. This includes trips of all types where one end of the trip is the traveler's residence (work commute trips, shopping trips, school trips, etc.).
- Office and industrial developments should be evaluated using VMT/employee as the metric. This VMT is for the employees' own trips to work, and does not include trips made by other people to the employee's worksite.

GHD utilized the American Canyon Travel Demand Model (ACTDM), incorporating U.S. Census data relevant to work commute patterns, and regional trip length data relevant to VMT attributable to trips outside the model area, to estimate the average existing rates of residential VMT per Capita, and non-residential VMT per Employee, and the associated thresholds:

Residential VMT (attributable to homes in American Canyon):

Residential VMT	/ Population	=	Existing VMT/Capita	*	19% reduction	=	Threshold VMT/Capita
381,468	22,959		16.6		81%		13.5

The residential VMT is the sum of the VMT attributable to all home-based trip productions to/from dwelling units located in American Canyon, incorporating the distance for each trip from the distance matrix in the model. This includes VMT taking place outside the area of the model's traffic analysis zones. These outer areas are represented with external links representing the average distance trips to/from American Canyon make in their respective directions.

Employment VMT (attributable to work trips to/from jobs in American Canyon):

Employment VMT	/ Jobs	=	Existing VMT/Job	*	19% reduction	=	Threshold VMT/job
151,916	4,442		34.2		81%		27.7

The employment VMT is the sum of all home-based work trips to and from places of employment in American Canyon. This includes VMT taking place outside the area of the model's traffic analysis zones (trips to and from homes located in other jurisdictions outside of the City and model area). These outer areas are represented with external links representing the average distance trips from the outer areas to work sites in American Canyon.

4. Analysis of VMT Impacts of Retail & Hotel Developments

Retail, hotel and service developments need to be handled somewhat differently for other types of non-residential land uses, such as office or industrial buildings. This is because they attract trips from customers, patrons, or visitors in addition to commute trips made by their own employees. These two components of the traffic generated by retail and service uses need to be handled separately:

[2] See: **https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf**

- ***VMT attributable to retail, hotel and service employees should be evaluated in the same manner as for office or industrial uses.*** That is, the average automobile commute lengths should be compared to the target reduction from the city-wide average rate of VMT/job.
- ***VMT attributable to retail customers should be assessed based on the anticipated net change in total regional VMT attributable to customer trips to/from the proposed development.*** OPR recommends that the impact of visitor/customer trips for retail uses be assessed based on whether overall VMT for the region increases or decreases as a result of the development. For local-serving retail and service developments, a presumption may be made that visitor trips to these uses will be short trips that substitute for longer trips to a more distant store of a similar type. The International Council of Shopping Centers has developed a classification system for retail developments of various sorts[3] and performed research into the trade area size of each (see Table 1). Based on this information, we have determined that Community Centers, Neighborhood Centers, and Strip/Convenience Centers are local-serving and can be presumed to have less-than-significant VMT impacts. Other types of retail developments would require quantitative assessment of their trade area to determine their VMT impacts.
- ***VMT attributable to hotel guests should be assessed in a similar manner as retail customers, based on whether total VMT for the region would increase as a result of guest VMT attributable to the hotel development.*** Most hotels provide lodging for guests that, in the absence of a proposed new hotel, would simply stay at another hotel or lodging facility in the area. The assessment of VMT attributable to hotel guests should therefore be based on the net effect of the proposed hotel location, compared to the VMT that would be generated by those guests if they stayed at other lodging options in the area..

5. Analysis of VMT Impacts of Transportation Projects

Transportation projects serve trips but do not generate them the way that land development projects do. They may, however, increase VMT by inducing more or longer vehicle trips than would have taken place if the project were not constructed. OPR recommends that the VMT impacts of a transportation project should be considered significant if the project results in a net increase in regional VMT. This can be determined using the City's traffic model. However, model analysis are not needed for certain types of projects that OPR has determined are not likely to lead to a measurable and substantial effect on VMT[4]. These include:

- Projects addressed at a programmatic level, such as in a Regional Transportation Plan EIR, whose impacts have been mitigated to less-than-significant. (CEQA Guidelines Section 15064.3(b))
- Rehabilitation, maintenance, replacement, safety, and repair projects on existing transportation assets (e.g., highways; roadways; bridges; culverts; Transportation Management System field elements such as cameras, message signs, detection, or signals; tunnels; transit systems; and assets that serve bicycle and pedestrian facilities) that do not add additional motor vehicle capacity.
- Roadside safety devices or hardware installation such as median barriers and guardrails.
- Roadway shoulder enhancements to provide "breakdown space," dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes.

[3] See: https://www.icsc.com/uploads/research/general/US_CENTER_CLASSIFICATION.pdf
[4] See: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

- Auxiliary lane additions to improve roadway safety if less than one mile in length.
- Traffic lane installation, removal, or reconfiguration not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes.
- Roadway capacity addition on local or collector streets when the project substantially improves pedestrian, cyclist, and, if applicable, transit conditions.
- General-purpose lane (including ramps) conversion to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel.
- Addition of a new permanently restricted transit vehicle lane.
- Reduction in number of through lanes.
- Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g., HOV, HOT, or trucks) from general vehicles.
- Traffic control device installation, removal, or reconfiguration, including Transit Signal Priority (TSP) features.
- Traffic metering system installation, detection systems, cameras, changeable message signs and other electronics designed to optimize vehicle, bicycle, or pedestrian flow.
- Signal timing to optimize vehicle, bicycle, or pedestrian flow.
- Roundabout or traffic circle installation.
- Traffic calming device installation or reconfiguration.
- Adoption of or increase in tolls.
- Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase.
- New transit service initiation.
- Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes.
- Off-street or on-street parking space removal or relocation.
- On-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs) adoption or modification.
- Traffic wayfinding signage.
- Rehabilitation and maintenance projects that do not add motor vehicle capacity.
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way.
- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel.
- Installation of publicly available alternative fuel/charging infrastructure.
- Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas that do not increase overall vehicle capacity along the corridor.

Table 1: U.S. Shopping Center Classifications and Trade Area Size

U.S. Shopping-Center Classification and Characteristics												
Type of Shopping Center	Concept	Center Count	Aggregate GLA (Sq. Ft.)	% Share of Industry GLA	Average Size (Sq. Ft.)	Typical GLA Range (Sq. Ft.)	Acres	# of Anchors	% Anchor GLA	Typical Number of Tenants	Typical Type of Anchors	Trade Area Size
General-Purpose Centers		**112,520**										
Super-Regional Mall	Similar in concept to regional malls, but offering more variety and assortment.	620	778,336,548	10.2%	1,255,382	800,000+	60-120	3+	50-70%	NA	Full-line or junior department store, mass merchant, discount department store and/or fashion apparel store.	5-25 miles
Regional Mall	General merchandise or fashion-oriented offerings. Typically, enclosed with inward-facing stores connected by a common walkway. Parking surrounds the outside perimeter.	600	353,795,548	4.7%	589,659	400,000-800,000	40-100	2+	50-70%	40-80 stores	Full-line or junior department store, mass merchant, discount department store and/or fashion apparel store.	5-15 miles
Community Center ("Large Neighborhood Center")	General merchandise or convenience- oriented offerings. Wider range of apparel and other soft goods offerings than neighborhood centers. The center is usually configured in a straight line as a strip, or may be laid out in an L or U shape, depending on the site and design.	9,776	1,930,849,736	25.4%	197,509	125,000-400,000	10-40	2+	40-60%	15-40 stores	Discount store, supermarket, drug, large-specialty discount (toys, books, electronics, home improvement/furnishings or sporting goods, etc.)	3-6 miles
Neighborhood Center	Convenience oriented.	32,588	2,340,711,371	30.8%	71,827	30,000-125,000	3-5	1+	30-50%	5-20 stores	Supermarket	3 miles
Strip/Convenience	Attached row of stores or service outlets managed as a coherent retail entity, with on-site parking usually located in front of the stores. Open canopies may connect the store fronts, but a strip center does not have enclosed walkways linking the stores. A strip center may be configured in a straight line, or have an "L" or "U" shape. A convenience center is among the smallest of the centers, whose tenants provide a narrow mix of goods and personal services to a very limited trade area.	68,936	911,202,922	12.0%	13,218	< 30,000	<3	Anchor-less or a small convenience-store anchor.	NA	NA	Convenience store, such as a mini-mart.	<1 mile
Specialized-Purpose Centers		**3,275**										
Power Center	Category-dominant anchors, including discount department stores, off-price stores, wholesale clubs, with only a few small tenants.	2,258	990,416,667	13.0%	438,626	250,000-600,000	25-80	3+	70-90%	NA	Category killers, such as home improvement, discount department, warehouse club and off-price stores	5-10 miles
Lifestyle	Upscale national-chain specialty stores with dining and entertainment in an outdoor setting.	491	164,903,247	2.2%	335,852	150,000-500,000	10-40	0-2	0-50%	NA	Large format upscale specialty	8-12 miles
Factory Outlet	Manufacturers' and retailers' outlet stores selling brand-name goods at a discount.	367	87,368,113	1.2%	238,060	50,000-400,000	10-50	NA	NA	NA	Manufacturers' and retailers' outlets	25-75 miles
Theme/Festival	Leisure, tourist, retail and service-oriented offerings with entertaiment as a unifying theme. Often located in urban areas, they may be adapted from older--sometimes historic--buildings and can be part of a mixed-use project.	159	23,498,769	0.3%	147,791	80,000-250,000	5-20	Unspecified	NA	NA	Restaurants, entertainment	25-75 miles
Limited-Purpose Property		**62**										
Airport Retail	Consolidation of retail stores located within a commercial airport	62	15,452,860	0.2%	249,240	75,000-300,000	NA	NA	NA	NA	No anchors; retail includes specialty retail and restaurants	NA
Total Industry		**115,857**										
Total Industry	**Traditional + Specialty + Special Purpose**	**115,857**	**7,596,535,781**	**100.0%**	**65,568**							

Sources: ICSC Research and CoStar Realty Information, Inc . (www.costar.com)

January 2017

Documents Incorporated by Reference in Draft EIR

As permitted by CEQA Guidelines Section 15150, this Draft EIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents, which have been incorporated by reference, has been briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and the Draft EIR has also been described. The documents and other sources that have been used in the preparation of this Draft EIR include but are not limited to:

- City of American Canyon General Plan
- American Canyon Municipal Code
- Napa County Airport Land Use Compatibility Plan
- City of American Canyon Urban Water Management Plan

In accordance with CEQA Guidelines Section 15150(b), the General Plan, the referenced documents and other sources used in the preparation of the Draft EIR are available for review at the American Canyon City Hall at the address shown below:

City of American Canyon City Hall
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Hours: Monday–Friday: 8:00 a.m. to 5:00 p.m.
Saturday–Sunday: Closed

Active Adults Center
2185 Elliot Drive
American Canyon, CA 94503
Hours: Monday - Friday 9:00 a.m. to 2:00 p.m.
Saturday–Sunday: Closed

American Canyon Library
300 Crawford Way
American Canyon, CA 94503
Hours: Monday, Tuesday, and Thursday–
Saturday: 10:00 a.m. to 6:00 p.m.
Wednesday: 12:00 p.m. to 8:00 p.m.
Sunday: Closed

SDG Commerce 220 EIR and CUP - Attachment 1.12 - Exhibit C: Final EIR

FCS
An ADEC Innovation

FINAL
Environmental Impact Report
SDG Commerce 220 Distribution Center Project
City of American Canyon, Napa County, California

State Clearinghouse Number 2023100842

Prepared for:
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
707.647.4337

Contact: William He, Senior Planner

Prepared by:
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Janna Waligorski, Project Manager

Date: October 4, 2024

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3.1 - Changes in Response to Specific Comments 3-1

Appendix A – Swainson Hawk Mitigation Support

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SECTION 1: INTRODUCTION

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15088, the City of American Canyon (Lead Agency) has evaluated the comments received on the SDG Commerce 220 Distribution Center Project Draft Environmental Impact Report (Draft EIR). Pursuant to CEQA Guidelines Section 15132, this Final EIR includes a list of persons, organizations, and agencies that provided comments on the Draft EIR; responses to the comments received regarding the Draft EIR; and errata, or revisions to the Draft EIR; as well as a Mitigation Monitoring and Reporting Program (MMRP) for use by the City of American Canyon during its review.

This document is organized into three sections:

- **Section 1—Introduction.** Provides an introduction to the Final EIR.
- **Section 2—Responses to Written Comments.** Provides a list of the agencies, organizations, and individuals who commented on the Draft EIR. Copies of all of the letters received regarding the Draft EIR and responses thereto are included in this section.
- **Section 3—Errata.** Includes an addendum listing refinements and clarifications on the Draft EIR, which have been incorporated.

The Final EIR includes the following contents:

- Draft EIR (provided under separate cover)
- Draft EIR Appendices (provided under separate cover)
- Responses to Written Comments on the Draft EIR and Errata (Section 2 and Section 3 of this document)
- Mitigation Monitoring and Reporting Program (provided under separate cover)

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SECTION 2: RESPONSES TO WRITTEN COMMENTS

2.1 - List of Authors

A list of public agencies, organizations, and individuals that provided comments on the SDG Commerce 220 Distribution Center Project Draft Environmental Impact Report (Draft EIR) is presented below. Each comment has been assigned a code. Individual comments within each communication have been numbered so comments can be crossed-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

Author **Author Code**

State Agencies

California Department of Fish and Wildlife ..... CDFW
California Department of Transportation ..... CALTRANS

Organizations

El Puente Comunitario ..... EPC
Napa/Solano Residents for Responsible Development ..... NSRRD
Soil Water Air Protection Enterprise ..... SWAPE
Shawn Smallwood ..... SMALLWOOD
Wilson Ihrig ..... IHRIG

Individuals

Yvonne Baginski (First Letter) ..... BAGINSKI 1
Yvonne Baginski (Second Letter) ..... BAGINSKI 2
Jeannette Goyetche ..... GOYETCHE

2.2 - Responses to Comments

2.2.1 - Introduction

In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15088, the City of American Canyon (City), as the Lead Agency, evaluated the comments received on the Draft EIR (State Clearinghouse No. 2023100842) for the SDG Commerce 220 Distribution Center Project and has prepared the following responses to the comments received. This Response to Comments document becomes part of the Final EIR for the proposed project in accordance with CEQA Guidelines Section 15132.

2.2.2 - Comment Letters and Responses

The comment letters reproduced in the following pages follow the same organization as used in the List of Authors.

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

July 22, 2024

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
WHe@cityofamericancanyon.org

Subject: SDG Commerce 220 Distribution Center Project, Draft Environmental Impact Report, SCH No. 2023100842, Napa County

Dear Mr. He:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (EIR) from the City of American Canyon (City) for SDG Commerce 220 Distribution Center Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] CDFW previously submitted comments in response to the Notice of Preparation of the Environmental Impact Report (NOP) in a letter dated November 17, 2023.

CDFW is submitting comments on the draft EIR to inform the City, as the Lead Agency, of potentially significant impacts to biological resources associated with the Project. **Thank you** for including in the draft EIR mitigation measures CDFW has recommended for past projects to mitigate impacts to special-status species such as burrowing owl (*Athene cunicularia*) and western pond turtle (*Actinemys marmorata*). 1

Based on Google Earth aerial imagery, it appears that Project construction may have prematurely started as recent equipment staging and earthmoving are visible. CDFW notified you of this issue via email on July 17, 2024 and you indicated that your records do not show any grading permits issued for the SDG Commerce 220 property and the Project should not start construction. **CDFW requests that the City investigate any unauthorized Project construction to uphold protection of fish and wildlife resources and compliance with CEQA and other environmental laws.**

CDFW ROLE 2

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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Species Act (CESA) or Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Agreement, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

2 CONT

PROJECT DESCRIPTION SUMMARY

Proponent: SDG Commerce 220, LLC

Objective: The Project would develop a 219,834-square-foot wine storage and distribution center, including the construction of vehicular access areas and drive isles and sharing a driveway with a neighboring facility. Additional vehicle parking spaces will be built, including 134 car spaces, 23 truck parking stalls,19 electric vehicle stalls, and 3 bicycle storage lockers with room for 12 bicycles. Construction activities are expected to span 9.5 months and will include landscaping and the construction of large concrete slabs and wall panels using typical construction equipment.

Location: The Project site is located on 1055 Commerce Court in the City of American Canyon, Napa County; Latitude 38.185969 North, Longitude -122.274294 West; and encompasses approximately 10.45 acres.

REGULATORY REQUIREMENTS

3

California Endangered Species Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA either during construction or over the life of the Project. **The Project has the potential to impact Swainson's hawk (*Buteo swainsoni*), CESA listed as threatened species, as further described below.** Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain an ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, & 15065.). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with CESA.

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Raptors and Other Nesting Birds

CDFW has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act. 3 CONT

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below, which are also included in **Attachment 1,** to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

I. Mitigation Measure Related Impact Shortcomings

MANDATORY FINDINGS OF SIGNIFICANCE. Does the Project have potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species? Does the Project have impacts that are individually limited, but cumulatively considerable?

AND

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service? 4

COMMENT 1: Swainson's hawk, draft EIR pages 3.3-15, 3.3-38, 3.3-39, and ES-8, Biological Resources Assessment page 42.

Issue: The draft EIR does not adequately mitigate potential impacts to Swainson's hawk. Mitigation Measure (MM) BIO-1b: Swainson's Hawk Avoidance and Minimization and Construction Monitoring of the draft EIR (page ES-8, 3.3-38) includes an insufficient buffer distance for occupied Swainson's hawk nests. Additionally, the draft EIR does not mitigate the loss of Swainson's hawk foraging habitat despite the Project site providing potentially suitable foraging habitat for this species and potentially suitable nest trees. There are unprocessed years 2023 and 2024 California Natural Diversity Database (CNDDB) records of potentially nesting Swainson's hawks approximately 1.4 miles north of the Project site, and a year 2021 CNDDB record of confirmed nesting Swainson's hawks along Fagan Creek approximately 1.9 miles north of the Project site,

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which is part of a cluster of nesting records indicating the Project site is likely used for foraging by nesting Swainson's hawks. 4 CONT

Specific impacts, why they may occur and be potentially significant:

Nesting Swainson's hawks

Thank you for including in MM BIO-1b (b) protocol-level Swainson's hawk surveys pursuant to the 2000 *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline) (draft EIR pages 3.4-35, 3.4-36, and 3.4-37). However, the proposed buffer distance of 600 feet (200 yards) around any detected active nests is potentially inadequate and therefore the Project has the potential to impact nesting Swainson's hawk through auditory or visual disturbances above ambient levels, which may result in Swainson's hawk nest abandonment and loss of eggs or reduced health and vigor and loss of young. This above survey protocol includes project activities which occur greater than 200 yards in a category of low disturbance to the reproductive success of individuals (TAC 2000 page 5). However, this "low" level of disturbance may still result in take, and a 600-foot buffer may not be adequate to prevent take of nesting Swainson's hawk. A more protective 0.5-mile buffer is recommended in both the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83992&inline) and the *Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991&inline) and should be implemented for this Project (CDFG 2012, and CEC and CDFG 2010). 5

Swainson's hawk foraging habitat

The Project's footprint will occupy approximately 10.45 acres (draft EIR page ES-1), displacing undeveloped grassland habitat. The draft EIR has established the potential for Swainson's hawk to nest in the vicinity of the Project site. However, it has not addressed mitigation for the loss of Swainson's hawk foraging habitat. Regarding nesting birds and all special-status bird species, the Biological Resources Assessment (page 42) states that "Although the site has been significantly disturbed in the past, the grassland on-site may provide marginal foraging opportunities to support nesting and rearing habitat." The draft EIR (page 3.3-15) states that "During the nesting season Swainson's hawk usually forage within 2 miles of the nest." Nesting Swainson's hawk adults and fledged young are limited in their foraging range and any in the vicinity of the Project site would likely rely on resources on it. Swainson's hawk chicks once fledged rely on nearby foraging resources to a greater extent than adults and are usually limited in their foraging scope to within just 0.5 miles from the nest (Woodbridge 1998). 6

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Additionally, in 2016, CDFW released a Status Review for Swainson's hawk in California and recommended the species retain its status as threatened under CESA (CDFW 2016). The review states there is no indication the species has reoccupied its historical range and the distribution of Swainson's hawk remains largely unchanged and restricted. Additionally, the review cites the **primary threat** to Swainson's hawk continues to be habitat loss, **especially the loss of suitable foraging habitat.** One recent study done by CDFW scientists indicated Swainson's hawk populations have been increasing, but also cautioned using this data to inform conservation planning, stating this apparent stability remains largely unclear (Furnas et al. 2022). The study cites concerns regarding impacts to Swainson's hawk from urban development, reduction in grasslands, and orchard and vineyard cultivation, all of which are prominent impacts in Napa County, where the Project is proposed.

6 CONT

Potentially significant impacts

Swainson's hawk is CESA listed as a threatened species and therefore is considered to be a threatened species pursuant to CEQA Guidelines section 15380. Therefore, if an active Swainson's hawk nest is disturbed by the Project or its foraging habitat is removed, the Project may result in a substantial reduction in the number or restriction in the range of a threatened species, which is considered a **Mandatory Finding of Significance** pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

7

Other large development projects in Napa County have not been required to mitigate for Swainson's hawk foraging habitat, despite CDFW's recommendations. Therefore, the net loss of foraging habitat from the proposed Project, in conjunction with other projects that have not mitigated for loss of Swainson's hawk foraging habitat, may also contribute to a significant cumulative impact to Swainson's hawk, which is a **Mandatory Finding of Significance.**

Recommended Mitigation Measures: To reduce potential impacts to Swainson's hawk to less-than-significant and comply with CESA, CDFW recommends incorporating the following into Mitigation Measures into MM BIO-1.

Swainson's Hawk Surveys: If Project activities are scheduled during the nesting season for Swainson's hawks (March 1 to September 15), prior to beginning work on the Project, a qualified biologist shall conduct surveys according to the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline) and prepare a report documenting the survey results. Survey methods shall be closely followed by starting early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys shall be conducted: 1) within a minimum 0.5-mile radius of the

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Project site or a larger area if needed to identify potentially impacted active nests, unless otherwise approved by CDFW in writing, and 2) for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys shall occur annually for the duration of the Project. The qualified biologist shall have a minimum of two years of experience implementing the survey methodology resulting in detections.

Swainson's Hawk Avoidance Buffer: If active Swainson's hawk nests are detected, the Project shall immediately notify CDFW and implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a qualified biologist, unless otherwise approved by CDFW in writing. Any detected nesting Swainson's hawk shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities, unless otherwise approved in writing by CDFW. If take of Swainson's hawk cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP. 8 CONT

Swainson's Hawk Foraging Habitat Mitigation: Prior to Project construction, the Project shall provide Swainson's hawk foraging habitat mitigation at a 1:1 ratio, which shall include: 1) permanent preservation of the species' foraging habitat through a conservation easement and implementing and funding a long-term management plan in perpetuity, or 2) purchase of Swainson's hawk foraging habitat credits at a mitigation bank, unless otherwise approved in writing by CDFW. The Project shall obtain CDFW's written approval of the habitat mitigation acreage and proposed habitat mitigation land or credits.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNDDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. 9

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is 10

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required in order for the underlying Project approval to be operative, vested, and final. (See Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

CONCLUSION

CDFW appreciates the opportunity to comment on the draft EIR to assist the City in identifying and mitigating Project impacts on biological resources. 10 CONT

Questions regarding this letter or further coordination should be directed to Nicholas Magnuson, Environmental Scientist, at Nicholas.Magnuson@wildlife.ca.gov or (707) 815-4166; or Melanie Day, Senior Environmental Scientist (Supervisory), at Melanie.Day@wildlife.ca.gov or (707) 210-4415.

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

Attachment 1. Draft Mitigation and Monitoring Reporting Plan

ec: Office of Planning and Research, State Clearinghouse (SCH No. 2023100842)

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REFERENCES

CDFG, 2012. *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni)* in the Central Valley of California. California Department of Fish and Game, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83992&inline

California Department of Fish and Wildlife (CDFW), 2016. 5-year Status Review: Swainson's hawk (*Buteo swainsoni*). Prepared for the California Fish and Game Commission. Nongame Bird and Mammal Program 1416 Ninth Street, Sacramento, CA.

CEC and CDFG, 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California. California Energy Commission and Department of Fish and Game, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991&inline

TAC, 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline

Woodbridge, B. 1998. Swainson's Hawk (*Buteo swainsoni*). In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California. California Partners in Flight.

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ATTACHMENT 1

Draft Mitigation and Monitoring Reporting Plan

Biological Resources (BIO)			
Mitigation Measure (MM)	**Description**	**Timing**	**Responsible Party**
BIO-1a	*Swainson's Hawk Surveys*: If Project activities are scheduled during the nesting season for Swainson's hawks (March 1 to September 15), prior to beginning work on the Project, a qualified biologist shall conduct surveys according to the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline) and prepare a report documenting the survey results. Survey methods shall be closely followed by starting early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys shall be conducted: 1) within a minimum 0.5-mile radius of the Project site or a larger area if needed to identify potentially impacted active nests, unless otherwise approved by CDFW in writing, and 2) for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys shall occur annually for the duration of the Project. The qualified biologist shall have a minimum of two years of experience implementing the survey methodology resulting in detections.	Prior to Ground Disturbance	Project Applicant
BIO-1b	*Swainson's Hawk Nest Avoidance Buffer*: If active Swainson's hawk nests are detected, the Project shall immediately notify CDFW and implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a qualified biologist, unless otherwise approved by CDFW in writing. Any detected nesting Swainson's hawk shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities, unless otherwise approved in writing by CDFW. If take of Swainson's hawk cannot be	Prior to Ground Disturbance and for Duration of Construction	Project Applicant

11

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	avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP.			
BIO-1c	*Swainson's Hawk Foraging Habitat Mitigation:* Prior to Project construction, the Project shall provide Swainson's hawk foraging habitat mitigation at a 1:1 ratio, which shall include: 1) permanent preservation of the species' foraging habitat through a conservation easement and implementing and funding a long-term management plan in perpetuity, or 2) purchase of Swainson's hawk foraging habitat credits at a mitigation bank, unless otherwise approved in writing by CDFW. The Project shall obtain CDFW's written approval of the habitat mitigation acreage and proposed habitat mitigation land or credits.	Prior to Ground Disturbance	Project Applicant	11 CONT

State Agencies

California Department of Fish and Wildlife (CDFW)

Response to CDFW-1
The commenter provides introductory statements saying that the agency has received the EIR and is submitting comments concerning it. The commenter also claims that project equipment staging and earthmoving were visible in recent aerial imagery and requests the City to investigate any unauthorized construction activities.

The recent grading on-site was completed as part of the construction of the adjacent SDG Commerce 217 Distribution Center Project (PL20-0008) and completed under a grading permit issued by the City of American Canyon. In accordance with CEQA, the grading was considered in the Initial Study prepared for the SDG Commerce 217 Project (Final Initial Study dated February 2012) and mitigation measures were implemented as applicable.

Response to CDFW-2
The commenter clarifies its role as a Trustee Agency/Responsible Agency regarding "take," unlisted species, and nesting birds and provides a related summary.

No environmental issues are raised, and no response is required.

Response to CDFW-3
The commenter provides background information on the proposed project and the regulatory requirements, such as the California Endangered Species Act (CESA) and raptors and other nesting birds.

No environmental issues are raised, and no response is required.

Response to CDFW-4
Comments were provided on the Draft EIR's mitigation measures regarding Swainson's hawk. The commenter states that the EIR did not adequately mitigate potential impacts to Swainson's hawk due to an insufficient buffer distance for occupied nests and unincorporated unprocessed California Natural Diversity Database (CNDDB) data of Swainson's hawk occurrences from 2023 and 2024.

Concerning the argument for an insufficient buffer distance for occupied nests, according to Jim Estep, an recognized expert on Swainson's hawk, a 0.5-mile buffer is not supported by any data-driven rationale (See Appendix A). Estep argues that this distance was selected to maximally ensure that nesting behavior/success would not be influenced and is therefore a highly conservative buffer distance. Now, 30 years after these guidelines were created, much more is known of Swainson's hawk, including their high degree of tolerance to noise and disturbances. Although no studies have been conducted to understand the most effective buffer distance, it is understood that a 0.5-mile buffer is unnecessarily large. Many successful nests have been documented in very close proximity to a multitude of disturbances with nest abandonment involving the direct impact to nest trees or disturbances next to active nests. Swainson's Hawk Technical Advisory Committee guidelines identify a 600-foot buffer based on the work of Mike Bradbury, a former California Department of Water Resources (DWR) employee. Through monitoring of nesting activity in the Sacramento-San Joaquin

Delta, Bradbury determined that a 600-foot buffer was a reasonable distance in most cases. Ultimately Estep argues that this species is quite tolerant of disturbance events and a 0.5-mile buffer is not necessary in most cases. He supports a 600-foot buffer with the caveat that specific site conditions should be taken into consideration.[1] As lead agency, the City has discretion to choose among differing expert opinions. (CEQA Guidelines § 15151).

Therefore, FirstCarbon Solutions (FCS) and the City agree that a 600-foot buffer is sufficient. Regarding unincorporated unprocessed CNDDB data, both occurrences are recorded over 1.5 miles from the project site, significantly outside of both the 600-foot and 0.5-mile buffer zones. Additionally, these occurrences were not confirmed nest but potentially nesting Swainson's hawk sightings. The nearest confirmed nest occurrence was recorded 1.9 mile from the site in 2021. Although these sightings do indicate that Swainson's hawk may forage within the project site, Mitigation Measure (MM) BIO-1a and MM BIO-1b would sufficiently mitigate for any Swainson's hawk found within 600 feet of the project site.

Response to CDFW-5
The commenter states that the Draft EIR does not adequately mitigate potential impacts to Swainson's hawk because it includes an insufficient buffer distance for occupied Swainson's hawk nests, and the commenter recommends specific edits to MM BIO-1b (Swainson's Hawk Avoidance and Minimization and Construction Monitoring) in the form of an extended proposed buffer distance of 0.5 mile.

Please see Response to CDFW-4. No further response is required.

Response to CDFW-6
The commenter states that the Draft EIR does not adequately mitigate potential impacts to Swainson's hawk foraging habitat.

FCS refutes the assumption that development of the project site would significantly impact Swainson's hawk foraging habitat. The project site constitutes 10.17 acres of disturbed land. East of the project site, there are thousands of acres of foraging habitat as seen via aerial satellite imagery. Additionally, the development of the site, is surrounded to the north and south by industrial development and has been anthropogenically disturbed recently, would not eliminate a significant area of foraging habitat for this species.

Response to CDFW-7
The commenter states that if an active Swainson's hawk nest is disturbed by the proposed project or its foraging habitat is removed, the proposed project may result in a substantial reduction in the number or restriction in the range of a threatened species, which is a Mandatory Finding of Significance, and since other large projects have not been required to mitigate foraging habitat, this may lead to a significant cumulative impact to Swainson's hawk.

FCS agrees that the disturbance of an active Swainson's hawk nest and removal of foraging habitat would result in a Mandatory Finding of Significance if such disturbance and removal were to occur.

[1] Estep, J. Estep Environmental Consulting. Received by Janna Waligorski. August 22, 2024.

However, FCS has implemented MM BIO-1a and MM BIO-1b to survey for Swainson's hawk nests within 600 feet of the project site to prevent such disturbances from occurring. Therefore, the project would not contribute to any cumulatively significant impact. Additionally, see Response to CDFW-6 for justification as to why development of the proposed project would not significantly impact Swainson's hawk foraging habitat.

Response to CDFW-8
The commenter offers suggested mitigations to reduce potential impacts to Swainson's hawk to less than significant. They recommend incorporating an increased survey distance of 0.5-mile radius in Swainson's hawk surveys, implementing an avoidance buffer distance of 0.5 mile if nests are detected, and mitigating for foraging habitat at a 1:1 ratio.

Please see Response to CDFW-4 for a response to increased Swainson's hawk survey and buffer distances, and please see Response to CDFW-6 for Swainson's hawk foraging habitat.

Response to CDFW-9
The commenter states that CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations and requests that the City report any special-status species and natural communities detected during project surveys to the CNDDB.

The proposed project would adhere to any and all reporting requirements under CEQA, including those related to the detection of any special-status species and natural communities.

Response to CDFW-10
The commenter notes that because the proposed project would have an impact on fish and/or wildlife, it would be required to pay the necessary filing fees due to the CDFW and then explains the timing requirements and legal implications of filing these fees. The commenter also provides conclusionary remarks.

The proposed project would be required to pay all applicable fees necessary under the law.

Response to CDFW-11
The commenter lays out three proposed mitigation measures for Swainson's hawk, including Swainson's Hawk Survey, Swainson's Hawk Nest Avoidance Buffer, and Swainson's Hawk Foraging Habitat Mitigation, consistent with comments previously provided.

These proposed mitigation measures are noted. Please see Response to CDFW-4 for a response to increased Swainson's hawk survey and buffer distances, and please see Response to CDFW-6 for Swainson's hawk foraging habitat.

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CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

August 1, 2024

SCH #: 2023100842
GTS #: 04-NAP-2023-00364
GTS ID: 31389
Co/Rt/Pm: NAP/29/2.9

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: SDG Commerce 220 Distribution Center Project – Draft Environmental Impact Report (DEIR)

Dear William He:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the SDG Commerce 220 Distribution Center Project. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the June 2024 DEIR.

Please note this correspondence does not indicate an official position by Caltrans on this project and is for informational purposes only. 1

Project Understanding
The project proposes to develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. The warehouse would provide 23 truck doors and up to 4,400 square feet of office space.

Travel Demand Analysis
The project vehicle miles traveled (VMT) analysis and significance determination are undertaken in a manner consistent with the City's adopted VMT policy. Per the DEIR, this project is found to have significant and unavoidable VMT impacts. Caltrans commends the City of American Canyon for requiring the development of a Transportation Demand Management (TDM) program to reduce employee VMT. The proposed measures identified in the TDM plan should be documented with annual monitoring reports to demonstrate effectiveness. 2

Please also consider the measures listed below that are quantified by the California Air Pollution Control Officers Association (CAPCOA) and shown to have different efficiencies reducing regional VMT:

- Implement Commute Trip Reduction Program (Voluntary and/or Mandatory)
- Implement Commute Trip Reduction Marketing
- Implement Subsidized or Discounted Transit Program
- Provide Employer-Sponsored Vanpool
- Implement Employee Parking Cash-Out
- Provide Community Based Travel Planning
- Implement Preferential Parking Permit Program
- Implement Telecommute and/or Alternative Work Schedule Program
- Provide Electric Vehicle Charging Infrastructure
- Provide Secure Bike Parking
- Designate Zero Emissions Delivery Zones
- Implement Shared Vehicle Program (car/bike/E-bike/scooter)
- Provide Local Shuttle (gas or electric) to Increase Transit Outreach
- Provide Real-Time Transit Information

3

Construction-Related Impacts
Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, please visit Caltrans Transportation Permits (*link*).

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Llisel Ayon, Associate Transportation Planner, via LDR-D4@dot.ca.gov. For future early coordination opportunities or project referrals, please visit Caltrans LDR website (*link*) or contact LDR-D4@dot.ca.gov.

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Sincerely,

YUNSHENG LUO
Branch Chief, Local Development Review
Office of Regional and Community Planning

c: State Clearinghouse

Local Agencies

California Department of Transportation (CALTRANS)

Response to CALTRANS-1
The commenter provides general introductory remarks, identifies that the comment letter is for informational purposes only, and provides a description of the proposed project.

No environmental issues are raised, and no further response is required.

Response to CALTRANS-2
The commenter commends the City for requiring the development of a Transportation Demand Management (TDM) program to reduce employee Vehicle Miles Traveled (VMT) and suggests that the measures in the TDM program should be documented with annual monitoring reports to demonstrate effectiveness.

The measures and effectiveness of the measures within the TDM program would be monitored and recorded as required by CEQA and the City.

Response to CALTRANS-3
The commenter provides various measures that are shown to have different efficiencies in reducing regional VMT.

Several of these measures are already included in MM TRANS-2, such as a commute trip reduction marketing initiative, encouraging ride sharing among project employees, and linking them to rideshare partners working nearby. The proposed project would also provide three bicycle lockers, each of which would accommodate up to four bicycles. Additionally, in compliance with the Cal Green Code the proposed project would provide five electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE stall, and 19 electric vehicle (EV) capable stalls. However, as concluded in the Draft EIR, even with the incorporation of all feasible mitigation, the proposed project would have a significant unavoidable impact related to VMT.

Response to CALTRANS-4
The commenter provides information on required transportation permits for project work that involves the movement of oversized or excessive load vehicles on State roadways, as well as general conclusionary remarks.

The proposed project would be required to comply with and obtain all applicable permits for oversized or excessive load vehicles.

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SDG 220 Distribution Center Draft Environmental Impact Report Project

Date * 07/22/2024

Name * Elena

Company El Puente Comunitario

Email *

Phone Number *

Please check all that apply *

- [ ] I own a home in American Canyon
- [ ] I rent a home in American Canyon
- [ ] I own a business in American Canyon
- [ ] I work in American Canyon
- [x] None of the above

Address *

Street Address

Address Line 2

City | State / Province / Region

Postal / Zip Code | Country

Comments *

If comments are being provided through the upload of a document, please indicate so.

love space a like see more space for seniors and accessibility entrance

File Upload

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Organizations

El Puente Comunitario (EPC)

Response to EPC-1

The commenter indicates they would like to see more space for seniors and an accessible entrance.

The commenter does not raise any environmental issues, and no response is required. All entrances would be required to meet applicable design and accessibility requirements.

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ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
TEL: (916) 444-6201
FAX: (916) 444-6209
kcarmichael@adamsbroadwell.com

SO. SAN FRANCISCO OFFICE
601 GATEWAY BLVD., SUITE 1000
SO. SAN FRANCISCO, CA 94080
TEL: (650) 589-1660
FAX: (650) 589-5062

KEVIN T. CARMICHAEL
CHRISTINA M. CARO
THOMAS A. ENSLOW
KELILAH D. FEDERMAN
RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
DARION N. JOHNSON
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

August 2, 2024

Via Email and Overnight Mail

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Email: whe@cityofamericancanyon.org

Re: Comments on the Draft Environmental Impact Report – SDG Commerce 220 Distribution Center Project (SCH No. 2023100842)

Dear Mr. He:

We are writing on behalf of the Napa/Solano Residents for Responsible Development ("Napa/Solano Residents") to provide comments on the Draft Environmental Impact Report[1] prepared for the SDG Commerce 220 Distribution Center Project SCH No. 2023100842 ("Project") prepared by the City of American Canyon ("City") pursuant to the California Environmental Quality Act ("CEQA")[2].

I. INTRODUCTION

The Project, proposed by SDG Commerce 220, LLC ("Applicant"), calls for development of a 219,834 square-foot wine storage and distribution center on a 10.45-acre parcel located at 1055 Commerce Court in the City of American Canyon ("City"), Napa County. The Project building includes 23 truck doors and approximately 4,400 square feet of office space and would be insulated and refrigerated at approximately 58 degrees Fahrenheit, making it suitable for storage of wine and related products.[3]

1

[1] City of American Canyon, Draft Environmental Impact Report, SDG Commerce 220 Distribution Center Project (June 5, 2024) (hereinafter, "DEIR"), *available at* https://ceqanet.opr.ca.gov/2023100842/2
[2] Pub. Resources Code ("PRC") §§ 21000 *et seq.*
[3] DEIR, p. 2-10.
6941-007j

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The Project site is currently undeveloped land with no structures on-site. The Project site includes a linear wetland and three isolated wetlands located within the northern portion of the property, and several soil stockpiles that are intended for use at the neighboring SDG Commerce 217 Project are located on the southern portion of the property.[4]

Napa/Solano Residents have reviewed the DEIR and find that it fails to comply with CEQA's basic requirement to act as an "informational document." It lacks meaningful details in critical areas, such as air quality, health risk, biological resources, and noise impacts, without which the public and decisionmakers cannot adequately assess the Project's significant impacts. Because of the DEIR's shortcomings, it is deficient as a matter of law because it fails to properly disclose and mitigate the Project's potentially significant impacts. The DEIR also lacks substantial evidence to support the City's conclusions regarding the Project's impacts and proposed mitigation. These deficiencies render the document inadequate for purposes of compliance with CEQA. 1 CONT

We reviewed the DEIR, technical appendices, and reference documents with the assistance of our expert consultants, including environmental health, air quality and GHG expert Paul E. Rosenfield, PhD. and hazardous materials expert Matt Hagemann, P.G., C.Hg. of Soil Water Air Protection Enterprise ("SWAPE"), biological resources expert Shawn Smallwood PhD, and noise expert Luke Watry of Wilson Ihrig, whose comments and qualifications are included as Exhibit A, Exhibit B, and Exhibit C respectively.[5] The City must address and respond to their comments separately and fully.[6]

II. STATEMENT OF INTEREST

Napa/Solano Residents is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential environmental impacts associated with Project development. Napa/Solano Residents includes the International Brotherhood of Electrical Workers Local 180, Plumbers &

[4] *Id.,* p. 2-1.
[5] **Exhibit A**, Comment Letter from Soil Water Air Protection Enterprise (hereinafter, "SWAPE Comments"); **Exhibit B**, Comment Letter from Shawn Smallwood (hereinafter, "Smallwood Comments"); **Exhibit C,** Comment Letter from Luke Watry (hereinafter, "Watry Comments")
[6] 14 Cal. Code Regs. ("CCR") §§ 15088(a), (c).
6941-007j

Steamfitters Local 343, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, District Council of Ironworkers and their members and their families, and other individuals that live and/or work in the City of American Canyon and Napa/Solano Counties.

Napa/Solano Residents supports the development of sustainable commercial and industrial centers where properly analyzed and carefully planned to minimize impacts on public health and the environment. Logistics centers like the Project should avoid adverse impacts to air quality, biological resources, transportation, and public health, and should take all feasible steps to ensure unavoidable impacts are mitigated to the maximum extent feasible. Only by maintaining the highest standards can commercial and industrial development truly be sustainable. 1 CONT

The individual members of Napa/Solano Residents and the members of the affiliated labor organizations live, work, recreate and raise their families in and around American Canyon and Napa County. They would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work constructing the Project itself. They would be the first in line to be exposed to any health and safety hazards which may be present on the Project site. They each have a personal interest in protecting the Project area from unnecessary, adverse environmental and public health impacts. 2

Napa/Solano Residents and its members also have an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for the members they represent. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for industry to expand in American Canyon and Napa County, and by making it less desirable for businesses to locate and people to live and recreate in the City, including the Project vicinity. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduces future employment opportunities. 3

Finally, Napa/Solano Residents is concerned with projects that can result in serious environmental harm without providing countervailing economic benefits. CEQA provides a balancing process whereby economic benefits are weighed against significant impacts to the environment.[7] It is in this spirit we offer these comments. 4

[7] Pub. Resources Code § 21081(a)(3); *Citizens for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 171.

III. LEGAL BACKGROUND

CEQA requires public agencies to analyze the potential environmental impacts of their proposed actions in an EIR.[8] "The foremost principle under CEQA is that the Legislature intended the act to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language."[9]

CEQA has two primary purposes. First, CEQA is designed to inform decisionmakers and the public about the potential significant environmental effects of a project.[10] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'"[11] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[12] As the CEQA Guidelines explain, "[t]he EIR serves not only to protect the environment but also to demonstrate to the public that it is being protected."[13]

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Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring consideration of environmentally superior alternatives and adoption of all feasible mitigation measures.[14] The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be

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[8] PRC § 21100.
[9] *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal ("Laurel Heights I")* (1988) 47 Cal.3d 376, 390 (internal quotations omitted).
[10] Pub. Resources Code § 21061; CEQA Guidelines §§ 15002(a)(1); 15003(b)-(e); *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 517 ("[T]he basic purpose of an EIR is to provide public agencies and the public in general with detailed information about the effect [that] a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.").
[11] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, at p. 564 (quoting *Laurel Heights I*, 47 Cal.3d at 392).
[12] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810; *see also Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*") (purpose of EIR is to inform the public and officials of environmental consequences of their decisions *before* they are made).
[13] CEQA Guidelines § 15003(b).
[14] *Id.* § 15002(a)(2), (3); *see also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at p. 564.
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avoided or significantly reduced." If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment" to the greatest extent feasible and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns."[15]

While courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A clearly inadequate or unsupported study is entitled to no judicial deference."[16] As the courts have explained, a prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process."[17] "The ultimate inquiry, as case law and the CEQA guidelines make clear, is whether the EIR includes enough detail 'to enable who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.'"[18]

5 CONT

IV. THE DEIR FAILS TO ADEQUATELY DESCRIBE THE PROJECT

The DEIR does not meet CEQA's requirements because it fails to include an accurate, complete and stable description of key Project components, rendering the DEIR's impact analysis inadequate. California courts have repeatedly held that "an accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR."[19] CEQA requires that a project be described with

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[15] PRC § 21081(a)(3), (b); CCR §§ 15090(a), 15091(a), 15092(b)(2)(A), (B); *Covington v. Great Basin Unified Air Pollution Control Dist*. (2019) 43 Cal.App.5th 867, 883.
[16] *Berkeley Jets*, 91 Cal.App.4th at p. 1355 (emphasis added) (quoting *Laurel Heights I*, 47 Cal.3d at 391, 409, fn. 12).
[17] *Berkeley Jets*, 91 Cal.App.4th at p. 1355; *see also San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722 (error is prejudicial if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process); *Galante Vineyards v. Monterey Peninsula Water Mgmt. Dist.* (1997) 60 Cal. App. 4th 1109, 1117 (decision to approve a project is a nullity if based upon an EIR that does not provide decision-makers and the public with information about the project as required by CEQA); *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946 (prejudicial abuse of discretion results where agency fails to comply with information disclosure provisions of CEQA).
[18] *Sierra Club,* 6 Cal.5th at p. 516 (quoting *Laurel Heights I*, 47 Cal.3d at 405).
[19] *Stopthemillenniumhollywood.com v. City of Los Angeles* (2019) 39 Cal.App.5th 1, 17; *Communities for a Better Environment v. City of Richmond* ("*CBE v. City of Richmond*") (2010) 184 Cal.App.4th 70, 85–89; *County of Inyo v. City of Los Angeles* (3d Dist. 1977) 71 Cal.App.3d 185, 193.
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enough particularity that its impacts can be assessed.[20] Without a complete project description, the environmental analysis under CEQA is impermissibly limited, thus minimizing the project's impacts and undermining meaningful public review.[21]

Here, the DEIR's description of the Project is inconsistent and unstable, in that the DEIR fails to disclose and, and therefore analyze, the use of natural gas during operation of the Project and the specifications for the Project's proposed battery energy storage systems. 6 CONT

1. The DEIR Fails to Consistently Describe the Use of Natural Gas During Project Operation

The DEIR states that the Project will "be built as all-electric and would not utilize natural gas during construction or operations."[22] Additionally, the DEIR states that "[e]lectric forklifts would be used during project operation."[23] Based on these assumptions, the DEIR concludes that the Project will not generate GHG emissions from the use of natural gas. However, the DEIR also states that operational vehicles at the Project site will use approximately 13,890 gallons of natural gas per year.[24] Additionally, the DEIR states that Project "[e]nergy sources include emissions from the combustion of natural gas for water heaters and other heat sources."[25] Finally, the DEIR fails to include any mitigation measures that prevent the use of natural gas at the Project site. The inconsistent description of the Project's use of natural gas results in a lack of relevant information that precludes informed decisionmaking and informed public participation. 7

Absent enforceable mitigation measures prohibiting the use of natural gas at the Project site, the City must disclose and analyze the potential GHG impacts from its use.

[20] CCR § 15124; *see, Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1988) 47 Cal.3d 376, 192–193.
[21] *Ibid.*
[22] DEIR, p. 3.5-15.
[23] *Id.* p. 3.2-31.
[24] DEIR, Appendix A, pdf. p. 185.
[25] DEIR, p, 3.2-52.
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2. The DEIR Fails to Describe the Project's Battery Backup Systems

According to the DEIR, the Project will include "a Rooftop Solar Photovoltaic system with Battery Storage"[26] However, the DEIR contains no information regarding the type of batteries to be used in the Project, nor does it include information regarding the size of the batteries, the chemical components of each individual battery, or the proposed layout of battery units. This information is critically important for worker safety and on-site and off-site impacts in the event of an accident. Absent this information, the opportunity for meaningful public review is drastically limited.

According to the National Fire Protection Association, battery storage systems can create hazardous conditions from thermal runaway resulting in the release of toxic or flammable gasses and other environmental impacts.[27] The conditions leading to thermal runaway can be mitigated using explosion prevention systems or deflagration venting, fire suppression systems, battery management systems, and adequate spacing between battery arrays based on the number and type of batteries used.[28] Recent battery system failures have resulted in injuries to first responders[29], the release of hazardous gasses[30] and fires that are difficult to extinguish.[31] 8

The DEIR also fails to provide any information regarding the design of the backup battery systems, including battery types, layout, type of cooling system they will use, and the type of fire detection and fire suppression systems that will be

[26] *Id.* p. 3.2-58.
[27] National Fire Protection Association, Energy Storage Systems Safety Fact Sheet (hereinafter "ESS Fact Sheet") (June 2020) pp. 1-2. available at https://www.nfpa.org/~/media/Files/Code%20or%20topic%20fact%20sheets/-ESSFactSheet.ashx
[28] ESS Fact Sheet, p. 2.
[29] AZ Central, 'Reasons that are still unknown': 30 experts investigate Surprise battery explosion that injured 9 (April 23, 2019) available at https://www.azcentral.com/story/money/business/energy/2019/04/23/arizona-public-service-provides-update-investigation-battery-fire-aps-surprise/3540437002/
[30] KSBW Action News, Highway 1 reopened near Moss Landing, shelter-in-place lifted (September 21, 2022) available at https://www.ksbw.com/article/highway-1-reopened-near-moss-landing-shelter-in-place-lifted/41302918#
[31] AZ Central, Fire crews tend to massive, smoldering battery in Chandler facility (April 21, 2022) available at https://www.azcentral.com/story/money/business/energy/2022/04/21/fire-crews-tend-massive-smoldering-battery-chandler-facility/7405430001/
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installed. This information is critical to determine the hazards and the potential environmental impacts posed by the batteries on site. The DEIR must be revised to include information, and an analysis of, the hazards presented regarding the proposed battery backup system at the Project site. 8 CONT

V. THE DEIR FAILS TO ADEQUATELY DESCRIBE THE EXISTING BASELINE

The DEIR fails to accurately disclose the baseline environmental conditions related to the Project's noise impacts and impacts to biological resources. As a result, the DEIR lacks the necessary baseline information against which to measure the Project's environmental impacts with regard to noise and wetlands and wildlife habitat.

The existing environmental setting is the starting point from which the lead agency must measure whether a proposed project may cause a significant environmental impact.[32] CEQA defines the environmental setting as the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and regional perspective.[33] Describing the environmental setting accurately and completely for each environmental condition in the vicinity of the Project is critical to an accurate, meaningful evaluation of environmental impacts. The courts have clearly stated that, "[b]efore the impacts of a project can be assessed and mitigation measures considered, an [environmental review document] must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined."[34] 9

A. The DEIR Fails to Establish a Proper Baseline for Existing Noise

According to the DEIR, "[t]he dominant noise sources in the project vicinity are traffic on local roadways and railroad and airport activity."[35] However, the DEIR fails to include any data to support this statement. The DEIR lacks any 10

[32] *See, e.g.*, *Communities for a Better Env't v. S. Coast Air Quality Mgmt. Dist.* (March 15, 2010) 48 Cal.4th 310, 316.
[33] CCR §15125(a) (emphasis added); *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1453 ("*Riverwatch*").
[34] *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.
[35] DEIR, p. 3.11-8.
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measurement of existing ambient noise conditions at the Project site and at nearby sensitive receptors. Absent baseline noise measurements it is impossible to determine whether the Project will have significant impacts on noise. Mr. Watry states that the operation of this Project along with the SDG 217 project to the north will necessarily result in increased noise at nearby sensitive receptors from increased truck traffic onsite and on Commerce Boulevard.[36]

Establishing baseline noise conditions allows "decision-makers [to] effectively determine whether the project complies with noise regulations and identify any potential adverse effects on the surrounding environment and communities."[37]

10 CONT

The DEIR does not provide an adequate baseline for noise levels. Absent an accurate environmental setting, the public and the City cannot fully determine the Project's noise impacts, including Project-related increases in noise over existing baseline conditions.[38] Absent an adequate description of the environmental setting, the DEIR is inadequate as a matter of law, for failure to provide a baseline against which to measure Project impacts. The DEIR must be revised to properly set forth the baseline noise measurements to adequately describe the existing noise environment.

B. The DEIR Fails to Establish a Proper Baseline With Respect to Impacts to Biological Resources

The DEIR's review of the Project's biological setting is based on several studies and reports prepared for the SDG 217 Project and the instant SDG 220 Project conducted between 2020 and 2023.[39] However, Dr. Smallwood found that the DEIR does not include clear information about the surveys that is necessary for adequate review and interpretation of the survey outcomes.[40] Such missing information includes the surveys' start times, time on site, and names of biologists who performed each survey.[41] Furthermore, Dr. Smallwood found that the species surveys were improperly conducted. For example, he explains that the "Nesting Bird Surveys" described in the DEIR were conducted in January, when birds do not

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[36] Watry Comments, p. 3.
[37] *Id.* at 4.
[38] *Galante Vineyards,* 60 Cal. App. 4th 1109, 1122 ("Due to the inadequate description of the environmental setting for the project, a proper analysis of project impacts was impossible.").
[39] DEIR, pp. 3.3-30- 3.3-31.
[40] Smallwood Comments, p. 15.
[41] *Id.* p. 20.
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nest.[42] Additionally, he found that the western pond turtle study described in the DEIR improperly focused on the wetland features of the Project site, resulting in a misleading conclusion that western pond turtles do not inhabit the Project site.[43] Dr. Smallwood explains that western pond turtle would not visit the site for the small wetlands, but instead, for the grassland sites to breed.[44]

11 CONT

1. Substantial Evidence Demonstrates the Presence of Additional Special Species at the Project Site

Dr. Smallwood presents substantial evidence from his own site surveys demonstrating that the Project site currently hosts several species, including special-status species, which the DEIR's surveys failed to detect due to poor or unsupported survey methods.[45]

Dr. Smallwood conducted two surveys at the Project site in 2019 and 2021. His observations revealed significantly more vertebrate wildlife species (79 species) than disclosed in the DEIR (46 species). Several of the species he detected included special status wildlife species such as bald eagle, coopers hawk, American kestrel, and northern harrier.[46] Dr. Smallwood modeled the pattern in species detections during the surveys he conducted to estimate the average number of species that actually occur at the site but were undetected during the DEIR's surveys. His models statistically demonstrate that the DEIR surveys missed dozens of species that are likely to occur on the Project site.[47] Dr. Smallwood's modeling demonstrates that the DEIR's environmental setting is incomplete and mischaracterizes the richness of wildlife on the Project site. Dr. Smallwood's modeling results also constitute substantial evidence that the Project's impacts on wildlife present on the site are greater than analyzed. In summary, Dr. Smallwood concludes, based on the evidence gathered in his surveys, that the Project site provides habitat for numerous special status species that would be adversely impacted by the loss of habitat resulting from the Project. The results of his surveys also demonstrate the deficiencies in the DEIR's limited survey methods.

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[42] *Id.* p. 16.
[43] *Id.* p. 17.
[44] *Ibid.*
[45] *Id.* pp. 12-15.
[46] *Id.* p. 2.
[47] *Id.* p. 13.

Dr. Smallwood states that a more realistic representation of species richness at the site could be obtained by implementing multiple survey methods and by repeating visual-scan surveys on various dates throughout the year. As a result of its deficient site surveys, the DEIR lacks substantial evidence to support its analysis of biological baseline conditions and conclusions regarding impacts to biological resources. The DEIR must be revised and recirculated to include a legally adequate baseline analysis.

12 CONT

2. The City Failed to Consult All Available Biological Resources Databases to Establish the Environmental Setting

The City relied on California Natural Diversity Database ("CNDDB") for determining occurrence likelihoods of special-status species. The City failed to consult other major databases such as eBird and iNaturalist. Dr. Smallwood reviewed these databases, and discovered that the actual of list of potentially-occurring species is much higher than are reported in the DEIR, finding that 114 special status species have the potential to occur at the Project site as opposed to the 28 reported in the DEIR.[48]

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Sole reliance on CNDDB for desktop review is not supported by substantial evidence. The California Department of Fish and Wildlife cautions that sole reliance on CNDDB is inappropriate as a basis for narrowing a list of potentially occurring species:

> "We work very hard to keep the CNDDB and the Spotted Owl Database as current and up-to-date as possible given our capabilities and resources. However, we cannot and do not portray the CNDDB as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation of our customers…"[49]

[48] *Id*. pp. 22-26.
[49] California Natural Diversity Database, "About the CNDDB," https://wildlife.ca.gov/Data/CNDDB/About.

The DEIR thus fails to set forth an accurate biological baseline, which is necessary to correctly evaluate the Project's impacts. 13 CONT

VI. THE DEIR FAILS TO DISCLOSE, ANALYZE AND MITIGATE POTENTIALLY SIGNIFICANT IMPACTS

An EIR must fully disclose all potentially significant impacts of a Project and implement all feasible mitigation to reduce those impacts to less than significant levels. The lead agency's significance determination with regard to each impact must be supported by accurate scientific and factual data.[50] An agency cannot conclude that an impact is less than significant unless it produces rigorous analysis and concrete substantial evidence justifying the finding.[51]

Moreover, the failure to provide information required by CEQA is a failure to proceed in the manner required by CEQA.[52] Challenges to an agency's failure to proceed in the manner required by CEQA, such as the failure to address a subject required to be covered in an EIR or to disclose information about a project's environmental effects or alternatives, are subject to a less deferential standard than challenges to an agency's factual conclusions.[53] In reviewing challenges to an agency's approval of an EIR based on a lack of substantial evidence, the court will 'determine de novo whether the agency has employed the correct procedures, scrupulously enforcing all legislatively mandated CEQA requirements.'[54] 14

Even when the substantial evidence standard is applicable to agency decisions to certify an EIR and approve a project, reviewing courts will not 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A clearly inadequate or unsupported study is entitled to no judicial deference.'"[55]

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[50] 14 CCR § 15064(b).
[51] *Kings Cty. Farm Bur. v. Hanford* (1990) 221 Cal.App.3d 692, 732.
[52] *Sierra Club v. State Bd. Of Forestry* (1994) 7 Cal.4th 1215, 1236.
[53] *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435.
[54] *Id., Madera Oversight Coal., Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102.
[55] *Berkeley Jets*, 91 Cal.App.4th at 1355.
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A. The DEIR Fails to Disclose, Analyze or Mitigate the Project's Significant Air Quality Impacts

The DEIR's air quality analysis concludes, with respect to health risks to sensitive receptors, that neither the Project's construction nor operation will cause a significant impact.[56] This conclusion is not supported by substantial evidence for several reasons.

First, SWAPE found that the construction health risk assessment ("HRA") prepared for the Project fails to consider age sensitivity factors and fraction of time at home for nearby sensitive receptors. Pursuant to the *Risk Assessment Guidelines* provided by the Office of Environmental Health Hazard Assessment ("OEHHA"), in order to properly calculate the Project's construction cancer risks, the health risk assessment must include age sensitivity factors in order to account for the increased sensitivity to carcinogens during early-in-life exposure and accurately assess risk for susceptible subpopulations such as children.[57] 15

Second, the City failed to conduct an operational health risk assessment for the Project, stating that because "project [heavy duty] truck trips are less than the 100-truck advisory threshold in the Air Quality and Land Use Handbook, an operational HRA is not necessary and therefore not analyzed."[58] However, SWAPE points out that the State of California Department of Justice ("DOJ") recommends that all warehouse projects prepare a quantitative HRA pursuant to the OEHHA guidelines which state that all projects lasting more than six months should be evaluated for the duration of the project.[59] Moreover, OEHHA recommends "that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR")."[60] Although the DEIR fails to disclose the expected Project life, it is reasonable to assume the Project will operate for at least 30 years and thus health risk impacts from Project operation must also be evaluated.[61] Construction equipment and trucks accessing the Project site during operations will emit diesel particulate matter ("DPM"), a known toxic air contaminant ("TAC") linked to serious health issues such as respiratory disease, lung damage, cancer, and premature death. The DEIR improperly omitted 16

[56] DEIR, pp. 3.2-56; 3.2-59.
[57] SWAPE Comments, p. 6.
[58] DEIR, p. 3.2-58.
[59] SWAPE Comments, p. 4.
[60] *Ibid.*
[61] *Ibid.*
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analysis of health risks from DPM, and a revised EIR should be prepared to include an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions. 16 CONT

Finally, by claiming a less than significant impact without conducting a quantified operational HRA for nearby, existing sensitive receptors, the DEIR fails to compare the excess health risk impact to the applicable BAAQMD threshold of 10 in one million and lacks evidence to support its conclusion that the health risk would be less-than-significant.[62] For these reasons, and based on the analysis and recommendations offered in SWAPE's expert comments, a quantified HRA that analyzes the adverse health impacts that may be caused by exposure to TACs from the Project's operational emissions must be performed and included in a revised EIR for the Project. 17

SWAPE conducted a screening-level HRA, which "demonstrate[d] that construction and operation of the Project could result in a significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used."[63] Utilizing AERSCREEN[64] and applicable HRA methodologies recommended by OEHHA, SWAPE estimates that nearby sensitive receptors will be exposed to "an excess cancer risk of approximately 14.6 in one million over the course of a residential lifetime (30 years)", thereby exceeding the BAAQMD threshold of ten in one million.[65] This is a significant health risk impact that is not disclosed in the DEIR, and is not adequately mitigated. 18

The City must prepare a revised EIR to address the potentially significant health risk impacts described in this comment letter and the attached expert comments. As written, the DEIR is completely deficient as an informational document in failing to disclose the Project's potentially significant impacts to public health and does not provide any mitigation to reduce these impacts to less than significant levels. 19

[62] *Ibid.*
[63] *Id.* at 9.
[64] U.S. EPA, *AERSCREEN Released as the EPA Recommended Screening Model* (April 2011), available at:
http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[65] SWAPE Comments, p. 9.
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In addition, SWAPE provides several mitigation measures in their comments which the City should consider implementing in the Project's MMRP in order to reduce the Project's health risk impacts from TAC emissions. SWAPE's proposed measures are based on the Southern California Association of Governments ("SCAG")'s 2020 RTP/SCS PEIR's Air Quality Project Level Mitigation Measures; and recommendations by CARB and the DOJ:

SCAG recommends:

- Minimizing unnecessary vehicular and machinery activities; and
- Requiring contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project.

CARB recommends:

- Require all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits, such that, emission reductions achieved are equal to or exceed that of a Tier 4 engine;
- Require all heavy-duty trucks entering the construction site during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-oxides of nitrogen (NOx) standard starting in the year 2022;
- Requiring all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units;
- Requiring all TRUs entering the project-site be plug-in capable;
- Requiring all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the project site to be zero-emission;
- Requiring future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans;
- Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than **two minutes** while on site; and
- Require the installing of vegetative walls or other effective barriers that separate loading docks and people living or working nearby.

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The DOJ recommends:

- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations; and
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.[66]

20 CONT

The City must consider implementation of these feasible mitigation measures in a revised and recirculated EIR for the Project.

B. The DEIR Fails to Adequately Analyze Potentially Significant Noise Impacts

CEQA requires agencies to conduct noise analyses for projects that consider both the absolute noise levels expected, and the degree noise levels are expected to increase over existing ambient conditions. Noise studies that rely on a single measure that excludes possible significant impacts from noise increases or noise extremes do not receive deference by reviewing courts.

In *King & Gardiner Farms, LLC v. County of Kern*, the Court of Appeal held that an agency cannot simply rely on compliance with local noise regulations to conclude there will be no significant noise impacts without considering the impacts of increases in noise.[67] The County approved an EIR for proposed zoning amendments to streamline oil and gas permitting.[68] The EIR included an analysis of noise impacts that determined significance based solely on whether the 65 decibel day-night average ("dBA DNL") threshold in the County General Plan would be exceeded.[69] The Court of Appeal reasoned that the County General Plan did not conclude that all increases in the magnitude of noise are insignificant until the 65 dBA DNL threshold is exceeded, so the General Plan "does not constitute substantial evidence that the magnitude of an increase in ambient noise is irrelevant."[70] Rather, an EIR's noise analysis should consider both the increase in noise level and the absolute noise level associated with a project in determining the

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[66] *Id.* pp. 10-11.
[67] *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 894.
[68] *Id.* at 829.
[69] *Id.* at 830, 889.
[70] *Id.* at 894.
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significance of the project's noise impacts.[71] The Court of Appeal concluded that an agency cannot exclusively rely on "a single cumulative DNL metric for determining the significance of the project's noise impacts" while deciding "the magnitude of the increase in ambient noise is irrelevant."[72]

21 CONT

In *Berkeley Jets*, the Court of Appeal invalidated the Port of Oakland's EIR for expansion of the Oakland Airport because of its reliance on an improper noise standard.[73] The EIR evaluated the significance of noise impacts based on whether the estimated level of sound would exceed 65 dB Community Noise Equivalent Level ("CNEL").[74] However, as the Court of Appeal explained, the CNEL metric—which averages noise over the course of a day—could not be the sole indicator of significant effects from noise because it does not provide a meaningful analysis of the "degree single overflights will create noise levels over and above the existing ambient noise level at a given location, and the community reaction to aircraft noise, including sleep disturbance."[75] Therefore, the Court concluded, a revised EIR with additional study of noise impacts from flights was necessary.[76]

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Here, the DEIR concludes that the Project's operational noise would not be significant. However, the DEIR fails to properly calculate the Project's operational noise and fails to consider the cumulative noise impacts from nearby warehouse developments which are underway resulting in a failure to analyze and mitigate the Project's significant operational noise impacts.

23

1. The DEIR Fails to Analyze and Mitigate Potentially Significant Operational Noise Impacts

Mr. Watry found that the DEIR's noise analysis fails to properly analyze the Project's operational noise because it assesses operational noise sources independently, comparing each source's noise level separately to the City's impact criteria.[77] Mr. Watry explains that this approach underestimates the Project's noise impact because operational noise sources, including parking lot activity, mechanical

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[71] *Id.*
[72] *Id.*
[73] *Berkeley Jets*, 91 Cal.App.4th at 1381–1382.
[74] *Id.* at 1373.
[75] *Id.* at 1381–1382.
[76] *Id.* at 1382.
[77] Watry Comments, p. 3.
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equipment, and truck loading activities, will all operate simultaneously.[78] Additionally, as discussed above, the DEIR fails to establish the existing noise environment, preventing an analysis of the relative increase in noise that will result from operation of the Project. 24 CONT

Furthermore, Mr. Watry found that the DEIR fails to account for the cumulative noise impacts that will result from operation of the SDG Commerce 217 project to the north. He explains that with these two new warehouses in operation, truck traffic on Commerce Boulevard could be expected to more than double, potentially resulting in a permanent increase in traffic noise levels over the City's established threshold, constituting a significant impact. 25

The DEIR lacks substantial evidence to support its conclusion that the Project's operational noise impacts will be less than significant because it failed to analyze the magnitude of noise increase from the Project and the cumulative noise impacts of the Project in conjunction with other projects on Commerce Boulevard. As a result, the DEIR fails to analyze and mitigate the Project's significant operational noise impacts. The DEIR must be revised and recirculated to analyze the Project's construction and operational noise impacts. 26

C. The DEIR Fails to Disclose, Analyze or Mitigate the Project's Biological Resources Impacts

1. The DEIR Fails to Adequately Analyze the Project's Habitat Loss Impacts and Substantial Evidence Shows the Project's Impacts Are Potentially Significant

Dr. Smallwood's comments demonstrate that habitat loss is a potentially significant impact not disclosed by the DEIR. He explains that habitat loss not only results in the immediate numerical decline of wildlife, but also in permanent loss of productive capacity.[79] His comments include calculations demonstrating the impacts the Project site would have on productive capacity. Dr. Smallwood found that the Project's 10.17 acres of grassland-wetland would support approximately 72 nest sites.[80] As Dr. Smallwood explains, assuming 1.39 broods per nest site, which is the average among 322 North American bird species, he calculates that the 27

[78] *Ibid.*
[79] Smallwood Comments, p. 22.
[80] *Id.* p. 29.

Project would cost California 100 nest attempts per year resulting in a loss of approximately 319 birds per year denied to California.[81] This predicted loss would be substantial and would qualify as a significant impact that is not addressed in the DEIR. The EIR must be revised to appropriately analyze potential Project impacts to wildlife. 27 CONT

2. The DEIR Fails to Adequately Analyze the Project's Traffic Collision Impacts and Substantial Evidence Shows the Project's Impacts Are Potentially Significant

The DEIR also provides no analysis of wildlife-traffic collision mortality that would result from the Project. The DEIR predicts annual vehicle miles traveled (VMT) of 2,568,115, which would put wildlife at dire risk of collision mortality along all reaches of roadway leading traffic to and from the Project site.[82] Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level.[83] Dr. Smallwood calculates that the Project's traffic would result in 1,407 vertebrate wildlife fatalities per year,[84] which represents a significant impact to biological resources. The City must prepare a revised EIR for the Project which analyzes and mitigates this impact. 28

VII. THE CITY MAY NOT MAKE THE REQUIRED FINDINGS TO APPROVE THE PROJECT'S LOCAL LAND USE PERMITS.

The Project requires that the City issue discretionary approvals, including a Conditional Use Permit.[85] The Conditional Use Permit requires that the City find that the Project is consistent with the policies and programs of the General Plan and will not be materially detrimental to the general health, safety and welfare of the public and residents in the vicinity of the Project.[86] As discussed above, the DEIR fails to disclose, analyze or effectively mitigate the Project's potentially significant impacts on air quality, public health, biological resources and 29

[81] *Ibid.*
[82] *Id.* p. 32.
[83] *Ibid.*
[84] *Ibid.*
[85] DEIR, p. 2-22.
[86] American Canyon Municipal Code § 19.42.020 D.1 and D.5.
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transportation. These impacts also create inconsistencies with General Plan policies which the DEIR fails to disclose and mitigate. As a result of these inconsistencies, the City is unable to make the necessary findings to approve the Project's local land use permits. 29 CONT

As an initial matter, the City may not make the required finding, pursuant to Municipal Code section 19.42.202 D.5., that the Project will not be materially detrimental to the general health, safety or general welfare of the public and residents in the vicinity of the Project. As discussed above, the Health Risk Assessment performed for the Project has serious flaws which prevent it from adequately analyzing health risks to sensitive receptors from the Project's air emissions. 30

The City is also precluded from making the required findings pursuant to Municipal Code section 19.42.020 D.1. because it cannot find that the Project complies with and is consistent with applicable General Plan policies. Analysis of the DEIR reflected in these comments show that the Project fails to comply with several key policies in the General Plan's Natural and Historic/Cultural Resources Element which includes policies relevant to the Project's impacts to biological resources.[87] For example, 31

- Policy 8.2.1 provides that land use applications for developments located within sensitive habitats, including riparian habitats or habitats within areas occupied by vernal pools, shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources and possible measures to reduce any identifiable impacts. As discussed in Dr. Smallwood's comments, the DEIR fails to examine the Project's impacts on foraging habitats for several special status bird species that inhabit the Project's wetland and grassland areas. 32

- Policy 8.4.2 requires preservation, where possible, of the habitat of rare, threatened or endangered species. This policy specifically references the northern harrier, which have been observed foraging at 33

[87] City of American Canyon, General Plan 2019, Chapter 8.0 Natural and Historic/Cultural Resources Element.

the Project site by Dr. Smallwood. The DEIR fails to evaluate the loss of foraging habitat for the northern harrier, let alone make any efforts to preserve such habitat. 33 CONT

Regarding noise impacts, the General Plan includes the following policy:

- Policy 11.2.4 requires that new industrial, commercial, and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior Ldn of 65 dBA in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. As explained above, the DEIR lacks the baseline analysis necessary to demonstrate compliance with this policy. 34

The DEIR fails to address or remedy these inconsistencies with General Plan policies, and the City accordingly may not make the necessary findings to support the required discretionary approvals for the Project.

VIII. CONCLUSION

For the reasons discussed above, the DEIR for the Project is wholly inadequate under CEQA. It must be thoroughly revised to provide legally adequate analysis of, and mitigation for, all of the Project's potentially significant impacts. These revisions will necessarily require that the DEIR be recirculated for additional public review. Until the DEIR has been revised and recirculated, as described herein, the City may not lawfully approve the Project. 35

Thank you for your attention to these comments. Please include them in the record of proceedings for the Project.

Sincerely,

Kevin Carmichael

KTC:ljl
6941-007j

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

July 23, 2024

Tara Rengifo
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd #1000
South San Francisco, CA 94080

Subject: Comments on the SDG Commerce 220 Distribution Center Project (SCH No. 2023100842)

Dear Ms. Rengifo,

We have reviewed the June 2024 Draft Environmental Impact Report ("DEIR") for the SDG Commerce 220 Distribution Center Project ("Project") located in the City of American Canyon ("City"). The Project proposes to construct 219,834-square-feet ("SF") of warehouse space, 134 car spaces, and 23 truck parking stalls on the 10.45-acre site.

Our review concludes that the DEIR fails to adequately evaluate the Project's health risk impacts. As a result, health risk impacts associated with construction and operation of the proposed Project may be underestimated and inadequately addressed. A revised Environmental Impact Report ("EIR") should be prepared to adequately assess and mitigate the potential health risk impacts that the Project may have on the environment. 1

Diesel Particulate Matter Emissions Inadequately Evaluated

The DEIR conducts a health risk analysis ("HRA") evaluating impacts from exposure to diesel particulate matter ("DPM") emissions during Project construction. Specifically, the DEIR estimates that the maximum cancer risk posed to nearby, existing residential sensitive receptors as a result of Project construction would be 0.8 in one million, which would not exceed the Bay Area Air Quality Management District ("BAAQMD") significance threshold of 10 in one million (see excerpt below) (p. 3.2-56, Table 3.2-16). 2

Table 3.2-16: Summary of Construction Health Risks at the Maximum Impacted Receptor

Impact Scenario	UTM E	UTM N	Cancer Risk[1] (risk per million)	Chronic Non-Cancer Hazard Index[2]	TAC Concentration[3] (µg/m³)
Residential MIR Impact	563979	4226674	0.8	0.001	0.0044
Worker MIR Impact	563625	4226775	1.0	0.019	0.0925
School MIR Impact	563877	4226209	0.2	0.002	0.00112
Thresholds of Significance			**10**	**1**	**0.3**
Exceeds Individual Source Threshold?			**No**	**No**	**No**

Notes:
DPM = diesel particulate matter
MIR = Maximally Impacted Sensitive Receptor
REL = Reference Exposure Level
TAC = toxic air contaminants
µg/m³ = micrograms per cubic meter
[1] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the DPM REL of 5 µg/m³.
[3] TAC concentration taken from AERMOD is always at the MIR identified from the project air dispersion models. The school MIR was identified as the Napa Junction Elementary School.
Emissions Source: Appendix B.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed November 30, 2023.

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CONT

[43] Bay Area Air Quality Management District (BAAQMD). 2016. BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines. December. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en. Accessed September 16, 2023.

The DEIR, however, fails to provide the exposure assumptions or conduct an operational HRA. The DEIR's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion should be reevaluated in a revised EIR, for four reasons:

First, the DEIR fails to mention or provide the exposure assumptions for the HRA, such as the age sensitivity factors ("ASF") or fraction of time at home ("FAH") values. Until the DEIR substantiates the use of correct exposure assumptions, the HRA underestimates the cancer risk posed to nearby, existing sensitive receptors because of Project construction. Furthermore, according to the *Risk Assessment Guidelines* provided by the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, the DEIR's model should have used the following equation:[1]

[1] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-7 Equation 8.2.4.

A. Equation 8.2.4 A: $RISK_{inh\text{-}res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$

7. $RISK_{inh\text{-}res}$ = Residential inhalation cancer risk
8. $DOSE_{air}$ = Daily inhalation dose (mg/kg-day)
9. CPF = Inhalation cancer potency factor (mg/kg-day^{-1})
10. ASF = Age sensitivity factor for a specified age group (unitless)
11. ED = Exposure duration (in years) for a specified age group
12. AT = Averaging time for lifetime cancer risk (years)
13. FAH = Fraction of time spent at home (unitless)

2 CONT

The DEIR and associated documents fail to include a dose and risk equation to calculate the Project's construction cancer risks. As such, we cannot verify that the DEIR's HRA is accurate, and the Project's cancer risks may be underestimated.

Second, the DEIR relies on guidance provided in the 2005 California Air Resources Board ("CARB")'s *Air Quality and Land Use Handbook* to omit an operational HRA. The DEIR states:

> "The traffic analysis estimates the daily HHD truck trips accessing the project site would be 128 trips, which is 64 HHD trucks per day. Since these project HHD truck trips are less than the 100-truck advisory threshold in the Air Quality and Land Use Handbook, an operational HRA is not necessary and therefore not analyzed in this study. As previously discussed, no TRUs would be operated while on-site. Therefore, risks due to DPM from this level of truck traffic would be less than significant" (p. 3.2-58).

3

The DEIR concludes that an operational HRA is not required as the projected heavy-heavy-duty ("HHD") truck trip rate does not exceed the advisory threshold of 100 trucks per day. However, as it is now July 2024, the Project should rely on the most recently updated guidance from the California Environmental Quality Act ("CEQA"), OEHHA, and the Department of Justice ("DOJ"), as demonstrated below.

Third, the State of California DOJ recommends that all warehouse projects prepare a quantitative HRA pursuant to the OEHHA, the organization responsible for providing guidance on conducting HRAs in California, as well as local air district guidelines.[2] OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015. This guidance document describes the types of projects that warrant the preparation of an HRA. OEHHA recommends that all short-term projects lasting at least 2 months assess cancer risks. Specifically, according to OEHHA:

4

[2] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, *available at*: https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf, p. 6.

> "Exposure from projects lasting more than 6 months should be evaluated for the duration of the project. In all cases, for assessing risk to residential receptors, the exposure should be assumed to start in the third trimester to allow for the use of the ASFs (OEHHA, 2009)."[3]

OEHHA also recommends that an exposure duration of 30 years should be used to estimate the individual cancer risk at the maximally exposed individual resident ("MEIR").[4] While the DEIR fails to provide the expected lifetime of the proposed Project, we can reasonably assume that the Project would operate for at least 30 years, if not more. Operation of the Project exceeds the 2-month and 6-month requirements set forth by OEHHA and should be evaluated for the entire 30-year residential exposure duration, as indicated by OEHHA guidance. These recommendations reflect the most recent state health risk policies, and as such, a revised EIR should be prepared to include an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions. 4 CONT

Fourth, by failing to prepare a quantified operational HRA, the Project is inconsistent with the CEQA requirements to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences."[5] According to the DEIR, operation of the Project is anticipated to generate about 372 daily vehicle trips, which would generate additional exhaust emissions and expose nearby sensitive receptors to DPM emissions (p. 3.13-12, Table 3.13-2). However, the DEIR fails to evaluate the toxic air contaminant ("TAC") emissions associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the Project is inconsistent with CEQA's requirement to correlate the Project-generated emissions with potential adverse impacts on human health. 5

Screening-Level Analysis Demonstrates Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[6] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA and the California Air Pollution Control Officers Associated ("CAPCOA") guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs").[7,8] A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an 6

[3] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-18.
[4] *Ibid*., p. 2-4.
[5] "Sierra Club v. County of Fresno." Supreme Court of California, December 2018, a*vailable at:* https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf.
[6] "AERSCREEN Released as the EPA Recommended Screening Model," U.S. EPA, April 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[7] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.
[8] "Health Risk Assessments for Proposed Land Use Projects." CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to residential sensitive receptors using the annual particulate matter 2.5 ("$PM_{2.5}$") exhaust estimates from the DEIR's CalEEMod output files, as recommended by the BAAQMD.[9] Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life. [10] Subtracting the 347-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 29.05 years.[11] The DEIR's operational CalEEMod emissions indicate that operational activities will generate approximately 80 pounds of DPM per year throughout operation. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in daily vehicle trips over Project operation, we calculated an average DPM emission rate by the following equation:

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{80\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00115}\boldsymbol{g/s}$$

6
CONT

Using this equation, we estimated an operational emission rate of 0.00115 g/s. Operation was simulated as a 10.45-acre rectangular area source in AERSCREEN, with approximate dimensions of 291- by 145-meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution. The population of American Canyon was obtained from U.S. 2022 Census data.[12]

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. The United States Environmental Protection Agency ("U.S. EPA") suggests that the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10% in screening procedures.[13] Review of the AERSCREEN output files demonstrates that the MEIR is located approximately 150 meters from the Project site. However, according to the DEIR, the nearest sensitive receptors are residential properties located 850 feet, or approximately 259.1 meters, to the east of the Project site (p. 2-26). Thus, the single-hour concentration estimated by AERSCREEN for Project operation is approximately 0.458 µg/m^3 DPM at approximately 300 meters

[9] "California Environmental Quality Act Air Quality Guidelines." BAAQMD, May 2017, *available at*: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, p. 8-8.
[10] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-18.
[11] See Attachment A for health risk calculations.
[12] "American Canyon." U.S. Census Bureau, 2022, *available at:* https://datacommons.org/place/geoId/0601640.
[13] "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised." U.S. EPA, October 1992, *available at:* https://www.epa.gov/sites/default/files/2020-09/documents/epa-454r-92-019_ocr.pdf.

downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.0458 µg/m^3 for Project operation at the nearest sensitive receptor.

We calculated the excess cancer risk to the nearest sensitive receptor using applicable HRA methodologies prescribed by OEHHA, as recommended by BAAQMD.[14] Specifically, guidance from OEHHA and the CARB recommends the use of a standard point estimate approach, including high-point estimate (i.e. 95th percentile) breathing rates and ASF in order to account for the increased sensitivity to carcinogens during early-in-life exposure and accurately assess risk for susceptible subpopulations such as children. The residential exposure parameters, such as the daily breathing rates ("BR/BW"), exposure duration ("ED"), ASF, FAH, and exposure frequency ("EF") utilized for the various age groups in our screening-level HRA are as follows:

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CONT

[14] "California Environmental Quality Act Air Quality Guidelines." BAAQMD, May 2017, *available at:* http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, p. 56; see also "Recommended Methods for Screening and Modeling Local Risks and Hazards." BAAQMD, May 2011, *available at:* http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20Modeling%20Approach.ashx, p. 65, 86.

Exposure Assumptions for Residential Individual Cancer Risk						
Age Group	**Breathing Rate** (L/kg-day)[15]	**Age Sensitivity Factor**[16]	**Exposure Duration** (years)	**Fraction of Time at Home**[17]	**Exposure Frequency** (days/year)[18]	**Exposure Time** (hours/day)
3rd Trimester	361	10	0.25	0.85	350	24
Infant (0 – 2)	1090	10	2	0.85	350	24
Child (2 – 16)	572	3	14	0.72	350	24
Adult (16 – 30)	261	1	14	0.73	350	24

6
CONT

For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor ("CPF") in units of inverse dose expressed in milligrams per kilogram per day ($mg/kg/day^{-1}$) to derive the cancer risk estimate. Therefore, to assess exposures, we utilized the following dose algorithm:

$$Dose_{AIR,\,per\ age\ group} = C_{air} \times EF \times \left[\frac{BR}{BW}\right] \times A \times CF$$

where:

$Dose_{AIR}$ = dose by inhalation (mg/kg/day), per age group
C_{air} = concentration of contaminant in air (µg/m3)
EF = exposure frequency (number of days/365 days)
BR/BW = daily breathing rate normalized to body weight (L/kg/day)

[15] "Air Toxics NSR Program Health Risk Assessment Guidelines." BAAQMD, December 2016, available at: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en#:~:text=To%20assess%20potential%20inhalation%20exposure%20to%20offsite%20workers%2C%20OEHHA%20recommended,for%20an%20eight%2Dhour%20day, p. 6; see also "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[16] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-5 Table 8.3.

[17] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 5-24; see also: "Air Toxics NSR Program Health Risk Assessment Guidelines." BAAQMD, December 2016, available at: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en#:~:text=To%20assess%20potential%20inhalation%20exposure%20to%20offsite%20workers%2C%20OEHHA%20recommended,for%20an%20eight%2Dhour%20day, p. 4, 5.

[18] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 5-24.

A = inhalation absorption factor (default = 1)
CF = conversion factor (1x10-6, µg to mg, L to m3)

To calculate the overall cancer risk, we used the following equation for each appropriate age group:

$$Cancer\ Risk_{AIR} = Dose_{AIR} \times CPF \times ASF \times FAH \times \frac{ED}{AT}$$

where:

$Dose_{AIR}$ = dose by inhalation (mg/kg/day), per age group
CPF = cancer potency factor, chemical-specific $(mg/kg/day)^{-1}$
ASF = age sensitivity factor, per age group
FAH = fraction of time at home, per age group (for residential receptors only)
ED = exposure duration (years)
AT = averaging time period over which exposure duration is averaged (always 70 years)

Consistent with the 347-day construction schedule, the annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the latter 1.30 years of the infant stage of life, the entire child stage of life (2 – 16 years), and the entire adult stage of life (16 – 30 years). The results of our calculations are shown in the table below.

The Maximally Exposed Individual at an Existing Residential Receptor

Age Group	Emissions Source	**Duration** (years)	**Concentration** (ug/m3)	Cancer Risk
3rd Trimester	Construction	0.25	*	*
	Construction	*0.70*	***	***
	Operation	*1.30*	*0.0458*	*8.30E-06*
Infant (0 - 2)	Total	2	*	*
Child (2 - 16)	Operation	14	0.0458	1.19E-05
Adult (16 - 30)	Operation	14	0.0458	1.84E-06
Lifetime		**30**		**1.38E-05**

As demonstrated in the table above, the excess cancer risks to infants, children, and adults at the nearest sensitive receptor located approximately 300 meters away, over the course of Project operation, are approximately 8.3, 11.9, and 1.84 in one million, respectively. The excess cancer risk associated with the Project operation over the course of a residential lifetime is approximately 13.8 in

6 CONT

one million. When summing the Project's operational cancer risk, as estimated by SWAPE, with the DEIR's construction-related cancer risk of 0.8 in one million, we estimate an excess cancer risk of approximately 14.6 in one million over the course of a residential lifetime (30 years) (p. 3.2-56, Table 3.2-16).[19] As such, the child and lifetime cancer risks exceed the BAAQMD threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified by the DEIR and associated documents.

Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level HRA is to demonstrate the potential link between Project-generated emissions and adverse health risk impacts. According to the U.S. EPA:

> "EPA's Exposure Assessment Guidelines recommend completing exposure assessments iteratively using a tiered approach to 'strike a balance between the costs of adding detail and refinement to an assessment and the benefits associated with that additional refinement' (U.S. EPA, 1992).
>
> In other words, an assessment using basic tools (e.g., simple exposure calculations, default values, rules of thumb, conservative assumptions) can be conducted as the first phase (or tier) of the overall assessment (i.e., a screening-level assessment).
>
> The exposure assessor or risk manager can then determine whether the results of the screening-level assessment warrant further evaluation through refinements of the input data and exposure assumptions or by using more advanced models."

6 CONT

As demonstrated above, screening-level analyses warrant further evaluation in a refined modeling approach. As our screening-level HRA demonstrates that construction and operation of the Project would result in a potentially significant health risk impact, a revised EIR should be prepared including a refined health risk analysis which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

According to CEQA Guidelines § 15096(g)(2):

> "When an updated EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."

7

[19] Calculated: 13.8 in one million + 0.8 in one million = 14.6 in one million.

The DEIR is consequently required under CEQA to implement all feasible mitigation to reduce the Project's potential impacts. As demonstrated in the sections above, the Project would result in potentially significant health risk impacts that should be mitigated further.

In order to reduce the DPM emissions associated with Project construction and operation, we recommend the DEIR consider several mitigation measures (see list below).

Southern California Association of Governments ("SCAG")'s 2020 RTP/SCS PEIR's Air Quality Project Level Mitigation Measures ("PMM-AQ-1") recommends:[20]

- Minimizing unnecessary vehicular and machinery activities; and
- Requiring contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project.

CARB recommends: [21]

- Require all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits, such that, emission reductions achieved are equal to or exceed that of a Tier 4 engine;
- Require all heavy-duty trucks entering the construction site during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-oxides of nitrogen (NOx) standard starting in the year 2022;
- Requiring all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units;
- Requiring all TRUs entering the project-site be plug-in capable;
- Requiring all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the project site to be zero-emission;
- Requiring future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans;
- Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than **two minutes** while on site; and
- Require the installing of vegetative walls or other effective barriers that separate loading docks and people living or working nearby.

7
CONT

The DOJ recommends:[22]

[20] *Ibid.* p. 8 – 9.
[21] "Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers." CARB, August 2023, *available at*: https://ww2.arb.ca.gov/sites/default/files/2023-08/CARB%20Comments%20-%20NOP%20for%20the%20%20Oak%20Valley%20North%20Project%20DEIR.pdf; Attachment A, p. 5 – 8.
[22] *Ibid.* p. 8 – 9.

- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations; and
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.

7 CONT

The CalEEMod User's Guide confirms that the methods for mitigating DPM emissions include the use of "alternative fuel, electric equipment, diesel particulate filters (DPF), oxidation catalysts, newer tier engines, and dust suppression."[23]

As demonstrated above, we have provided several mitigation measures that would reduce Project-related, DPM emissions developed from sources including SCAG, CARB, and the DOJ. These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently reduce emissions released during Project construction and operation.

8

A revised EIR should be prepared that includes *all* feasible mitigation measures, as well as health risk to ensure that the necessary mitigation measures are implemented to reduce emissions to the maximum extent feasible. The revised EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's potentially significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

9

Sincerely,



Matt Hagemann, P.G., C.Hg.

[23] "Calculation Details for CalEEMod." CAPCOA, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-a2020-4-0.pdf?sfvrsn=6, Appendix A, p. 60.



Paul E. Rosenfeld, Ph.D.

Attachment A: Health Risk Calculations
Attachment B: AERSCREEN Output Files
Attachment C: Matt Hagemann CV
Attachment D: Paul Rosenfeld CV

Construction	
2024	
Annual Emissions (tons/year)	0.04
Daily Emissions (lbs/day)	0.219178082
Construction Duration (days)	121
Total DPM (lbs)	26.52054795
Total DPM (g)	12029.72055
Start Date	9/2/2024
End Date	1/1/2025
Construction Days	121
2025	
Annual Emissions (tons/year)	0.03
Daily Emissions (lbs/day)	0.164383562
Construction Duration (days)	226
Total DPM (lbs)	37.15068493
Total DPM (g)	16851.55068
Start Date	1/1/2025
End Date	8/15/2025
Construction Days	226

Total	
Total DPM (lbs)	63.67123288
Total DPM (g)	28881.27123
Emission Rate (g/s)	0.000963326
Release Height (meters)	3
Total Acreage	10.45
Max Horizontal (meters)	290.83
Min Horizontal (meters)	145.41
Initial Vertical Dimension (meters)	1.5
Setting	American Canyon
Population	21,432
Start Date	9/2/2024
End Date	8/15/2025
Total Construction Days	347
Total Years of Construction	0.95
Total Years of Operation	29.05

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.04
Daily Emissions (lbs/day)	0.219178082
Total DPM (lbs)	80
Emission Rate (g/s)	0.001150685
Release Height (meters)	3
Total Acreage	10.45
Max Horizontal (meters)	290.83
Min Horizontal (meters)	145.41
Initial Vertical Dimension (meters)	1.5
Setting	American Canyon
Population	21,432

10

The Maximally Exposed Individual at an Existing Residential Receptor				
Age Group	**Emissions Source**	**Duration** (years)	**Concentration** (ug/m3)	**Cancer Risk**
3rd Trimester	Construction	0.25	*	*
	Construction	*0.70*	*	*
	Operation	*1.30*	*0.0458*	*8.31E-06*
Infant (0 - 2)	Total	2	*	*
Child (2 - 16)	Operation	14	0.0458	1.19E-05
Adult (16 - 30)	Operation	14	0.0458	1.84E-06
Lifetime		**30**		**1.38E-05**

10
CONT

Attachment B

AERSCREEN 21112 / AERMOD 21112 07/22/24
15:58:41

TITLE: SDGCommerce220, Operational

********** AREA PARAMETERS **********

SOURCE EMISSION RATE:	0.115E-02	g/s	0.913E-02	lb/hr
AREA EMISSION RATE:	0.272E-07	g/(s-m2)	0.216E-06	lb/(hr-m2)
AREA HEIGHT:	3.00	meters	9.84	feet
AREA SOURCE LONG SIDE:	290.83	meters	954.17	feet
AREA SOURCE SHORT SIDE:	145.41	meters	477.07	feet
INITIAL VERTICAL DIMENSION:	1.50	meters	4.92	feet
RURAL OR URBAN:	URBAN			
POPULATION:	21432			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

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********** BUILDING DOWNWASH PARAMETERS **********

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

********** FLOW SECTOR ANALYSIS **********
25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	1.182	15	150.0	WIN

* = worst case diagonal

```
*********************  MAKEMET METEOROLOGY PARAMETERS  ********************
--------------------------------------------------------------------------

MIN/MAX TEMPERATURE:    250.0 / 310.0 (K)

MINIMUM WIND SPEED:       0.5 m/s

ANEMOMETER HEIGHT:     10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
DOMINANT CLIMATE TYPE:    Average Moisture
DOMINANT SEASON:          Winter

ALBEDO:                  0.35
BOWEN RATIO:             1.50
ROUGHNESS LENGTH:       1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED


       METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT
       -------------------------------------------------------------

 YR MO DY JDY HR
 -- -- -- --- --
 10 01 10  10 01

    H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 -1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50

    HT  REF TA     HT
- - - - - - - - - - -
  10.0   310.0    2.0


--------------------------------------------------------------------------
*********************** AERSCREEN AUTOMATED DISTANCES *********************
                  OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE
--------------------------------------------------------------------------


                      MAXIMUM                              MAXIMUM
            DIST     1-HR CONC                  DIST     1-HR CONC
             (m)      (ug/m3)                    (m)      (ug/m3)
         ---------------------               ---------------------
            1.00    0.8881                   2525.00    0.2991E-01
```

11
CONT

25.00	0.9513	2550.00	0.2951E-01
50.00	1.009	2575.00	0.2913E-01
75.00	1.061	2600.00	0.2875E-01
100.00	1.107	2625.00	0.2839E-01
125.00	1.149	2650.00	0.2802E-01
150.00	1.182	2675.00	0.2767E-01
175.00	0.9642	2700.00	0.2771E-01
200.00	0.7492	2725.00	0.2736E-01
225.00	0.6371	2750.00	0.2702E-01
250.00	0.5608	2775.00	0.2669E-01
275.00	0.5047	2800.00	0.2636E-01
300.00	0.4577	2825.00	0.2604E-01
325.00	0.4178	2850.00	0.2573E-01
350.00	0.3835	2875.00	0.2542E-01
375.00	0.3535	2900.00	0.2513E-01
400.00	0.3275	2925.00	0.2483E-01
425.00	0.3045	2950.00	0.2454E-01
450.00	0.2840	2975.00	0.2426E-01
475.00	0.2659	3000.00	0.2399E-01
500.00	0.2496	3025.00	0.2372E-01
525.00	0.2349	3050.00	0.2345E-01
550.00	0.2217	3075.00	0.2319E-01
575.00	0.2098	3100.00	0.2293E-01
600.00	0.1987	3125.00	0.2268E-01
625.00	0.1887	3150.00	0.2244E-01
650.00	0.1796	3175.00	0.2220E-01
675.00	0.1711	3200.00	0.2196E-01
700.00	0.1633	3225.00	0.2173E-01
725.00	0.1562	3250.00	0.2150E-01
750.00	0.1496	3275.00	0.2127E-01
775.00	0.1433	3300.00	0.2105E-01
800.00	0.1375	3325.00	0.2084E-01
825.00	0.1321	3350.00	0.2062E-01
850.00	0.1271	3375.00	0.2042E-01
875.00	0.1225	3400.00	0.2021E-01
900.00	0.1181	3425.00	0.2001E-01
925.00	0.1140	3450.00	0.1981E-01
950.00	0.1100	3475.00	0.1962E-01
975.00	0.1063	3500.00	0.1943E-01
1000.00	0.1028	3525.00	0.1924E-01
1025.00	0.9958E-01	3550.00	0.1905E-01
1050.00	0.9649E-01	3575.00	0.1887E-01
1075.00	0.9357E-01	3600.00	0.1869E-01
1100.00	0.9079E-01	3625.00	0.1851E-01
1125.00	0.8813E-01	3650.00	0.1834E-01
1150.00	0.8560E-01	3675.00	0.1817E-01
1175.00	0.8320E-01	3700.00	0.1800E-01
1200.00	0.8092E-01	3725.00	0.1784E-01
1225.00	0.7875E-01	3750.00	0.1768E-01
1250.00	0.7667E-01	3775.00	0.1752E-01

11
CONT

1275.00	0.7468E-01	3800.00	0.1736E-01
1300.00	0.7278E-01	3825.00	0.1720E-01
1325.00	0.7096E-01	3850.00	0.1705E-01
1350.00	0.6923E-01	3875.00	0.1690E-01
1375.00	0.6757E-01	3900.00	0.1675E-01
1400.00	0.6597E-01	3925.00	0.1661E-01
1425.00	0.6443E-01	3950.00	0.1646E-01
1450.00	0.6295E-01	3975.00	0.1632E-01
1475.00	0.6152E-01	4000.00	0.1618E-01
1500.00	0.6016E-01	4025.00	0.1604E-01
1525.00	0.5885E-01	4050.00	0.1591E-01
1550.00	0.5758E-01	4075.00	0.1578E-01
1575.00	0.5637E-01	4100.00	0.1564E-01
1600.00	0.5520E-01	4125.00	0.1551E-01
1625.00	0.5407E-01	4150.00	0.1539E-01
1650.00	0.5299E-01	4175.00	0.1526E-01
1675.00	0.5194E-01	4200.00	0.1514E-01
1700.00	0.5092E-01	4225.00	0.1501E-01
1725.00	0.4994E-01	4250.00	0.1489E-01
1750.00	0.4899E-01	4275.00	0.1478E-01
1775.00	0.4807E-01	4300.00	0.1466E-01
1800.00	0.4717E-01	4325.00	0.1454E-01
1825.00	0.4631E-01	4350.00	0.1443E-01
1850.00	0.4548E-01	4375.00	0.1432E-01
1875.00	0.4467E-01	4400.00	0.1420E-01
1900.00	0.4388E-01	4425.00	0.1409E-01
1925.00	0.4311E-01	4450.00	0.1399E-01
1950.00	0.4236E-01	4475.00	0.1388E-01
1975.00	0.4164E-01	4500.00	0.1377E-01
2000.00	0.4094E-01	4525.00	0.1367E-01
2025.00	0.4026E-01	4550.00	0.1357E-01
2050.00	0.3960E-01	4575.00	0.1347E-01
2075.00	0.3895E-01	4600.00	0.1337E-01
2100.00	0.3833E-01	4625.00	0.1327E-01
2125.00	0.3773E-01	4650.00	0.1317E-01
2150.00	0.3714E-01	4675.00	0.1307E-01
2175.00	0.3656E-01	4700.00	0.1298E-01
2200.00	0.3600E-01	4725.00	0.1289E-01
2225.00	0.3546E-01	4750.00	0.1279E-01
2250.00	0.3493E-01	4775.00	0.1270E-01
2275.00	0.3441E-01	4800.00	0.1265E-01
2300.00	0.3391E-01	4825.00	0.1260E-01
2325.00	0.3342E-01	4850.00	0.1256E-01
2350.00	0.3294E-01	4875.00	0.1251E-01
2375.00	0.3247E-01	4900.00	0.1247E-01
2400.00	0.3202E-01	4925.00	0.1242E-01
2425.00	0.3158E-01	4950.00	0.1238E-01
2450.00	0.3114E-01	4975.00	0.1233E-01
2475.00	0.3072E-01	5000.00	0.1229E-01
2500.00	0.3031E-01		

11
CONT

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--------------------------------------------------------------------------------
**********  AERSCREEN MAXIMUM IMPACT SUMMARY  **********
--------------------------------------------------------------------------------

3-hour, 8-hour, and 24-hour scaled
concentrations are equal to the 1-hour concentration as referenced in
SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
under Screening Guidance

                    MAXIMUM      SCALED      SCALED      SCALED      SCALED
                     1-HOUR      3-HOUR      8-HOUR     24-HOUR      ANNUAL
  CALCULATION          CONC        CONC        CONC        CONC        CONC
   PROCEDURE         (ug/m3)     (ug/m3)     (ug/m3)     (ug/m3)     (ug/m3)
--------------    ----------  ----------  ----------  ----------  ----------
FLAT TERRAIN        1.183       1.183       1.183       1.183         N/A

DISTANCE FROM SOURCE        150.99 meters



IMPACT AT THE
AMBIENT BOUNDARY   0.8881      0.8881      0.8881      0.8881         N/A

DISTANCE FROM SOURCE          1.00 meters
```

11
CONT

Attachment C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

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CONT

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

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CONT

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.
- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:
- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:
- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

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CONT

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:
- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

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Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

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Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

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Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

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Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

Attachment D

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Focus on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years of experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Rosenfeld P. E., Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution.* **233,** 171.

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

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CONT

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research.* 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

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CONT

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

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CONT

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

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CONT

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

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Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

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UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division
Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

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In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation
Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

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In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al.cvs. Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

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In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.
Case No. 1716-CV10006
Rosenfeld Deposition 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.
Case No. 2:17-cv-01624-ES-SCM
Rosenfeld Deposition 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" Defendant.
Case No. 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No. BC615636
Rosenfeld Deposition 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs vs. The 3M Company et al., Defendants
Case No. 1:16-cv-02531-RBJ
Rosenfeld Deposition 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No. 1923
Rosenfeld Deposition 11-17-2017

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In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintifs vs. Chevron Corporation, et al., Defendants
Cause No. C12-01481
Rosenfeld Deposition 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case No. 1:19-cv-00315-RHW
Rosenfeld Deposition 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No. LC102019 (c/w BC582154)
Rosenfeld Deposition 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants
Case No. 4:16-cv-52-DMB-JVM
Rosenfeld Deposition July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No. RG14711115
Rosenfeld Deposition September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No. LALA002187
Rosenfeld Deposition August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action No. 14-C-30000
Rosenfeld Deposition June 2015

In The Iowa District Court for Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No. 4980
Rosenfeld Deposition May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case No. CACE07030358 (26)
Rosenfeld Deposition December 2014

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In the County Court of Dallas County Texas
Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.
Case No. cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., Plaintiffs, vs. Republic Services, Inc., et al., Defendants
Case No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.
Civil Action No. 2:09-cv-232-WHA-TFM
Rosenfeld Deposition July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., Plaintiffs, vs. Drummond Company Inc., et al., Defendants
Civil Action No. CV 2008-2076
Rosenfeld Deposition September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., Plaintiffs, vs. Citgo Petroleum Corporation, et al., Defendants.
Case No. 2:07CV1052
Rosenfeld Deposition July 2009

EXHIBIT B

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

21 July 2024

RE: SDG Commerce 220 Distribution Center

Dear Mr. He,

I write to comment on potential impacts to biological resources from the proposed SDG Commerce 220 Distribution Center Project, which I understand would add a 35-foot-tall 219,834 sf wine storage and distribution center on 10.17 acres of open space sandwiched between two recently constructed warehouses north to south and eucalyptus groves east to west. I comment on the analyses of impacts to biological resources in FirstCarbon Solutions (FCS 2023a) and the DEIR prepared by the City of American Canyon.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached. 1

SITE VISITS

To prepare expert testimony on the potential impacts to biological resources resulting from the SDG Commerce 330 and SDG Commerce 217 projects, I twice visited the site of proposed SDG 220 Distribution Center Project, first on 23 January 2019 from 06:15 hours to 10:50 hours, and again on 5 January 2021 from 08:23 to 09:25 hours. Because the site of the SDG Commerce 220 Industrial Center is located between the other two project sites I was there to visit, my surveys overlapped the site of the SDG Commerce 220 project. All three of the SDG sites originally composed one contiguous patch of grassland with scattered coyote brush and wetlands inclusions, all surrounded by groves of blue gum eucalyptus (Photo 1). Upon my second visit, the SDG Commerce 330 project had been developed (Photo 2). 2

In total I surveyed the project site and its surround for 5.62 hours. I walked the site's perimeter where accessible, stopping to scan for wildlife with use of binoculars. I recorded all species of vertebrate wildlife I detected, including those whose members flew over the site or were seen nearby, off the site. Animals of uncertain species identity were either omitted or, if possible, recorded to the Genus or higher taxonomic level.



Photos 1 and 2. *Views of the SDG Commerce 330 site before and after construction, and to the right side of the images, part of the neighboring SDG Commerce 220 Industrial Commerce site before it was graded.*

At and around the site of the proposed project, I saw a juvenile bald eagle (Photos 3 and 4), Cooper's hawk and northern harrier (Photos 5 and 6), American kestrel (Photo 7), and golden-crowned sparrow, song sparrow and white-crowned sparrow (Photos 8–10), among many others, some of which I photo-documented in my comment letters to the City regarding the SDG Commerce 330 and 217 projects. In total I detected 60 species of vertebrate wildlife, including 10 special-status species (Table 1). Having spent only 5.62 hours at and around the site, 60 species indicated the site is inherently rich in wildlife.

Reconnaissance surveys, such as those completed at the project site, cannot support species' absence determinations, as protocol-level detection surveys are needed to do that, but they can confirm the presence of species that happen to be detected. Such surveys can also support an estimate of the number of species that were not detected, thereby revealing the degree to which the survey sampled the local wildlife community that was available at the time of the survey. One way to do this is to model the pattern in species detections with time into a survey. The cumulative number of species' detections

2 CONT

increases with increasing survey time, but eventually with diminishing numbers of newly-detected species. In the case of my first 2.58-hour survey at the project site, a model fit to the pattern in the data predicted that had I spent more time on site, or had I help from more biologists, I would have detected 79 species (Figure 1).

Photos 3 and 4. *A juvenile bald eagle flew along the eucalyptus trees surrounding the project site on 23 January 2019. On 5 January 2021, Bay Trail visitors informed me that two bald eagles had been living in the area this winter.*





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Photos 5 and 6. *Cooper's hawk (top) and northern harrier (bottom) fly over the project site, 23 January 2019.*

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Photo 7. *American kestrel perches on a Eucalyptus branch on southern boundary of proposed project site, 23 January 2019 (left) and on a pole just south of the project site on 5 January 2021 (right).*

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Photos 8 and 9. *Golden-crowned sparrow and song sparrow next to project site, 5 January 2021.*



Photo 10. *White-crowned sparrow next to the site of the proposed project, 23 January 2019.*

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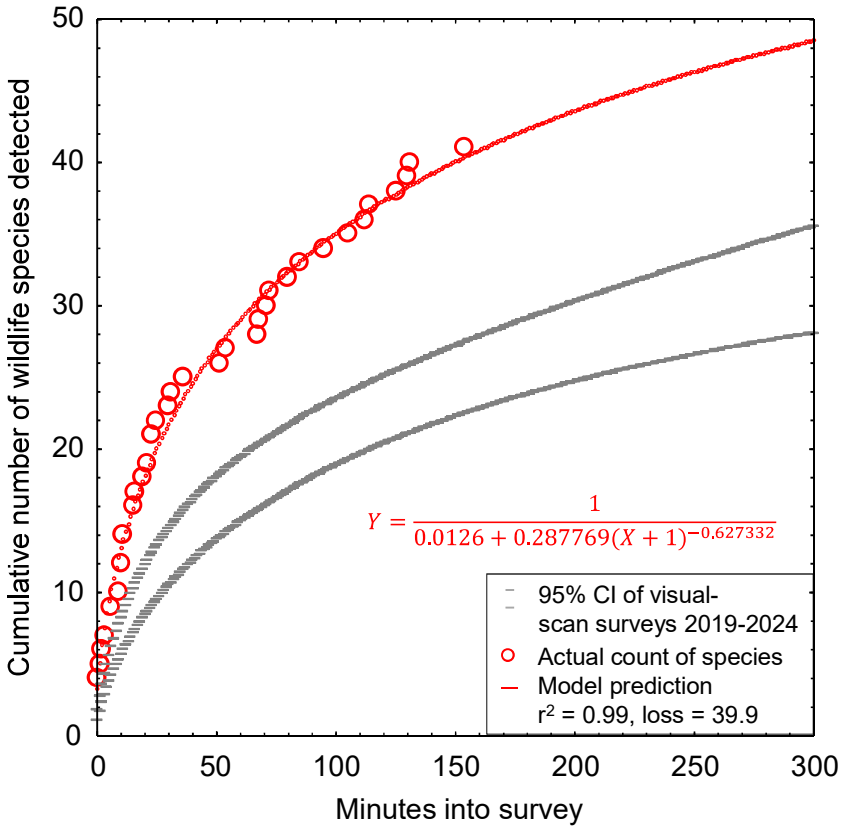
The patterns in the data also indicate that my rate of species detections at the project site far exceeded the upper bound of the 95% confidence interval I estimated from all 18 surveys I completed at other project sites on the east side of the San Francisco Bay (Figure 1). In other words, wildlife species richness at the project site far exceeds the species richness I have found at other project sites in the region. This is more evidence that the project site is inherently rich in wildlife species.

The site supports many species of wildlife than I could detect during two brief reconnaissance surveys. However, although this modeling approach is useful for more realistically representing the species richness of the site at the time of a survey, it cannot represent the species richness throughout the year or across multiple years because many species are seasonal or even multi-annual in their movement patterns and in their occupancy of habitat. I surveyed only in January, and therefore was unlikely to see some of the species that would use the site in spring, summer or fall. That other species occur at the site is in evidence in Table 1, which also reports species of vertebrate wildlife observed by consultants who focused their surveys on the entirety of the original patch of grassland, or on specific portions of it. Their results combined with mine total 98 species of vertebrate wildlife having been detected there, including 18 special-status

species (Table 1). Even this documented species richness is short of the true species richness at the project site.

Figure 1. *Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on my survey on the morning of 23 January 2019. The 95% confidence interval (CI) was based on 18 surveys at sites on the east side of the Bay Area.*



By use of an analytical bridge, I can apply a model developed from a much larger, more robust data set at a research site to predict the number of wildlife species that would make use of the project site over the longer term. As part of my research, I completed a much larger survey effort across 167 km² of annual grasslands of the Altamont Pass Wind Resource Area, Alameda County, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I used at the project site. At each of the 46 survey stations at my research site, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a+b\times(Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The models' coefficients of determination, r^2, ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

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I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I detected 18.5 species over the first 5.62 hours of surveys in the Altamont Pass (5.62 hours to match the number of hours I surveyed at the project site), which composed 32.4% of the total predicted species I would detect with a much larger survey effort. Given the example illustrated in Figure 2, the 60 species I detected after my 5.62 hours of survey at the project site likely represented 33.4% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, I would likely detect $^{60}/_{0.324} = 185$ diurnally-active species of vertebrate wildlife at the site. Assuming my ratio of special-status to non-special-status species was to hold through the detections of all 185 predicted species, then continued surveys would eventually detect 31 special-status species of vertebrate wildlife. To check on these predictions, I analytically bridged my findings at the SDG Commerce site to another site I surveyed 41 times in Rancho Cordova. That analytical bridge predicted 170 species if I was to continue surveys throughout a year or longer, so not very different from my bridge to the Altamont Pass study area.

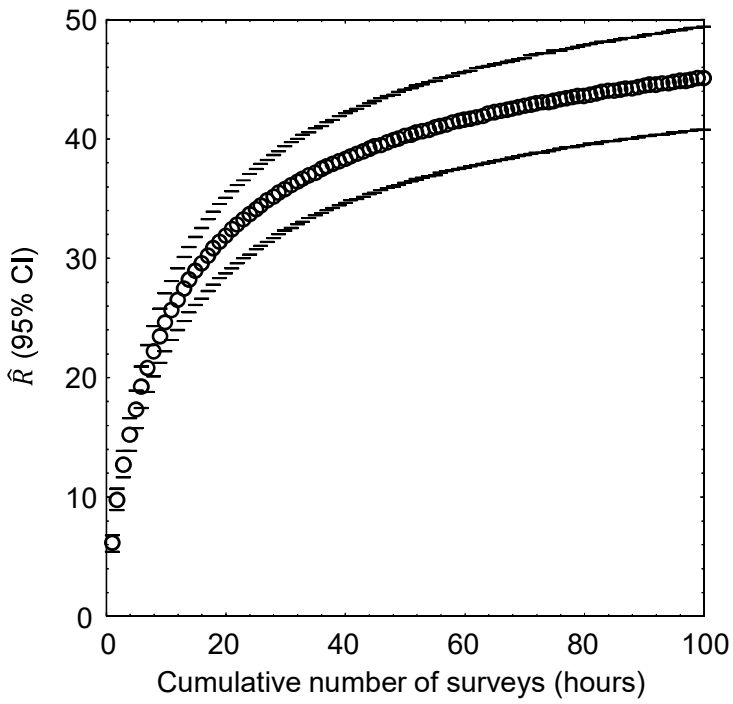

Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019.*

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CONT

With surveys to detect nocturnal wildlife such as owls and bats, the true number of species composing the wildlife community of the site must be larger. A series of reconnaissance surveys cannot alone reveal the inventory of a site's wildlife community.

Table 1. *Species of wildlife I observed during visits on 23 January 2019 and 5 January 2021 at the site of the proposed SDG Commerce 217 Warehouse*, during an *offsite visit during my 2021 survey that includes a walk along Napa River and Bay Trails just south and west of the project site, during surveys conducted by myself (KSS), Monk & Associates (M&A), Pinecrest Research Corp, (PRC), and FirstCarbon Solutions (FCS).*

Species	***Scientific name***	**Status[1]**	**KSS 2019**	**KSS 2021**	**KSS offsite 2019, 2021**	**M&A 2006-2019**	**PRC 2023**	**FCS 2023**
Sierran treefrog	*Pseudacris sierra*		X		X	X		
Western fence lizard	*Sceloporus occidentalis*					X		
Canada goose	*Branta canadensis*		X			X	X	X
Northern shoveler	*Anas clypeata*				X			
Mallard	*Anas platyrhynchos*		X				X	X
California quail	*Callipepla californica*		X			X		
Wild turkey	*Meleagris gallopavo*	Non-native				X	X	
Pied-billed grebe	*Podilymbus podiceps*				X			
Ring-necked pheasant	*Phasianus colchicus*	Non-native				X		
Mourning dove	*Zenaida macroura*		X		X	X	X	X
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	X			X		
Black-chinned hummingbird	*Archilochus alexandri*		X					
Anna's hummingbird	*Calypte anna*		X	X	X	X	X	X
Allen's hummingbird	*Selasphorus sasin*	BCC					X	
Virginia rail	*Rallus limicola*					X		
American coot	*Fulica americana*				X		X	X
Black-necked stilt	*Himantopus mexicanus*				X			
American avocet	*Recurvirostra americanus*				X			
Killdeer	*Charadrius vociferus*						X	
Long-billed dowitcher	*Limnodromus scolopaceus*				X			
Least sandpiper	*Caladris minutilla*				X			
Ring-billed gull	*Larus delawarensis*		X		X			
California gull	*Larus californicus*	BCC, TWL					X	X
Herring gull	*Larus argentatus*		X		X			

2 CONT

Species	***Scientific name***	**Status[1]**	**KSS 2019**	**KSS 2021**	**KSS offsite 2019, 2021**	**M&A 2006-2019**	**PRC 2023**	**FCS 2023**
American white pelican	*Pelacanus erythrorhynchos*	SSC1, BCC					X	X
Great blue heron	*Ardea herodias*					X	X	X
Turkey vulture	*Cathartes aura*	BOP			X	X	X	X
Osprey	*Pandion haliaetus*	TWL, BOP				X	X	
White-tailed kite	*Elanus leucurus*	CFP, BOP				X	X	X
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP	X		X			
Cooper's hawk	*Accipiter cooperii*	WL, BOP	X					
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP	X					
Red-shouldered hawk	*Buteo lineatus*	BOP			X	X	X	X
Red-tailed hawk	*Buteo jamaicensis*	BOP	X	X	X	X	X	
Barn owl	*Tyto alba*	BOP				X		
Great horned owl	*Bubo virginianus*	BOP	X					
Belted kingfisher	*Ceryle alcyon*					X		
Nuttall's woodpecker	*Picoides nuttallii*	BCC	X		X	X	X	X
Northern flicker	*Colaptes auratus*		X	X	X	X	X	X
American kestrel	*Falco sparverius*	BOP	X		X	X		
Peregrine falcon	*Falco peregrinus*	BOP			X		X	
Black phoebe	*Sayornis nigricans*		X		X	X	X	X
Say's phoebe	*Sayornis saya*		X		X	X		
California scrub-jay	*Aphelocoma californica*		X			X	X	X
American crow	*Corvus brachyrhynchos*		X	X		X	X	X
Common raven	*Corvus corax*		X		X	X	X	X
Hutton's vireo	*Vireo huttoni*		X					
Chestnut-backed chickadee	*Poecile rufescens*					X	X	X
Tree swallow	*Tachycineta bicolor*					X	X	X
Northern rough-winged swallow	*Stelgidopteryx serripennis*		X					

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CONT

Species	***Scientific name***	**Status[1]**	**KSS 2019**	**KSS 2021**	**KSS offsite 2019, 2021**	**M&A 2006-2019**	**PRC 2023**	**FCS 2023**
Violet-green swallow	*Tachycineta thalassina*						X	
Barn swallow	*Hirundo rustica*		X			X		
Cliff swallow	*Petrochelidon pyrrhonota*					X	X	X
Bushtit	*Psatriparus minimus*		X	X		X		
Wrentit	*Chamaea fasciata*	BCC				X		
Ruby-crowned kinglet	*Regulus calendula*					X	X	X
Cedar waxwing	*Bombycilla cedrorum*						X	X
Brown creeper	*Certhia americana*					X	X	
Rock wren	*Salpinctes obsoletus*						X	X
Bewick's wren	*Thryomanes bewickii*					X	X	X
House wren	*Troglodytes aedon*		X				X	X
Marsh wren	*Cistothorus palustris*				X	X		
Northern mockingbird	*Mimus polyglottos*		X		X	X	X	
European starling	*Sturnus vulgaris*	Non-native	X	X	X	X	X	X
Western bluebird	*Sialia mexicana*		X			X	X	X
Hermit thrush	*Catharus guttatus*						X	X
American robin	*Turdus migratorius*					X	X	X
House sparrow	*Passer domesticus*	Non-native				X	X	
American pipit	*Anthus rubescens*						X	
House finch	*Carpodacus mexicanus*		X		X	X	X	X
Purple finch	*Haemorhous purpureus*						X	X
Lesser goldfinch	*Carduelis psaltria*				X	X	X	X
American goldfinch	*Carduelis tristis*		X				X	X
Fox sparrow	*Passerella iliaca*				X		X	X
Dark-eyed junco	*Junco hyemalis*		X	X	X	X	X	X
White-crowned sparrow	*Zonotrichia leucophrys*		X		X	X	X	X
Golden-crowned sparrow	*Zonotrichia atricapilla*		X		X		X	X
Savannah sparrow	*Passerculus sandwichensis*					X		

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CONT

Species	*Scientific name*	Status[1]	KSS 2019	KSS 2021	KSS offsite 2019, 2021	M&A 2006-2019	PRC 2023	FCS 2023
Song sparrow	*Melospiza melodia*				X	X	X	X
Lincoln's sparrow	*Melospiza lincolnii*				X			
California towhee	*Pipilo crissalis*		X		X		X	X
Spotted towhee	*Pipilo maculatus*					X		
Western meadowlark	*Sturnella neglecta*		X					
Bullock's oriole	*Icterus bullockii*	BCC				X		
Red-winged blackbird	*Agelaius phoeniceus*		X		X	X	X	X
Brown-headed cowbird	*Molothrus ater*				X	X	X	X
Brewer's blackbird	*Euphagus cyanocephalus*		X		X	X	X	
Yellow-rumped warbler	*Setophaga coronata*		X	X	X	X	X	X
Black-tailed jackrabbit	*Lepus californicus*					X	X	X
Botta's pocket gopher	*Thomomys bottae*				X			
Western gray squirrel	*Sciurus griseus*					X		
California ground squirrel	*Otospermophilus beecheyi*				X	X		
Raccoon	*Procyon lotor*			X				
Coyote	*Canis latrans*					X		
House cat	*Felis catus*					X	X	X
Mule deer	*Odocoileus hemionus*						X	X
Columbian black-tailed deer	*Odocoileus hemionus ssp. columbianus*					X		
California vole	*Microtus californicus*						X	X

[1] Listed as FT or FE = federal threatened or endangered, CT or CE = California threatened or endangered, CFP = California Fully Protected (CFG Code 3511), SSC = California Species of Special Concern, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, TWL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (California Fish and Game Code 3503.5).

2 CONT

EXISTING ENVIRNMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the biological species that use the site, their relative abundances, how they use the site, key ecological relationships, and known and ongoing threats to those species with special status. A reasonably accurate characterization of the environmental setting can provide the basis for determining whether the site holds habitat value to wildlife, as well as a baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site's regional setting, is one of CEQA's essential analytical steps. Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of the proposed project, these needed steps have been completed but their results misrepresented in the DEIR. 3

Environmental Setting Informed by Field Surveys

To CEQA's primary objective to disclose potential environmental impacts of a proposed project, the analysis should be informed of which biological species are known to occur at the project site or nearby, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources.

Having completed many surveys on and around the project site between 2006 and 2019, Monk & Associates detected 62 species of vertebrate wildlife, including 10 special-status species (Table 1). However, Monk & Associates reported no details of their surveys, such as names and qualifications of survey personnel, survey start times, and survey duration. The reporting did not include the information needed to interpret findings. Nevertheless, 61 species is a lot of species to be found during what were reconnaissance surveys. 4

Pinecrest Research Corp completed 11 surveys in 2023, accumulating a list of 61 species detected, including 10 special-status species (Table 1). However, did not report how long their surveys lasted, and this missing detail impinges on interpretation of the survey findings. Nevertheless, 62 species is a lot of species to be found during what were essentially reconnaissance surveys.

FCS (2023a) reports to have detected 46 species of vertebrate wildlife at the project site, which is a lot of species relative to most other reconnaissance survey efforts I have reviewed involving hundreds of other project sites. Six (13%) of the 46 species were special-status species. These species detections resulted from two surveys, the first on December 2, 2022, and the second on March 17, 2023, plus "Seven pre-construction surveys … between January 18 and April 7, 2023, for a total of approximately 30 survey hours … for the entirety of the Commerce 217 project site and relevant adjacent areas (which included the adjacent SDG Commerce 220 site). FCS's detection of 46 species

over 30+ hours reflected a less productive survey effort compared to Monk & associates and Pinecrest Research Corp.

FCS (2023a) neglects to report critically important methodological details about the two site-specific surveys, such as what time the surveys began and how long they lasted. Nothing was reported about weather conditions. There is no report of the number of biologists who performed the surveys. Therefore, it is difficult to determine why the species detections numbered fewer than I would expect. 4 CONT

The objectives of FCS's (2023a) reconnaissance surveys were "to ascertain general site conditions, wildlife use, and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. Potentially sensitive areas identified during the literature review were ground-truthed during the field survey for mapping accuracy." Unclear was whether these multiple objectives were pursued sequentially or simultaneously. If simultaneously, then I suggest the biologists would have been disadvantaged by trying to see too much at once, and therefore achieved an inferior species detection rate. 5

As for the preconstruction surveys, they were described as focused on burrowing owl detections, nesting Swainson's hawks, other nesting birds, and pond turtles. Focused surveys would have detracted from seeing as many of the available species of wildlife as possible, which is the principal objective of reconnaissance surveys. In other words, preconstruction surveys are in pursuit of objectives other than those typical of reconnaissance surveys. Furthermore, preconstruction surveys lose their focus for a given species if the surveys are performed simultaneously for burrowing owls, Swainson's hawks, other nesting raptors, other nesting birds, and pond turtles, and they would have lost focus had they been performed simultaneously for any combination of two of these groups, let alone all four groups. Preconstruction surveys should be performed separately for burrowing owls, Swainson's hawks, nesting birds, and pond turtles. In fact, the CDFW (2000) guidelines clearly state, "Surveys should be conducted in a manner that maximizes the potential to observe the adult Swainson's hawks" and "Minimize distractions while surveying." 6

Regarding preconstruction surveys for nesting Swainson's hawks on the neighboring SDG Commerce 217 site, FCS (2023a:19) reports, "Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) and the Staff Report on Burrowing Owl Mitigation*." In fact, the surveys did not meet the timing recommendations of the cited Swainson's hawk guidelines. No surveys were completed in Period V. I will also note that although the three surveys of Period III were technically within the date range of Period III, the survey dates were 5, 6, and 7 April, which are the very first three days of Period III, and when most Swainson's hawks have yet to return from their migration to Mexico. The dates of the surveys appear to me to have been selected to minimize the likelihood of detection of Swainson's hawks. This impression is inconsistent with the first line of the CDFW's (2020) survey guidelines under Methodology, where it states "Surveys should be

conducted in a manner that maximizes the potential to observe the adult Swainson's hawks…"

6 CONT

Pinecrest Research Corp reportedly completed special-status species surveys across the entirety of the SDG Commerce 220 site. Survey personnel from Pinecrest were the same survey personnel identified for the SDG Commerce 217 site on the same dates, so it appears that the same two biologists performed the surveys for the same named taxa on the same dates. FCS (2023a:20) reports, "Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) and the Staff Report on Burrowing Owl Mitigation*." In fact, the Swainson's hawk surveys did not meet the timing recommendations of the cited guidelines, as noted above. Additionally at the SDG 220 site, three surveys were completed during Period IV of the guidelines even though the guidelines state in bold font not to survey during Period IV. Only one of the three surveys were completed in Period V.

7

Moreover, FCS (2023a) neglects to mention in the context of the reporting of these special-status species surveys that the SDG Commerce 220 site of the surveys was graded on 29 May 2023, and that the site was in a graded condition over the last 35 days of the surveys. If Swainson's hawks were nesting adjacent to the site, the grading activity likely would have disturbed the nests to the degree that the Swainson's hawks abandoned the nest attempt. This grading activity should have been immediately reported to CDFW, and it should have been clearly reported biological technical reports that were prepared for the DEIR.

8

The special-status species surveys did not achieve the minimum standards of CDFW's (2012) burrowing owl survey guidelines, either. FCS (2023b) identifies the first three burrowing owl surveys as breeding-season surveys. They were not. Burrowing owls do not breed in January, which means the 18 January survey was not a breeding-season survey as reported. Although CDFW (2012) recommends one survey between 15 February and 15 April, burrowing owls are only sorting out pair bonds and scouting out nest sites during this time. In my experience, burrowing owls do not commit to nest attempts until late April and early May (Smallwood et al. 2013). Therefore, the two surveys in March were not really breeding-season surveys. CDFW (2012) recommends 2-3 surveys between 15 April and 15 July, but FCS might have completed one survey on 24 April (it is unclear that FCS did do a survey on 24 April), but failed to meet the survey standard. Furthermore, FCS (2023b) is silent on the grading of the project site on 29 May 2023. The grading of the site could have affected the likelihood of detection of burrowing owls, and should have been reported as recommended by CDFW (2012).

9

The special-status species surveys are also described as "Nesting bird surveys" (FCS 2023a). Birds do not nest in January, which means the 18 January survey was not a nesting-season survey as reported. Having surveyed to estimate total nest density at two research sites, I can point out that the surveys did not extend far enough into the breeding season to detect all of the available nests. More importantly, however, if it was true that "FCS Biologists observed no active nests within the vicinity of the project site," then the FCS biologists were not qualified to survey for nesting birds. I find nesting

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birds at every site I survey for nesting birds, even in grasslands, but most especially at a site surrounded by trees. It is not believable that presumably competent biologists would have surveyed the site repeatedly through the breeding season only to have found no nesting attempts by birds.

10 CONT

FCS (2023b:3) reports, "No evidence of western pond turtle activity was observed during any of the field surveys. There are some wetland features on-site, however no ponds or streams suitable for western pond turtle exist onsite and no signs of adults or nests were observed." This reporting is misleading. Western pond turtles would not visit the project site for the small wetlands that occur on it. Western pond turtles visit grassland sites to breed. They lay their eggs in ground squirrel or pocket gopher burrows.

11

Though there can be some overlap in methodology, the methods required for the detection of each of the targeted taxonomic groups of special-status species surveys are unique. As examples, surveys for Swainson's hawks requires scans toward the sky, whereas surveys for western pond turtles required scans toward the ground. Each taxonomic group has its own survey guidelines, and those who prepared each set of guidelines expected survey personnel to focus on the taxon that is the subject of the guidelines. The surveys performed by FCS and Pinecrest Research Corp targeted Swainson's hawk, burrowing owl, other nesting raptors, other nesting birds and western pond turtle simultaneously and using a common methodology. I therefore do not see how the survey guidelines of each taxonomic group could have been implemented.

12

Lastly, with regard to the IS/MND prepared for the SDG Commerce 217 project, FCS (2023b:3) asserts that "With implementation of the pre-construction surveys, and implementation of the recommendations for Swainson's hawk, burrowing owl, nesting birds, and western pond turtle, the project is in compliance with MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4 and MM BIO-5." First, there was no MM BIO-5. But second, the preconstruction surveys of all four mitigation measures failed to meet their scheduling standards relative to the date when ground was broken for project construction.

13

Field notes reported by Pinecrest Research Corp. reveal that site 217 was graded on 29 April 2023, and site 220 was graded on 28 May 2023. FCS (2023a:2) reports "as part of the SDG Commerce 217 development, much of the SDG Commerce 220 project site was graded between May 29 and July 2, 2023, to procure existing, stockpiled soil[1] for use as clean fill material for the SDG Commerce 217 site." This the use of site 220 as a soil borrow in support of the SDG Commerce 217 project was addressed in an IS/MND circulated by the City in 2020. The whole of the project, as acknowledged by FCS's above-quoted reporting, included the SDG Commerce 217 construction and the soil-borrow from adjacent site 220. The mitigation measures directed to biological resources

[1] Monk & Associates (2020b) does not refer to any stockpiled soil on site 220, and I did not see any there when I visited the site in January 2021. Google Earth Imagery shows no evidence of stockpiled soil on the SDG Commerce 220 site on 10 July 2022, nor on earlier dates.

of the SDG Commerce 217 project therefore applied to the soil-borrow portion of the project on site 220 as well. Ground-breaking of the SDG Commerce 217 project included the grading of site 220 for the soil borrow.

According to Mitigation Measure BIO-1 of the IS/MND prepared for the SDG Commerce 217 project, "A preconstruction survey for burrowing owls shall be conducted 14 days prior or less to initiating ground disturbance." The last survey completed, however, was on 28 April 2023, which was 31 days prior to ground-breaking. The project went forward out of compliance with Mitigation Measure BIO-1, and therefore it is unknown whether take of burrowing owls was avoided.

According to Mitigation Measure BIO-2 of the IS/MND, "Pre-construction surveys for nesting Swainson's hawks shall be conducted for a quarter-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to a project's initiation. The surveys shall be conducted in accordance with CDFW's "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" (CDFG 2000), …" However, no Swainson's hawk surveys were completed in period V. In fact, construction of site 217 and ground-breaking of site 220 both began in period IV – the most delicate period of the Swainson's hawk breeding season. The project went forward out of compliance with Mitigation Measure BIO-2, and therefore it is unknown whether take of Swainson's hawks was avoided.

13
CONT

According to Mitigation Measure BIO-3 of the IS/MND, "In order to avoid impacts to nesting raptors, a preconstruction nesting survey shall be conducted by a qualified raptor biologist prior to commencing with earth-moving or construction work if this work would commence between February 1st and August 31st. The survey shall be conducted within the 30-day period prior to site disturbance." However, no ground-nesting raptor survey or raptor survey of any kind was completed within 30 days of earth-moving work on the site of SDG Commerce 220. The project went forward out of compliance with Mitigation Measure BIO-3, and therefore it is unknown whether take of nesting raptors was avoided.

According to Mitigation Measure BIO-4 of the IS/MND, "To ensure that impacts to nesting passerine birds are avoided, a nesting survey shall be conducted within 15 days prior to commencing construction/ grading or tree removal activities if this work would commence between March 1 and September 1." No such survey was completed within 15 days prior to grading. The project went forward out of compliance with Mitigation Measure BIO-4, and therefore it is unknown whether take of nesting passerine birds was avoided.

The City failed to enforce the implementation of all four of the IS/MND's mitigation measures intended to protect special-status species of wildlife on the SDG Commerce 220 site. There were no other mitigation measures directed towards biological resources – there were only these four measures – none of which were implemented as prescribed. By not implementing the measures as prescribed, the last several surveys completed by Pinecrest Research Corp detected many fewer species of wildlife indicative of adverse

effects of both mowing and groundbreaking (Figure 3). The survey that followed mowing yielded only 21% of the number of species that had been detected in early April, and the survey that followed the grading of the site yielded 0% of the number of species that had been detected earlier. The impacts to wildlife due to mowing and ground-breaking were significant.

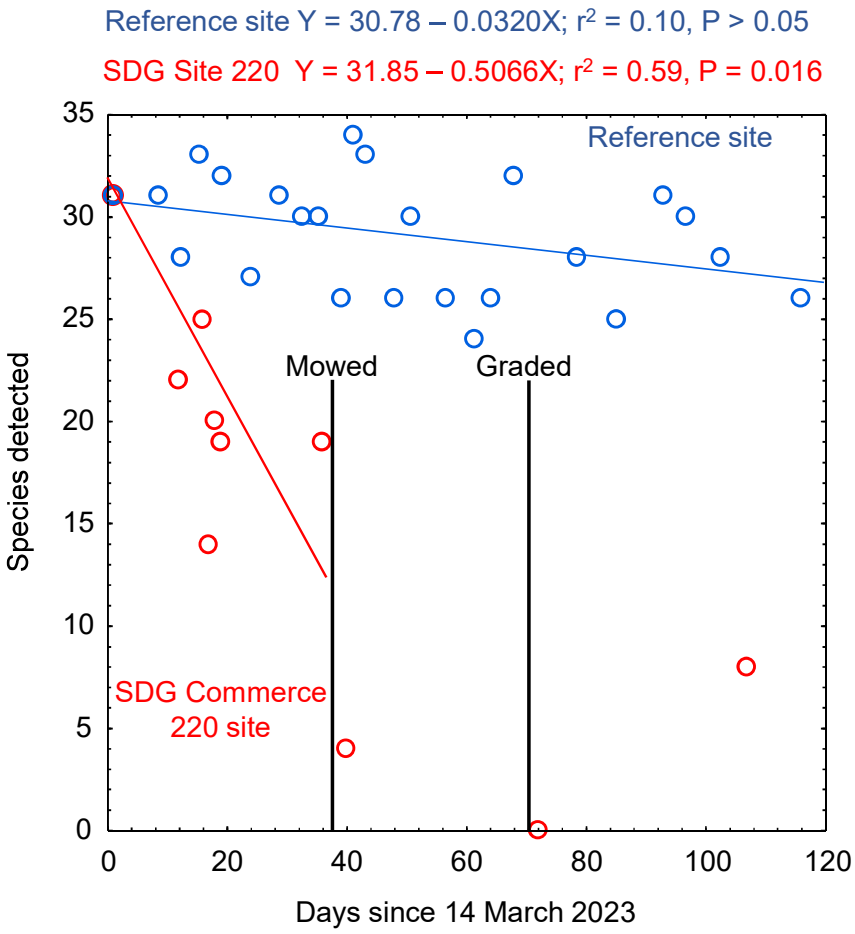

Figure 3. *The number of vertebrate wildlife species detected by survey date completed by myself within 40 minutes of the survey start time at a reference site (blue), and by Pinecrest Research Corp on the SDG Commerce 220 site (red), which as of 28 May 2023 was used as the soil borrow site for the SDG Commerce 217 project. Vertical lines depict about when site 220's vegetation was mowed and when ground was broken (graded) for the soil borrow.*

During the breeding season of 2023, I happened to survey for wildlife over the same date range in Rancho Cordova, which I use herein as a reference site. All of my reference site surveys began in early morning, and from these surveys I restricted my species tallies to the first 40 minutes of each survey in order to establish a comparable maximum count of species (my actual survey times lasted hours per survey). Whereas the number of species I detected within 40 minutes at my reference site did not decline significantly, the number of species detected by Pinecrest Research Corp did decline significantly through the date of mowing of the site's vegetation (Figure 3). My surveys at the reference site established that the decline at site 220 was unlikely due to season. A

13
CONT

likely explanation for the decline until the date of mowing was a decline in the time spent surveying. Had the number of species declined at my reference site due to a decline in survey time, then I would have had to lessen my survey time to only 8.5 minutes by 24 April 2023 in order to achieve the same level of decline measured at site 220. Such a survey duration would have been much too brief for a 10.17-acre site. However, whether the survey time was reduced at site 220 remains unknown because survey duration was not reported.

13 CONT

Not only were the preconstruction surveys not performed when they were supposed to be performed just prior to ground-breaking on site 220, but as noted earlier, they were not implemented to achieve the minimum standards of their respective survey protocols. This means that absence determinations were unsupportable for Swainson's hawk, burrowing owl, nesting raptors, other nesting birds, western pond turtle, and any other species for which detection survey protocols or guidelines are available, or for which detection survey protocols or guidelines are unavailable but for which survey methods linked to scientific standards can be appropriated. The entries of Absent and None under Occurrence Potential of Table 2 are unsupported, and therefore unreliable.

14

FCS (2023a) reports that Pinecrest Research Corp completed protocol-level rare plant surveys. However, the surveys did not achieve the minimum standards of the CDFW (2018) survey guidelines. For one thing, the last survey was completed after site 220 was graded, thereby restricting the survey to the graded field's periphery. There was also no survey of a reference site. The same biologists who did the wildlife surveys also did the plant surveys, and they surveyed for both plants and wildlife on the same dates. If the wildlife and plant surveys were simultaneous, then the focus needed for either taxonomic group was lacking.

15

Environmental Setting Informed by Desktop Review

The purpose of literature and database review, and of consulting with local experts, is to inform the reconnaissance-level survey, to augment it, and to help determine which protocol-level detection surveys should be implemented. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and site conditions. This step is important because the reconnaissance survey is not going to detect all of the species of wildlife that make use of the site. This step can identity those species yet to be detected at the site but which have been documented to occur nearby or whose available habitat associations are consistent with site conditions. Some special-status species can be ruled out of further analysis, but only if compelling evidence is available in support of such determinations (see below).

16

FCS (2023a) lists its literature and database sources relied upon in its desktop analysis, including reports by Monk & Associates and Pinecrest Research Corp. that were prepared for SDG Commerce 217 and 330. I note that it would have been appropriate to have also relied on my expert testimony I provided on SDG Commerce 330 and SDG Commerce 217. One of CEQA's primary objectives is that the environmental review be informative of the current environmental setting. My testimony provided observations

of wildlife – including special-status species of wildlife – on the project site. One such species was bald eagle. Another adjacent to the site was peregrine falcon. These and other observations should be included in the DEIR.

To compile its list of potentially-occurring special-status species for inclusion in its analysis of occurrence likelihoods, the DEIR relies principally on queries of the iPac and the California Natural Diversity Data Base (the CNDDB). FCS (2023a:19) adds, "Online resources such as eBird and California Herps were also consulted, as necessary." However, it is unclear how "as necessary" applies, nor is it clear how California Herps could have been used other than to check site 220's location and environmental setting against the geographic range maps and habitat characterizations of each species in California Herps. It is also clear from my review of eBird that FCS (2023a) did not consult eBird (Table 2).

The DEIR's Exhibit 3.3-3 (FCS 2023a: Exhibit 6) depicts a map of the results of the CNDDB queries. It is uninformative, as it fails to identify any of the species depicted on the map.

According to the DEIR, the initial pool of special-status species considered for inclusion in its analysis of occurrence potential was drawn from queries of the CNDDB occurrence records on the local 7.5-minute Quadrangle and the eight surrounding Quads. This screening step, however, is flawed. The CNDDB is intended to aid the formulation of a list of species for inclusion in the analyses of occurrence likelihoods, but it is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by the CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present.*" FCS (2023a) and the DEIR misuse the CNDDB. 16 CONT

The CNDDB relies entirely on volunteer or permit reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to the CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to the CNDDB. Furthermore, CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the CNDDB's inception. The lack of CNDDB records for species only recently assigned special status would have been due to insufficient time having elapsed since the assignments. And because negative findings are not reported to the CNDDB, the CNDDB cannot provide the basis for estimating occurrence likelihoods, either. The DEIR's analysis of special-status species occurrence likelihoods is fundamentally flawed.

Table 2. *Occurrence likelihoods of special-status bird species according to Monk & Associates (M&A), Pinecrest Research Corp, (PRC), and FirstCarbon Solutions (FCS), and my own review of site visits and eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org), where 'Very close' indicates records within 1.5 miles of the site, "nearby" indicates records within 1.5 and 4 miles, and "in region" indicates records within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. Entries in bold font identify species I detected.*

Common name	***Species name***	**Status[1]**	**Occurrence potential**			
			FCS	**M&A**	**PRC**	**KSS**
Conservancy fairy shrimp	*Branchinecta conservatio*	FE				In region
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	Absent	None		In region
California freshwater shrimp	*Syncaris pacifica*	FE, CE	Absent			In region
Monarch	*Danaus plexippus*	FC	Low			Very close
Crotch's bumble bee	*Bombus crotchii*	CCE	Absent			Nearby
California tiger salamander	*Ambystoma californiense*	FT, CT, WL				In region
California giant salamander	*Dicamptodon ensatus*	SSC	Absent			In region
Red-bellied newt	*Taricha rivularis*	SSC	Absent			In region
Foothill yellow-legged frog	*Rana boylii*	CT, SSC	Absent	None		In region
California red-legged frog	*Rana draytonii*	FT, SSC	Absent	None		In region
Western pond turtle	*Emys marmorata*	SSC	Low	None	Absent	Very close
Brant	*Branta bernicla*	SSC2				Nearby
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL				Very close
Redhead	*Aythya americana*	SSC2				Very close
Harlequin duck	*Histrionicus histrionicus*	SSC2				In region
Barrow's goldeneye	*Bucephala islandica*	SSC				Very close
Western grebe	*Aechmophorus occidentalis*	BCC				Very close
Clark's grebe	*Aechmophorus clarkii*	BCC				Very close
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE, BCC				In region
Black swift	*Cypseloides niger*	SSC3, BCC	Absent			Nearby

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Common name	*Species name*	Status[1]	Occurrence potential			
			FCS	M&A	PRC	KSS
Vaux's swift	*Chaetura vauxi*	SSC2, BCC				Very close
Costa's hummingbird	*Calypte costae*	BCC				In region
Rufous hummingbird	*Selasphorus rufus*	BCC				Very close
Allen's hummingbird	*Selasphorus sasin*	BCC				On site
Yellow rail	*Coturnicops noveboracensis*	SSC, BCC	Absent			In region
California Ridgway's rail	*Rallus obsoletus obsoletus*	FE, CE, CFP	Absent	None		Very close
American avocet[2]	*Recurvirostra americana*	BCC				Very close
Mountain plover	*Charadrius montanus*	SSC2, BCC				In region
Snowy plover	*Charadrius nivosus*	BCC				Very close
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC, BCC	Absent			In region
Whimbrel[2]	*Numenius phaeopus*	BCC				Very close
Long-billed curlew	*Numenius americanus*	WL				Very close
Marbled godwit	*Limosa fedoa*	BCC				Very close
Red knot (Pacific)	*Calidris canutus*	BCC				Very close
Short-billed dowitcher	*Limnodromus griseus*	BCC				Very close
Willet	*Tringa semipalmata*	BCC				Very close
Laughing gull	*Leucophaeus atricilla*	WL				In region
Heermann's gull	*Larus heermanni*	BCC				In region
Western gull	*Larus occidentalis*	BCC				Very close
California gull	*Larus californicus*	BCC, WL				On site
California least tern	*Sternula antillarum browni*	FE, CE, FP				Very close
Black tern	*Chlidonias niger*	SSC2, BCC				Nearby
Elegant tern	*Thalasseus elegans*	BCC, WL				Nearby
Black skimmer	*Rynchops niger*	BCC, SSC3				Nearby
Common loon	*Gavia immer*	SSC				Very close
Brandt's cormorant	*Urile penicillatus*	BCC				In region
Double-crested cormorant	*Phalacrocorax auritus*	WL				Very close
American white pelican	*Pelacanus erythrorhynchos*	SSC1, BCC				On site

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CONT

Common name	*Species name*	Status[1]	Occurrence potential			
			FCS	M&A	PRC	KSS
California brown pelican	*Pelecanus occidentalis californicus*	FP				Very close
Least bittern	*Ixobrychus exilis*	SSC2				In region
White-faced ibis	*Plegadis chihi*	WL				Very close
Turkey vulture	*Cathartes aura*	BOP				On site, **Very close**
Osprey	*Pandion haliaetus*	WL, BOP				On site
White-tailed kite	*Elanus luecurus*	CFP, BOP	Low			On site
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL	Low			Very close
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP	Low	Unlikely to nest onsite		**On site**
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP				Very close
Cooper's hawk	*Accipiter cooperii*	WL, BOP				**On site**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP				**On site**
Red-shouldered hawk	*Buteo lineatus*	BOP				On site, **Very close**
Swainson's hawk	*Buteo swainsoni*	CT, BOP	Low	Unlikely to nest adjacent to project site	Absent	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP				**On site**
Ferruginous hawk	*Buteo regalis*	WL, BOP		None		Very close
Rough-legged hawk	*Buteo lagopus*	BOP				Nearby
Barn owl	*Tyto alba*	BOP				On site
Western screech-owl	*Megascops kennicotti*	BOP				Nearby
Great horned owl	*Bubo virginianus*	BOP				**On site**
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP	Low	Unlikely to nest on the project site	Absent	Very close
Long-eared owl	*Asio otus*	BCC, SSC3, BOP				In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP				In region
Lewis's woodpecker	*Melanerpes lewis*	BCC				Nearby

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CONT

Common name	*Species name*	Status[1]	Occurrence potential			
			FCS	M&A	PRC	KSS
Nuttall's woodpecker	*Picoides nuttallii*	BCC				**On site**
American kestrel	*Falco sparverius*	BOP				**On site**
Merlin	*Falco columbarius*	WL, BOP				Very close
Peregrine falcon	*Falco peregrinus*	BOP	Absent	None		On site, **Very close**
Prairie falcon	*Falco mexicanus*	WL, BOP				Very close
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2				Very close
Willow flycatcher	*Empidonax trailii*	CE				Very close
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2				In region
Loggerhead shrike	*Lanius ludovicianus*	SSC2				Very close
Oak titmouse	*Baeolophus inornatus*	BCC				Very close
California horned lark	*Eremophila alpestris actia*	WL				Very close
Bank swallow	*Riparia riparia*	CT	Absent			Nearby
Purple martin	*Progne subis*	SSC2				Nearby
Wrentit	*Chamaea fasciata*	BCC				Very close
California thrasher	*Toxostoma redivivum*	BCC				Nearby
Cassin's finch	*Haemorhous cassinii*	BCC				In region
Lawrence's goldfinch	*Spinus lawrencei*	BCC				Very close
Grasshopper sparrow	*Ammodramus savannarum*	SSC2				Nearby
Samuel's song sparrow	*Melospiza melodia samuelis*	BCC, SSC	Absent	None		In range
Black-chinned sparrow	*Spizella atrogularis*	BCC				In region
Bell's sparrow	*Amphispiza b. belli*	WL				In region
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2, BCC				Nearby
Yellow-breasted chat	*Icteria virens*	SSC3				In region
Yellow-headed blackbird	*X. xanthocephalus*	SSC3	Absent			Very close
Bullock's oriole	*Icterus bullockii*	BCC				Very close
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	Absent	None		Very close
Lucy's warbler	*Leiothlypis luciae*	SSC3, BCC				In region
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC				In region
San Francisco common yellowthroat	*Geothlypis trichas sinuosa*	SSC3, BCC	Absent	None		In range

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Common name	*Species name*	Status[1]	Occurrence potential			
			FCS	M&A	PRC	KSS
Yellow warbler	*Setophaga petechia*	SSC2				Very close
Summer tanager	*Piranga rubra*	SSC1				Very close
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	Low			In region
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H				In region
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M				In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H				In region
Hoary bat	*Lasiurus cinereus*	WBWG:M				In region
Miller's myotis	*Myotis evotis*	WBWG:M				In region
Little brown myotis	*Myotis lucifugus*	WBWG:M				In region
Fringed myotis	*Myotis thysanodes*	WBWG:H				In range
Yuma myotis	*Myotis yumanensis*	WBWG:LM				In region
Suisun shrew	*Sorex ornatus sinuosus*	SSC	Absent			In range
Salt-marsh harvest mouse	*Reithrodontomys raviventris*	FE, CE, FP	Absent	None		In region
American badger	*Taxidea taxus*	SSC	Absent			In region

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[1] Listed as FT or FE = federal threatened or endangered, FC = federal candidate for listing, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, CT or CE = California threatened or endangered, CCT or CCE = Candidate California threatened or endangered, CFP = California Fully Protected (California Fish and Game Code 3511), SSC = California Species of Special Concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range, associated with habitat that is declining in extent), SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively (Shuford and Gardali 2008), WL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (CFG Code 3503.5), and WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H).
[2] Uncertain if BCC based on 2021 Bird of Conservation Concern list.

As an example of how the CNDDB fails to serve as a comprehensive database of special-status species occurrences, FCS (2023a:42) reports, "The closest [white-tailed kite] CNDDB record was documented 5.3 miles north of the project site (CNDDB Occurrence No. 181)." Had Monk & Associates reported its observation(s) of white-tailed kite during its surveys of 2006–2019, then the nearest CNDDB record(s) would have been on the site.

In another example, FCS (2023a:41) reports, "The closest [northern harrier] CNDDB record was documented 2.8 miles west of the project site (CNDDB Occurrence No. 29). No individual northern harriers or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023." In fact, a northern harrier was observed just south of the site by me, as it flew right over my head. My observation was reported to the City via my comment letter on the potential impacts of the SDG Commerce 330 project, but it is not in the CNDDB. 16 CONT

Regarding Swainson's hawks, FCS (2023a:40) reports that "No individual Swainson's hawk or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023." A shortfall of this reporting is the failure to note that about a third of the cited surveys were completed while Swainson's hawks were yet to return from their annual migration to Mexico. Another shortfall is the failure to note seven eBird records of Swainson's hawks on American Canyon Wetlands, and one of the records as recently as 28 June 2024. I have twice found Swainson's hawks in the area, including a nesting pair with at least one fledgling only three miles north-northeast of the project site. 17

In my assessment based on database reviews and a site visit, 114 special-status species of wildlife are known to occur near enough to the site to be analyzed for occurrence potential at one time or another (Table 2). Of these, 16 (14%) have been reported on the project site, and 43 (38%) have been documented in databases within 1.5 miles of the site ('Very close'), 14 (12%) within 1.5 and 4 miles ('Nearby'), and another 37 (32%) within 4 to 30 miles ('In region'). More than half (62) of the special-status species in Table 2 have been reportedly seen within 4 miles of the project site. The site therefore likely supports many special-status species of wildlife. On any given day, one or more yet-to-be documented special-status species likely makes use of the project site, but being there to document that use probably requires multiple surveys (see Figures 1 and 2). Reconnaissance surveys are not designed to support absence determinations of any of these species. Therefore, sufficient survey effort should be directed to the site to either confirm that the species in Table 2 use the site or to support absence determinations. 18

Of the 114 special-status species in Table 2, FCS (2023a) and the DEIR analyze the occurrence likelihoods of only 28 (25%) of them. Of these 25 species analyzed by FCS, three are inconsistent in their occurrence likelihood determinations between FCS, Monk & Associates, and Pinecrest Research Corp. These inconsistencies apply to western pond

turtle, Swainson's hawk, and burrowing owl – three of the species of greatest special concern. Three more species were assigned occurrence likelihoods of low and absent, but I detected all three of these species – northern harrier, white-tailed kite and peregrine falcon – at or next to the project site. Nine more species were assigned occurrence likelihoods of low and absent, but occurrence records exist for these species within 1.5 miles of the project site. Two more species were assigned occurrence likelihoods of absent, but occurrence records exist for these species between 1.5 and 4 miles of the project site. Half of the special-status species analyzed by FCS (2023a) for occurrence likelihoods are assigned likelihoods that comport poorly with databases of occurrence records and my site visits. 18 CONT

FCS (2023a) repeatedly concludes that occurrences on the project site of various taxa, such as burrowing owl, white-tailed kite, bird nests, western pond turtle, bats, and monarch, "cannot be ruled out." This question of whether a species, guild, or nests can be ruled out appears supererogatory. Without the support of protocol-level detection surveys, very few wildlife species whose geographic ranges overlap the project site can be determined absent, which means they cannot be ruled out.

FCS (2023a) also characterizes potential occurrences of special-status species as the occurrences of vagrants. For example, burrowing owls that might visit the site are referred to as vagrants. Having researched burrowing owls over many years, it is unclear to me what FCS means by vagrant burrowing owls. I suggest the term is meaningless. 19

FCS (2023a:41) claims that "Nesting white-tailed kite habitat consists mainly of oak and sycamore woodlands…" This is not the case in my experience (Erichsen et al. 1996; monitoring over past four years by K. S. Smallwood, unpublished data). I see no reason why white-tailed kites would not nest next to or nearby the project site. The white-tailed kites observed on site by Pinecrest Research Corp were likely foraging in support of a nest attempt nearby, as the kites were seen during the breeding season. In my experience, white-tailed kites will travel up to several miles from nest sites to forage, but nest sites are abandoned after too much forage is eliminated within the breeding territory; that is, white-tailed kites are sensitive to habitat loss. 20

Another flaw of the characterization of the existing environmental setting is found where FCS (2023a:42) speculates, "Although the site has been significantly disturbed in the past, the grassland on-site may provide marginal foraging opportunities to support nesting and rearing habitat." No evidence is presented in support of the claim that the project site provides only marginal foraging opportunities to nesting birds. 21

POTENTIAL BIOLOGICAL IMPACTS

An impacts analysis should consider whether and how a proposed project would affect members of a species, larger demographic units of the species, the whole of a species, and ecological communities. The accuracy of this analysis depends on an accurate characterization of the existing environmental setting. In the case of the proposed project, the existing environmental setting has not been accurately characterized, and 22

several important types of potential project impacts have been inadequately analyzed. These types of impacts include habitat loss, interference with wildlife movement, and wildlife-automobile collision mortality.

HABITAT LOSS

Habitat loss results in a reduced productive capacity of affected wildlife species, but the DEIR makes no attempt to estimate this lost capacity for any of the wildlife species potentially affected. In the case of birds, two methods exist for estimating the loss of productive capacity that would be caused by the project. One method would involve surveys to count the number of bird nests and chicks produced. The alternative method would be to infer productive capacity from estimates of total nest density elsewhere.

Because the project is located within an area that has undergone severe habitat fragmentation, the habitat that remains in fragmented patches probably no longer supports its original productive capacity of wildlife (Smallwood 2015). However, several studies have estimated total avian nest density at locations that had likewise been highly fragmented. Two study sites in grassland/wetland/woodland complexes within agricultural matrices had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. To acquire a total nest density closer to conditions in California, I surveyed patches of open space in northern California throughout the breeding seasons of 2023 and 2024. The most relevant study site to the vegetation cover on the project site consisted of a 4.22-acre patch of Grassland with a small wetland inclusion and two small willows east of Davis, where I estimated 7.11 nest sites/acre in 2024. Applying this estimate to the 10.17 acres of grassland-wetland on the project site would predict 72 nest sites. Assuming 1.39 broods per nest site, which is the average among 322 North American bird species, then I predict the project would cost California 100 nest attempts/year. 22 CONT

The loss of 72 nest sites and 100 nest attempts per year would qualify as significant impacts that have not been analyzed in the DEIR. But the impacts would not end with the immediate loss of nest sites. The reproductive capacity of the site would be lost. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, the project would prevent the production of 290 fledglings per year. Assuming an average bird generation time of 5 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 319 birds per year denied to California.

INTERFERENCE WITH WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. Unfortunately, the DEIR's analysis of whether the project would interfere with wildlife movement in the region is flawed and misleading. According to FCS (2023a:44), the site is not a wildlife movement corridor because it "has a history of disturbance associated with eucalyptus 23

tree removal in 2012, and continued disturbance associated with the paintball facility located immediately to the southeast." And at page 44, "Field surveys and a query of CDFW's BIOS6 information on wildlife linkages in the Bay Area confirm the that the proposed project will not interfere with the movement of native wildlife." CDFEW's BIO6 does not pretend to know where all wildlife corridors and linkages are located. Moreover, and more importantly, whether the site functions as a wildlife movement corridor or is located within a corridor is not the only consideration when it comes to the standard CEQA Checklist question of whether the project would interfere with wildlife movement in the region. The primary phrase of the CEQA standard goes to wildlife movement regardless of whether the movement is channeled by a corridor.

Moreover, the conclusions regarding whether the site functions as a corridor or is located within a corridor lack supporting evidence. Although FCS (2023a:21) reports "The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey… Conclusions are based on the information compiled during the literature review, aerial photographs, USGS topographic maps and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity," this reporting fails to identify any specific field method and only vaguely connects potential lines of evidence. There was no sampling regime. There was no program of observation to record wildlife movement patterns, nor to quantify them or to qualitatively assess them. Based on what is reported, FCS (2023a) did not record or measure wildlife movement in any way. The conclusions of FCS (2023a) and the DEIR regarding wildlife movement on the project site are speculative and conclusory. 23 CONT

A site such as the project site is critically important for wildlife movement because it composes an increasingly diminishing area of open space within a growing expanse of anthropogenic uses, forcing more species of volant wildlife to use the site for stopover and staging during migration, dispersal, and home range patrol (Warnock 2010, Taylor et al. 2011, Runge et al. 2014). The project, due to its elimination of 10.17 acres of open space This impact would be significant, and as the project is currently proposed, it would be unmitigated.

TRAFFIC IMPACTS TO WILDLIFE

Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic to get to and from the project site (Photos 11—13), including along roads far from the project footprint. Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally. 24

The nearest study of traffic-caused wildlife mortality was performed along a 2.5-mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study next to Vasco Road (Brown et al. 2016). Brown et al.'s (2016) adjustment factors for carcass persistence resembled those of Santos et al. (2011). Also applying searcher detection rates from Brown et al. (2016), the adjusted total number of fatalities was estimated at 12,187 animals killed by traffic on the road. This fatality number over 1.25 years and 2.5 miles of road translates to 3,900 wild animals per mile per year. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

Photo 11. *A Gambel's quail dashes across a road* on *3 April 2021. Such road crossings are usually successful, but too often prove fatal to the animal. Photo by Noriko Smallwood.*



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CONT

Photo 12. *Mourning dove killed by vehicle on a California road. Photo by Noriko Smallwood, 21 June 2020.*





Photo 13. *Raccoon killed on Road 31 just east of Highway 505 in Solano County. Photo taken on 10 November 2018.*

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data resulted in an estimated 3,900 animals killed per mile along a county road in Contra Costa County. Two percent of the estimated number of fatalities were birds, and the balance was composed of 34% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 52.3% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs, western toads, arboreal salamanders, slender salamanders and others), and 11.7% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species). VMT is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

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CONT

Predicting project-generated traffic impacts to wildlife

The DEIR predicts 2,568,115 Annual VMT. During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 12,187 wildlife fatalities, or 1,825 vehicle miles per fatality. This rate divided into the predicted annual VMT would predict 1,407 vertebrate wildlife fatalities per year.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The DEIR does not analyze this potential impact, nor does it propose to mitigate it. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project. Given the predicted level of project-generated, traffic-caused mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts.

CUMULATIVE IMPACTS

The DEIR (p. 3.3-46) establishes a flawed geographic scope of analysis, where it claims, "The geographic scope of the cumulative biological resources analysis is the project vicinity as the project activity would only affect the surrounding project area." This assertion is conclusory and inaccurate. For one thing, project-generated traffic would kill wildlife on roads as far from the project site as the project-generated traffic would extend. In another example, the loss of foraging opportunities at the project site could result in Swainson's hawks or white-tailed kites abandoning their nest sites 1 to 3 miles away.

The DEIR presents a flawed analysis of cumulative impacts, including to biological resources. The DEIR asserts that all biological impacts would be mitigated, thereby avoiding cumulative impacts to biological resources. The DEIR contrives the false standard that a given project impact is cumulatively considerable only when it has not been fully mitigated at the project level. It claims, "The proposed project's incremental contribution to these less than significant cumulative impacts would not be significant with adherence to the mitigation measures related to special-status species identified above (see MM BIO1a through MM BIO-1g) and compliance with other applicable standards and requirements under the comprehensive regulatory framework." The DEIR implies that cumulative impacts are really residual impacts left over by inadequate mitigation of project impacts. This notion of residual impacts being the source of cumulative impacts is inconsistent with CEQA's definition of cumulative effects. Individually mitigated projects do not negate the significance of cumulative impacts. If they did, then CEQA would not require a cumulative effects analysis. 25

The DEIR establishes a false standard: "If there is no impact associated with respect to a particular CEQA threshold, discussion of cumulative impacts is not required." This standard is inconsistent with the very CEQA definition of cumulative effects.

Regarding potential project contributions of cumulative effects to special-status species, the DEIR (p. 3.3-46) explains, "numerous laws and regulations are in place to protect biological resource within the cumulative project area, including, but not limited to CESA, federal Endangered Species Act, CWA, and applicable General Plan and Municipal Code requirements. Future projects within the cumulative geographic context would be required to comply with applicable federal, State, and local laws, regulations and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on biological resources. Standard pre-construction surveys and, if necessary, avoidance procedures would be required for cumulative projects with the potential to impact special-status species. Because cumulative development has limited potential to support special-status species and would be required to comply with the above requirements, cumulative impacts related to special-status species would be less than significant." Similarly, at page 3.3-47, the DEIR claims, "none of the identified cumulative projects include wildlife corridors that connect to the proposed project site. Other areas surrounding the project site consist primarily of urban development or undeveloped land significantly surrounded by urban development. Any future development that occurs within the cumulative 26

analysis area would have to take into account the potential impacts to these corridors and mitigate as required under applicable laws and regulations. The cumulative projects are primarily located in urban or commercially developed areas and therefore are not likely to significantly impact wildlife movement corridors. Therefore, it can be reasonably assumed that there would be no cumulative impacts to fish and wildlife movement corridors." However, according to CEQA Guidelines §15064(h)(3), "When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable." The DEIR provides no explanation of how implementing the particular requirements of the laws and regulations it cites would ensure that the project's incremental contributions to cumulative effects would not be cumulatively considerable. 26 CONT

Even if the cited policies and regulations were implemented in full, the same could be said of many other development projects. If the policies and regulations that all development projects must implement were effective, then one should not be able to measure significant changes to wildlife abundance and species richness that result from development projects. To test the efficacy of existing policies and regulations, Noriko Smallwood and I measured the impacts of habitat loss to wildlife caused by mitigated development projects. We revisited 80 sites of proposed projects that we had originally surveyed in support of comments on CEQA review documents (Smallwood and Smallwood 2023). We revisited the sites to repeat the survey methods at the same time of year, the same start time in the day, and the same methods and survey duration in order to measure the effects of mitigated development on wildlife. We structured the experiment in a before-after, control-impact experimental design, as some of the sites had been developed since our initial survey and some had remained undeveloped. We found that mitigated development resulted in a 66% loss of species on site, and 48% loss of species in the project area. Counts of vertebrate animals declined 90%. "Development impacts measured by the mean number of species detected per survey were greatest for amphibians (-100%), followed by mammals (-86%), grassland birds (-75%), raptors (-53%), special-status species (-49%), all birds as a group (-48%), non-native birds (-44%), and synanthropic birds (-28%). Our results indicated that urban development substantially reduced vertebrate species richness and numerical abundance, even after richness and abundance had likely already been depleted by the cumulative effects of loss, fragmentation, and degradation of habitat in the urbanizing environment," and despite all of the mitigation measures per existing laws and regulations. 27

The project's contribution to the cumulative effects of project-generated traffic mortality of wildlife can be predicted by comparing my findings above (or the findings of another suitable analytical approach) and comparing them to the cumulative predicted mortality from similar projects already built or in the planning stages or reasonably foreseeable in the future. For example, the SDG Commerce 217 project was predicted to generate 2,355 daily VMT, which project to one year would be 859,575 annual VMT. I do not know what the annual VMT might have resulted from the SDG Commerce 330 project, but assuming for the sake of argument that VMT is proportional the square-footage of floor space of the project warehouses, then annual VMT at the 330 site would be 1,307,508, and the total annual VMT of the three neighboring SDG Commerce projects would be 28

4,735,198. Assuming the rate of wildlife fatalities per annual VMT measured along Vasco Road in Contra Costa County would apply to the roadways in the region surrounding the SDG Commerce projects, then using the same methodology I used earlier would predict 2,595 wildlife fatalities per year. This same type of calculation should be extended to the other warehouses in the City of American Canyon to predict the cumulative traffic toll to wildlife in this region.

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MITIGATION

MM BIO-1a Pre-construction Surveys for Swainson's Hawk

It is hard to take this measure seriously, because the City failed to enforce it in the case of the SDG Commerce 217 project (see my earlier comments on this issue).

29

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of Swainson's hawks caused by the project's habitat destruction.

MM BIO-1b Swainson's Hawk Avoidance and Minimization and Construction Monitoring

30

This measure, if implemented, would not avoid the reduction in productive capacity of Swainson's hawks caused by the project's habitat destruction.

MM BIO-1c Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found)

It is hard to take this measure seriously, because the City failed to enforce it in the case of the SDG Commerce 217 project (see my earlier comments on this issue).

31

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of burrowing owls caused by the project's habitat destruction. Also, CDFW (2012) warns that passive relocation can be regarded as take.

MM BIO-1d Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

It is hard to take this measure seriously, because the City failed to enforce it in the case of the SDG Commerce 217 project (see my earlier comments on this issue). Moreover, the consultants hired to perform the preconstruction surveys before the SDG Commerce 217 project failed to detect any nesting birds, which is unbelievable.

32

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of birds caused by the project's habitat destruction. I predict that the loss of habitat caused by the project would deny Californians 290 birds per year, and impact that would not be avoided by preconstruction nest surveys.

MM BIO-1e Roosting Bat Pre-construction Survey and Avoidance

It is hard to take this measure seriously, because the City failed to enforce the preconstruction survey requirements in the case of the SDG Commerce 217 project (see my earlier comments on this issue).

33

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of bats caused by the project's habitat destruction.

MM BIO-1f Protection of Western Pond Turtles

It is hard to take this measure seriously, because the City failed to enforce the preconstruction survey requirements in the case of the SDG Commerce 217 project (see my earlier comments on this issue).

34

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of western pond turtles caused by the project's habitat destruction.

MM BIO-1g Protection of Overwintering Monarch Butterfly

It is hard to take this measure seriously, because the City failed to enforce the preconstruction survey requirements in the case of the SDG Commerce 217 project (see my earlier comments on this issue).

35

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of monarchs caused by the project's habitat destruction.

RECOMMENDED MEASURES

Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that would be caused by bird-window collisions and the project-generated road traffic in the region. I suggest that this mitigation can be directed toward funding research to identify fatality patterns and effective impact reduction measures such as reduced speed limits and wildlife under-crossings or overcrossings of particularly dangerous road segments. Compensatory mitigation can also be provided in the form of donations to wildlife rehabilitation facilities (see below).

36

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by collisions with automobiles traveling to and from the project site, and by free-ranging house cats.

Thank you for your attention,



Shawn Smallwood, Ph.D.

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Kenneth Shawn Smallwood
Curriculum Vitae

3108 Finch Street
Davis, CA 95616
Phone (530) 756-4598
Cell (530) 601-6857
puma@dcn.org

Born May 3, 1963 in
Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

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Experience

- 480 professional publications, including:
- 83 peer reviewed publications
- 24 in non-reviewed proceedings
- 371 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 87 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC

reviewed the science underlying the Alameda County Avian Protection Program, and advised the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

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Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their

conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science*, U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

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Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS

analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

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Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

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Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the

County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

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Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. and M. L. Morrison. 2018. Nest-site selection in a high-density colony of burrowing owls. Journal of Raptor Research 52:454-470.

Smallwood, K. S., D. A. Bell, E. L. Walther, E. Leyvas, S. Standish, J. Mount, B. Karas. 2018. Estimating wind turbine fatalities using integrated detection trials. Journal of Wildlife Management 82:1169-1184.

Smallwood, K. S. 2017. Long search intervals under-estimate bird and bat fatalities caused by

wind turbines. Wildlife Society Bulletin 41:224-230.

Smallwood, K. S. 2017. The challenges of addressing wildlife impacts when repowering wind energy projects. Pages 175-187 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

May, R., Gill, A. B., Köppel, J. Langston, R. H.W., Reichenbach, M., Scheidat, M., Smallwood, S., Voigt, C. C., Hüppop, O., and Portman, M. 2017. Future research directions to reconcile wind turbine–wildlife interactions. Pages 255-276 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

Smallwood, K. S. 2017. Monitoring birds. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Smallwood, K. S., L. Neher, and D. A. Bell. 2017. Siting to Minimize Raptor Collisions: an example from the Repowering Altamont Pass Wind Resource Area. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Johnson, D. H., S. R. Loss, K. S. Smallwood, W. P. Erickson. 2016. Avian fatalities at wind energy facilities in North America: A comparison of recent approaches. Human–Wildlife Interactions 10(1):7-18.

Sadar, M. J., D. S.-M. Guzman, A. Mete, J. Foley, N. Stephenson, K. H. Rogers, C. Grosset, K. S. Smallwood, J. Shipman, A. Wells, S. D. White, D. A. Bell, and M. G. Hawkins. 2015. Mange Caused by a novel Micnemidocoptes mite in a Golden Eagle (*Aquila chrysaetos*). Journal of Avian Medicine and Surgery 29(3):231-237.

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Mete, A., N. Stephenson, K. Rogers, M. G. Hawkins, M. Sadar, D. Guzman, D. A. Bell, J. Shipman, A. Wells, K. S. Smallwood, and J. Foley. 2014. Emergence of Knemidocoptic mange in wild Golden Eagles (Aquila chrysaetos) in California. Emerging Infectious Diseases 20(10):1716-1718.

Smallwood, K. S. 2013. Introduction: Wind-energy development and wildlife conservation. Wildlife Society Bulletin 37: 3-4.

Smallwood, K. S. 2013. Comparing bird and bat fatality-rate estimates among North American wind-energy projects. Wildlife Society Bulletin 37:19-33. + Online Supplemental Material.

Smallwood, K. S., L. Neher, J. Mount, and R. C. E. Culver. 2013. Nesting Burrowing Owl Abundance in the Altamont Pass Wind Resource Area, California. Wildlife Society Bulletin: 37:787-795.

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Smallwood, K. S., D. A. Bell, B. Karas, and S. A. Snyder. 2013. Response to Huso and Erickson Comments on Novel Scavenger Removal Trials. Journal of Wildlife Management 77: 216-225.

Bell, D. A., and K. S. Smallwood. 2010. Birds of prey remain at risk. Science 330:913.

Smallwood, K. S., D. A. Bell, S. A. Snyder, and J. E. DiDonato. 2010. Novel scavenger removal trials increase estimates of wind turbine-caused avian fatality rates. Journal of Wildlife Management 74: 1089-1097 + Online Supplemental Material.

Smallwood, K. S., L. Neher, and D. A. Bell. 2009. Map-based repowering and reorganization of a wind resource area to minimize burrowing owl and other bird fatalities. Energies 2009(2):915-943. http://www.mdpi.com/1996-1073/2/4/915

Smallwood, K. S. and B. Nakamoto. 2009. Impacts of West Nile Virus Epizootic on Yellow-Billed Magpie, American Crow, and other Birds in the Sacramento Valley, California. The Condor 111:247-254.

Smallwood, K. S., L. Rugge, and M. L. Morrison. 2009. Influence of Behavior on Bird Mortality in Wind Energy Developments: The Altamont Pass Wind Resource Area, California. Journal of Wildlife Management 73:1082-1098.

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Smallwood, K. S. 2008. Wind power company compliance with mitigation plans in the Altamont Pass Wind Resource Area. Environmental & Energy Law Policy Journal 2(2):229-285.

Smallwood, K. S., C. G. Thelander. 2008. Bird Mortality in the Altamont Pass Wind Resource Area, California. Journal of Wildlife Management 72:215-223.

Smallwood, K. S. 2007. Estimating wind turbine-caused bird mortality. Journal of Wildlife Management 71:2781-2791.

Smallwood, K. S., C. G. Thelander, M. L. Morrison, and L. M. Rugge. 2007. Burrowing owl mortality in the Altamont Pass Wind Resource Area. Journal of Wildlife Management 71:1513-1524.

Cain, J. W. III, K. S. Smallwood, M. L. Morrison, and H. L. Loffland. 2005. Influence of mammal activity on nesting success of Passerines. J. Wildlife Management 70:522-531.

Smallwood, K.S. 2002. Habitat models based on numerical comparisons. Pages 83-95 *in* Predicting species occurrences: Issues of scale and accuracy, J. M. Scott, P. J. Heglund, M. Morrison, M. Raphael, J. Haufler, and B. Wall, editors. Island Press, Covello, California.

Morrison, M. L., K. S. Smallwood, and L. S. Hall. 2002. Creating habitat through plant relocation: Lessons from Valley elderberry longhorn beetle mitigation. Ecological Restoration 21: 95-100.

Zhang, M., K. S. Smallwood, and E. Anderson. 2002. Relating indicators of ecological health and integrity to assess risks to sustainable agriculture and native biota. Pages 757-768 *in* D.J. Rapport, W.L. Lasley, D.E. Rolston, N.O. Nielsen, C.O. Qualset, and A.B. Damania (eds.), Managing for Healthy Ecosystems, Lewis Publishers, Boca Raton, Florida USA.

Wilcox, B. A., K. S. Smallwood, and J. A. Kahn. 2002. Toward a forest Capital Index. Pages 285-298 *in* D.J. Rapport, W.L. Lasley, D.E. Rolston, N.O. Nielsen, C.O. Qualset, and A.B. Damania (eds.), Managing for Healthy Ecosystems, Lewis Publishers, Boca Raton, Florida USA.

Smallwood, K.S. 2001. The allometry of density within the space used by populations of Mammalian Carnivores. Canadian Journal of Zoology 79:1634-1640.

Smallwood, K.S., and T.R. Smith. 2001. Study design and interpretation of Sorex density estimates. Annales Zoologi Fennici 38:141-161.

Smallwood, K.S., A. Gonzales, T. Smith, E. West, C. Hawkins, E. Stitt, C. Keckler, C. Bailey, and K. Brown. 2001. Suggested standards for science applied to conservation issues. Transactions of the Western Section of the Wildlife Society 36:40-49.

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- San Gorgonio Crossings EIR (2017; 22 pp);
- Replies to responses on Jupiter Project IS and MND (2017; 12 pp);
- MacArthur Transit Village Project Modified 2016 CEQA Analysis (2017; 12 pp);
- Central SoMa Plan DEIR (2017; 14 pp);
- Colony Commerce Center Specific Plan DEIR (2016; 16 pp);
- Fairway Trails Improvements MND (2016; 13 pp);
- Review of Avian-Solar Science Plan (2016; 28 pp);
- Replies to responses on Initial Study for Pyramid Asphalt (2016; 5 pp);
- Initial Study for Pyramid Asphalt (2016; 4 pp);
- Agua Mansa Distribution Warehouse Project Initial Study (2016; 14 pp);
- Santa Anita Warehouse IS and MND (2016; 12 pp);
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- Orange Show Logistics Center Initial Study and MND (2016; 9 pp);
- City of Palmdale Oasis Medical Village Project IS and MND (2016; 7 pp);
- Comments on proposed rule for incidental eagle take (2016, 49 pp);
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- Kimball Business Park DEIR (2016; 10 pp);
- Jupiter Project IS and MND (2016; 9 pp);
- Revised Draft Giant Garter Snake Recovery Plan of 2015 (2016, 18 pp);
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- Proposed Section 24 Specific Plan Agua Caliente Band of Cahuilla Indians DEIS (2015, 9 pp);
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- Declaration of K. Shawn Smallwood on Biological Impacts of the Ivanpah Solar Electric Generating System (ISEGS) (2011; 9 pp);
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Intervenors Friends of the Columbia Gorge & Save Our Scenic Area. Comments on Whistling Ridge Wind Energy Power Project DEIS, Skamania County, Washington (2010; 41 pp);

- Evaluation of Klickitat County's Decisions on the Windy Flats West Wind Energy Project (2010; 17 pp);
- St. John's Church Project Draft Environmental Impact Report (2010; 14 pp.);
- Initial Study/Mitigated Negative Declaration for Results Radio Zone File #2009-001 (2010; 20 pp);
- Rio del Oro Specific Plan Project Final Environmental Impact Report (2010;12 pp);
- Answers to Questions on 33% RPS Implementation Analysis Preliminary Results Report (2009: 9 pp);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington. Second Declaration to Friends of the Columbia Gorge, Inc. and Save Our Scenic Area (Dec 2008; 17 pp);
- Comments on Draft 1A Summary Report to CAISO (2008; 10 pp);
- County of Placer's Categorical Exemption of Hilton Manor Project (2009; 9 pp);
- Protest of CARE to Amendment to the Power Purchase and Sale Agreement for Procurement of Eligible Renewable Energy Resources Between Hatchet Ridge Wind LLC and PG&E (2009; 3 pp);
- Tehachapi Renewable Transmission Project EIR/EIS (2009; 142 pp);
- Delta Shores Project EIR, south Sacramento (2009; 11 pp + addendum 2 pp);
- Declaration of Shawn Smallwood in Support of Care's Petition to Modify D.07-09-040 (2008; 3 pp);
- The Public Utility Commission's Implementation Analysis December 16 Workshop for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 9 pp);
- The Public Utility Commission's Implementation Analysis Draft Work Plan for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 11 pp);
- Draft 1A Summary Report to California Independent System Operator for Planning Reserve Margins (PRM) Study (2008; 7 pp.);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington. Declaration to Friends of the Columbia Gorge, Inc. and Save Our Scenic Area (Sep 2008; 16 pp);
- California Energy Commission's Preliminary Staff Assessment of the Colusa Generating Station (2007; 24 pp);
- Rio del Oro Specific Plan Project Recirculated Draft Environmental Impact Report (2008: 66 pp);
- Replies to Response to Comments Re: Regional University Specific Plan Environmental Impact Report (2008; 20 pp);
- Regional University Specific Plan Environmental Impact Report (2008: 33 pp.);
- Clark Precast, LLC's "Sugarland" project, Negative Declaration (2008: 15 pp.);
- Cape Wind Project Draft Environmental Impact Statement (2008; 157 pp.);
- Yuba Highlands Specific Plan (or Area Plan) Environmental Impact Report (2006; 37 pp.);
- Replies to responses to comments on Mitigated Negative Declaration of the proposed

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Mining Permit (MIN 04-01) and Modification of Use Permit 96-02 at North Table Mountain (2006; 5 pp);

- Mitigated Negative Declaration of the proposed Mining Permit (MIN 04-01) and Modification of Use Permit 96-02 at North Table Mountain (2006; 15 pp);
- Windy Point Wind Farm Environmental Review and EIS (2006; 14 pp and 36 Powerpoint slides in reply to responses to comments);
- Shiloh I Wind Power Project EIR (2005; 18 pp);
- Buena Vista Wind Energy Project Notice of Preparation of EIR (2004; 15 pp);
- Negative Declaration of the proposed Callahan Estates Subdivision (2004; 11 pp);
- Negative Declaration of the proposed Winters Highlands Subdivision (2004; 9 pp);
- Negative Declaration of the proposed Winters Highlands Subdivision (2004; 13 pp);
- Negative Declaration of the proposed Creekside Highlands Project, Tract 7270 (2004; 21 pp);
- On the petition California Fish and Game Commission to list the Burrowing Owl as threatened or endangered (2003; 10 pp);
- Conditional Use Permit renewals from Alameda County for wind turbine operations in the Altamont Pass Wind Resource Area (2003; 41 pp);
- UC Davis Long Range Development Plan of 2003, particularly with regard to the Neighborhood Master Plan (2003; 23 pp);
- Anderson Marketplace Draft Environmental Impact Report (2003: 18 pp + 3 plates of photos);
- Negative Declaration of the proposed expansion of Temple B'nai Tikyah (2003: 6 pp);
- Antonio Mountain Ranch Specific Plan Public Draft EIR (2002: 23 pp);
- Response to testimony of experts at the East Altamont Energy Center evidentiary hearing on biological resources (2002: 9 pp);
- Revised Draft Environmental Impact Report, The Promenade (2002: 7 pp);
- Recirculated Initial Study for Calpine's proposed Pajaro Valley Energy Center (2002: 3 pp);
- UC Merced -- Declaration of Dr. Shawn Smallwood in support of petitioner's application for temporary restraining order and preliminary injunction (2002: 5 pp);
- Replies to response to comments in Final Environmental Impact Report, Atwood Ranch Unit III Subdivision (2003: 22 pp);
- Draft Environmental Impact Report, Atwood Ranch Unit III Subdivision (2002: 19 pp + 8 photos on 4 plates);
- California Energy Commission Staff Report on GWF Tracy Peaker Project (2002: 17 pp + 3 photos; follow-up report of 3 pp);
- Initial Study and Negative Declaration, Silver Bend Apartments, Placer County (2002: 13 pp);
- UC Merced Long-range Development Plan DEIR and UC Merced Community Plan DEIR (2001: 26 pp);
- Initial Study, Colusa County Power Plant (2001: 6 pp);
- Comments on Proposed Dog Park at Catlin Park, Folsom, California (2001: 5 pp + 4 photos);
- Pacific Lumber Co. (Headwaters) Habitat Conservation Plan and Environmental Impact Report (1998: 28 pp);
- Final Environmental Impact Report/Statement for Issuance of Take authorization for listed

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species within the MSCP planning area in San Diego County, California (Fed. Reg. 62 (60): 14938, San Diego Multi-Species Conservation Program) (1997: 10 pp);
- Permit (PRT-823773) Amendment for the Natomas Basin Habitat Conservation Plan, Sacramento, CA (Fed. Reg. 63 (101): 29020-29021) (1998);
- Draft Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). (Fed. Reg. 64(176): 49497-49498) (1999: 8 pp);
- Review of the Draft Recovery Plan for the Arroyo Southwestern Toad (*Bufo microscaphus californicus*) (1998);
- Ballona West Bluffs Project Environmental Impact Report (1999: oral presentation);
- California Board of Forestry's proposed amended Forest Practices Rules (1999);
- Negative Declaration for the Sunset Skyranch Airport Use Permit (1999);
- Calpine and Bechtel Corporations' Biological Resources Implementation and Monitoring Program (BRMIMP) for the Metcalf Energy Center (2000: 10 pp);
- California Energy Commission's Final Staff Assessment of the proposed Metcalf Energy Center (2000);
- US Fish and Wildlife Service Section 7 consultation with the California Energy Commission regarding Calpine and Bechtel Corporations' Metcalf Energy Center (2000: 4 pp);
- California Energy Commission's Preliminary Staff Assessment of the proposed Metcalf Energy Center (2000: 11 pp);
- Site-specific management plans for the Natomas Basin Conservancy's mitigation lands, prepared by Wildlands, Inc. (2000: 7 pp);
- Affidavit of K. Shawn Smallwood in Spirit of the Sage Council, et al. (Plaintiffs) vs. Bruce Babbitt, Secretary, U.S. Department of the Interior, et al. (Defendants), Injuries caused by the No Surprises policy and final rule which codifies that policy (1999: 9 pp).

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Comments on other Environmental Review Documents:

- Proposed Regulation for California Fish and Game Code Section 3503.5 (2015: 12 pp);
- Statement of Overriding Considerations related to extending Altamont Winds, Inc.'s Conditional Use Permit PLN2014-00028 (2015; 8 pp);
- Draft Program Level EIR for Covell Village (2005; 19 pp);
- Bureau of Land Management Wind Energy Programmatic EIS Scoping document (2003: 7 pp.);
- NEPA Environmental Analysis for Biosafety Level 4 National Biocontainment Laboratory (NBL) at UC Davis (2003: 7 pp);
- Notice of Preparation of UC Merced Community and Area Plan EIR, on behalf of The Wildlife Society—Western Section (2001: 8 pp.);
- Preliminary Draft Yolo County Habitat Conservation Plan (2001; 2 letters totaling 35 pp.);
- Merced County General Plan Revision, notice of Negative Declaration (2001: 2 pp.);
- Notice of Preparation of Campus Parkway EIR/EIS (2001: 7 pp.);
- Draft Recovery Plan for the bighorn sheep in the Peninsular Range (*Ovis candensis*) (2000);
- Draft Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*), on behalf of The Wildlife Society—Western Section (2000: 10 pp.);
- Sierra Nevada Forest Plan Amendment Draft Environmental Impact Statement, on behalf of The Wildlife Society—Western Section (2000: 7 pp.);

- State Water Project Supplemental Water Purchase Program, Draft Program EIR (1997);
- Davis General Plan Update EIR (2000);
- Turn of the Century EIR (1999: 10 pp);
- Proposed termination of Critical Habitat Designation under the Endangered Species Act (Fed. Reg. 64(113): 31871-31874) (1999);
- NOA Draft Addendum to the Final Handbook for Habitat Conservation Planning and Incidental Take Permitting Process, termed the HCP 5-Point Policy Plan (Fed. Reg. 64(45): 11485 - 11490) (1999; 2 pp + attachments);
- Covell Center Project EIR and EIR Supplement (1997).

Position Statements I prepared the following position statements for the Western Section of The Wildlife Society, and one for nearly 200 scientists:

- Recommended that the California Department of Fish and Game prioritize the extermination of the introduced southern water snake in northern California. The Wildlife Society--Western Section (2001);
- Recommended that The Wildlife Society—Western Section appoint or recommend members of the independent scientific review panel for the UC Merced environmental review process (2001);
- Opposed the siting of the University of California's 10th campus on a sensitive vernal pool/grassland complex east of Merced. The Wildlife Society--Western Section (2000);
- Opposed the legalization of ferret ownership in California. The Wildlife Society--Western Section (2000);
- Opposed the Proposed "No Surprises," "Safe Harbor," and "Candidate Conservation Agreement" rules, including permit-shield protection provisions (Fed. Reg. Vol. 62, No. 103, pp. 29091-29098 and No. 113, pp. 32189-32194). This statement was signed by 188 scientists and went to the responsible federal agencies, as well as to the U.S. Senate and House of Representatives.

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Posters at Professional Meetings

Leyvas, E. and K. S. Smallwood. 2015. Rehabilitating injured animals to offset and rectify wind project impacts. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S., J. Mount, S. Standish, E. Leyvas, D. Bell, E. Walther, B. Karas. 2015. Integrated detection trials to improve the accuracy of fatality rate estimates at wind projects. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S. and C. G. Thelander. 2005. Lessons learned from five years of avian mortality research in the Altamont Pass WRA. AWEA conference, Denver, May 2005.

Neher, L., L. Wilder, J. Woo, L. Spiegel, D. Yen-Nakafugi, and K.S. Smallwood. 2005. Bird's eye view on California wind. AWEA conference, Denver, May 2005.

Smallwood, K. S., C. G. Thelander and L. Spiegel. 2003. Toward a predictive model of avian

fatalities in the Altamont Pass Wind Resource Area. Windpower 2003 Conference and Convention, Austin, Texas.

Smallwood, K.S. and Eva Butler. 2002. Pocket Gopher Response to Yellow Star-thistle Eradication as part of Grassland Restoration at Decommissioned Mather Air Force Base, Sacramento County, California. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and Michael L. Morrison. 2002. Fresno kangaroo rat (*Dipodomys nitratoides*) Conservation Research at Resources Management Area 5, Lemoore Naval Air Station. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and E.L. Fitzhugh. 1989. Differentiating mountain lion and dog tracks. Third Mountain Lion Workshop, Prescott, AZ.

Smith, T. R. and K. S. Smallwood. 2000. Effects of study area size, location, season, and allometry on reported *Sorex* shrew densities. Annual Meeting of the Western Section of The Wildlife Society.

Presentations at Professional Meetings and Seminars

Repowering the Altamont Pass. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Developing methods to reduce bird mortality in the Altamont Pass Wind Resource Area, 1999-2007. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

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Conservation and recovery of burrowing owls in Santa Clara Valley. Santa Clara Valley Habitat Agency, Newark, California, 3 February 2017.

Mitigation of Raptor Fatalities in the Altamont Pass Wind Resource Area. Raptor Research Foundation Meeting, Sacramento, California, 6 November 2015.

From burrows to behavior: Research and management for burrowing owls in a diverse landscape. California Burrowing Owl Consortium meeting, 24 October 2015, San Jose, California.

The Challenges of repowering. Keynote presentation at Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 10 March 2015.

Research Highlights Altamont Pass 2011-2015. Scientific Review Committee, Oakland, California, 8 July 2015.

Siting wind turbines to minimize raptor collisions: Altamont Pass Wind Resource Area. US Fish and Wildlife Service Golden Eagle Working Group, Sacramento, California, 8 January 2015.

Evaluation of nest boxes as a burrowing owl conservation strategy. Sacramento Chapter of the Western Section, The Wildlife Society. Sacramento, California, 26 August 2013.

Predicting collision hazard zones to guide repowering of the Altamont Pass. Conference on wind

power and environmental impacts. Stockholm, Sweden, 5-7 February 2013.

Impacts of Wind Turbines on Wildlife. California Council for Wildlife Rehabilitators, Yosemite, California, 12 November 2012.

Impacts of Wind Turbines on Birds and Bats. Madrone Audubon Society, Santa Rosa, California, 20 February 2012.

Comparing Wind Turbine Impacts across North America. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Alameda County Scientific Review Committee meeting, 17 February 2011

Comparing Wind Turbine Impacts across North America. Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 3 May 2011.

Update on Wildlife Impacts in the Altamont Pass Wind Resource Area. Raptor Symposium, The Wildlife Society—Western Section, Riverside, California, February 2011.

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Siting Repowered Wind Turbines to Minimize Raptor Collisions. Raptor Symposium, The Wildlife Society - Western Section, Riverside, California, February 2011.

Wildlife mortality caused by wind turbine collisions. Ecological Society of America, Pittsburgh, Pennsylvania, 6 August 2010.

Map-based repowering and reorganization of a wind farm to minimize burrowing owl fatalities. California burrowing Owl Consortium Meeting, Livermore, California, 6 February 2010.

Environmental barriers to wind power. Getting Real About Renewables: Economic and Environmental Barriers to Biofuels and Wind Energy. A symposium sponsored by the Environmental & Energy Law & Policy Journal, University of Houston Law Center, Houston, 23 February 2007.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Meeting with Japan Ministry of the Environment and Japan Ministry of the Economy, Wild Bird Society of Japan, and other NGOs Tokyo, Japan, 9 November 2006.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Symposium on bird collisions with wind turbines. Wild Bird Society of Japan, Tokyo, Japan, 4 November 2006.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. California Society for Ecological Restoration (SERCAL) 13th Annual Conference, UC Santa

Barbara, 27 October 2006.

Fatality associations as the basis for predictive models of fatalities in the Altamont Pass Wind Resource Area. EEI/APLIC/PIER Workshop, 2006 Biologist Task Force and Avian Interaction with Electric Facilities Meeting, Pleasanton, California, 28 April 2006.

Burrowing owl burrows and wind turbine collisions in the Altamont Pass Wind Resource Area. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, February 8, 2006.

Mitigation at wind farms. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Incorporating data from the California Wildlife Habitat Relationships (CWHR) system into an impact assessment tool for birds near wind farms. Shawn Smallwood, Kevin Hunting, Marcus Yee, Linda Spiegel, Monica Parisi. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Toward indicating threats to birds by California's new wind farms. California Energy Commission, Sacramento, May 26, 2005.

Avian collisions in the Altamont Pass. California Energy Commission, Sacramento, May 26, 2005.

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Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. EPRI Environmental Sector Council, Monterey, California, February 17, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. The Wildlife Society—Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Associations between avian fatalities and attributes of electric distribution poles in California. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Minimizing avian mortality in the Altamont Pass Wind Resources Area. UC Davis Wind Energy Collaborative Forum, Palm Springs, California, December 14, 2004.

Selecting electric distribution poles for priority retrofitting to reduce raptor mortality. Raptor Research Foundation Meeting, Bakersfield, California, November 10, 2004.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. Annual Meeting of the Society for Ecological Restoration, South Lake Tahoe, California, October 16, 2004.

Lessons learned from five years of avian mortality research at the Altamont Pass Wind Resources Area in California. The Wildlife Society Annual Meeting, Calgary, Canada, September 2004.

The ecology and impacts of power generation at Altamont Pass. Sacramento Petroleum Association,

Sacramento, California, August 18, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Consortium meeting, Hayward, California, February 7, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Symposium, Sacramento, November 2, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. National Wind Coordinating Committee, Washington, D.C., November 17, 2003.

Raptor Behavior at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

California mountain lions. Ecological & Environmental Issues Seminar, Department of Biology, California State University, Sacramento, November, 2000.

Intra- and inter-turbine string comparison of fatalities to animal burrow densities at Altamont Pass. National Wind Coordinating Committee, Carmel, California, May, 2000.

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Using a Geographic Positioning System (GPS) to map wildlife and habitat. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Suggested standards for science applied to conservation issues. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

The indicators framework applied to ecological restoration in Yolo County, California. Society for Ecological Restoration, September 25, 1999.

Ecological restoration in the context of animal social units and their habitat areas. Society for Ecological Restoration, September 24, 1999.

Relating Indicators of Ecological Health and Integrity to Assess Risks to Sustainable Agriculture and Native Biota. International Conference on Ecosystem Health, August 16, 1999.

A crosswalk from the Endangered Species Act to the HCP Handbook and real HCPs. Southern California Edison, Co. and California Energy Commission, March 4-5, 1999.

Mountain lion track counts in California: Implications for Management. Ecological & Environmental Issues Seminar, Department of Biological Sciences, California State University, Sacramento, November 4, 1998.

“No Surprises” -- Lack of science in the HCP process. California Native Plant Society Annual Conservation Conference, The Presidio, San Francisco, September 7, 1997.

In Your Interest. A half hour weekly show aired on Channel 10 Television, Sacramento. In this episode, I served on a panel of experts discussing problems with the implementation of the Endangered Species Act. Aired August 31, 1997.

Spatial scaling of pocket gopher (*Geomyidae*) density. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Estimating prairie dog and pocket gopher burrow volume. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Ten years of mountain lion track survey. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Study and interpretive design effects on mountain lion density estimates. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Small animal control. Session moderator and speaker at the California Farm Conference, Sacramento, California, Feb. 28, 1995.

Small animal control. Ecological Farming Conference, Asylomar, California, Jan. 28, 1995.

Habitat associations of the Swainson's Hawk in the Sacramento Valley's agricultural landscape. 1994 Raptor Research Foundation Meeting, Flagstaff, Arizona.

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Alfalfa as wildlife habitat. Seed Industry Conference, Woodland, California, May 4, 1994.

Habitats and vertebrate pests: impacts and management. Managing Farmland to Bring Back Game Birds and Wildlife to the Central Valley. Yolo County Resource Conservation District, U.C. Davis, February 19, 1994.

Management of gophers and alfalfa as wildlife habitat. Orland Alfalfa Production Meeting and Sacramento Valley Alfalfa Production Meeting, February 1 and 2, 1994.

Patterns of wildlife movement in a farming landscape. Wildlife and Fisheries Biology Seminar Series: Recent Advances in Wildlife, Fish, and Conservation Biology, U.C. Davis, Dec. 6, 1993.

Alfalfa as wildlife habitat. California Alfalfa Symposium, Fresno, California, Dec. 9, 1993.

Management of pocket gophers in Sacramento Valley alfalfa. California Alfalfa Symposium, Fresno, California, Dec. 8, 1993.

Association analysis of raptors in a farming landscape. Plenary speaker at Raptor Research Foundation Meeting, Charlotte, North Carolina, Nov. 6, 1993.

Landscape strategies for biological control and IPM. Plenary speaker, International Conference on Integrated Resource Management and Sustainable Agriculture, Beijing, China, Sept. 11, 1993.

Landscape Ecology Study of Pocket Gophers in Alfalfa. Alfalfa Field Day, U.C. Davis, July 1993.

Patterns of wildlife movement in a farming landscape. Spatial Data Analysis Colloquium, U.C. Davis, August 6, 1993.

Sound stewardship of wildlife. Veterinary Medicine Seminar: Ethics of Animal Use, U.C. Davis. May 1993.

Landscape ecology study of pocket gophers in alfalfa. Five County Grower's Meeting, Tracy, California. February 1993.

Turbulence and the community organizers: The role of invading species in ordering a turbulent system, and the factors for invasion success. Ecology Graduate Student Association Colloquium, U.C. Davis. May 1990.

Evaluation of exotic vertebrate pests. Fourteenth Vertebrate Pest Conference, Sacramento, California. March 1990.

Analytical methods for predicting success of mammal introductions to North America. The Western Section of the Wildlife Society, Hilo, Hawaii. February 1988.

A state-wide mountain lion track survey. Sacramento County Dept Parks and Recreation. April 1986.

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The mountain lion in California. Davis Chapter of the Audubon Society. October 1985.

Ecology Graduate Student Seminars, U.C. Davis, 1985-1990: Social behavior of the mountain lion; Mountain lion control; Political status of the mountain lion in California.

Other forms of Participation at Professional Meetings

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Berlin, Germany, March 2015.
- Scientific Committee, Conference on Wind energy and Wildlife impacts, Stockholm, Sweden, February 2013.
- Workshop co-presenter at Birds & Wind Energy Specialist Group (BAWESG) Information sharing week, Bird specialist studies for proposed wind energy facilities in South Africa, Endangered Wildlife Trust, Darling, South Africa, 3-7 October 2011.
- Scientific Committee, Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 2-5 May 2011.
- Chair of Animal Damage Management Session, The Wildlife Society, Annual Meeting, Reno, Nevada, September 26, 2001.

- Chair of Technical Session: Human communities and ecosystem health: Comparing perspectives and making connection. Managing for Ecosystem Health, International Congress on Ecosystem Health, Sacramento, CA August 15-20, 1999.

- Student Awards Committee, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

- Student Mentor, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Printed Mass Media

Smallwood, K.S., D. Mooney, and M. McGuinness. 2003. We must stop the UCD biolab now. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2002. Spring Lake threatens Davis. Op-Ed to the Davis Enterprise.

Smallwood, K.S. Summer, 2001. Mitigation of habitation. The Flatlander, Davis, California.

Entrikan, R.K. and K.S. Smallwood. 2000. Measure O: Flawed law would lock in new taxes. Op-Ed to the Davis Enterprise.

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Smallwood, K.S. 2000. Davis delegation lobbies Congress for Wildlife conservation. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 1998. Davis Visions. The Flatlander, Davis, California.

Smallwood, K.S. 1997. Last grab for Yolo's land and water. The Flatlander, Davis, California.

Smallwood, K.S. 1997. The Yolo County HCP. Op-Ed to the Davis Enterprise.

Radio/Television

PBS News Hour,

FOX News, Energy in America: Dead Birds Unintended Consequence of Wind Power Development, August 2011.

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Mountain lion attacks (with guest Professor Richard Coss). 23 April 2009;

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Wind farm Rio Vista Renewable Power. 4 September 2008;

KQED QUEST Episode #111. Bird collisions with wind turbines. 2007;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. December 27, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. May 3, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. February 8, 2001;

KDVS Speaking in Tongues (host Ron Glick & Shawn Smallwood), California Energy Crisis: 1 hour. Jan. 25, 2001;

KDVS Speaking in Tongues (host Ron Glick), Headwaters Forest HCP: 1 hour. 1998;

Davis Cable Channel (host Gerald Heffernon), Burrowing owls in Davis: half hour. June, 2000;

Davis Cable Channel (hosted by Davis League of Women Voters), Measure O debate: 1 hour. October, 2000;

KXTV 10, In Your Interest, The Endangered Species Act: half hour. 1997.

Reviews of Journal Papers (Scientific journals for whom I've provided peer review)

Journal	**Journal**
American Naturalist	Journal of Animal Ecology
Journal of Wildlife Management	Western North American Naturalist
Auk	Journal of Raptor Research
Biological Conservation	National Renewable Energy Lab reports
Canadian Journal of Zoology	Oikos
Ecosystem Health	The Prairie Naturalist
Environmental Conservation	Restoration Ecology
Environmental Management	Southwestern Naturalist
Functional Ecology	The Wildlife Society--Western Section Trans.
Journal of Zoology (London)	Proc. Int. Congress on Managing for Ecosystem Health
Journal of Applied Ecology	Transactions in GIS
Ecology	Tropical Ecology
Wildlife Society Bulletin	Peer J
Biological Control	The Condor

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Committees

- Scientific Review Committee, Alameda County, Altamont Pass Wind Resource Area
- Ph.D. Thesis Committee, Steve Anderson, University of California, Davis
- MS Thesis Committee, Marcus Yee, California State University, Sacramento

Other Professional Activities or Products

Testified in Federal Court in Denver during 2005 over the fate of radio-nuclides in the soil at Rocky Flats Plant after exposure to burrowing animals. My clients won a judgment of $553,000,000. I have also testified in many other cases of litigation under CEQA, NEPA, the Warren-Alquist Act, and other environmental laws. My clients won most of the cases for which I testified.

Testified before Environmental Review Tribunals in Ontario, Canada regarding proposed White Pines, Amherst Island, and Fairview Wind Energy projects.

Testified in Skamania County Hearing in 2009 on the potential impacts of zoning the County for development of wind farms and hazardous waste facilities.

Testified in deposition in 2007 in the case of O'Dell et al. vs. FPL Energy in Houston, Texas.

Testified in Klickitat County Hearing in 2006 on the potential impacts of the Windy Point Wind Farm.

Memberships in Professional Societies

The Wildlife Society
Raptor Research Foundation

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Honors and Awards

Fulbright Research Fellowship to Indonesia, 1987
J.G. Boswell Full Academic Scholarship, 1981 college of choice
Certificate of Appreciation, The Wildlife Society—Western Section, 2000, 2001
Northern California Athletic Association Most Valuable Cross Country Runner, 1984
American Legion Award, Corcoran High School, 1981, and John Muir Junior High, 1977
CIF Section Champion, Cross Country in 1978
CIF Section Champion, Track & Field 2 mile run in 1981
National Junior Record, 20 kilometer run, 1982
National Age Group Record, 1500 meter run, 1978

Community Activities

District 64 Little League Umpire, 2003-2007
Dixon Little League Umpire, 2006-07
Davis Little League Chief Umpire and Board member, 2004-2005
Davis Little League Safety Officer, 2004-2005
Davis Little League Certified Umpire, 2002-2004
Davis Little League Scorekeeper, 2002
Davis Visioning Group member
Petitioner for Writ of Mandate under the California Environmental Quality Act against City of Woodland decision to approve the Spring Lake Specific Plan, 2002
Served on campaign committees for City Council candidates

Representative Clients/Funders

Law Offices of Stephan C. Volker	EDF Renewables
Blum Collins, LLP	National Renewable Energy Lab
Eric K. Gillespie Professional Corporation	Altamont Winds LLC
Law Offices of Berger & Montague	Salka Energy
Lozeau | Drury LLP	Comstocks Business (magazine)
Law Offices of Roy Haber	BioResource Consultants
Law Offices of Edward MacDonald	Tierra Data
Law Office of John Gabrielli	Black and Veatch
Law Office of Bill Kopper	Terry Preston, Wildlife Ecology Research Center
Law Office of Donald B. Mooney	EcoStat, Inc.
Law Office of Veneruso & Moncharsh	US Navy
Law Office of Steven Thompson	US Department of Agriculture
Law Office of Brian Gaffney	US Forest Service
California Wildlife Federation	US Fish & Wildlife Service
Defenders of Wildlife	US Department of Justice
Sierra Club	California Energy Commission
National Endangered Species Network	California Office of the Attorney General
Spirit of the Sage Council	California Department of Fish & Wildlife
The Humane Society	California Department of Transportation
Hagens Berman LLP	California Department of Forestry
Environmental Protection Information Center	California Department of Food & Agriculture
Goldberg, Kamin & Garvin, Attorneys at Law	Ventura County Counsel
Californians for Renewable Energy (CARE)	County of Yolo
Seatuck Environmental Association	Tahoe Regional Planning Agency
Friends of the Columbia Gorge, Inc.	Sustainable Agriculture Research & Education Program
Save Our Scenic Area	Sacramento-Yolo Mosquito and Vector Control District
Alliance to Protect Nantucket Sound	East Bay Regional Park District
Friends of the Swainson's Hawk	County of Alameda
Alameda Creek Alliance	Don & LaNelle Silverstien
Center for Biological Diversity	Seventh Day Adventist Church
California Native Plant Society	Escuela de la Raza Unida
Endangered Wildlife Trust	Susan Pelican and Howard Beeman
and BirdLife South Africa	Residents Against Inconsistent Development, Inc.
AquAlliance	Bob Sarvey
Oregon Natural Desert Association	Mike Boyd
Save Our Sound	Hillcroft Neighborhood Fund
G3 Energy and Pattern Energy	Joint Labor Management Committee, Retail Food Industry
Emerald Farms	Lisa Rocca
Pacific Gas & Electric Co.	Kevin Jackson
Southern California Edison Co.	Dawn Stover and Jay Letto
Georgia-Pacific Timber Co.	Nancy Havassy
Northern Territories Inc.	Catherine Portman (for Brenda Cedarblade)
David Magney Environmental Consulting	Ventus Environmental Solutions, Inc.
Wildlife History Foundation	Panorama Environmental, Inc.
NextEra Energy Resources, LLC	Adams Broadwell Professional Corporation
Ogin, Inc.	

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Representative special-status species experience

Common name	Species name	Description
Field experience		
California red-legged frog	*Rana aurora draytonii*	Protocol searches; Many detections
Foothill yellow-legged frog	*Rana boylii*	Presence surveys; Many detections
Western spadefoot	*Spea hammondii*	Presence surveys; Few detections
California tiger salamander	*Ambystoma californiense*	Protocol searches; Many detections
Coast range newt	*Taricha torosa torosa*	Searches and multiple detections
Blunt-nosed leopard lizard	*Gambelia sila*	Detected in San Luis Obispo County
California horned lizard	*Phrynosoma coronatum frontale*	Searches; Many detections
Western pond turtle	*Clemmys marmorata*	Searches; Many detections
San Joaquin kit fox	*Vulpes macrotis mutica*	Protocol searches; detections
Sumatran tiger	*Panthera tigris*	Track surveys in Sumatra
Mountain lion	*Puma concolor californicus*	Research and publications
Point Arena mountain beaver	*Aplodontia rufa nigra*	Remote camera operation
Giant kangaroo rat	*Dipodomys ingens*	Detected in Cholame Valley
San Joaquin kangaroo rat	*Dipodomys nitratoides*	Monitoring & habitat restoration
Monterey dusky-footed woodrat	*Neotoma fuscipes luciana*	Non-target captures and mapping of dens
Salt marsh harvest mouse	*Reithrodontomys raviventris*	Habitat assessment, monitoring
Salinas harvest mouse	*Reithrodontomys megalotus distichlus*	Captures; habitat assessment
Bats		Thermal imaging surveys
California clapper rail	*Rallus longirostris*	Surveys and detections
Golden eagle	*Aquila chrysaetos*	Numerical & behavioral surveys
Swainson's hawk	*Buteo swainsoni*	Numerical & behavioral surveys
Northern harrier	*Circus cyaeneus*	Numerical & behavioral surveys
White-tailed kite	*Elanus leucurus*	Numerical & behavioral surveys
Loggerhead shrike	*Lanius ludovicianus*	Large area surveys
Least Bell's vireo	*Vireo bellii pusillus*	Detected in Monterey County
Willow flycatcher	*Empidonax traillii extimus*	Research at Sierra Nevada breeding sites
Burrowing owl	*Athene cunicularia hypugia*	Numerical & behavioral surveys
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	Monitored success of relocation and habitat restoration
Analytical		
Arroyo southwestern toad	*Bufo microscaphus californicus*	Research and report.
Giant garter snake	*Thamnophis gigas*	Research and publication
Northern goshawk	*Accipiter gentilis*	Research and publication
Northern spotted owl	*Strix occidentalis*	Research and reports
Alameda whipsnake	*Masticophis lateralis euryxanthus*	Expert testimony

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EXHIBIT C

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #24-001.xx

July 24, 2024

Kevin T. Carmichael
Associate Attorney
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

SUBJECT: **SDG Commerce – 220 Distribution Center**
American Canyon, CA
Review and Comments on EIR Noise Analysis

Dear Mr. Carmichael,

As requested, we have reviewed the information and noise impact analysis for the SDG Commerce 220 Distribution Center Project in American Canyon, CA. The project proposes to construct a 219,834-square-foot wine storage and distribution center on a currently empty site. The surrounding properties are primarily other warehouses, with the nearest noise-sensitive receptor being a residence 900 feet east of the project site. This letter comments on the Environmental Impact Report (EIR) prepared by FirstCarbon Solutions, with an emphasis on Section 3.11 – Noise, and Appendix H - Noise Supporting Information.

1

Wilson Ihrig is an acoustical consulting firm that has practiced exclusively in the field of acoustics since 1966. During our almost 58 years of operation, we have prepared hundreds of noise studies for Environmental Impact Reports and Statements. We have one of the largest technical laboratories in the acoustical consulting industry. We also utilize industry-standard acoustical programs such as Roadway Construction Noise Model (RCNM), SoundPLAN, and CadnaA. In short, we are well qualified to prepare environmental noise studies and review studies prepared by others.

Adverse Effects of Noise[1]

Learning Outcomes.[2] There is a link between acoustical barriers in the classroom such as background noise and speech intelligibility and the scholastic achievement of students. ANSI Standard S12.60-2002 sets acoustical performance criteria and design requirements for classrooms and other learning spaces.

Impaired Cognitive Performance. Studies have established that noise exposure impairs people's abilities to perform complex tasks (tasks that require attention to detail or analytical processes) and makes reading, paying attention, solving problems, and memorizing more difficult. This is why there are standards for classroom background noise levels and why offices and libraries are designed to provide quiet work environments.

Noise-Induced Hearing Loss. If a person is repeatedly exposed to loud noises, he or she may experience noise-induced hearing impairment or loss. In the United States, both the Occupational Health and Safety Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) promote standards and regulations to protect the hearing of people exposed to high levels of industrial noise.

Speech Interference. Another common problem associated with noise is speech interference. In addition to the obvious issues that may arise from misunderstandings, speech interference also leads to problems with concentration fatigue, irritation, decreased working capacity, and automatic stress reactions. For complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Typical indoor speech levels are 45 to 50 dBA at 1 meter, so any noise above 30 dBA begins to interfere with speech intelligibility. The common reaction to higher background noise levels is to raise one's voice. If this is required persistently for long periods of time, stress reactions and irritation will likely result. 2

Sleep Disturbance. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Noise exposure for people who are sleeping has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as increased fatigue, depressed mood, and decreased work performance.

Cardiovascular and Physiological Effects. Human's bodily reactions to noise are rooted in the "fight or flight" response that evolved when many noises signaled imminent danger. These include increased blood pressure, elevated heart rate, and vasoconstriction. Prolonged exposure to acute noises can result in permanent effects such as hypertension and heart disease.

[1] More information on these and other adverse effects of noise may be found in *Guidelines for Community Noise*, eds B Berglund, T Lindvall, and D Schwela, World Health Organization, Geneva, Switzerland, 1999. (https://www.who.int/publications/i/item/a68672)

[2] More information on classroom acoustical criteria and studies related to educational outcomes may be found in ANSI Standard S12.60-2002.

Baseline Noise Is Not Properly Established

Despite a section titled "Existing Noise Levels[3]," no measurements or estimates are provided for the existing noise conditions around the Project site. In *King & Gardiner Farms LLC v. County of Kern*, the Court of Appeal ruled that an agency cannot rely solely on compliance with local noise regulations to conclude that there will be no significant noise impacts without considering the effects of noise increases. Therefore, without measuring or calculating the existing Ldn/CNEL level using generally accepted methodology, it is infeasible to assess the increase in the Ldn/CNEL level due to the Project.

The existing noise levels at the residence 900 feet east of the Project site are likely relatively low, given the lack of major noise sources within 2,500 feet. The cumulative effect of two new warehouses in the area, including the SDG Commerce 220 Distribution Center and the new warehouse directly to the north, could significantly increase noise levels over the existing conditions primarily due to increased truck traffic both on-site and along Commerce Boulevard. 3

The EIR should be updated to consider the existing noise levels and the cumulative increase over the existing level that will occur from the addition of both new warehouses on Commerce Boulevard. An EIR must properly document the typical baseline noise conditions to determine impact.

Operational Noise Levels Not Properly Calculated

The EIR's impact analysis assesses each of the Project's operational noise sources independently, comparing each source's noise level separately to the City's impact criteria[4]. This approach is incorrect and underestimates the operational noise produced by the Project, as the operational noise sources, including parking lot activity, mechanical equipment, and truck loading activities, will all operate simultaneously. 4

The EIR should be updated to combine these sources into a single estimate of on-site operational noise at each sensitive receiver. The same methodology should be applied to the second warehouse north of the Project site, and the cumulative operational noise levels should be compared with the existing noise levels (discussed above) as well as the City's criteria.

Cumulative Traffic Increases Not Considered

In Section 3.11.5 – Mobile Source Operational Noise Impacts the EIR states, "for the purposes of this analysis, a doubling of the existing ADT volumes would result in a substantial permanent increase in traffic noise levels.[4]" The EIR estimates that the SDG Commerce 220 Distribution Center would add 372 daily trips to Commerce Boulevard. While this is not a doubling of the 559 daily trips from the existing Valley Wine Warehouse south of the Project, Section 3.11.6 on Cumulative Impacts fails to consider the additional daily truck trips from the new warehouse under construction directly to the north of the Project site. Since Commerce Boulevard terminates at the Valley Wine Warehouse, all existing traffic along Commerce Boulevard is assumed to be associated with the Valley Wine Warehouse. With these two new warehouses in operation, truck traffic on Commerce Boulevard 5

[3] Page 3.11-8, Environmental Impact Report, SDG Commerce 220 Distribution Center Project, June 2024
[4] Section 3.11.5, Environmental Impact Report, SDG Commerce 220 Distribution Center Project, June 2024

could be expected to more than double, potentially resulting in a substantial permanent increase in traffic noise levels, constituting an impact.

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The EIR should be updated to consider the cumulative traffic noise impacts of both new warehouse Projects on Commerce Boulevard.

Conclusions

There are several errors and omissions in the EIR noise analysis, including insufficient determination of the existing noise environment, improper calculations of operational noise estimates, and a failure to consider the cumulative effects of the two warehouse projects on Commerce Boulevard. Correcting these would potentially identify significant impacts which require mitigation. Please feel free to contact me with any questions on this information.

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Very truly yours,

WILSON IHRIG



Luke Watry

Senior Consultant

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION



LUKE WATRY

Senior Consultant

Luke joined Wilson Ihrig in 2016 and is involved in a wide array of projects including building acoustic design, construction monitoring, modal analysis, as well as transit noise and vibration mitigation. He works out of our Seattle office, has been an important team member on several multi-year transit expansion projects, and has experience on the full breadth of project design work from conception to certification. He is well versed in the use of SoundPLAN, ME'scope, ArcGIS, MATLAB, AutoCAD, Envy, Excel, and experimental design concepts.

Education

- B.S. Mechanical Engineering, University of Colorado, Boulder, CO

Project Experience

BNSF Cowlitz River Bridge Replacement Hydroacoustic Monitoring, WA
Provided hydroacoustic monitoring and reporting services for pile driving activities during the construction of a new rail bridge.

BNSF Northern Pacific Depot Vibration Assessment, Sandpoint, ID
Provided hydroacoustic monitoring and reporting services for pile driving activities in the Pend Oreille River during the construction of a new BNSF rail bridge.

CAHSR EIR/EIS: San Francisco to San Jose & San Jose to Merced Segments, CA
Provided noise modeling and mitigation design services for over 120 miles of high-speed rail alignment through densely populated areas of the San Francisco Peninsula, San Jose, Gilroy, and the Central Valley. Noise impact to sensitive wildlife was also analyzed alongside the standard human-centric criteria.

CTA CRCC 7000-Series Vehicle Noise Consulting, Chicago, IL
Certified the noise and vibration specifications of a new range of CRRC 7000-series "L" vehicles. The specifications included ride quality, exterior vibration, interior noise, and exterior noise across a variety of track types.

Fred Hutchinson Cancer Center, Seattle, WA
Documented the existing acoustic conditions prior to a renovation of animal research laboratories. Developed acoustic criteria and control recommendations for the new laboratories and support facilities.

Houston METRO University BRT, Houston, TX
Conducted an environmental noise and vibration assessment for a new 25-mile BRT project. Provided the client with a technical report outlining the assessment and recommended noise and vibration control measures.

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North Mercer Island/Enatai Sewer Upgrade, WA
Provided construction vibration monitoring in accordance with county permit requirements. Remote vibration monitors were installed at residential properties adjacent to construction sites.

Metropolitan Atlanta Rapid Transit Authority (MARTA) On-Call Task, Atlanta, GA
Performed a full modal analysis on five bridges owned by MARTA. The results from the field-testing were analyzed and compared against AISC and AASHTO engineering standards.

Microsoft Building 87 Redmond Link Extension Noise and Vibration, Redmond, WA
Analyzed the potential for ground borne noise and vibration disruption due to Redmond Link Extension. The building contains multiple anechoic chambers, including the "quietest room on earth," as well as sensitive prototype manufacturing facilities.

Microsoft Building 87 Redmond Link Extension Ballast Mat Installation, Redmond, WA
Provided daily construction quality inspections during the installation of a high-performance ballast mat system. Quality issues identified during construction were resolved with the contractor and the completed installation was approved by the ballast mat manufacturer and Sound Transit.

MicroSurgical Technology, Redmond, WA
Conducted a noise survey in a surgical instrument production facility. Developed a report assessing the workers daily noise exposure and provided noise control recommendations.

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Mount Bay Apartments, Tacoma, WA
Provided noise and vibration mitigation services for the design of a mid-rise apartment building located adjacent to a busy rail corridor. Specific recommendations for wall construction and windows were provided to the client.

Nisqually Tribe / Joint Base Lewis-McChord Test Noise Monitoring Review, Olympia, WA
Recorded and analyzed rocket artillery being tested at Joint Base Lewis-McChord, adjacent to the Nisqually Indian Community.

Safeway #2870 Claremont / College Avenue Construction, Oakland, CA
Drafted reports and addressed noise exceedances during demolition and reconstruction of a Safeway and shopping complex.

San Francisco Department of Public Works On-Call Tasks, San Francisco, CA
Implemented construction noise and vibration monitoring for various pipe improvement projects. Long-term monitors were positioned based on predicted work scheduling; short-term attended monitoring was conducted during high-risk activities such as pile driving.

SLAC National Accelerator Laboratory, San Mateo, CA
Generated a site-specific vibration propagation model and analyzed the potential for vibration impacts to ongoing scientific experiments during the construction of a new building on the SLAC campus. Testing included measuring transfer mobilities, determining the vibration response of particle beamline equipment, and vibration generated by construction equipment.

Sound Transit Auburn Parking Garage, Auburn, WA
Measured existing long-term vibration levels inside a medical facility adjacent to the site of a future Sound Transit parking garage. The medical facility contains sensitive equipment including a Varian linear accelerator.

Sound Transit Redmond Link Extension, Redmond, WA
Produced vibration prediction models and mitigation design for future light rail track extending through the Microsoft campus and into Downtown Redmond.

Sound Transit Northgate Link Extension, Seattle, WA
Monitored construction vibration and ground-borne noise created by a tunnel boring machine drilling under the University of Washington and surrounding neighborhoods.

Sound Transit Northgate Link Extension Performance Certification, Seattle, WA
Certified the performance of a 5 Hz floating slab constructed in the tunnels underneath the University of Washington (UW) as a part of Sound Transit's Northgate Link Extension**.** Tests were conducted before, during, and after the floating slab construction. One test included measuring vibration levels simultaneously at 16 locations spread across UW and the transit tunnels below.

Sound Transit Rolling Noise Investigation, Seattle, WA
Assisted in developing a computational model of light rail noise. Wheel roughness, rail roughness, and track decay rates were measured for use as model inputs. Wayside noise measurements were used to validate the noise model.

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Sound Transit Tacoma Link Expansion, Tacoma, WA
Provided vibration modeling and mitigation design services for a 2.4-mile expansion of streetcar service. Building vibration response testing was conducted at various residences, medical centers, and community buildings to improve modeling accuracy.

Sound Transit, Siemens Mobility LRV Testing, Seattle, WA
Certified the noise and vibration specifications of a new range of Siemens LRVs. In addition to certifying ride quality, interior noise, and exterior noise specifications, force density levels of the new vehicles were measured and compared to the existing Kinkisharyo fleet.

State Route 520 Interchange Hydroacoustics, Seattle, WA
Provided hydroacoustic monitoring and reporting services for pile driving activities in Lake Washington during the construction of SR520.

Valley Metro, Siemens Mobility LRV Testing, Phoenix, AZ
Certified the noise and vibration specifications of a new range of LRVs. The specifications included ride quality, exterior vibration, interior noise, and exterior noise.

Napa/Solano Residents for Responsible Development (NSRRD)

Note to Reader: This letter includes attachments from Soil/Water/Air Protection Enterprise (SWAPE), Kenneth Shawn Smallwood (SMALLWOOD), and Wilson Ihrig (IHRIG).

Response to NSRRD-1
The organization provides general introductory remarks, summarizes the proposed project, asserts the Draft EIR failed to comply with CEQA, and expresses general opposition to the proposed project. The organization referenced three attachments from its consultants. The organization also provided a statement of interest.

Responses to the three attachments are provided as discussed in the following responses. There is no evidence to support the organization's claims that the Draft EIR failed to comply with CEQA requirements.

Response to NSRRD-2
The commenter states that individual members of the organization and affiliated labor organizations would be directly impacted by the proposed project's environmental, health, and safety impacts and may work in constructing the proposed project. As such, the organization has an interest in protecting the project vicinity from adverse environmental and public health impacts.

No environmental issues specific to the proposed project are raised, and no further response is necessary.

Response to NSRRD-3
The commenter states that the organization has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. The comment states that environmentally detrimental projects can jeopardize future jobs and reduce future employment opportunities.

No environmental issues specific to the proposed project are raised, and no further response is necessary.

Response to NSRRD-4
The commenter states that the organization is concerned with projects that can result in serious environmental harm without providing countervailing economic benefits.

No environmental issues specific to the proposed project are raised, and no further response is necessary.

Response to NSRRD-5
The organization provides general legal background regarding CEQA.

No environmental issues specific to the proposed project are raised, and no further response is necessary.

Response to NSRRD-6
The organization asserts the Draft EIR failed to adequately describe the proposed project, and the comment alleges the project description is inconsistent and unstable. The organization further states that use of natural gas during operation was not disclosed or analyzed and that the specifications for the proposed project's battery energy storage systems were not included.

The comment is noted. The organization's specific comments in this regard are addressed in Responses to NSRRD-7 and NSRRD-8.

Response to NSRRD-7
The organization asserts that the proposed project does not consistently describe the use of natural gas during project operation. The organization states that the proposed project failed to include any mitigation measures that would prevent the use of natural gas at the project site, and the organization further asserts that the inconsistent description of the use of natural gas results in a lack of relevant information for informed decision-making and public participation.

As described in Chapter 2, Project Description, Section 2.3, Project Characteristics, the proposed project would not use natural gas. Furthermore, as indicated in Section 3.2, Air Quality, and Section 3.7, Greenhouse Gas Emissions, of the Draft EIR, the proposed project would not include natural gas appliances or natural gas plumbing, because it is subject to Tier 3 of the Industrial Use Greenhouse Gas Standards found in Chapter 19.01.061 of the City's Municipal Code. As further described in Section 3.5, Energy, the proposed project would not utilize natural gas as a building fuel. The commenter mentioned 13,980 gallons of natural gas, as referenced in Appendix B (not A, they made a typo), page 185. This is natural gas projected to be used during construction. When referring to the use of natural gas during construction and operation, the Draft EIR refers to natural gas used for construction equipment, appliances, and plumbing, not vehicles, as is an appropriate characterization when comparing against the Bay Area Air Quality Management District (BAAQMD) thresholds of significance. However, it should be noted that the use of natural gas powered construction equipment is a conservative assumption as the project applicant has indicated that use of such equipment is unlikely. The Draft EIR does state that, in evaluating potential air quality impacts associated with a project, "energy sources include emissions from the combustion of natural gas for water heaters and other heat sources." As is shown in the corresponding Table 3.2-15, the air pollutant emissions associated with energy are zero (because the proposed project is all-electric). As described throughout the Draft EIR, operation of the proposed project would not utilize natural gas, and as such, no mitigation measures would be required related to natural gas.

Response to NSRRD-8
The organization asserts that the Draft EIR does not contain information regarding the type, size, chemical components, or proposed layout of battery units related to the battery storage for the rooftop solar photovoltaic system. The organization alleges that this information is important for worker safety and impacts in the event of an emergency. The organization further states that battery storage systems can create hazardous conditions from thermal runaway and may require cooling, fire detection, and fire suppression systems. The organization asserts that Draft EIR must be revised to include information and analysis of potential hazards from the proposed battery storage system.

As demonstrated by *Citizens for a Sustainable Treasure Island v. City & County of San Francisco* (2014) 227 CA4th, 1053, a CEQA document's description of the project description should identify the project's main features and other information needed for an analysis of the proposed project's environmental impacts. The project description "should not supply extensive detail beyond that needed for evaluation and review of the environmental impact" (CEQA Guidelines § 15124). The proposed project is thoroughly described within the Draft EIR and supporting documents, which provide the level of detail needed for the evaluation of the proposed project by the public and decision-makers and for the review of the proposed project's environmental impacts. As such, detailed plans such as grading plans, floor plans, or elevations are not required to be included in the Draft EIR's project description and a general description of the proposed project and conceptual plans are allowed. Battery storage specifications are not required components of the CEQA document.

The comment does not provide substantial evidence regarding any significant environmental impact. The proposed project would provide battery storage in accordance with the requirements of the California Code of Regulations Title 24, Part 6, Section 140.10(b) as described in Draft EIR Section 3.2, Air Quality. The proposed project would comply with all requirements described in Title 24 of the California Code of Regulations, also known as the California Building Standards Code (CBC), and the California Fire Code, which is a component of the CBC, containing fire safety-related building standards.

Response to NSRRD-9
The organization asserts that the Draft EIR fails to accurately disclose the baseline environmental conditions related to potential noise and biological resources impacts. The comment then provides legal background regarding the existing environmental setting within CEQA.

Responses related to the Draft EIR's disclosure of baseline conditions for noise and biological resources are discussed under Responses NSRRD-10 and NSRRD-11, respectively.

Response to NSRRD-10
The commenter states the Draft EIR fails to include any data to support that traffic on local roadways and railroad and airport activity are dominant noise sources in the project vicinity. The commenter asserts that absent baseline noise measurements make it impossible to determine whether the proposed project will have significant impacts to noise.

The commenter concedes that the Draft EIR adequately demonstrates that the proposed project would not result in noise levels that would result in a substantial increase in excess of the City's applicable noise performance thresholds. Furthermore, they do not dispute the assumptions or calculations of the reasonable worst-case construction and operational noise levels identified in the Draft EIR. However, they assert that this does not negate the need to provide evidence that the proposed project would not result in a substantial increase above existing ambient noise levels. They claim that without baseline ambient noise measurements and a comparison of the proposed project's noise impacts, it cannot be determined whether there would be a substantial increase or not above existing noise levels.

However, the commenter fails to provide any evidence that demonstrates that any potential impact could occur. They do not dispute the evidence presented in the Draft EIR which, by common reason, negates the possibility of a potential substantial increase in existing ambient noise levels as measured at the nearest receptor. For example, the Draft EIR identifies that the highest calculated construction noise levels would be 40 A-weighted decibels (dBA) day/night average noise level (L_{dn}) as measured at the exterior façade of the nearest receptor; and the highest calculated operational noise level would be 38 dBA L_{dn} as measured at the exterior of the nearest receptor, a single-family residence. These noise levels are below typical suburban ambient noise levels, and the Draft EIR correctly identifies that these noise levels are also well below levels that the City considers to be acceptable for residential land uses.

However, it can easily be shown that these noise levels would not result in even an audible increase in interior noise levels as measured at the nearest residential receptor. For example, based on the United States Environmental Protection Agency (EPA) Protective Noise Levels,[2] a combination of standard construction walls, doors, and windows, in accordance with building code requirements for multi-family residential developments, would provide 25 dBA in exterior-to-interior noise reduction with windows closed and 15 dBA or more in exterior-to-interior noise reduction with windows open. Therefore, the proposed project's reasonable worst-case construction and operational noise levels would attenuate to below 25 dBA and 23 dBA L_{dn}, respectively, as measured in the interior of the nearest residential receptor with the residential windows being open.

These noise levels, by common reason, are so low that they could not be constituted as a substantial increase in existing ambient noise levels as measured at the nearest receptor. For example, the report by Wilson Ihrig upon which the commenter bases their opinion (attached to their letter), states that typical indoor speech levels are 45 to 50 dBA at 1 meter. Therefore, the reasonable worst-case construction and operational noise levels, as measured at the interior of the nearest residential receptor would be more than 20 dBA below the level of typical conversational speech. Again, the report by Wilson Ihrig upon which the commenter bases their opinion identifies that, for complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Therefore, the proposed project's reasonable worst-case construction and operational noise levels of 25 dBA and 23 dBA L_{dn}, as measured inside the nearest residential receptor with windows open, are well below the level that would be considered to have the potential to interfere with speech. It should further be noted that the proposed project's reasonable worst-case construction and operational noise levels would attenuate to below 15 dBA and 13 dBA L_{dn} as measured inside the nearest residential receptor with the residential windows being closed.

Therefore, as the Draft EIR logically concludes, due to distance attenuation, the proposed project's construction and operational noise levels would not result in even an audible increase in interior noise levels as measured at the nearest residential receptor, and therefore could not reasonably result in a temporary or permanent substantial increase in ambient noise levels, as measured at the nearest residential receptor. Therefore, the proposed project's reasonable worst-case construction and operational noise levels would be less than significant.

[2] EPA 550/9-79-100, November 1978.

Response to NSRRD-11
To preface this response, as discussed on Draft EIR Section 3.3, Biological Resources, pages 3.3-30 and 3.3-33, two separate biological consulting firms (Monk & Associates and Pinecrest Research Corporation) assessed the project site between 2006 and 2023. The studies included biological resource reports, habitat assessments, special-status plant and animal survey reports, and an aquatic resource jurisdictional determination. Additionally, FirstCarbon Solutions (FCS) peer reviewed these biological firms' work prior to the release of the Draft EIR and determined it to be adequate. In sum, the project site has been substantially studied and there is an abundance of information about its baseline biological conditions.

With that in mind, the Draft EIR used this abundance of information to describe the existing biological conditions in Draft EIR Section 3.3, Biological Resources, on pages 3.3-1 through 3.3-20. This discussion included (1) soil, typography, and hydrology; (2) vegetation communities and land cover types; (3) sensitive natural communities; (4) common wildlife; (5) special-status species; (6) State or federally protected waters and wetlands; and (7) wildlife movement corridors and nursery sites. Draft EIR Exhibit 3.3-1 provided a soils map, Exhibit 3.3-2 provided a vegetation communities and land cover map, Exhibit 3.3-3 provided a CNDDB special-status species occurrences map, and Exhibit 3.3-4 provided a biological impacts map. By any objective standard, this constitutes an adequate description of the existing baseline conditions of the project site and is supported by substantial evidence. The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-4, -11, and -12.

Response to NSRRD-12
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-2 and -19.

Response to NSRRD-13
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the EIR. These comments are addressed independently in Response to SMALLWOOD-17.

Response to NSRRD-14
The commenter provides their interpretation of legal requirements and case law. The legal statutes and case law speak for themselves. The general claims and information presented by the commenter regarding legal standards of review are not specific to the proposed project and do not specifically raise any issues concerning the proposed project or the Draft EIR and do not provide substantial evidence to support the claim that the Draft EIR is inadequate. The comment does not raise any specific environmental issue with respect to the proposed project or the analysis in the Draft EIR.

The City finds that the studies relied on in the Draft EIR are adequate and supported and that the Draft EIR provides all required information. Moreover, the City notes that under CEQA, an EIR is required to evaluate a reasonable analysis of impacts. It is not required to perform every study or undertake every investigation suggested. It must be prepared with a sufficient degree of analysis to provide decision-makers with the information needed to make an intelligent decision concerning a project's environmental consequences (CEQA Guidelines Sections 15151, 15204(a); *San Joaquin Raptor Rescue Ctr. v County of Merced* (2007) 149 CA4th 645, 666.) Because this comment recites

general legal provisions regarding CEQA without any direct application to the proposed project, it requires no further response.

Response to NSRRD-15
The commenter states that the conclusion in the Draft EIR with respect to health risks to sensitive receptors from construction-related impacts is not supported by substantial evidence. To support this claim, the commenter states that the construction health risk assessment (HRA) prepared for the proposed project fails to consider age sensitivity factors (ASF) and fraction of time at home (FAH) for nearby sensitive receptors.

The construction HRA was prepared and followed the methodologies presented in the California Environmental Protection Agency (Cal/EPA)/California Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015), which was adopted in 2015, replacing the previous 2003 guidance manual. As summarized in the Draft EIR and shown in detail in Appendix B, the appropriate ASF and FAH assumptions were utilized. Section 3.2, Air Quality, of the Draft EIR provides an overview of the HRA assumptions, as well as a summary of the HRA results. Detailed HRA assumptions and results are provided in Appendix B of the Draft EIR. As described more fully therein, the Hot Spots Analysis and Reporting Program 2 (HARP2) was used to automatically calculate the health risk for the proposed project. Use of the HARP2 modeling ensures that the calculational procedures for cancer and non-cancer risk follow the OEHHA 2015 Guidelines and that ASF and FAH parameters are applied correctly. The HARP2 output files, which are included in Appendix B of the Draft EIR, detail how the HARP2 model was applied and document the appropriate HRA parameters for ASF and FAH for exposure.

Age Sensitivity Factors
As described in Section 3.2, Air Quality, as well as Appendix B of the Draft EIR, the HRA prepared for the proposed project evaluated cancer and non-cancer chronic hazard risks from construction at the Maximally Exposed Individual Resident (MEIR), the Maximally Exposed Individual Worker (MEIW), and other sensitive receptors of interest, such as schools. As described in the Draft EIR and shown in the HARP summary report in Appendix B, the HRA prepared for the proposed project does apply the appropriate ASF as recommended by the OEHHA Risk Assessment Guidelines. An age sensitivity factor of 10 was applied for infants with exposure starting in the third trimester (pre-birth) until age 2. Children from ages 2 to 16 are assumed to be 3 times more sensitive than adults. No adjustments were made for adult exposure for ages greater than 16. As stated in the Draft EIR, "OEHHA Health Risk assessment protocols specify HRAs for residential exposure should start with exposure starting at third trimester and this approach is used for both the Construction and Operational HRA for the proposed project."

Fraction of Time at Home
As described in Section 3.2, Air Quality of the Draft EIR, the analysis utilized OEHHA guidance for evaluating an individual receptor based on a 30-year residential exposure over a 70-year averaging period. Specifically, the OEHHA guidance recommends using the 95th percentile breathing rate for age groups less than 2 years old and the 80th percentile breathing rate for age groups that are greater than or equal to 2 years old. The construction exposure period is less than 2 years and, as

per OEHHA guidance, exposure was evaluated starting in the third trimester and conservatively evaluated exposure for ages less than 2 years based on the 95th percentile breathing rate. Residents less than 16 years of age are assumed to be exposed continuously 24 hours per day, 7 days per week (fraction of time at home). The Construction HRA considers exposure starting in third trimester of pregnancy and continuing for 11 months.

Accordingly, the Draft EIR and related technical appendices adequately disclosed all assumptions and methodologies utilized in the HRA, including, among others, the ASF and FAH, and accurately evaluated and disclosed the proposed project's potential health risk impacts according to established standards. The commenter's assertions related to ASF and FAH are incorrect and unsubstantiated. The comment does not provide any specific evidence related to emissions nor does it raise any issues that require a revision of the Draft EIR, and no further response is necessary.

Response to NSRRD-16

The commenter states that the conclusion in the Draft EIR with respect to health risks to sensitive receptors from project operation is not supported by substantial evidence because the City failed to conduct an operational HRA for the proposed project.

The California Air Resources Board (ARB) in the Land Use Planning Handbook (Handbook) provides guidance, standards, methodologies, and procedures for conducting air quality analyses and was used extensively in the preparation of the air quality analysis for the proposed project.

For purposes of this project, the Draft EIR followed the guidance issued by the ARB in the Land Use Planning Handbook (Handbook) that states, "avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units [TRUs] per day, or where TRU unit operations exceed 300 hours per week). The ARB recommendation is based on distance-related findings that demonstrate that cancer risks decrease to acceptable levels with distance based on truck volumes in the range of 100 per day.

Lead agencies have discretion to use guidance recommended by other public agencies as the basis for establishing thresholds of significance and making significance determinations. See CEQA Guidelines Section 15064.7(c). Using the ARB guidance to inform its thresholds of significance, the City found that there was no quantitative analysis required for future cancer risk within the project area as the proposed project is consistent with recommendations regarding truck trips and siting of new sensitive land uses. The traffic analysis in the Draft EIR estimates 64 daily truck trips associated with the proposed project's operation. Additionally, no TRUs would be operated while on-site. Accordingly, the proposed project is not considered a substantial source of diesel particulate emissions because the proposed project's truck trips are less than the 100-truck advisory threshold in the Air Quality and Land Use Handbook; and because no TRUs would be operated while on-site, health risks were found to be less than significant. Based on this information, the analysis in the Draft EIR correctly concluded that an operational HRA was not warranted. In light of the information presented in the Draft EIR, the commenter did not provide any substantial evidence to support the claim that an operational HRA should have been conducted. The commenter did not provide

evidence or reasoning as to why the ARB guidance should not be followed. Therefore, the comment does not raise any issues that require a revision of the Draft EIR.

Response to NSRRD-17

The commenter stated that the Draft EIR's finding of a less than significant impact to nearby existing sensitive receptors as a result of operation of the proposed project is lacking in its evidence and that a revised EIR should include an operational HRA.

Preparation of an operational HRA pursuant to OEHHA guidance is not required under CEQA, nor is it required for any permits or approvals. There is no evidence to suggest that the proposed project would generate emissions that are excessive or above acceptable levels that already occur in the environment. As stated in Response to NSRRD-16, the analysis in the Draft EIR cited the recommendations by ARB which are based on risk assessment for distribution centers based on TRU activity and truck traffic. The assessment finds a significant drop off in cancer risk to levels in the 10 to 100 per 1 million range (for the year 2000) starting at 800 feet from the facility (the risk assessment was conducted for TRUs and assumes, based on an emissions basis, similar risks for a facility with truck volumes of less than 100 trucks per day). However, it should be noted that the risk assessment evaluated emission rates for the years 2000, 2010, and 2020 and found that as the fleet became cleaner over time, the health risks continued to drop significantly. The estimated risk range versus distance from the center of TRU activity area for the year 2020 was estimated to be less than 10 in 1 million at 650 feet. The closest sensitive receptor to the proposed project is approximately 850 feet in distance. The closest school is more than 1,200 feet in distance from the proposed project. As mentioned, the Handbook benchmarked approximately 100 trucks per day as having a similar risk profile to TRUs. Therefore, because the traffic analysis estimates 64 daily truck trips associated with the proposed project's operation (which is less than 100 daily truck trips), and no TRUs in operation while on-site, based on ARB guidance and recommendations, the health risks could be reasonably assumed to be 10 in 1 million or less at 850 feet from the proposed project site, and health risks from project operation would be less than significant. Therefore, the comment does not raise any issues that require a revision of the Draft EIR.

Response to NSRRD-18

The commenter stated that SWAPE conducted a screening level HRA (HRSA) which demonstrated that construction and operation of the proposed project could result in significant health risk impacts when correct assumptions and up-to-date, applicable guidance are used.

Please refer to Response NSRRD-15, which outlines how the Draft EIR correctly followed the guidance and recommendations by BAAQMD and OEHHA in preparing the HRA for construction-related impacts. The HRA for construction found health risks that are below the BAAQMD threshold of 10 in 1 million, and therefore represent less than significant impacts. The Draft EIR adequately disclosed the potential health risks and mitigation is not required.

Regarding operational impacts, please refer to Response to SWAPE-6, which outlines the flawed HRSA analysis utilizing inappropriate emissions and assumptions. The commenter has not provided any substantial evidence to support the assertion that the HRSA demonstrated that the proposed project could result in significant health risk impacts from project operation.

Response to NSRRD-19
The commenter states that the City must prepare a revised EIR to address the potentially significant health risk impacts described in the comment letter and in the expert comments attached therein. The commenter further stated that the Draft EIR is completely deficient as an informational document in failing to disclose the proposed project's potentially significant impacts to public health and does not provide mitigation to reduce these impacts.

As noted in Responses to NSRRD-15 through NSRRD-19 and Response to SWAPE-6, the commenter has not provided any substantial evidence to support the assertion that the Draft EIR is deficient or fails to disclose the proposed project's potential impacts. As discussed above, the preparation of an HRA is not required, there is no evidence of potentially significant health risks that have not already been addressed in the Draft EIR, and the submission of general comments from experts does not trigger recirculation. The Draft EIR reflects a reasoned analysis that thoughtfully discloses the project's air quality impacts and identifies mitigation measures to reduce significant impacts to the extent feasible. The Draft EIR is sufficient under the law, no changes are warranted based on the information submitted in this comment, and recirculation is not triggered.

No further response is required.

Response to NSRRD-20
The commenter provided several mitigation measures that the City should consider implementing in order to reduce the proposed project's health risk impacts from toxic air contaminant (TAC) emissions.

As stated on page 3.2-58 of the Draft EIR, the proposed project includes several design features and best management strategies specific to warehouse projects. However, CEQA only requires mitigation to minimize the project's significant environmental impact (Public Resources Code [PRC] § 21002.1(a); State CEQA Guidelines § 15126.4(a)(3)). CEQA does not require, or grant authority to a lead agency to impose, mitigation for impacts that are less than significant. For example, in *North Coast Rivers Alliance v Marin Mun. Water Dist.* (2013) 216 CA4th 614, 649, the court held that an EIR was not required to discuss green energy credits as a mitigation measure for energy impacts when the EIR had determined that the project's energy impacts would be less than significant. The Draft EIR found less than significant impacts from the proposed project's health risks, and therefore, consistent with CEQA case law and the Public Resources Code, no mitigation measures are required. Accordingly, the City rejects each of the commenter's recommendations suggested in this comment as unnecessary.

Response to NSRRD-21
The commenter states that CEQA requires agencies to conduct noise analysis for projects that consider both the absolute noise levels expected and the degree noise levels are expected to increase over existing ambient conditions.

No assertion about this proposed project is contained in the comment and therefore no response is required.

Response to NSRRD-22
The commenter references a court case.

No assertion about this proposed project is contained in the comment and therefore no further response is required.

Response to NSRRD-23
The commenter asserts the Draft EIR fails to properly calculate the proposed project's operational noise and fails to consider the cumulative noise impacts from nearby warehouse developments which are underway, resulting in a failure to analyze and mitigate the proposed project's significant operational noise impacts.

This comment is a general introductory comment. Please see Responses to NSRRD-24 through 26. The Draft EIR thoroughly calculated the proposed project's operational noise and cumulative impacts in Section 3.11. The operational noise was calculated in the Draft EIR by demonstrating that the reasonable worst-case scenario for all sources of operational noise would be less than significant. The Draft EIR states that there is only one project on the cumulative projects list that is within 1,000 feet of the project site (the project immediately north of this project site). That project is currently under construction and will be completed before this project begins construction. Therefore, there would not be an existing cumulative construction noise impact condition.

Refer to response to comment NSRRD-10 regarding the assertion related to an inadequate baseline noise level comparison of the proposed project's noise impacts.

Response to NSRRD-24
The commenter asserts that the Draft EIR fails to analyze and mitigate potentially significant operational noise impacts because it underestimates the operational noise sources. The commenter also states that the Draft EIR fails to establish the existing noise environment.

The Draft EIR did calculate the reasonable worst-case scenario for all sources of operational noise and demonstrated that impacts were less than significant. However, the commenter does not provide any evidence that the combination of the proposed project's various operational noise levels would result in a significant impact. Even if the noise sources combined, they would be less than significant. A-weighted decibels are based on a logarithmic scale. They cannot be added or subtracted in the usual arithmetic way.

As is documented in the Draft EIR, the proposed project's parking lot activity could result in a reasonable worst-case average noise level of 38 dBA L_{dn} as measured at the nearest receptor; mechanical system operations could result in a reasonable worst-case average noise level of 23 dBA L_{dn} as measured at the nearest receptor; and reasonable worst-case truck loading and unloading noise levels could average 35 dBA L_{dn} as measured at the nearest receptor. If these various reasonable worst-case operational noise levels were to occur at the same time over a 24-hour period, they could result in a combined reasonable worst-case operational noise level of 39.8 dBA L_{dn} as measured at the nearest receptor. This is below the reasonable worst-case construction noise level identified in the Draft EIR that was also demonstrated to result in a less than significant impact as measured at the nearest receptor. Therefore, The Draft EIR correctly identifies that the proposed

project's combined operational noise levels would not cause ambient noise levels to exceed the City's exterior substantial increase noise level criterion. Refer to response to comment NSRRD-10 regarding the assertion related to an inadequate baseline noise level comparison of the proposed project's noise impacts. Therefore, the proposed project's combined operation noise level would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and the impact of the combined noise produced by project-related operations to off-site sensitive receptors would be less than significant.

Response to NSRRD-25
The commenter asserts that the Draft EIR fails to account for the cumulative noise impacts that will result from operation of the SDG Commerce 217 project to the north of the proposed project site and that traffic noise levels from the combined operations of both warehouses are expected to more than double traffic on Commerce Boulevard.

The commenter does not provide any evidence to support the claim that the proposed project would double traffic on Commerce Boulevard or Commerce Court (note that the proposed project and SDG Commerce 217 are located on Commerce Court) and result in a substantial increase in traffic noise levels as measured at a sensitive receptor in the project vicinity. In fact, the commenter does not dispute the proposed project's calculated average daily project trips or the documented average daily project trips of the project that is located directly south of the project site on Commerce Court. Furthermore, the commenter avoids the fact that Commerce Court ends just south of the project site and that all project traffic will travel north on Commerce Court away from the closest off-site sensitive receptors. The commenter also fails to consider the fact that the SDG Commerce 217 project that is north of the project site has already gone through its own CEQA review and has been approved and is therefore now considered part of the baseline condition.

The Draft EIR shows that documented existing average daily traffic volumes along Commerce Court/Boulevard adjacent to the project are 559 trips each weekday. These existing average daily trips all travel north along Commerce Court and pass the proposed project site continuing on to Commerce Boulevard. In fact, they are the only trips that pass the proposed project site since Commerce Court terminates adjacent to the project site immediately south of the proposed project site. The Draft EIR goes on to identify that the proposed project would result in 372 average daily trips, which would clearly not double traffic on the roadway segment adjacent to the proposed project site. These project trips would not result in even a 1 dBA increase in existing traffic noise levels on the roadway segment adjacent to the project site and, therefore, would result in an increase that would be well below the 3 dBA increase that the Draft EIR identifies would be a substantial increase above existing conditions (See Draft EIR Section 3.11, page 3.11-17).

It can reasonably be deduced that, since the proposed project would not double traffic on the lowest traffic volume segment of Commerce Court, it would similarly not result in a doubling of traffic volumes on segments of Commerce Court that have even higher traffic volumes. In addition, as pointed out previously, those segments are even further from the nearest residential receptors in the project vicinity. Thus, it is evident that the proposed project would not result in a substantial permanent increase in existing traffic noise levels as measured at the nearest sensitive receptors in the project vicinity.

Therefore, the proposed project would result in a less than significant contribution to existing cumulative traffic noise levels and the commenter does not provide any evidence to the contrary.

Response to NSRRD-26
The commenter asserts that the Draft EIR lacks substantial evidence to support its conclusion that the proposed project's operational noise impacts will be less than significant because it failed to analyze the magnitude of noise increase from the proposed project and the cumulative noise impacts of the proposed project in conjunction with other projects on Commerce Boulevard.

Please refer to Responses to NSRRD-10, NSRRD-23, NSRRD-24, and NSRRD-25.

Response to NSRRD-27
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-11 and -23.

Response to NSRRD-28
The commenter summarizes findings from Dr. Shawn Smallwood, PhD regarding wildlife traffic collision mortality, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-25.

Response to NSRRD-29
The organization asserts that the Draft EIR fails to disclose, analyze, or effectively mitigate the proposed project's potentially significant impacts on air quality, public health, biological resources, and transportation. The organization further alleges that these impacts create inconsistencies with General Plan policies and that the City cannot make the requisite findings to approve the proposed project's local land use permits.

Please refer to Responses to NSRRD-14 through NSRRD-28 for a discussion of the Draft EIR's analysis and mitigation related to air quality, public health, biological resources, and transportation. As noted in those responses, the Draft EIR provided sufficient analysis and mitigation for these potentially significant impacts as feasible. Therefore, the Draft EIR adequately analyzed potential inconsistencies with the General Plan policies applicable to the proposed project. Please refer to Responses to NSRRD-30 through NSRRD-34 for more discussion on the proposed project's consistency with specific General Plan policies.

Response to NSRRD-30
The organization alleges that the City may not make required findings to approve the proposed project entitlements because the proposed project is in conflict with Municipal Code Section 19.42.202 D.5, which states that a project will not be materially detrimental to the general health, safety, and welfare. The organization reiterated its previous comments about the alleged deficiencies of the HRA.

Refer to Responses to NSRRD-15 through NSRRD-20 and SWAPE-2 through SWAPE-8, which show that the project-specific HRA provided in the Draft EIR is sufficient for the purposes of CEQA and demonstrates compliance with the applicable federal, State, and local regulations. As such, the City may make the required finding pursuant to Municipal Code Section 19.42.202 D.5 that the proposed project would not be materially detrimental to the general health, safety, or welfare of the public.

Response to NSRRD-31
The organization alleges that the City may not make required findings to approve the proposed project entitlements because the proposed project is in conflict with Municipal Code Section 19.42.020 D.1, which require consistency with applicable General Plan policies. The organization claims that the proposed project would not comply with several key policies in the General Plan's Natural and Historic/Cultural Resources Element, relevant to biological resources.

As stated in *Families Unafraid to Uphold Rural etc. v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1336: A project is consistent with the general plan "if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment… A given project need not be in perfect conformity with each and every general plan policy. To be consistent, a [project] must be 'compatible with' the objectives, policies, general land uses and programs specified in the general plan." (See also *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal. App. 4th 704, 719). Please also refer to Responses to NSRRD-32 through NSRRD-34 and SMALLWOOD-2 through SMALLWOOD-36, which discuss potential impacts related to biological resources. As such, the City may make the required finding pursuant to Municipal Code Section 19.42.020 D.1 that the proposed project would be consistent with the General Plan.

Response to NSRRD-32
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-22.

Response to NSRRD-33
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-19 and Response to SMALLWOOD-22.

Response to NSRRD-34
The commenter mentions Policy 11.2.4, which requires that new industrial, commercial, and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. The commenter asserts that the Draft EIR lacks the baseline analysis necessary to demonstrate compliance with this policy.

Please refer to Responses to NSRRD-10.

Response to NSRRD-35
The organization states that the Draft EIR is wholly inadequate under CEQA and must be revised and recirculated.

As indicated in Responses NSRRD-1 through NSRRD-34, as well as responses to SWAPE-1 through SWAPE-13, SMALLWOOD-1 through SMALLWOOD-38, and IHRIG-1 through IHRIG-7, none of the alleged deficiencies are supported by substantial evidence, and, therefore, there is no legal basis to revise and recirculate the Draft EIR.

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Soil Water Air Protection Enterprise (SWAPE)

Response to SWAPE-1

The commenter notes that they reviewed the June 2024 Draft EIR for the proposed project and that their review concludes that the Draft EIR fails to adequately evaluate the proposed project's health risk impacts. The commenter further notes that health risk impacts associated with construction and operation of the proposed project may be underestimated and are inadequately addressed, and a revised EIR should be prepared.

Pursuant to CEQA, a general response to a general comment is sufficient (CEQA Guidelines § 15088(c)). The comment alleges general objections to the Draft EIR but does not provide substantial evidence regarding any alleged deficiencies. The City finds that the Draft EIR contains a thoughtful, accurate analysis of the proposed project's potential impacts that complies with CEQA guidelines; therefore, there is no legal basis to revise and recirculate the Draft EIR.

Response to SWAPE-2

The commenter noted that the Draft EIR conducted a HRA to evaluate impacts from exposure to diesel particulate matter (DPM) emissions during the proposed project's construction. The commenter stated that the Draft EIR failed to provide exposure assumptions and, therefore, the proposed project's cancer risks may be underestimated.

As noted in Response to NSRRD-15, the Draft EIR provided the appropriate exposure assumptions as recommended by OEHHA guidance at page 3.2-35. As previously stated and shown in the Draft EIR, the construction HRA that was prepared for the proposed project followed the methodologies described in the Cal/EPA/OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015), which was adopted in 2015, replacing the previous 2003 guidance manual. As disclosed in the Draft EIR, the HRA was prepared using ARB's HARP2, which is the recommended model for calculating and presenting HRA results because it follows the risk assessment guidance and methodology recommended by OEHHA. The Draft EIR provides an overview of the HRA assumptions, as well as a summary of the HRA results. Detailed HRA assumptions and results are provided in Appendix B. As detailed more fully therein, the HARP2 modeling was used to automatically calculate the health risk for the proposed project. Use of HARP2 ensures that the calculational procedures for cancer and non-cancer risk follow the OEHHA 2015 Guidelines and that ASF and FAH parameters are applied correctly. The HARP2 output files, which are included in Appendix B, detail how the HARP2 model was applied and documents the appropriate HRA parameters for ASF and FAH for exposure. The methodology used to prepare the HRA, including modeling parameters and assumptions, was properly disclosed in the Draft EIR, as required by CEQA.

Response to SWAPE-3

The commenter notes that the Draft EIR relies on guidance provided in the 2005 ARB Air Quality and Land Use Handbook (Handbook) to omit an operational HRA and should rely on OEHHA and Department of Justice (DOJ) guidance.

The commenter did not provide justification or evidence as to why the 2005 ARB Air Quality and Land Use Handbook is inappropriate for purposes of the analysis, nor did the commenter provide justification outlining why the DOJ document is more appropriate for purposes of the analysis.

Response to SWAPE-4
The commenter notes that the DOJ recommends that all warehouse projects prepare a quantitative HRA pursuant to OEHHA and that the HRA follow OEHHA guidance in terms of exposure duration.

As noted in Response to NSRRD-15, the HRA conducted for the proposed project fully analyzed all construction-related impacts and followed OEHHA guidance, including an exposure duration of 30 years to estimate individual cancer risk at the MEIR. As noted in Response to NSRRD-16 and Response to NSRRD-17, the Draft EIR found a less than significant impact related to health risks associated with operation of the proposed project. The Draft EIR followed recommendations and guidance by the ARB in reaching this conclusion. There are no requirements set forth by OEHHA to assess the potential health risks from warehouse projects.

Response to SWAPE-5
The commenter states that by failing to prepare an operational HRA, the proposed project is inconsistent with the CEQA requirements to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." The commenter stated that the proposed project would generate about 372 daily vehicle trips, which would generate additional exhaust emissions and exposure to nearby sensitive receptors to DPM emissions; however, the commenter states that the Draft EIR fails to evaluate the TAC emissions associated with the proposed project's operation. The commenter further stated that the Draft EIR did not make a reasonable effort to connect the proposed project's operational TAC emissions to the potential health risks posed to nearby receptors, and therefore the proposed project is inconsistent with CEQA's requirement to correlate the project-generated emissions with potential adverse impacts on human health.

The commenters' assertions are unsubstantiated. First, the Draft EIR does include an analysis of the proposed project's potential health risks from project operation. The analysis in the Draft EIR is based upon ARB guidance and recommendations and found that potential operational-related health risks would be less than significant, which represents a connection to the proposed project's air quality impacts and likely health consequences. Please refer to Responses to NSRRD-15 and NSRRD-16 for an overview of the screening level analysis that was conducted in the Draft EIR to support these findings.

Second, as described in Responses NSRRD-15 and NSRRD-16, the Draft EIR utilized a screening level analysis to evaluate the potential impacts from TAC emissions associated with the proposed project's operation. A screening level analysis may be conducted to demonstrate potential health risk impacts (as stated by the commenter themself in SWAPE-6); only if the screening analysis finds unacceptable health risks then a more refined modeling approach should be conducted. The Draft EIR utilized the ARB Air Quality and Land Use Handbook as a mechanism to conduct a screening level analysis. Please refer to comment NSRRD-15 and NSRRD-16.

Response to SWAPE-6

The commenter provided a screening level HRA (HRSA) for the proposed project's operational-related health risk impacts which was prepared with AERSCREEN. The commenter noted that "the HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project." In other words, the HRSA is a conservative screening analysis that is not meant to portray the health risks associated with the proposed project; rather, it is a screening tool to be used to determine whether an additional level of analysis should be conducted.

AERSCREEN will produce estimates of "worst-case" 1-hour concentrations for a single source rather than the annual average. AERSCREEN is intended to produce concentration estimates that are equal to or greater than the estimates produced by AERMOD with a fully developed set of meteorological and terrain data. As stated, AERSCREEN is an intentionally conservative screening tool. In addition, the HRSA utilized assumptions that serve to make the HRSA findings even more conservative. For example, the mobile source emissions associated with project operation (including the passenger vehicles and trucks) are represented in AERSCREEN as a uniform area source.

Furthermore, the emissions utilized in the HRSA (80 pounds of $PM_{2.5}$ annually, which are assumed as DPM for purposes of the HRSA) are based on emissions from a mix of passenger vehicles and medium-duty and heavy-duty trucks and are calculated based on an average truck trip length of 35.6 miles. However, emissions from the full truck trip length of 35.6 miles should not be utilized in a health risk analysis because, unlike regional emissions, localized emissions are evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects. In other words, all the emissions along the entirety of 35.6 miles (the assumed trip length) will not be experienced within the localized area that is analyzed in a HRA (typically 1,000 feet to 0.25 mile around the project site). Therefore, the HRSA provided by the commenter is flawed because it does not accurately reflect the localized emissions that should be evaluated in a health risk assessment. Because the HRSA is inaccurate, it does not constitute substantial evidence of the proposed project's effects, nor does it provide substantial evidence that a more refined HRA should be prepared to assess potential operational-related health impacts.

For informational purposes only, a screening level estimate of potential cancer risks associated with the proposed project operation was prepared by utilizing the corrected emission rates. VMT-based DPM from trucks based on a 0.24-mile trip length from the proposed project site combined with trip-based DPM from truck idling and ignition starts is 0.95 pounds annually (not the 80 pounds referenced in the HRSA). When utilizing the correct total DPM emissions (0.95 pounds annually) with the same methodology as presented by the commenter in the HRSA, the total lifetime cancer risk at the MEIR is estimated to be 0.96 in 1 million, which supports the less than significant finding presented in the Draft EIR. For informational purposes, the details of this analysis are presented below:

According to CalEEMod estimates, VMT-based DPM from trucks (as PM_{10} exhaust) is 85.45 pounds annually and DPM from truck idling/ignition starts is 0.348 pounds annually (as PM_{10} exhaust). The

truck trip emissions are adjusted based on a 0.25-mile trip length and combined with 100 percent of the emissions associated with truck idling/ignition starts.

The average DPM emission rate is calculated by the following equation:

> *Emission Rate* (grams/second) = (0.95 lbs/365 days) x (453.6 grams/lbs) x (1 day/24 hours) x (1 hour/3,600 seconds) = 0.00001355 grams/second.

The concentration is directly proportional to emissions simulated in AERSCREEN for a 291 meter by 145 meter area source and therefore is calculated with the exact ratio of emission rates. The operational lifetime cancer risk calculated in the commenter's HRSA is then scaled to account for the difference in emission rates as follows:

> Corrected cancer risk = 13.8 in a million (HRSA) x (0.95/80) = 0.163875
>
> Construction cancer risk = 0.8
>
> Total lifetime Cancer Risk at MEIR: 0.96 in 1 million

In addition to the flawed HRSA analysis utilizing inappropriate emissions and assumptions, the commenter did not provide any evidence as to why the use of AERSCREEN as a screening tool is more appropriate than the use of the ARB Air Quality and Land Use Handbook as a screening tool. Therefore, neither the HRSA nor the alleged deficiencies of the analysis are supported by substantial evidence, and, therefore, there is no legal basis to reassess the less than significant impacts as outlined in the Draft EIR.

Response to SWAPE-7

The commenter states that the Draft EIR is required under CEQA to implement all feasible mitigation to reduce the proposed project's potential impacts.

Please refer to Responses NSRRD-15 and NSRRD-16 which outline the less than significant finding for potential health risks related to project operation, and the associated analysis. As stated in Responses NSRRRD-15 and NSRRD-16, none of the alleged deficiencies are supported by substantial evidence, and, therefore, there is no legal basis to require additional mitigation measures.

Response to SWAPE-8

The commenter states that the CalEEMod User's Guide confirms that the methods for mitigating DPM emissions include the use of "alternative fuel, electric equipment, diesel particulate filters (DPF), oxidation catalysts, newer tier engines, and dust suppression." The commenter further stated that several mitigation measures would offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed project, which would subsequently reduce emissions from the proposed project's construction. The commenter states that a revised EIR should be prepared that includes all feasible mitigation measures, and an analysis with mitigation measures incorporated.

As stated in Response to SWAPE-7, the health risks from the proposed project's construction and operation were found to be less than significant. CEQA does not require mitigation measures to be applied to a project with less than significant impacts. (CEQA Guidelines § 15126.4 (a)(3)). The commenter did not provide substantial evidence demonstrating why the proposed project's construction or operational-related health risks are significant, and therefore the recommendation that all feasible mitigation measures be implemented does not have legal basis. Therefore, the comment does not raise any issues that require a revision of the Draft EIR.

Response to SWAPE-9
The commenter provided a disclaimer stating that SWAPE has received limited discovery regarding this proposed project. Comment is noted. However, no assertion about this proposed project is contained in the comment and therefore no response is required.

Response to SWAPE-10
Commenter provided health risk calculations. No further response is required.

Response to SWAPE-11
Commenter provided AERSCREEN output files. No further response is required.

Response to SWAPE-12
The commenter (Matthew Hagemann) provided his curriculum vitae. No further response is required.

Response to SWAPE-13
The commenter (Paul Rosenfeld) provided his curriculum vitae. No further response is required.

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Shawn Smallwood (SMALLWOOD)

Response to SMALLWOOD-1
The commenter provides background information regarding their expertise and the proposed project.

No environmental issues are raised, and no further response is required.

Response to SMALLWOOD-2
The commenter describes the environmental conditions and lists species observed during his two site visits. Photos and a species table are attached dictating evidence of species observed. The commenter also predicts potential species richness present within the site. None of commenter's observations, if accurate, would result in revisions to the conclusions in the Draft EIR.

The commenter describes the presence of 18 special-status species observed on-site during his surveys. All 18 special-status species observed by the commenter are avian species. The protection of these species is covered under Draft EIR MM BIO-1a through MM BIO-1d with species-specific mitigations for Swainson's hawk and burrowing owl described under MM BIO-1a through MM BIO-1c and mitigations for additional nesting bird species, including northern harrier, golden eagle, white-tailed kite, and others, described in MM BIO-1d.

The comment also alleges that a series of reconnaissance surveys cannot alone reveal the inventory of a site's wildlife community but does not offer alternative suggestions. Additionally, surveys performed for and relied upon in the EIR are based on industry established standards. CDFW has reviewed the EIR and did not have any comments regarding the methodology relating to the analysis. The predictions of potential species used by the commenter are entirely speculative and are not a recognized method for identifying potential species on a site. Speculation does not constitute substantial evidence under CEQA. (CEQA Guidelines §§ 15145; 15384).

Response to SMALLWOOD-3
The commenter states that the needed steps in characterizing environmental setting have been completed but the results are misrepresented in the EIR. As addressed above, CDFW reviewed the EIR and did not have any comments regarding the methodology relating to the analysis, including the characterization of environmental settings.

Response to SMALLWOOD-4
The commenter addresses how previous surveys conducted by Monk & Associates and Pinecrest Research Corp did not provide survey details such as names, qualifications, and survey start times and durations and that the species counts attained from these surveys were, in his opinion, "a lot of species to be found during these reconnaissance surveys." The commenter then notes how FCS detected less species over their survey period than the previously stated surveys and also failed to provide information such as survey duration, weather conditions and the number of biologists.

Please refer to Response to SMALLWOOD-3.

Response to SMALLWOOD-5
The commenter recounts FCS's objectives for reconnaissance surveys and questions whether these objectives were pursued sequentially or simultaneously. If simultaneously, the commenter suggest the biologists would have been disadvantaged by trying to see too much at once and, therefore, achieved an inferior species detection rate than Monk & Associates and Pinecrest Research Corp.

The commenter, in a type of Goldilocks effect, neglects to specify what number he expects to be justified by the survey hours conducted by each company but simply states that the results of Monk & Associates and Pinecrest seem to be too high while FCS's seems to be too little. It should also be noted that Monk & Associates conducted their surveys prior to development of the southern property, which likely contributed to their larger number of observed species. As noted above, CDFW reviewed the EIR and did not have any comments regarding the methodology relating to the analysis, including the species count attained by FCS.

Response to SMALLWOOD-6
The commenter states that there are issues with FCS's pre-construction surveys. The commenter states that pre-construction surveys lose their focus for a given species if the surveys are performed simultaneously for burrowing owls, Swainson's hawks, other nesting raptors, other nesting birds, and pond turtles, and they would have lost focus had they been performed simultaneously for any combination of two of these groups, let alone all four groups. The commenter argues that pre-construction surveys should be performed separately.

CDFW reviewed the EIR and did not have any comments regarding the previous survey methodology used for any species. No further response is required in this respect.

The commenter also alleges that FCS Swainson's hawk pre-construction survey protocol for the adjacent Commerce 217 site was not met, as no surveys took place during Period V and Period III's surveys were performed too close together. The commenter argues that this was done to "minimize the likelihood of detection of Swainson's hawk." This comment is noted. However, as stated above, CDFW reviewed the EIR and did not have any comments regarding the previous survey methodology used for this species on either site. Furthermore, mitigation applicable to the adjacent Commerce 217 project is beyond the purview of this project's CEQA documentation. Additionally, the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) states that "to meet the minimum level of protection for the species, surveys should be completed for at least the two survey periods immediately prior to a project's initiation." Swainson's hawk detection surveys for the Commerce 217 site took place during the first four survey periods (starting in January and ending in April 2023), meeting the Protocol's requirement.

Finally, the purpose of the EIR is to ascertain biological impacts to the Commerce 220 site (not the Commerce 217 site). Accordingly, Swainson's hawk protocol-level surveys were conducted of this site by Pinecrest Research Corp Biologist Dr. Christopher T. DiVittorio. Additionally, MM BIO-1a through MM BIO-1c in the EIR would require additional Swainson's hawk surveys, further lowering any potential impacts to this species to less than significant under CEQA.

Response to SMALLWOOD-7
The commenter states that Pinecrest Research Corp did not meet the timing requirements for Swainson's hawk surveys as stipulated in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol). The commenter states that three surveys were completed during Period IV of the guidelines even though the guidelines state in bold font not to survey during Period IV and only one of the three surveys were completed in Period V.

The commenter is not incorrect in his recounting of the Pinecrest Swainson's hawk survey timing. However, as stated above, the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) states that "to meet the minimum level of protection for the species, surveys should be completed for at least the two survey periods immediately prior to a project's initiation." Large areas of vegetation within Commerce 220 were graded between May 29 and July 2, 2023, via an approved grading plan issued by the City of American Canyon in March 2023. Therefore, the minimum level of protection for this species was met by the Pinecrest surveys performed in Period I, II, III, and IV. The grading that occurred on-site made Period V surveys optional to meet survey protocol. Lastly, MM BIO-1a through MM BIO-1b in the EIR would require additional Swainson's hawk surveys, lowering any impacts to this species to less than significant under CEQA.

Response to SMALLWOOD-8
The commenter states that FCS neglected to mention in the context of the reporting of these special-status species surveys that the SDG Commerce 220 site of the surveys was graded on May 29, 2023. The commenter argues that this grading activity should have been immediately reported to CDFW, and it should have been clearly reported in biological technical reports that were prepared for the Draft EIR.

This comment assumes that FCS did not clearly report this grading activity in technical reports prepared for the EIR. However, the Biological Resource Assessment (BRA) located in Appendix C.1 of the EIR clearly states on multiple occasions that, as part of the SDG Commerce 217 development, much of the Commerce 220 project site was graded between May 29 and July 2, 2023, to procure existing, stockpiled soil for use as clean fill material for the Commerce 217 site. The BRA also states that a Monk & Associates (M&A) authored an Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site in September 2020 analyzed grading impacts (BRA Appendix D.1). Additionally, an approved grading plan was issued by the City of American Canyon in March 2023 (BRA Appendix D.1). Therefore, grading activity was reported and clearly defined in technical reports for the EIR.

Response to SMALLWOOD-9
The commenter states that FCS burrowing owl surveys did not achieve the minimum standards of CDFW's (2012) burrowing owl survey guidelines due to the labeling of three burrowing owl surveys as breeding season surveys between January and April 2023 and only one conducted survey between April 15 and July 15, 2023. The commenter also states that FCS is silent on the grading of the project site on May 29, 2023, and should have reported the grading to CDFW.

Based on CDFW's Staff Report on Burrowing Owl Mitigation, in California, the burrowing owl breeding season extends from February 1 to August 31, with some variances by geographic location

and climatic conditions.[3,4] However, breeding has also been documented in December based off the CDFW's Staff Report on Burrowing Owl Mitigation.[5,6] Therefore, in accordance with CDFW, FCS's use of breeding season terminology for its surveys was not incorrect.

Although FCS did not conduct two burrowing owl surveys between April 15 and July 15, 2023, Pinecrest Research Corp did. It is the joint findings of both company's surveys that were used in the negative declaration of burrowing owls on the project site during the time of the surveys. As stated in the Draft EIR (3.3-36), no western burrowing owls have been observed on the project site during the 18 field surveys conducted by FCS and Pinecrest in 2023. However, out of an abundance of caution, FCS still requires MM BIO-1c to mitigate potential impacts to burrowing owl. With implementation of MM BIO-1c, impacts to burrowing owl on-site would be less than significant. For comments related to the May 29, 2023 grading on-site, see Response to SMALLWOOD-8.

Response to SMALLWOOD-10

The commenter states that a survey conducted by FCS on January 18, 2023, was called a nesting bird survey. The commenter then states that "birds do not nest in January." The commenter then questions the qualifications of surveyors who did not note nests within the project vicinity as the commenter "finds nesting birds at every site I survey for nesting birds."

The commenter is correct in stating that most birds do not begin their nesting season in January. However, species such as the bald eagle do. The bald eagle's nesting season occurs between January and July/August. As this species was observed by the commenter during his surveys, it is correct in calling a January survey in areas associated with bald eagle a nesting bird survey. Additionally, the commenter questioned the qualifications of a surveyor who did not find nests within the project vicinity. However, the commenter did not note the identification of any nests in his survey report of the property either. .

Response to SMALLWOOD-11

The commenter states that FCS's comments on western pond turtles are misleading due to the lack of acknowledgment that western pond turtles visit grassland sites to breed and lay their eggs in ground squirrel or pocket gopher burrows.

CDFW has reviewed the EIR and did not have any comments regarding western pond turtle methodology. Additionally, surveys were conducted of the entire project site, not just wetland areas. (See *Existing Docuentation* on page 3.3-30 and -31 of the Draft EIR). Therefore, although the commenter may find it misleading, FCS's negative declaration of western pond turtle activity on-site holds true.

[3] Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. Burrowing owl (Speotyto cunicularia), in A. Poole and F. Gill, editors, The Birds of North America, The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C., USA.

[4] Thomsen, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. Condor 73: 177-192.

[5] Ibid.

[6] Gervais, J. A., D. K. Rosenberg, and L. A. Comrack. Burrowing Owl (Athene cunicularia) in Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento, California, USA.

Response to SMALLWOOD-12
The commenter states that the surveys performed by FCS and Pinecrest Research Corp targeted Swainson's hawk, burrowing owl, other nesting raptors, other nesting birds and western pond turtle simultaneously and using a common methodology and, therefore, the survey guidelines of each taxonomic group could not have been properly implemented.

The inability of surveyors to successfully conduct different surveys at the same time is speculation and, as stated previously, speculation does not constitute substantial evidence under CEQA. Furthemore, CDFW has reviewed the EIR and did not have any comments regarding survey methodology. Finally, the Draft EIR has proposed mitigation measures for the species (Swainson's hawk, burrowing owl, western pond turtle, and other nesting birds) the commenter has questioned using a common methodology for and, therefore, would still mitigate to ensure any potential impacts to these species would be less than signifcant under CEQA.

Response to SMALLWOOD-13
The commenter states that there is no MM BIO-5, although the IS/MND prepared for the SDG Commerce 217 project states there is. The commenter also argues that the pre-construction surveys of all four mitigation measures required of the IS/MND prepared for the adjacent Commerce 217 site failed to meet their scheduling standards relative to the date when ground was broken for project construction.

FCS acknowledges that reference to MM BIO-5 is a typo and has been corrected in Section 4, Errata. Mitigation applicable to the adjacent Commerce 217 project is beyond the purview of this proposed project's CEQA documentation. Ground-disturbing work that occurred on the Commerce 220 project site was covered by the IS/MND prepard for the Commerce 217 project. Furthermore, CDFW has reviewed the EIR for this project (Commerce 220) and did not have any comments regarding the proposed failure of scheduling standards related to the date when ground was broken for project construction. See Response to BAGINSKI1 for justification on the continued applicability of MM BIO-1a through MM BIO-1g.

Response to SMALLWOOD-14
The commenter states that, not only were the pre-construction surveys for the Commerce 217 project not performed when they were supposed to be performed just prior to ground-breaking on the Commerce 220 project, but as noted earlier, they were not implemented to achieve the minimum standards of their respective survey protocols.

See Response to SMALLWOOD -13 regarding the Commerce 217 mitigation measures and for justification on the continued applicability of MM BIO-1a through MM BIO-1g. See also, Response to SMALLWOOD-7 through Response to SMALLWOOD-11 for how each survey met the minimum standards of their respective survey protocols.

Response to SMALLWOOD-15
The commenter states that Pinecrest Research Corp's protocol-level rare plant surveys did not achieve the minimum standards of the CDFW (2018) survey guidelines due to a lack of reference site survey, ground disturbance via grading, and simultaneous surveying.

CDFW has reviewed the EIR and did not have any comments regarding rare plant survey methodology. Ground disturbance occurred as permitted for the Commerce 217 project.

Response to SMALLWOOD-16
The commenter described the purpose of literature and database reviews. The commenter also states that FCS included reports by M&A and Pinecrest Research Corp in its literature and database sources but that it also should have referenced the commenter's "expert testimony" that was provided on SDG Commerce 330 and SDG Commerce 217. The commenter complains that the Draft EIR Exhibit 3.3-3 is uninformative as it does not identify any of the species on the map. The commenter also states that using CNDDB as a screening step is flawed as, according to the commenter, it is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community, and therefore, the Draft EIR's analysis of special-status species occurrence likelihoods is fundamentally flawed.

The purpose of Exhibit 3.3-3 is not to demonstrate where special-status species are directly, but to demonstrate the breadth of occurrences within the United States Geological Survey (USGS) nine-quadrangle map area of the project site. The literature and database review in the Draft EIR was completed based on standard industry practice for the preparation of an EIR, including a preliminary literature search of special-status species with potential to occur in the area, followed by observations by FCS, M&A, and Pinecrest Biologists during numerous field surveys of the site covering the better part of 18 years (e.g., the first field survey of the site occurred on March 1, 2006). The literature search included a search of theCDFW's CNDDB, which is included in Appendix C of the Draft EIR. The CNDDB search queried all special-status species recorded in the *Cuttings Wharf, California* 7.5-minute USGS Topographic Quadrangle and its eight neighboring quadrangles. The CNDDB search was used in combination with on-site observations in preparation of the Draft EIR. The use of CNDDB is a standard industry practice and does not make the Draft EIR's analysis fundamentally flawed.

Response to SMALLWOOD-17
The commenter argues that a shortfall of the EIR's Swainson's hawk analysis is the failure to note that about a third of the cited surveys were completed while Swainson's hawks were yet to return from their annual migration to Mexico. The commenter argues that another shortfall is the failure to note seven eBird records of Swainson's hawks on American Canyon wetlands, one as recently as June 28, 2024.

Swainson's hawk returns northward from Mexico between February and May.[7] However, according to the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol), surveys begin for this species in January to determine potential nest locations. Therefore, surveys conducted before Swainson's hawk typical return from Mexico are in accordance with Swainson's hawk survey protocol. Additionally, although eBird is sometimes used as a additonal resource by FCS, its use is not based on standard industry practice for the preparation of

[7] eBird. Swainson's Hawk. 29 May 2023. Website: https://ebird.org/news/swainsons-hawk#:~:text=It%20breeds%20commonly%20on%20the%20Great%20Plains%2C%20as,South%20America%2C%20returning%20northward%20from%20February%20to%20May. Accessed September 24, 2024.

an EIR. Moreover, the Draft EIR prescribes mitigation measures for Swainson's hawk to ensure any potential impacts to this speices is reduced to less than significant levels under CEQA.

Response to SMALLWOOD-18
The commenter argues that occurrence likelihoods for several special-status species were identified as low or absent in the EIR but the commenter identified these individuals flying over or next to the project site. These species include northern harrier, white-tailed kite, and peregrine falcon. The commenter argues that reconnaissance surveys are not enough to confirm absence of species on-site and that without protocol-level detection surveys, no species with overlap in range can be ruled out as having the potential to occur on the site.

FCS is in alignment with the commenter's assessment that northern harrier and white-tailed kite have the potential to be present within the project site. MM BIO-1d of the Draft EIR accounts for special-status species such as the northern harrier, golden eagle, white-tailed kite, and others (including peregrine falcon, if present), and offers protection guidelines to lower impacts to these species to less than significant levels.

Concerning FCS's assertion that the additional special-status species identified by the commenter are absent from the site, the information in Appendix C to the EIR provides a scientifically sound basis for establishing existing conditions necessary for an analysis of potential species impacted. Consistent with industry standards and based on the experience of an expert Biologist, habitats were assessed based on a combination of literature review, aerial photographs, soil surveys, and site visits. Additionally, the Special-status Species Evaluation Tables located in Draft EIR Appendix C.2 evaluates special-status species recorded within the *Cuttings Wharf, California* 7.5-minute USGS Topographic Quadrangle Map and its eight neighboring quadrangles by the CNDDB and California Native Plant Society Electronic Inventory (CNPSEI). This table depicts these species' required habitat and potential to occur within the project site based on habitat types observed on-site. As shown in this table, species likelihood of occurrence can be ruled out based on habitat presence on-site. Therefore, the commenter's assertion that no species with overlapping range with the project site can be ruled out as having the potential to occur is incorrect.

Response to SMALLWOOD-19
The commenter suggests that the term "vagrant" in relation to burrowing owls is meaningless.

The term "vagrant" is used by FCS to describe a species that could disperse or wander into the project site prior to project construction but does not nest on-site. This definition as been added to the EIR, see Section 3, Errata of this Final EIR.

Response to SMALLWOOD-20
The commenter argues that nesting white-tailed kite habitat is more varied than oak and sycamore woodlands and could therefore nest next to or near the site.

FCS agrees that this species could nest in the adjacent eucalyptus trees, as stated on 3.3-17 of the Draft EIR, and MM BIO-1d would protect would protect any such adjacent nests within the applicable buffer distance.

Response to SMALLWOOD-21
The commenter argues that there is no evidence in support of the claim that the project site provides only marginal foraging opportunities to nesting birds.

As stated in the EIR, the project site's grassland has been significantly disturbed in the past by anthropogenic means and is directly bounded by warehouse developments to the north and south. This has resulted in habitat fragmentation and lowered habitat suitability to provide more than marginal foragaing habitat for nesting birds. Based on the numerous field surveys conducted between March 1, 2006 and July 2, 2023, there is no evidence to support that the project site provides more than marginal foraging opportunities to nesting birds. FCS maintains its original statement.

Response to SMALLWOOD-22
The commenter argues that several important types of potential project impacts have been inadequately analyzed. These types of impacts include habitat loss, interference with wildlife movement, and wildlife-automobile collision mortality. Concerning habitat loss, the commenter argues that FCS makes no attempt to estimate the loss of wildlife productive capacity on-site.

It should also be noted that the protection of productive capacity is not a stipulation held under CEQA and is therefore not a necessary component that will be addressed in this response. Moreover, the vast majority of the habitat present on-site is not considered sensitive by CDFW as it has been significantly disturbed by anthropogenic effects.

Regarding habitat loss, the key State resource agency, CDFW, has been consulted regarding the proposed project and has determined that the mitigation proposed by the project would be sufficient, with minor species-specific alterations, to mitigate the proposed project's impacts on species and associated habitat. Additionally, the commenter's formula for speculating habitat loss is not recognized by CEQA industry professionals as a methodology for assessing habitat loss and is based on conjecture. Measures specific to migratory and nesting birds have been incorporated into the EIR as binding mitigation measures (see MM BIO-1a, -1b, -1c, and -1d).

Response to SMALLWOOD-23
The commenter argues that the Draft EIR's analysis of whether the proposed project would interfere with wildlife movement in the region is flawed and misleading. The commenter argues this is due to a lack of evidence on whether the site functions as a corridor or is located within a corridor. The commenter also argues that no sampling regime or record of wildlife movement patterns was obtained by FCS and that results are speculative. The commenter argues impacts to wildlife movement would be significant and unmitigated.

While the proposed project would result in loss of local wildlife habitat, it would not significantly interfere with wildlife movement. Extensive suitable alternative stopover habitat (e.g., undeveloped) for migratory birds and bats can be found to the east and west of the project site. These areas are less fragmented, isolated, and less prone to disturbance from human activities and therefore may be more desirable for some migratory species.

The movement of any terrestrial species or species with limited dispersal ability is likely currently inhibited given the semi-commercial location of the project site. Areas directly south and north of the project site are composed of extensive commercial developments. The project site does not contain habitat features such as riparian corridors that could function as wildlife corridors. Importantly, the project site is not within a designated wildlife corridor based on the CDFW's Essential Connectivity Areas geospatial data set, which uses habitat modeling to identify areas of land with value as wildlife corridors. As such, the site is not recognized as being "critically important" as suggested by commenter.

Response to SMALLWOOD-24
The commenter argues that increased wildlife mortality will be caused by the proposed project's contribution to increased road traffic in the region and that this would produce a potentially significant adverse biological impact.

The photographs included in this comment are not from the project site. Also, the traffic study cited in this comment was conducted in Contra Costa County and the commenter includes numerous unsupported assumptions in applying that study's conclusions to the proposed project. The mathematical analysis provided is based on speculative assumptions from non-related projects outside of Napa County.

As discussed above, the proposed project is not within a designated wildlife corridor. Instead, the project site is bounded by existing industrial development that limits species movement on-site. The site plan and design of the proposed project would not encourage species to traverse internal roadways to reach habitat. The proposed project's traffic generation would amount to only a small portion of existing traffic in the project vicinity and greater region. As such, the operation of the proposed project is not anticipated to result in significant impacts related to wildlife traffic fatalities. See Response to SMALLWOOD-23.

Response to SMALLWOOD-25
The commenter argues that FCS's geographic scope of analysis is conclusory and inaccurate due to traffic fatalities and the loss of foraging opportunities leading to Swainson's hawk and white-tailed kite nest abandonment.

See Response to SMALLWOOD-24 regarding wildlife traffic facitilities. To see how impacts to Swainson's hawk and white-tailed kite are being mitigated, see Response to SMALLWOOD-22.

Response to SMALLWOOD-26
The commenter argues that the Draft EIR provides no explanation of how implementing the particular requirements of the laws and regulations it cites would ensure that the proposed project's incremental contributions to cumulative effects would not be cumulatively considerable.

Compliance with relevant regulatory standards is an appropriate basis for determining that the proposed project will not have a significant environmental impact. (*Tracy First v City of Tracy* (2009) 177 CA4th 912). The commenter incorrectly assumes that the Draft EIR only views residual impacts unsuccessfully mitigated as potential cumulative impacts. This is speculation and not supported by the Cumulative Impacts analysis. The commenter also argues that FCS does not address how

implementation of laws and regulations would contribute to cumulative effects not being cumulatively considerable. However, EIR Impact Bio-4 goes into detail regarding how the proposed project meets any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This is then referenced in the Local Policies and Ordinances section of the Cumulative Impacts analysis. Therefore, the Draft EIR does justify how the proposed project's incremental contributions to cumulative effects would not be cumulatively considerable.

Response to SMALLWOOD-27
The commenter argues that implementation of cited policies and regulations are not effective as changes in species abundance and richness still occur with the implementation of development. The commenter then argues this point through survey models done by the commenter.

The study of species richness and abundance post-development is not required by any regulation or industry established standard. CDFW has reviewed the EIR and did not have any comments regarding the methodology relating to the Cumulative Impacts analysis. The predictions of the loss of species richness and abundance used by the commenter are not a recognized method for identifying the cumulative effects of project site development. Speculation does not constitute substantial evidence under CEQA. (CEQA Guidelines § 15384(a)).

Response to SMALLWOOD-28
The commenter argues that wildlife fatalities via traffic would be very large due to the proposed project and that his same calculations should be extended to the other warehouses in the City of American Canyon to predict the cumulative traffic toll to wildlife in this region.

See Response to SMALLWOOD-24 regarding traffic facillities.

Response to SMALLWOOD-29
The commenter argues that MM BIO-1a is hard to take seriously as it was not enforced by the City prior to grading SDG Commerce 217 and the mitigation would not avoid the reduction in productive capacity of Swainson's hawks caused by the project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this Draft EIR. Please see Response to SMALLWOOD-22 for reductions to productive capacity caused by habitat loss.

Response to SMALLWOOD-30
The commenter argues that MM BIO-1b would not avoid the reduction in productive capacity of Swainson's hawks caused by the proposed project's habitat destruction.

See Response to SMALLWOOD-22.

Response to SMALLWOOD-31
The commenter argues that MM BIO-1c is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and the mitigation would not avoid the reduction in productive capacity of burrowing owl caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this Draft EIR. See Response to SMALLWOOD-22.

Response to SMALLWOOD-32
The commenter argues that MM BIO-1d is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and he is flabbergasted that the surveyor did not identify any nesting birds. The commenter also argues that the mitigation would not avoid the reduction in productive capacity of nesting birds caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this Draft EIR. See Response to SMALLWOOD-10 for nesting bird comment. Please see Response to SMALLWOOD-22 for productive capacity comment.

Response to SMALLWOOD-33
The commenter argues that MM BIO-1e is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and the mitigation would not avoid the reduction in productive capacity of roosting bats caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this Draft EIR. See Response to SMALLWOOD-22.

Response to SMALLWOOD-34
The commenter argues that MM BIO-1f is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and the mitigation would not avoid the reduction in productive capacity of western pond turtle caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this EIR. See Response to SMALLWOOD-22.

Response to SMALLWOOD-35
The commenter argues that MM BIO-1g is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and the mitigation would not avoid the reduction in productive capacity of monarch butterfly caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this EIR. See Response to SMALLWOOD-22.

Response to SMALLWOOD-36
The commenter argues that compensatory mitigation is needed for the increased wildlife mortality that will be caused by the proposed project's contribution to increased road traffic in the region, and mitigation is suggested.

Please see Response to SMALLWOOD-24.

Response to SMALLWOOD-37
The commenter (Kenneth Shawn Smallwood) provided his curriculum vitae. No response is required.

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Wilson Ihrig (IHRIG)

Response to IHRIG-1
The commenter provides background information regarding their expertise and the proposed project.

No environmental issues are raised, and no response is required.

Response to IHRIG-2
The commenter provides a description of the adverse effects of noise, including learning outcomes, cognitive performance, hearing loss, speech interference, sleep disturbance, and other physiological effects.

No project-specific environmental issues are raised, and no response is required.

Response to IHRIG-3
The commenter asserts that the Draft EIR should be updated to consider the existing noise levels and the cumulative increase over the existing level that would occur from the addition of both new warehouses on Commerce Court. Furthermore, they state that the Draft EIR must properly document the typical baseline noise conditions to determine impact.

The commenter does not provide any evidence that existing ambient noise levels are so low that the proposed project's construction or operational noise levels could result in a potential substantial temporary or permanent increase in ambient noise levels as measured at the nearest sensitive receptors in the project vicinity. Please refer to Response to NSRRD-10, -23, -24, and -25. As indicated therein, the Draft EIR noise analysis includes sufficient determination of how the proposed project would not result in a substantial increase in ambient noise levels compared to existing conditions as measured at the nearest sensitive receptors in the project vicinity.

Response to IHRIG-4
The commenter asserts the EIR should be updated to combine operational noise sources into a single estimate of on-site operational noise at each sensitive receiver. The same methodology should be applied to the second warehouse north of the project site, and the cumulative operational noise levels should be compared with the existing noise levels (discussed above) as well as the City's criteria.

The commenter does not provide any evidence to support their implied conclusion that a significant operational noise impact could be potential with implementation of the proposed project. Please refer to Response to NSRRD-10, -23, -24, and -25. As indicated therein, the Draft EIR noise analysis includes sufficient determination of how the proposed project would not result in a substantial increase in ambient noise levels compared to existing conditions, but rather, it provides a conservative reasonable worst-case calculation of combined operational noise estimates as measured at the nearest receptors and demonstrates that the proposed project would not result in a substantial permanent increase in ambient noise levels as measured at the nearest sensitive receptors in the project vicinity.

Response to IHRIG-5
The commenter asserts that the EIR should be updated to consider the cumulative traffic noise impacts of both new warehouse projects on Commerce Court.

The commenter does not provide any evidence to support their implied conclusion that a significant impact could be potential with implementation of the proposed project. Please refer to Response to NSRRD-10, -23, -24, and -25. As indicated therein, the Draft EIR noise analysis includes sufficient determination of how the proposed project would not result in a substantial increase in ambient noise levels compared to existing conditions, but rather it provides a conservative reasonable worst-case calculation of that demonstrate that project-related traffic would not result in a substantial contribution to a cumulative traffic noise impact as measured at the nearest sensitive receptors in the project vicinity.

Response to IHRIG-6
The commenter provides a summary of their previous assertions that there are several errors and omissions in the EIR noise analysis, including insufficient determination of the existing noise environment, improper calculations of operational noise estimates, and a failure to consider the cumulative effects of the two warehouse projects on Commerce Court and that correcting these would potentially identify significant impacts which require mitigation.

The commenter does not provide any evidence to support their implied conclusion that a potentially significant impact could occur with implementation of the proposed project. Refer to Response to NSRRD-21, -22, -23, -24, -25, 2-6, and -34, as well as Response to IHRIG-1, -2, -3, -4, and -5. Please refer to Response to NSRRD-10, -23, -24, and -25. As indicated therein, the Draft EIR noise analysis includes sufficient determination of how the proposed project would not result in a substantial increase in ambient noise levels compared to existing conditions; it provides a conservative reasonable worst-case calculation of combined operational noise estimates as measured at the nearest receptors; and provides clear calculations that demonstrate that project-related traffic would not result in a substantial contribution to a cumulative traffic noise impact as measured at the nearest sensitive receptors in the project vicinity.

Response to IHRIG-7
The commenter (Luke Watry) provided his curriculum vitae. No response is necessary.

Response to DEIR, 1055 Commerce Ct.

From: Yvonne Baginski, yvonnebaginski@gmail.com

June 26, 2024

Thank you for the opportunity to respond to the DEIR for the SDG project on 1055 Commerce Ct. in American Canyon.

Here is a list of my questions/concerns and recommendations:

1. This DEIR is frankly, moot. This property has been graded, the trees cutdown and it 2qw parking lot for laborers working to build out on the the warehouses on adjoining property. With the exception of two small wetlands, property is devoid of any vegetation to support wildlife. The wetlands are also cordoned off with orange plastic fencing, thereby making them inaccessible to wildlife. It is just packed dirt now. There is no accurate measure of environmental or wildlife impact. 1
2. Knowing this, one cannot ignore the surrounding and adjacent lands that support a number of species of wildlife that are on the threatened or "special" species list. While this DEIR is specific to this piece of land, there are animals in the adjacent lands needing protection. There is a cumulative effect of the construction of three warehouses, and this is noted in the DEIR. As is, the decline in wildlife is evident after construction started. If there was no verified count of wildlife species living in this area, we cannot accurately measure the decline in wildlife, Wildlife decline is an assumption based on anecdotal evidence. For example, there are fewer ground squirrels seen when walking the trails. We don't see many nocturnal species unless we are on the gounds at night,etc. 2
3. In February, 2024, I saw numerous monarch butterflies in the Eucalyptus trees directly adjacent to the property. It was a warm sunny day, and I estimate 20-30 monarchs flying around. It is possible that there are overwintering monarchs in those eucalyptus trees. The time to see these overwintering monarchs is in the WINTER months, and that's not when the EIR biologist was in the field. I asked on the NEXT DOOR website whether other people have noticed the monarchs, and received several photos and stories, so I know they are in the area. At this time, there is no protection in place for the eucalyptus trees behind the site. I also suspect that construction noise and lights will make it more difficult for the 3

monarchs to continue living in those trees. The excessiveness of noise, lighting, dust and fumes will also be driving out any other animals living there...including the birds and bats. I am asking whether there could be a time-limited intervention preventing construction work during certain times of the day/night. Can this be made a quiet/dark site at during nighttime hours so that the nocturnal animals have someplace to live/hunt? No lights or trucks after 5 p.m.? This would be extended to when the warehouses become operational. 3 CONT

4. Re; the wetlands: How will they be maintained, managed and protected? Who will be responsible for their upkeep? There are three wetlands on the property and they have a building/asphalt barrier between them. If wildlife is denied access to these wetlands, what is the purpose to keeping them intact? Can the asphalt barrier in-between the wetlands be removed? Can a wildlife corridor be made on the property from the wetlands to the North Slough? Or, just between the two wetlands? Is there a management plan in place for the wetlands? 4
5. Where do the roosting bats go when they're evicted? The eucalyptus trees are not protected and are slated to be cleared. There is no conservation area for the bats/birds/butterflies. Would this property owner consider placing bat roosting boxes and a raptor nest site on the property? 5
6. Due to the proximity of the property to the estuary, is it possible for the landscaping to be native trees and plants conducive to the local wildlife? Specifically live oaks, willows, and developing a riparian habitat around the wetlands. Shouldn't the landscape architect be working with a wildlife biologist to develop the best habitat to replace what has been destroyed? Can the landscaping planned for this area be traded out for native plants? 6
7. The proximity of monarchs and other butterflies would also point to the necessity of building pollinator-friendly landscaping...including milkweed and other native flowering plants. In reviewing the landscaping for this property, the recommended plantings are standard-issue and not specific to this micro-climate or location. Will the landscaper consider a native plants, pollinator friendly landscape?
8. Pesticide use is especially destructive to bees, and butterflies. Having native plants and a riparian habitat will reduce the use of pesticides. Would the property developer agree to a no pesticide/herbicide policy ? This is especially relevant with the use of bait station boxes. This area is used by raptors (hawks, eagles, etc.) for hunting. The bait station boxes are filled with a poison which takes 3-4 days to kill the rodent. During this time, the rodent is "slowing" down in the fields and becomes easy prey. While bait stations are legal (the pesticide industry has very powerful lobbyists), there are snap trap alternatives that won't 7

harm the wildlife up the chain or cause undue suffering. Please consider no pesticides/herbicides/bait stations to protect wildlife. Restrict rodent killing to snap traps only. 7 CONT

9. Right now, the biggest risk to the local wildlife is the continual destruction of their habitat with no replacement/restoratkl . The animals have nowhere to go. This translates to a certain death. There are no surveys or "before and after" wildlife counts after the construction of a warehouse. These building developers aren't planting or replacing habitat. Switching to native, local landscaping would be an easy transition. No lighting/trucks during dark hours. Will the landscape architect consult with wildilfe biologists on what could be done to enhance wildlife habitat on the property? 8
10. As American Canyon works towards meeting carbon reduction goals, there's no mention in this DEIR on whether this warehouse will be using MCE, rather than PG&E for electricity. What about rooftop solar? Will there be an EV station on site for employee/visitor vehicles? 9
11. Re: Swainson Hawks and other birds...could the landscaping professionals meet with the Napa-Solano Audobon Society to create a plants and nesting site plan that would be conducive to the area? 10
12. A jurisdictional "no killing of any wildlife" rule during and after construction. Any wildlife injured would be taken immediately to the local wildlife rehabilitation center. I am asking that signs be posted throughout the construction area to that effect, with the name, phone number and location of the wildlife rehabilitation center prominently posted. 11

Those are my current thoughts, and I would appreciate a response and an opportunity to work with you all in creating a wildlife friendly site on this property.

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Individuals

Yvonne Baginski (First Letter) (BAGINSKI 1)

Response to BAGINSKI 1-1
The commenter states that the Draft EIR is moot and argues that there is no accurate measure of environmental or wildlife impact due to the fenced off wetlands and graded portions of the project site.

The recent grading on-site was completed as part of the construction of the adjacent SDG Commerce 217 Distribution Center Project (PL20-0008) and completed under a grading permit issued by the City of American Canyon. In accordance with CEQA, the grading was considered in the Initial Study prepared for the SDG Commerce 217 Project (Final Initial Study dated February 2021) and mitigation measures were implemented as applicable.

The biological analysis for the proposed project is based on pre-graded site conditions, as noted in the Draft EIR Section 3.3.3, Environmental Settings, and describes the site's pre-graded habitat as containing Avena spp. -Bromus spp. Herbaceous Semi-Natural stands, a linear wetland, and seasonal wetlands. The Project Impacts and Mitigation Measures sections of the Draft EIR were based on impacts to these habitat types and therefore demonstrates accurate measures to mitigate environmental and wildlife impacts. Large areas of vegetation were graded between May 29 and July 2, 2023, via an approved grading permit issued by the City of American Canyon in March 2023 in relation to the adjacent SDG Commerce 217 project. The grading did not encroach into the wetlands features or associated wetland buffer areas, but effectively eliminated non-native grassland throughout much of the site. However, MM BIO-1a through MM BIO-1e account for surveying outside of the project site and into ungraded buffer zones and would therefore account for project-related impacts to environmental conditions and listed species. Additionally, if graded habitat is left untouched, habitat for special-status species could reemerge on-site. Therefore, regardless of City-approved grading on-site, MM BIO-1a through MM BIO-1e remain valid because they would reduce environmental and wildlife impacts to less than significant levels under CEQA.

Response to BAGINSKI 1-2
The commenter argues that the decline in wildlife after construction is not verifiable without a previous understanding of wildlife levels on the project site and within the project area, but a decline in wildlife is evident since construction started.

Under CEQA, the proposed project is responsible for demonstrating that project impacts would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or United States Fish and Wildlife Service (USFWS). Additionally, under CEQA, the proposed project must not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of wildlife nursery sites. Draft EIR Section 3, Biological Resources, provides information on the status of the project site (and surrounding areas as applicable), including wildlife, prior to project implementation. With implementation of MM BIO-1a through MM

BIO-1e, project impacts to CEQA-protected resources would be less than significant. CEQA does not mandate that projects mitigate for apparent declines in general wildlife levels post-construction.

Response to BAGINSKI 1-3

The commenter states that monarch butterflies have been seen in the eucalyptus trees directly adjacent to the project site and argues that, at this time, there are no protections in place for the eucalyptus trees or species (such as birds, bats, or monarchs) that may be affected by noise, light, fumes, or dust produced through construction activities.

As described in Impact BIO-1 in Section 3.3.7 of the Draft EIR, there is a potential for the monarch butterfly to overwinter in the eucalyptus woodland adjacent to the site. It is also acknowledged that construction activities, including dust, noise, and vibration adjacent to overwintering colonies could result in loss of overwintering monarch butterflies. As stated in Baginski 1, large areas of vegetation were graded between May 29 and July 2, 2023, via an approved grading plan issued by the City of American Canyon in March 2023. Moreover, grading occurred between November 1 and July 31, 2023, which, as stipulated in MM BIO-1g, is outside of the overwintering season. However, regardless of grading in 2023, MM BIO-1g requires a pre-construction survey (and avoidance of all direct and indirect impacts to overwintering colonies) for construction activities that take place during the overwintering season. Therefore, MM BIO-1g remains valid because it would reduce any potential impacts on monarch butterfly to less than significant levels under CEQA.

Similarly, Impact BIO-1 also states that areas adjacent to the project site provide suitable nesting habitat for a variety of species of nesting birds, including special-status bird species such as northern harrier, golden eagle, white-tailed kite, and others. Disturbed grassland and barren areas provide potential nesting opportunities for ground nesting birds. Additionally, trees adjacent to the site could provide suitable bat roosting habitat, including for special-status bats such as pallid bat. Construction activities that occur during the avian nesting season (generally February 1 to August 31) and the roosting season could disturb protected nesting and roosting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting and roosting season could result in direct harm to nesting birds and roosting bats, while noise, light, and other construction-related disturbances may cause nesting birds or roosting bats adjacent to the vegetation removal areas to abandon their nests/roosts. City-approved grading did occur between May 29 and July 2, 2023 (in relation to the adjacent SDG Commerce 217 project), but construction related to Commerce 220 has not commenced. Therefore, regardless of City-approved grading on-site, with implementation of MM BIO-1d and MM BIO-1e, which require pre-construction nesting bird and roosting bat surveys and avoidance of direct and indirect impacts on nests and roosts, potential project-related impacts on protected bird nests and bats would be reduced to a less than significant level under CEQA. Therefore, special-status species would be protected prior to project initiation.

Response to BAGINSKI 1-4

The commenter questions how the wetlands on-site will be maintained, managed, and protected and who will be responsible for their upkeep. The commenter also questions what the purpose of the wetlands is if wildlife is potentially denied access to them due to current barriers. The commenter wonders if the asphalt barrier in between the wetlands can be removed, if a wildlife

corridor can be made from the wetlands to the North Slough or between the two wetlands, and if there is a management plan for the wetlands.

CEQA requires the proposed project not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Because hydrological connection for the wetlands would not be impacted by the proposed project due to compliance with applicable laws and regulations related to jurisdictional waters and wetlands (see Section 3.3.4, Regulatory Framework) and the implementation of wetland buffer avoidance areas, additional maintenance, management, and protection is not required for these wetlands. Additionally, as described in Impact BIO-2 of the Draft EIR, protected wetlands fall under the jurisdiction of State and federal agencies. These agencies require protection of potential jurisdictional wetland features regardless of their availability to support wildlife.[8]

Response to BAGINSKI 1-5
The commenter questions where roosting bats go when evicted and states that eucalyptus trees are not protected and slated to be cleared. The commenter also states that there are no conservation areas for bats, birds, and butterflies and wonders if the property owner would consider placing bat roosting boxes and a raptor nest site on the property.

These comments are noted. There is significant adjacent eucalyptus habitat to the east and west of the project site that would provide adequate habitat to any evicted bats, though evictions would only be necessary from May 1 through October 1 and would be conducted by a qualified Biologist. There are no eucalyptus tree protections in place within the Draft EIR because no eucalyptus trees are located within the project boundary and therefore no eucalyptus trees would be removed as part of project initiation. Therefore, no eucalyptus tree protection is required. Removal of eucalyptus trees on adjacent property is beyond the purview of the proposed project and related CEQA analysis. Additionally, roosting bat and nesting bird (including raptor) mitigations are covered under MM BIO-1a through MM BIO-1e and would reduce impacts to roosting bats and nesting birds to a less than significant level under CEQA. Therefore, roosting bat boxes and raptor nest sites on the property are not required under CEQA, but the applicant shall be consulted as to the optional addition of these elements.

Response to BAGINSKI 1-6
The commenter asks whether it is possible for landscaping within the project site to contain native plants, including milkweed and flowering plants for monarchs and questions whether the landscape architect is working with a wildlife Biologist to develop habitat replacement.

The project's proposed landscaping plan incorporates drought-tolerant species in accordance with the provisions of the Water Conservation and Landscape Act, but no laws or regulations require the project to plant native species or meet additional landscaping criteria. The comment discusses a

[8] California Department of Transportation (Caltrans). Chapter 3 – Waters of the U.S. and the State. 2024. Website: https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-3-biological-resources/ch-3-waters-of-the-us-and-state#3-3.1. Accessed September 24, 2024.

non-mandatory request of the applicant. No project-specific environmental issues are raised, and no CEQA response is required.

Response to BAGINSKI 1-7
The commenter requests that the project developer please consider no pesticides/herbicides/bait stations to protect wildlife and restrict rodent killing to snap traps only.

The comment discusses a non-mandatory request of the applicant. No project-specific environmental issues are raised, and no CEQA response is required. Response to BAGINSKI 1-8
The commenter questions whether the landscape architect will consult with wildlife biologists on what could be done to enhance wildlife habitat on the property due to the loss of wildlife habitat on-site.

Sensitive natural community (seasonal wetlands) located within the project site has been actively avoided through a buffer. The remaining site does not contain significant habitat value. Please see Response to BAGINSKI 1-6 above.

Response to BAGINSKI 1-9
The commenter questions whether the proposed project would utilize Marin Clean Energy (MCE) or Pacific Gas and Electric Company (PG&E) for electricity, whether there would be rooftop solar systems, and whether there would be an EV charging station on-site for employee/visitor vehicles.

The proposed project would utilize MCE or PG&E for electricity. There would be rooftop solar systems, and there would be an EV charging station on-site for employee/visitor vehicles. As described in Section 3.5, Energy, of the Draft EIR, MCE would procure and PG&E would deliver electricity to the proposed project. Furthermore, the proposed project would install solar on the building rooftop and would produce an estimated 235,000 kilowatt-hours (kWh) per year. Additionally, the proposed project would provide five EVSE stalls, one van accessible EVSE stall, and 19 EV-capable stalls.

Response to BAGINSKI 1-10
The commenter questions whether the landscaper could meet with the Napa-Solano Audubon Society to create a plants and nesting site plan that would be conducive to the area.

Please see Response to BAGINSKI 1-6 above.

Response to BAGINSKI 1-11
The commenter recommends implementing a jurisdictional “no killing of any wildlife” rule during and after construction where any wildlife injured would be taken immediately to the local wildlife rehabilitation center and that signs be posted throughout the construction area to that effect.

Implementation of MM BIO-1a through MM BIO-6 would reduce the likelihood of loss of wildlife. Additionally, pursuant to CEQA requirements, only special-status species require mitigation to reduce/avoid impacts (see MM BIO-1a through MM BIO-6).

New eComment for Rescheduled Regular Planning Commission Meeting

noreply@granicusideas.com <noreply@granicusideas.com>

Mon 7/29/2024 1:36 PM

To:CityClerk <CityClerk@cityofamericancanyon.org>;Nicolle Hall <nhall@cityofamericancanyon.org>;Martha Banuelos <mbanuelos@amcanfire.com>;Brent Cooper <bcooper@cityofamericancanyon.org>;William He <whe@cityofamericancanyon.org>;Bill Ross - External <wross@lawross.com>;cbellardo@lawross.com <cbellardo@lawross.com>;Brando Cruz <bcruz@cityofamericancanyon.org>;Davet Mohammed <dmohammed@cityofamericancanyon.org>;Andrew Goff <agoff@cityofamericancanyon.org>;Eric Altman <ealtman@cityofamericancanyon.org>;Crystal Mallare <cmallare@cityofamericancanyon.org>

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City of American Canyon

New eComment for Rescheduled Regular Planning Commission Meeting

Yvonne Baginski submitted a new eComment.

Meeting: Rescheduled Regular Planning Commission Meeting

Item: 3.) SDG Commerce 220 Distribution Center Draft Environmental Impact Report (DEIR) Public Review Workshop

eComment: 1. This property has already been graded and the trees cut down. There is nothing left to protect except two small wetlands. Who will manage these wetlands and protect them from further destruction? Will the wetlands include a protected corridor so they can be accessible to wildlife? Who will measure the wildlife numbers using these wetlands? 2. The surrounding areas support a number of wildlife species that are currently threatened or endangered. The monarch butterflies are currently using the eucalyptus trees adjacent to this property for overwintering roosting. They were seen this past February and there have been numerous sightings by local walkers. There are also bats and raptors using these trees. This is an important area for wildlife protection. There is a cumulative effect of the recent decline in wildlife as these three warehouses have been built. We have no measure of the loss of wildlife and their absence only assumes that they've died because there isn't any place to relocate along this corridor of development. Nocturnal species are especially difficult to gauge. Excessive noise, lighting, dust and fumes will continue to drive out animals, birds and bats. Is there a possibility that all construction be halted between the hours of 6 p.m. to 6 a.m.? That would give animals at least 12 hours of respite. Also, the property should eliminate all-night lighting. Will the owner of the property consider putting up bat boxes and roosting areas for the wildlife? Can native trees and vegetation be planted in the landscaping? 3. The wetlands will be surrounded by concrete, and trucks lumbering daily will destroy any wildlife attempting access to them. Can a riparian habitat be developed around the wetlands? And, would wildlife corridors be considered? The property is close to the estuary, thereby making it a natural place for animals to cross and congregate. Would the landscape architect work with a wildlife biologist to develop the best habitat possible

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to replace what's been destroyed? Should pollinator friendly landscaping (ie. milkweed) be planted? Will the landscaper consider native plants ? 4. Will the developer agree to a "no pesticide, no herbicide" policy? This is especially relevant with poison bait stations. This area is heavily used by rodents, including ground squirrels They are food for the raptors. No bait stations or poisons, please. 5. Will this warehouse be using MCE instead of PG&E?

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Yvonne Baginski (Second Letter) (BAGINSKI 2)

Response to BAGINSKI 2-1

The commenter states that the project site has already been graded and the trees have been cut down, leaving only two small wetlands to protect. The commenter asks who will manage these wetlands and protect them from further destruction. The commenter further asks whether the wetlands will be a protected corridor accessible to wildlife and who will measure the wildlife numbers using these wetlands.

In 2011, the Napa County Superior Court granted an approval to grade the property as part of a cleanup plan to comply with a Final Judgment and Stipulation (Case No. 26-07165 *City of American Canyon vs. Robert L. Couch Jur,* et al.). More recently, additional grading on-site was completed as part of the construction of the adjacent SDG Commerce 217 Distribution Center Project (PL20-0008) and completed under a grading permit issued by the City of American Canyon (GR23-0001). In accordance with CEQA, the grading was considered in the Initial Study prepared for the SDG Commerce 217 Project (Final Initial Study dated February 2021) and mitigation measures were implemented as applicable.

The biological analysis for the proposed project is based on pre-graded site conditions, as noted in the Draft EIR Section 3.3.3, Environmental Setting, and depicts the site's pre-graded habitat as containing Avena spp. -Bromus spp. Herbaceous Semi-Natural stands, a linear wetland, and seasonal wetlands. The Project Impacts and Mitigation Measures section of the Draft EIR was based on impacts to these habitat types and therefore demonstrates accurate measures to mitigate environmental and wildlife impacts pre-grading. Section 3.3, Biological Resources, of the Draft EIR, provides information on the status of the project site (and surrounding areas as applicable), including wildlife, prior to project implementation. With implementation of MM BIO-1a through MM BIO-1e, project impacts to CEQA-protected resources would be less than significant.

As described in the Draft EIR, the proposed project would avoid all impacts on potential jurisdictional wetland features through the implementation of a wetland buffer avoidance area, and the project site does not function as a critical wildlife movement corridor. Therefore, potential impacts on wildlife movement are less than significant. Additionally, the wetlands present on-site provide only marginal habitat and do not require future management or mitigation outside out what has already been detailed within the EIR's mitigation measures.

Response to BAGINSKI 2-2

The commenter states that monarch butterflies have been seen in the eucalyptus trees directly adjacent to the project site and argues that, at this time, there are no protections in place for the eucalyptus trees or species (such as birds, bats, or monarchs) that may be affected by noise, light, fumes, or dust produced through construction activities. The commenter also asks if the proposed project could put bat boxes and roosting areas for wildlife, as well as plant native trees and vegetation in the landscaping.

As described in Impact BIO-1 in Section 3.3.7 of the Draft EIR, there is a potential for the monarch butterfly to overwinter in the eucalyptus woodland adjacent to the site. It is also acknowledged that construction activities, including dust, noise, and vibration adjacent to overwintering colonies could

result in loss of overwintering monarch butterflies. However, MM BIO-1g includes a pre-construction survey and, if found, avoidance in coordination with USFWS and CDFW would be implemented to reduce any potential impacts on monarch butterfly to less than significant levels under CEQA.

Similarly, Impact BIO-1 also states that areas adjacent to the project site provide suitable nesting habitat for a variety of species of nesting birds, including special-status bird species such as northern harrier, golden eagle, white-tailed kite, and others. Disturbed grassland and barren areas provide potential nesting opportunities for ground nesting birds. Additionally, trees adjacent to the site could provide suitable bat roosting habitat, including for special-status bats such as pallid bat. Construction activities that occur during the avian nesting season (generally February 1 to August 31) and the roosting season could disturb protected nesting and roosting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting and roosting season could result in direct harm to nesting birds and roosting bats, while noise, light, and other construction-related disturbances may cause nesting birds or roosting bats adjacent to the vegetation removal areas to abandon their nests/roosts. However, with implementation of MM BIO-1d and MM BIO-1e, requiring pre-construction nesting bird and roosting bat surveys and avoidance of direct and indirect impacts on nests and roosts, potential project-related impacts on protected bird nests and bats would be reduced to a less than significant level under CEQA. Therefore, special-status species would be protected, and no roosting bat boxes or raptor nest sites on the project site would be required.

The project's proposed landscaping plan incorporates drought-tolerant species in accordance with the provisions of the Water Conservation and Landscape Act, but no laws or regulations require the project to plant native species or meet additional landscaping criteria. Because the comment discusses a non-mandatory request of the applicant, no project-specific environmental issues are raised, and no further CEQA response is required.

Response to BAGINSKI 2-3

The commenter argues that the wetlands would be surrounded by concrete and the truck movements would destroy any wildlife attempting to access them. The commenter asks whether a riparian habitat could be developed around the wetlands and if wildlife corridors would be considered. The commenter states that the project site is close to the estuary, making it a natural congregation place for wildlife. The commenter further asks whether the landscape architect would work with a wildlife Biologist to develop the best habitat possible to replace what has been removed, if pollinator-friendly landscaping could be included, and if the landscaper would consider native plants.

CEQA requires that the proposed project not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. The on-site wetlands do not currently have a hydrological connection to any other wetlands. Project-related wetlands impacts will comply with applicable laws and regulations related to jurisdictional waters and wetlands (see Section 3.3.4, Regulatory Framework). Implementation of a wetland buffer avoidance area, additional maintenance, management, and protection is not required for these wetlands. Additionally, as

described in Impact BIO-2 of the Draft EIR, protected wetlands fall under the jurisdiction of State and federal agencies.

The existing temporary and proposed barriers surrounding the wetlands cannot be removed as they define the buffer avoidance areas that protect the wetlands from encroaching construction and operational activities. Elimination of the barriers would potentially subject the wetlands to construction- and operational-related impacts and remove the project from CEQA compliance. Additionally, it is inadvisable to argue for a wildlife corridor to travel through an active, graded construction site nor an active warehouse operation. This could potentially expose wildlife to additional risks. Furthermore, the project site does not serve as a wildlife movement corridor, as discussed in Impact BIO-3 of the Draft EIR. Lastly, a management plan is not required under CEQA for these wetlands as adherence to applicable laws and regulations listed in Section 3.3.4, Regulatory Framework, of the Draft EIR would lower impacts to the wetlands to a less than significant level under CEQA.

The project's proposed landscaping plan incorporates drought-tolerant species in accordance with the provisions of the Water Conservation and Landscape Act, but no laws or regulations require the project to plant native species or meet additional landscaping criteria.

Response to BAGINSKI 2-4
The commenter requests that the project developer please consider no pesticides/herbicides/bait stations to protect wildlife.

The comment discusses a non-mandatory request of the applicant. No project-specific environmental issues are raised, and no further CEQA response is required.

Response to BAGINSKI 2-5
The commenter asks whether the proposed project would utilize MCE or PG&E.

As discussed in Section 3.5, Energy, of the Draft EIR, the proposed project would utilize electricity procured by MCE and delivered by PG&E.

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New eComment for Rescheduled Regular Planning Commission Meeting

noreply@granicusideas.com <noreply@granicusideas.com>

Tue 7/30/2024 10:45 AM

To:CityClerk <CityClerk@cityofamericancanyon.org>;Nicolle Hall <nhall@cityofamericancanyon.org>;Martha Banuelos <mbanuelos@amcanfire.com>;Brent Cooper <bcooper@cityofamericancanyon.org>;William He <whe@cityofamericancanyon.org>;Bill Ross - External <wross@lawross.com>;cbellardo@lawross.com <cbellardo@lawross.com>;Brando Cruz <bcruz@cityofamericancanyon.org>;Davet Mohammed <dmohammed@cityofamericancanyon.org>;Andrew Goff <agoff@cityofamericancanyon.org>;Eric Altman <ealtman@cityofamericancanyon.org>;Crystal Mallare <cmallare@cityofamericancanyon.org>

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City of American Canyon

New eComment for Rescheduled Regular Planning Commission Meeting

Jeannette Goyetche submitted a new eComment.

Meeting: Rescheduled Regular Planning Commission Meeting

Item: 3.) SDG Commerce 220 Distribution Center Draft Environmental Impact Report (DEIR) Public Review Workshop

eComment: My comments & concerns regarding the DEIR for proposed SDG Commerce 220 Distribution Center Project. I wonder what kind of environmental report can honestly be done on this property. I walked the area some time ago & the area had already been graded & looked like it was being prepared for construction. If an environmental report is to be done, seems like it is too late. Surrounding the area , according to Special-Status & Sensitive Natural Communities (p.7) of the report,are many endangered species of mammals, plants, fish,birds, amphibians & reptiles. The cumulative effect on construction will impact all these species. I understand there are 3 small wetlands on the property. What I witnessed were the areas cordoned off with plastic orange fencing. My concern is what is the plan for these wetlands? How does a wetland survive amidst the concrete & noise of a warehouse? Are there biologists assisting with the planning of keeping the wetlands viable? Has there been any study on the proximity of the warehouse development to our treasured wetlands to the west...American Canyon's jewel. According to the DEIR there will be a cumulative significant unavoidable impact on the environment as a result of the vehicles miles traveled (VMT) report based on the number of cars & diesel trucks traveling in& out of the facilities. According to the DEIR,the facilities will employ 225 workers when fully operational.The impact of the air & noise pollution on the wildlife& neighboring elementary school is worrisome. One last comment: I find it confusing that this area was zoned Commercial Recreation by City of American Canyon General Plan & a Recreation Zoning District Code Amendment was adopted by the City Council in January 2018. This ordinance allows wine related warehousing & distribution facilities as a condition permitted use within the REC Zone

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district. My question is, how is a warehouse considered "Recreation" ? Thank you for listening to my thoughts and concerns. Jeannette Goyetche , American Canyon resident

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CONT

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City of American Canyon, CA

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Jeannette Goyetche (GOYETCHE)

Response to GOYETCHE-1
The commenter asks what kind of environmental report can be done for the project site because it appears that the project site has already been graded and prepared for construction.

See Response to BAGINSKI 2-1 regarding recent on-site grading.

Response to GOYETCHE-2
The commenter states that there are many endangered species within the project vicinity and argues that the cumulative effect of construction would impact these special-status species.

As described in Section 3.3, Biological Resources, of the Draft EIR, the proposed project would have less than significant impacts on special-status species within the project vicinity with the implementation of MM BIO-1a through MM BIO-1g. Section 3.3.8 of the Draft EIR also analyzed potential cumulative impacts with regard to biological resources, which would be less than significant with mitigation incorporated.

Response to GOYETCHE-3
The commenter asks about the plan for the wetlands on-site, which are currently fenced off. The commenter asks about the protection features for the wetlands, expressing concern about concrete and noise. The commenter also asks if there has been a study on the proximity of the proposed project on the wetlands to the west of the project site.

Refer to Response to BAGINSKI 2-3.

Response to GOYETCHE-4
The commenter states that the proposed project would have a significant and unavoidable cumulative impact related to VMT.

As discussed in Section 3.13, Transportation, of the Draft EIR, the proposed project would have significant and unavoidable impacts related to VMT, both individually and cumulatively, even with the incorporation of mitigation. The proposed project would implement MM TRANS-2, which requires the implementation of a TDM program to reduce VMT to the greatest extent feasible. The nearest bus stop to the project site is 1.3 miles away and serves only limited destinations; therefore, given the land use context of the project area and per the California Air Pollution Control Officers Association (CAPCOA) Handbook, a TDM program is estimated to result in a VMT reduction of approximately 4 percent. As such, even with the implementation of mitigation, impacts related to VMT would remain significant and unavoidable.

Response to GOYETCHE-5
The commenter expresses concern about the potential impacts of air and noise pollution on the wildlife and the neighboring elementary school.

As described in Section 3.2, Air Quality, of the Draft EIR, the proposed project would have less than significant impacts related to air quality with mitigation incorporated. The proposed project would not expose sensitive receptors to substantial pollutant concentrations, such as students at the

elementary school. Additionally, as described in MM AIR-1, the proposed project would be required to implement BAAQMD Best Management Practices (BMPs) to control dust during construction. This would reduce impacts related to air quality to the greatest extent feasible.

As described in Section 3.11, Noise, of the Draft EIR, the proposed project would have less than significant impacts related to noise without mitigation. As such, the proposed project would not significantly impact sensitive receptors with regard to noise.

Additionally, as discussed in Section 3.3, Biological Resources, of the Draft EIR, the proposed project would implement MM BIO-1a through MM BIO-1g, which would reduce impacts to special-status species during construction.

Response to GOYETCHE-6
The commenter explains the Zoning District for the proposed project and questions how a warehouse is considered Recreation.

As described in the Draft EIR, the project site is zoned Recreation (REC) by the City's Zoning Map. A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zoning district. Per Municipal Code Section 19.15.020, winery related uses, including such activities as bottling, storage, logistics, distribution, wine packing and wine-related services, are conditionally permitted within the Recreation zone subject to approval of a use permit by the planning commission. The proposed project would develop a 219,834-square-foot wine warehouse on the project site. As such, the proposed project would be consistent with the conditionally permitted uses of the REC zoning district.

The proposed project would also be consistent with the Municipal Code's applicable development standards for the Recreation zone as outlined in Table 3.10-3 of the Draft EIR.

SECTION 3: ERRATA

The following are revisions to the Draft EIR for the SDG Commerce 220 Distribution Center Project. These revisions are minor modifications and clarifications to the document, and do not change the significance of any of the environmental issue conclusions within the Draft EIR. The revisions are listed by page number. All additions to the text are underlined (underlined) and all deletions from the text are stricken (~~stricken~~).

3.1 - Changes in Response to Specific Comments

Section 3.2, Air Quality

Page 3.2-52, first paragraph

The following text has been added to provide clarification.

Operational emissions typically include area, energy, and mobile sources. Area sources would include emissions from architectural coatings, consumer products, and landscape equipment. Energy sources would include emissions from the combustion of natural gas for water heaters and other heat sources; however, there is no natural gas for heaters and other heat sources associated with the proposed project. Therefore, as shown in Table 3.215, emissions associated with energy are zero. Mobile sources include exhaust and road dust emissions from the automobiles that would travel to and from the project site. Pollutants of concern include ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Section 3.3, Biological Resources

Page 3.3-12, Special Status Wildlife Species

The following edit has been made to clarify the use of the term, vagrant.

The remaining eight species (and functional groups like nesting birds and roosting bats that include special-status species) could have at least theoretical potential to occur on-site, perhaps as vagrant, dispersing, or foraging individuals, and are therefore discussed in more detail below. Note that the term vagrant is used in this context to describe a species that could disperse or wander into the project site prior to project construction but does not nest on-site.

Page 3.3-30, last bullet

The following edit has been made to fix an erroneous typo.

- FirstCarbon Solutions (FCS). 2023. Pre-Construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-4, ~~and BIO-5~~ per the Mitigation Monitoring and Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California. April 2023.

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SDG Commerce 220 EIR and CUP - Attachment 1.13 - Exhibit C: FEIR Appendix

Appendix A: Swainson Hawk Mitigation Support

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From: Jim Estep
To: Janna Waligorski
Cc: Robert Carroll; Maddie Dolan; Mary Bean
Subject: RE: Request for Swainson Hawk Mitigation Support
Date: Thursday, August 22, 2024 12:41:31 PM
Attachments: image002.png

Caution: This is an external email and may contain suspicious subject or content. Please take care when clicking links or opening attachments. When in doubt, please contact your IT Department

Hi Janna,

I am not available to take on any tasks until at least the first of the year. However, I did a quick review of the bio section for your project, and despite the SWHA section being a bit out of date and misleading (although not particularly relevant to the impact/mitigation) (for example, CV SWHA are not known to winter in the Argentinian Pampas where the use of the pesticide issues were identified – see Airola et al. 2019, JRR 53(3)), I think the mitigation and use of the 600-foot buffer is appropriate. You might point out to the CDFW folks that there never was any data-supported rationale for the 0.5 mile buffer. This distance was selected to maximally ensure that disturbance impacts would not influence nesting behavior or success. In that regard, and due to the lack of information at the time, although arbitrary it was appropriate that the buffer be highly conservative. Today, however – 30 years after the guidelines were prepared – we have lots of experience and examples of the high degree of tolerance of nesting Swainson's hawks to noise and other disturbances. Although a specific study has not been conducted to better establish a more data-driven buffer distance, we know that the 0.5 mile distance is unnecessarily large. We have many examples of active, successful nests immediately adjacent to a variety of disturbances. Most of the examples of disturbance-related nest abandonment that I am aware of involve direct impacts to nest trees or disturbances occurring in the immediate vicinity of active nests (including those caused by biologists closely observing nests for long periods). The 600-foot buffer identified in the SWHATAC guidelines originated from work that Mike Bradbury, formerly with DWR, was conducting on the barriers project in the Sacramento-San Joaquin Delta. Through a significant amount of monitoring of active nests, they determined that 600 feet was a reasonable buffer distance in most cases.

That said, it remains important to look at each case independently and to consider and minimize all potential disturbances. Other things also come into play, such as line-of-sight, topography, tree structure and height, and existing ongoing disturbances – such as roadways and proximity to existing development and related disturbances. Timing can also be important – the period of nest establishment and incubation (mid-March to mid-May) are the most sensitive. Once nestlings are present, the potential for nest abandonment decreases substantially. These can all be important in minimizing the chance of nest abandonment and establishing an appropriate no-disturbance buffer. But the species is quite tolerant (note the use of roadside trees, urban nests, etc.), and a 0.5 mile buffer is unlikely to be necessary in most or all cases. So, I would support a 600-foot buffer as a general starting place, but an assessment of the specific site conditions should be conducted to support the findings and any remedies.

Jim

Jim Estep
Estep Environmental Consulting
3202 Spinning Rod Way
Sacramento, CA 95833
916-921-2515
jim.estep@comcast.net

FCS
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SDG Commerce 220 EIR and CUP - Attachment 1.14 - Exhibit D: MMRP

Mitigation Monitoring and Reporting Program for the SDG Commerce 220 Distribution Center Project Environmental Impact Report City of American Canyon, Napa County, California

Prepared for:
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
707.647.4337

Contact: William He, Senior Planner

Prepared by:
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Janna Waligorski, Project Manager

Report Date: September 12, 2024

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PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) and CEQA Guidelines Section 15097 require a Lead Agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) whenever it adopts a Mitigated Negative Declaration (MND) in conjunction with a project approval. The purpose of the MMRP is to ensure compliance with the mitigation measures occurs during project implementation.

The Draft EIR prepared for the proposed SDG Commerce 220 Distribution Center Project (proposed project) concluded that project implementation could result in potentially significant effects on the environment and mitigation measures were incorporated into the proposed project or are required as a condition of project approval that reduce these potential impacts to a less than significant level. This MMRP documents how and when the mitigation measures adopted by the Lead Agency will be implemented and confirms that potential environmental impacts are reduced to less than significant levels as identified in the Draft EIR.

This document does not discuss those subjects that the environmental analysis demonstrates would result in less than significant impacts and for which no mitigation was proposed or necessary.

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Table 1: SDG Commerce 220 Distribution Center Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
3.2 Air Quality					
MM AIR-1: Implement BAAQMD Best Management Practices to Control Dust During Construction The following dust control measures, as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the proposed project and implemented during construction: • All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least two times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard. • All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes, as required by the California Airborne Toxics Control Measure (ACTM) Title 13, Section 2485 of California Code of Regulations. Clear signage	Incorporation into project construction documents. On-site inspection. Submittal of proof of implementation during construction.	Prior to issuance of a grading permit or building permit. During construction. During construction	City of American Canyon		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
regarding idling restrictions shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The construction contractor shall take corrective action within 48 hours. The BAAQMD's and the City's phone numbers shall also be visible to ensure compliance with applicable regulations.					
3.3 Biological Resources					
MM BIO-1a: Pre-construction Surveys for Swainson's Hawk Prior to ground disturbance that occurs during the nesting season for Swainson's hawk (generally March 20 to July 20), a qualified Biologist shall conduct Swainson's hawk nesting surveys within a 0.5-mile radius of the project site to determine whether nests are occupied. Occupancy shall be determined through observation of all accessible areas, including from public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) on and near the project site. The qualified Biologist shall follow the survey protocol outlined in the California Department of Fish and Wildlife (CDFW) *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley,* which recommends surveys according to the following survey periods: **I. January–March 20:** Conduct one survey total.	Qualified Biologist pre-construction surveys and submittal of survey documents.	Prior to ground disturbance during nesting season (March 20 through July 20).	City of American Canyon; California Department of Fish and Wildlife (CDFW); Qualified Biologist; United States Fish and Wildlife Service (USFWS).		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
II. **March 20–April 5:** Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset. III. **April 5–April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset. IV. **April 21–June 10:** Initiating surveys are not recommended. Monitoring of known nest sites only. V. **June 10–July 30:** (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset. Pre-construction surveys shall be completed for at least the two survey periods immediately prior to a project's initiation.					
MM BIO-1b: Swainson's Hawk Avoidance and Minimization and Construction Monitoring Following the implementation of MM BIO-1a, if nests are located and determined to be occupied, minimization measures must be implemented, and construction monitoring conducted as follows: 1. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson's hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment. 2. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern.	On-site monitoring by the Qualified Biologist if survey finds Swainson's Hawk species.	During construction.	City of American Canyon; CDFW; Qualified Biologist; USFWS.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
3. No tree containing an active Swainson's hawk nest shall be removed.					
MM BIO-1c: Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found) A qualified Biologist shall conduct a habitat assessment for wintering burrowing owl, and surveys if habitat is present. The qualified Biologist shall follow the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation habitat assessment and survey methodology prior to project activities occurring during the burrowing owl wintering season from September 1 to January 31. The habitat assessment and surveys shall encompass a sufficient buffer zone to detect owls nearby that may be impacted, which shall be a minimum of 1,640 feet unless otherwise approved in writing by the CDFW. Surveys shall include four nonbreeding season surveys spread evenly throughout the nonbreeding season pursuant to the CDFW 2012 Staff Report. Time lapses between surveys or project activities shall trigger subsequent surveys, as determined by a qualified Biologist, including but not limited to a final survey within 24 hours prior to ground disturbance and before construction equipment mobilizes to the project area. The qualified Biologist shall have a minimum of 2 years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections. Detected burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan shall be subject to CDFW review. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a "take" avoidance, minimization, or mitigation measure; therefore, off-site habitat compensation shall be included in	Qualified Biologist pre-construction surveys and submittal of survey documents	Prior to project activities during the burrowing owl wintering season (September 1 through January 31	City of American Canyon; CDFW; Qualified Biologist; USFWS		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
the eviction plan. Habitat compensation acreages shall be approved by CDFW, as the amount depends on-site-specific conditions and must be completed before project construction unless otherwise approved in writing by CDFW. Habitat compensation shall also include placement of a conservation easement and preparation and implementation of a long-term management plan prior to project construction.					
MM BIO-1d: Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found). 1. If the proposed project requires vegetation to be removed during the nesting season (February 1 to August 31), pre-construction surveys shall be conducted no more than 7 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present within the project site and buffer area as appropriate. 2. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).	Qualified Biologist's pre-construction survey and submittal of survey documents; on-site monitoring by the qualified Biologist if survey finds active bird or raptor nests	Prior to ground or vegetation disturbance during nesting season (February 1 to August 31)	City of American Canyon; CDFW; Qualified Biologist; USFWS		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
3. The qualified Biologist shall monitor the active nest during construction activities and modify the protection zone accordingly to prevent project-related nest disturbance, until the young have fledged.					
MM BIO-1e: Roosting Bat Pre-construction Survey and Avoidance A qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) within 250 feet of project construction activities (where accessible). If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Grading shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).	Qualified Biologist's pre-construction bat survey and submittal of survey documents; on-site monitoring by the qualified Biologist if survey finds bat species	7 to 14 days prior to ground disturbance and/or construction	City of American Canyon; CDFW; Qualified Biologist; USFWS		
MM BIO-1f: Protection of Western Pond Turtles A qualified Biologist (i.e., a Biologist with at least 2 years of experience conducting surveys for western pond turtle detections) shall submit a wildlife exclusion fencing plan to	Submittal of wildlife exclusion fencing plan by qualified Biologist to CDFW; Qualified Biologist's pre-	Prior to construction	City of American Canyon; CDFW; Qualified Biologist; USFWS		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
the California Department of Fish and Wildlife (CDFW) for review and approval prior to starting construction. Exclusion fencing shall be installed along the western perimeter of the project site to prevent the species from traveling from North Slough onto the project site during construction. A qualified Biologist shall survey the project site and adjacent habitat within 72 hours of the start of project activities to determine whether western pond turtle or their nests are present and guide the installation of the exclusion fence. If western pond turtles are discovered, a qualified Biologist with experience handling and relocating the species shall move the species to the nearest suitable habitat outside of the project area and exclusion fencing. If western pond turtle nests are found, CDFW shall be notified prior to starting project activities, and the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fence until eggs hatch and young turtles disperse to the adjacent North Slough. In addition, if nest(s) are located during surveys, moth balls (naphthalene) shall be sprinkled around the vicinity of the nest (no closer than 5 feet) to mask human scent and discourage predators. Grading within the nest site's 50-foot buffer area shall be delayed until the young leave the nest as determined by a qualified Biologist. If the CDFW allows translocation of any nestling pond turtles this shall be completed by a qualified Biologist under the direction of the CDFW.	construction surveys and submittal of survey documents				
MM BIO-1g: Protection of Overwintering Monarch Butterfly Activities such as vegetation removal, grading, or initial ground-disturbing activities shall be conducted between November 1 and July 31 (outside of the overwintering season) to the extent feasible. If such activities must be initiated during the overwintering season (August 1 through October 31), a pre-construction overwintering survey shall be conducted by a qualified Biologist no more than 7 days prior	Qualified Biologist pre-construction overwintering survey and submittal of survey documents	7 days prior to vegetation removal, grading, or initial ground disturbance if occurring during Overwintering season (August 1 through October 31)	City of American Canyon; CDFW; Qualified Biologist; USFWS		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
to vegetation removal, grading, or initial ground disturbance. The survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any colonies that could potentially be affected either directly or indirectly by project activities. If no colonies are present, then project activities can commence as scheduled. If a colony is present, project construction shall cease immediately to avoid all direct and indirect impacts and report the presence of the colony to the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and follow all recommendations provided by USFWS and CDFW.					
3.4 Cultural-Tribal Cultural Resources					
MM CUL-1a: All construction personnel directly involved with project-related ground disturbance shall attend a "tailgate" Worker Environmental Awareness Program (WEAP) training for archaeological resources. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology.	Qualified Archaeologist's WEAP training	Prior to ground disturbance or construction	City of American Canyon; Qualified Archaeologist		
MM CUL-1b: An Archaeological Monitor reporting to the qualified Archaeologist, shall be present during the clearing, grading, and trenching phases of the proposed project to check for the inadvertent discovery of archaeological resources or human remains. Over the course of the proposed project, should the Archaeologist determine that the probability of inadvertent discovery is low, they may make a recommendation to the lead agency that monitoring	Qualified Archaeologist's on-site monitoring	During clearing, grading, and trenching phases	City of American Canyon; Qualified Archaeologist		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
be reduced to regular periodic or "spot-check" monitoring, or that monitoring may cease altogether					
MM CUL-1c: If buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the lead agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the Master Plan area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA Guidelines. If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the lead agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the lead agency where they would be	Inclusion of discovery clause in all construction contracts. Qualified Archaeologist's recommendations if any cultural or historical resources are discovered. County notification if historical or archaeological materials are encountered. Provision of Section 15064.5 permit(s) and copy of DPR 523 forms; Qualified Archaeologist's submittal of findings and documentation	Prior to ground-disturbing activities. During ground-disturbing activities prior to excavation. During ground-disturbing activities. During ground-disturbing activities	City of American Canyon; Qualified Archaeologist		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
afforded long-term preservation to allow future scientific study.					
MM CUL-3: In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:	Notes on construction plans; Site inspection; Submittal of documentation	During ground-disturbing activities	City of American Canyon;		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains: • When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.					
3.6 Geology, Soils, and Seismicity					
MM GEO-1: Prior to the issuance of the building permit, recommendations from the Geotechnical Engineering Investigation prepared by Krazan & Associates [Draft EIR Appendix E] shall be incorporated into all project plans and applicable construction-related permits and submitted to the City of American Canyon for review and approval.	Incorporation into project construction documents	Prior to Issuance of building permit	City of American Canyon		
Implementation of **MM HYD-1.**					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM GEO-5: Although extremely unlikely, should any significant paleontological resources (e.g., bones, teeth, well-preserved plant elements) be unearthed by the construction crew, their activities shall be diverted at least 15 feet from the find until a professional Paleontologist has assessed it and, if deemed significant, salvaged in a timely manner. Collected fossils shall be deposited in an appropriate repository, such as the University of California Museum of Paleontology (UCMP), where they shall be properly curated and made available for future research.	Qualified Paleontologist documentation of discovery and submittal of documents. Qualified Paleontologist's notification to appropriate agencies	During construction During construction	City of American Canyon; Qualified Paleontologist		
3.9 Hydrology and Water Quality					
MM HYD-1: Prior to the issuance of grading permits or building permits (whichever occurs first), the project applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) by preparing a Storm Water Pollution Prevention Plan (SWPPP) and submitting it, along with a Notice of Intent (NOI), to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The City of American Canyon shall confirm that the applicant has prepared a SWPPP and obtained coverage under the General Permit prior to issuance of grading or building permits. The SWPPP shall identify a practical sequence for Best Management Practice (BMP) implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall address both the project site and adjacent parcel where soil stockpiles would be removed and the borrow pit would be created to provide fill for the project site. The SWPPP shall include but not be limited to the following elements:	Submittal of SWPPP and Notice of Intent (NOI) to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). Submittal of documents to the City of American Canyon. Incorporation of SWPPP into construction documents.	Prior to the issuance of grading permits or building permits (whichever occurs first)	City of American Canyon; San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB)		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• Temporary erosion control measures shall be employed for disturbed areas. • No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months. Disturbed areas shall be covered with soil stabilizers, mulch, fiber rolls, or temporary vegetation. • Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures. Drop inlets shall be lined with filter fabric/geotextile. • Discharge from the stormwater system shall be diffused in such a way as to mimic existing overland flow conditions. • The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. This may include locating construction-related equipment and processes that contain or generate pollutants in a secure way, away from storm drains, gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities. • BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure. • In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance as					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
an interim erosion control measure throughout the wet season. Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a SWPPP in accordance with the requirements of the Statewide General Permit. The SWPPP shall be implemented during construction.					
3.13 Transportation					
MM TRANS-2: Transportation Demand Management Program The proposed project shall develop a Transportation Demand Management (TDM) program to encourage employees to choose non-personal vehicle modes of transportation for commuting. This includes a commute trip reduction marketing initiative, through which the employer would disseminate information about available transportation options. Strategies would include encouraging ride sharing among project employees and linking them to resources to find rideshare partners working nearby, such as through the Napa Valley Transportation Authority (NVTA) V-Commute program or the regional 511.org program. Marketing materials can also inform employees of resources such as the Guaranteed Ride Home Program, which provides free rides home in emergency situations for employees using non-personal vehicle transportation modes.	Submittal of Transportation Demand Management (TDM) program	Prior to occupancy	City of American Canyon		

PC RESOLUTION NO. 2024-XX

A RESOLUTION RECOMMENDING THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON APPROVE THE SDG COMMERCE 220 DISTRIBUTION CENTER CONDITIONAL USE PERMIT FOR DEVELOPMENT OF A 219,834 SQUARE FOOT WINE WAREHOUSE ON A 10.17 ACRE SITE LOCATED AT 1055 COMMERCE COURT, APN 058-030-069 (FILE NUMBER PL23-0017)

WHEREAS, on August 3, 2023, SDG Commerce 220, LLC (Applicant) submitted a Conditional Use Permit (CUP) for development of a 220,000 square feet wine distribution warehouse at 1055 Commerce Ct; and

WHEREAS, the project site is in the Recreation (REC) Zoning District and a winery is a permitted use with a CUP; and

WHEREAS, the project will include 23 truck doors and approximately 4,400 square feet of office space; and

WHEREAS, on October 24, 2024, the Planning Commission recommended the City Council certify that the Final Environmental Impact Report (EIR) (SCH# 2021010104) has been completed in compliance with the California Environmental Quality Act (CEQA) and as adequately reflects the City's independent judgement and analysis regarding the potential environmental impacts associated with the SDG Commerce 220 Distribution Center Project, and adopt CEQA Findings of Fact, a Statement of Overriding Considerations, for the Project, and adopt a the Mitigation Monitoring and Reporting Program for the Project; and

WHEREAS, the SDG Commerce 220 Distribution Center Final EIR specifically evaluated the Conditional Use Permit at a Project level and the Planning Commission reviewed and considered the information contained in the Final EIR prior to making recommendations concerning the approval of the proposed project; and

WHEREAS, on October 24, 2024, the Planning Commission conducted a duly-noticed public hearing to evaluate the SDG Commerce 220 Distribution Center Conditional Use Permit and heard all public speakers and considered all written materials including the staff report and oral testimony given at the meeting.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission recommends the City Council make all the required findings to approve the SDG Commerce 220 Distribution Center Conditional Use Permit, as follows:

SECTION 1: Conditional Use Permit Findings

According to ACMC Section 19.42.020(D), the planning commission may approve or conditionally approve an application for a conditional use permit or minor use permit if it makes all of the following findings:

A. The proposed use is consistent with the policies and programs of the general plan and any applicable master or specific plan.

The site is proposed as a wine distribution warehouse, and wineries are a permitted use in the REC zone through a Conditional Use Permit. The use is consistent with the General Plan and Municipal Code.

B. The proposed use is consistent with the purpose(s) and standards of the applicable zoning district(s).

A wine warehouse is a permitted use in the Commercial Recreation zoning district with issuance of a conditional use permit. The project complies with height, bulk, setback and all applicable design standards as shown in the table below.

	Required	*Provided*	*Compliance*
Min. Size	*10 acres*	*10.17 acres*	*Yes*
Site Coverage	*50%*	*49.6%*	*Yes*
Building Height	*35 ft*	*35 ft*	*Yes*
Front Setback (from local streets)	*15 ft*	*71 ft*	*Yes*
Side setback	*35 ft*	*63 ft*	*Yes*
Rear setback	*35 ft*	*156 ft*	*Yes*

C. The proposed use complies with applicable policies of the Napa County Airport land use compatibility plan.

The project is consistent with Zones D of the Napa County Airport Land Use Compatibility Plan. Warehouses are acceptable with recordation of an Avigation and Hazard Easement Deed. The property-owner completed the recordation for the 3 parcels of 1075, 1055, and 1005 Commerce Ct on July 26, 2019.

D. The project site is physically suitable for the type and intensity of land use being proposed.

The site is flat with few physical constraints. Similar to its neighbors in the north and south, the site is physically suitable for a warehouse.

E. The proposed use will not be a nuisance or materially detrimental to the general health, safety, and welfare of the public or to property and residents in the vicinity.

The wine warehouse will not be a nuisance to detrimental to property and residents in the vicinity. The site does not emit any lights, odors, or noises beyond normal levels of a warehouse. No residential parcels are near the site.

F. The site for the proposed use has adequate access, and meets parking and circulation standards and criteria.

The wine warehouse use has adequate access and meets all parking and circulation standards.

G. There are adequate provisions for water and sanitary services, and other public utilities to ensure that the proposed use would not be detrimental to public health and safety.

Water, sewer, recycled water, and utilities will be extended to the wine warehouse.

SECTION 2: Conditions of Approval

SECTION 2. CONDITIONS OF APPROVAL

1. The Conditional Use Permit approval is granted for a new 35-foot tall, single-story 219,834-square foot Wine Warehouse on a 10.17-acre site with parking, truck and trailer loading spaces, drive aisles, landscaping, and stormwater detention features at 1055 Commerce Circle, APN 058-030-069 (file no. PL23-0017), which shall be substantially as shown on file in the Community Development Department, except as modified by conditions contained in this approval. Exhibit A includes the following:
    a. Architectural Plans prepared by Ward Architects, consisting of 9 sheets showing the proposed site plans, building elevations, and roof plans, submitted on 10-6-2023.
    b. Civil plans prepared by RSA+, consisting of 12 sheets showing the preliminary grading, utilities, and site layout plans submitted on 10-6-2023.
    c. Landscaping Plans prepared by Ward Architects, consisting of 3 sheets showing the proposed landscaping plans, submitted on 10-6-2023.

2. The applicant shall defend, indemnify, and hold harmless the City of American Canyon ("City"), its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, consultants, volunteers and agents from and against all claims, actions, including actions to arbitrate or mediate, damages, losses, judgments, liabilities, expenses and other costs, or proceedings against the City, its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, volunteers, or agents to attack, modify, set aside, void, or annul an approval, conditional approval, permit, entitlement, environmental document, environmental clearance, mitigation plan, or any other document or any of the proceedings, acts, or determinations taken, done, or made prior to granting of such approval, conditional approval, permit, entitlement, environmental clearance, environmental document, mitigation plan, or other documents, by the City, including, without limitation, an action against an advisory agency, appeal board, or legislative body within the applicable limitation period.

    The obligation to defend, indemnify and hold the City harmless shall include the payment of all legal costs and attorney's fees (including a third party award of attorney's fees), arising out of, resulting from, or in connection with the City's act or acts leading up to and including approval of any environmental document or mitigation plan granting approvals to the applicant, incurred on behalf of, or by, the City, its elected and appointed officials, officers, employees, representatives, attorneys, boards, commissions, volunteers and agents in connection with the defense of any claim, action, or proceeding challenging the entire or a portion of an approval, conditional approval, permit, entitlement or any other document of any related claim.

    The obligation to defend, indemnify, and hold the City harmless shall include, but not be limited to, the cost of preparation of any administrative record by the City, staff time, copying costs, court costs, or attorney's fees arising out of a suit or challenge contesting the adequacy of a permit, approval, conditional approval, entitlement, environmental document, mitigation plan, environmental clearance, or any other document or approval related to the applicant's project.

    The City will promptly notify the applicant of any claim, action, or proceeding and will cooperate fully in the defense. If the City fails to promptly notify the applicant of any claim, action, or proceeding,

or the City fails to cooperate fully in the defense, the applicant shall not be responsible to defend, indemnify, or hold harmless the City.

In the event a legal challenge to a City permit, approval, conditional approval, environmental document, environmental clearance, mitigation plan, entitlement or any other document, proceeding, determination, or action related to the applicant's project is successful, and an award of attorneys' fees is granted against the City, the applicant shall be responsible to timely pay the full amount of such an award.

3. Appeal. The approval shall become effective on the expiration of the appeal period, ten calendar days following the decision, unless an appeal to the City Council is filed. An appeal may be filed with the Community Development Director by filling out an Appeal Form accompanied by a fee of $795. This approval is also subject to return of the "Applicant Confirmation of Conditions of Approval" form signed by the property owner. Should an appeal period end on a Saturday, Sunday or holiday, the final day for filing an appeal shall be the following Monday, or the next business day following a holiday. If there is no appeal, this approval will be final on November 4, 2024.

4. The applicant is responsible for paying all charges related to the processing of this discretionary case application within 30 days of the issuance of the final invoice or prior to the issuance of building permits for this project, whichever occurs first. Failure to pay all charges shall result in delays in the issuance of required permits or the revocation of the approval of this application.

5. The date upon which the approval is final shall be considered the day of the imposition of the fees, dedications, reservations and exactions required by these conditions approval for the purposes of protesting the imposition pursuant to California Government Code Section 66020.

6. Expiration of this Approval. If no construction permits have been issued and construction commenced within one year of the date upon which this approval is final, the approval shall become null and void and of no effect. An extension of time may be granted by the Community Development Director upon the written request by a responsible party before the expiration of the one-year period, provided that the Director can make the findings that there have been no substantial changes in the approved plans, and that there has been no change of circumstances which would prevent any of the required findings of approval being made.

7. All plans submitted for review and approval and all development shall be in substantial conformance with the approved exhibits, except where modified by a condition of approval. The Community Development Director or designee may approve minor changes to the project as approved by the Planning Commission on the plans submitted for the construction permits with a determination that the changes are in substantial compliance with the representation of the project as reviewed by the Planning Commission and City Council, that the proposed change will be in compliance with the required development standards, and the change will not materially affect adjacent private or public property.

8. Prior to obtaining a building permit, all parties working on the project must obtain a business license from the City.

9. Prior to issuance of each building permit, the applicant shall submit a Certificate of Compliance from the Napa Valley Unified School District (NVUSD). For more information contact NVUSD Developer Fees - developerfees@nvusd.org.

10. The Applicant is responsible to remove any graffiti that occurs on the site within 24 hours.

Planning

11. The conditions of this Permit shall be printed on the first sheet of each plan set submitted for a building permit pursuant to this Conditional Use Permit, under the title "Conditional Use Permit Conditions". The second sheet may also be used if the first sheet is not of sufficient size to list all of the conditions. The sheet(s) containing the conditions shall be of the same size as those sheets containing the construction drawings; 8-1/2" by 11" sheets are not acceptable.

12. All new rooftop equipment is required to be screened. The parapet shall be opaque and equal in height to the top of the rooftop mechanical equipment.

13. Plans submitted for building permits shall include all exterior site lighting including building mounted lighting, lighting within the parking areas and along walkways that provide a minimum of 1-foot candle illumination of these areas. Lighting shall be shielded as appropriate and avoid light spillage or glare from the project site. Exterior light fixtures on buildings shall be oriented downward and shall be shielded to return potential light and glare impacts.

<u>Landscape and Irrigation Plans</u>

14. The applicant shall agree to a licensing agreement that requires them to maintain the landscaping within the right-of-way along the project frontage. Prior to final inspection of the building permit, the applicant shall amend their facilities operation and maintenance plan (O&M plan) to include this activity.

15. The landscape plan shall comply with the requirements of the California Government Code 65591 et. seq. known as the Water Conservation in Landscaping Act as set out in the model water efficient landscape ordinance adopted by the California Department of Water Resources and amended in 2015. All plant material shall be served by a city-approved automatic irrigation system.

16. All trees shall be 15 gallons in size or larger.

17. Prior to the issuance of a certificate of occupancy, all landscaping shall be completed and the project's landscape architect shall provide a written certification that all plant materials have been installed in accordance with the approved landscape plan.

18. All planting shall be maintained in good growing condition. Such maintenance shall include, where appropriate, pruning, mowing, weeding, cleaning of debris and trash, fertilizing and regular watering. Whenever necessary, planting shall be replaced with other plant materials to insure continued compliance with applicable landscaping requirements. Required irrigation systems shall be fully maintained in sound operating condition with heads periodically cleaned and replaced when missing to insure continued regular watering of landscape areas, and health and vitality of landscape materials.

19. All tree stakes and ties shall be removed within one year following installation or as soon as trees are able to stand erect without support.

20. Clear sight triangles shall be maintained at all driveways. Low-lying plantings and other site fixtures, including signs, shall be no taller than 30 inches within the site's vision triangles.

Signs

21. Signs for the project shall require a sign permit approval from the Community Development Department. This requirement does not apply to traffic signs, building addressing or directional signs for wayfinding.

Building and Safety

22. Prior to the final inspection, the applicant shall submit a letter of certification to the Building Official from the project architect, civil engineer, and landscape architect certifying that all improvements have been constructed in accordance with the approved building plans.

23. Construction and grading activities on the site shall be limited to between 7:00 a.m. and 6:00 p.m. Monday through Friday. Work between the hours of 6:00 pm and 7:00 am and work on weekends and holidays requires prior written approval from the Building Official. If weekends and holiday work is approved construction and grading activities on the site shall be limited to between 8:00 a.m. to 6:00 p.m. on Saturdays, and between 10:00 a.m. and 6:00 p.m. on Sundays and State and Federal holidays.

    a. Construction activities shall be limited to daylight hours between 7:00 a.m. and 6:00 p.m., except for required nighttime construction for concrete pours onsite that would comply with the City of American Canyon's Noise limits for construction activities. In addition to the Chief Building Official's approval, all property owners within 300 feet of the site and all residents who have expressed concern over nighttime construction noise during the construction of the SDG Commerce 330 project and the SDG Commerce 217 project, or otherwise have requested notification regarding project construction, also shall be notified by the applicant. The City shall be pre-notified of nighttime construction.

24. Prior to issuance of a building permit, the applicant shall submit a plan for the diversion of at least 70 percent of the debris from the building demolition and construction. The plan shall include the qualified recycler that will be used, the methods of managing diversion of construction materials on site, and the proposed documentation that will be submitted to confirm that the diversion goal has been met.

25. Prior to issuance of a building permit, the applicant shall submit a request to the Chief Building Official for any proposed deferred submittals on a form provided by the Building and Safety Division. The Deferred Submittal request shall include a justification for each proposed deferred submittal. The Chief Building Official shall issue a determination on each proposed deferred submittal request.

26. Prior to the final inspection, a Certified Access Specialist (CASp) shall submit a letter certifying that all improvements have been constructed in compliance with applicable state and federal accessibility standards. Determination of consistency shall be subject to the review and approval of the Building Official.

Fire District

27. New and modified buildings shall conform to requirements set forth in the currently adopted editions of the California Building Code, California Fire Code, as amended by the City of American Canyon and American Canyon Fire Protection District, and Nationally Recognized Standards.

28. There shall be no deferred submittals for fire protection equipment and related utilities. Fire protection plans shall not be attached to or bound with the building plan submittal package. This

includes but is not limited to Automatic Fire Sprinkler, Fire Alarm, Fixed Fire Protection and Civil plans.

29. All Fire related underground piping and fire appurtenances shall be shown on the Civil plan submittal. In addition to the Civil plan submittal, at least (1) plan set under separate cover shall be submitted to American Canyon Building Division for routing to the American Canyon Fire Protection District detailing all underground piping and related fire appurtenances including but not limited to underground piping, underground sweep detail, underground trench details showing depth of burial, type of backfill, manufacturer's specifications of piping, valves joints, fittings and calculated size and locations of thrust blocks, hydrants locations (designate public or private), gate shut-off valves, PIV's, FDC's, fire pumps, fire pump and/or riser rooms.

30. Underground utility contractor, architect and fire sprinkler contractor shall coordinate the location of risers and control valves prior to the issuance of a building permit.

31. Fire Department plan review shall be based on the information submitted at the time of permit application. Any changes to the approved/permitted scope of work including additions, alterations, demolition, repair or a change in occupancy/use may impact the project requirements, including but not limited to the installation of additional fire protection systems or components.

32. An approved water supply capable of supplying the required fire flow for fire protection systems shall be provided to all premises upon which facilities or buildings are hereby constructed or moved into or within the City. Required fire flow and hydrant distribution shall be in accordance with Appendix B and C of the California Fire Code. Applicant shall demonstrate on plan submittal; square footage of each building on plan and provide the required fire flow information. Applicant shall demonstrate that the number and spacing of onsite fire hydrants meets the California Fire Code.

BUILDING FIRE FLOW REQUIREMENTS – CFC TABLES B105.2 & B105.1(2)
INFORMATION BELOW IS A SAMPLE AND FOR REFERENCE ONLY

Table B105.1(2) – Building size = 129, 600 square feet
Construction type = Type IIA
FF = 5,250 gpm at 20 psi
Duration = 4 hours
Table B105.2 – Fire sprinkler allowance = - 50%
5,250 – 2,625 = 2,625 gpm
FF = 2,625 gpm @ 20 psi
Duration = 2 hours
Table CC105.1 – Approximate number of hydrants = 3
Average spacing = 400 feet + 25% allowable increase = 500
Maximum distance from street or frontage = 225 feet = 50% allowable increase = 337.5

33. Fire Protection systems shall be installed in accordance with provisions set forth in the California Fire Code as amended by the City of American Canyon and the applicable National Fire Protection Association Standard.

34. The fire protection equipment shall be located within an interior room having an approved exterior access door or in an exterior enclosure attached to the building, specifically, for the purpose of housing such equipment.

35. Fire Apparatus Access Roads shall be designed in accordance with provisions set forth in the California Fire Code Chapter 5 and Appendix D as amended by the City of American Canyon and the applicable Public Works Standard.

36. Fire apparatus access roads shall have an unobstructed minimum width of 20 feet (curb to curb) and a minimum unobstructed vertical clearance of 13' 6". They shall have an all-weather paved surface capable of supporting a GVW of 71,000 pounds. Where hydrants are provided – the width shall be a minimum of 26-feet.

37. Access roads shall be completed with all-weather surfaces prior to the stockpiling of combustible materials or beginning combustible construction. Fire apparatus access shall be provided to within 150 feet of the most remote portions of all building from an approved exterior route. If this cannot be achieved fire apparatus turnarounds will be needed.

38. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. Vertical traffic calming in the form of speed pumps, humps or dips are prohibited along fire access roads without prior approval of the fire Code Official. The minimum width and clearances established in Section 503.2.1 shall be maintained at all times.

39. When required by the Fire Chief, fire apparatus access roads shall be designated as Fire Lanes and appropriate signs and/or markings installed in accordance with the California Vehicle Code and approved City standards.

40. Where applicable improvement plan submittals for permit shall include locations of fire lane red curbing and fire lane signage. Please refer to and include City Public Works Standard FP-2A & 2B with plan submittals for permitting.

41. The City of American Canyon requires that a fire hydrant be in service within 250 feet of the furthest point of construction prior to the stockpiling of combustible materials for the beginning of construction.

42. Fire Department Connections (FDC) shall be located not more than 100 ft. from the nearest fire hydrant.

Public Works

<u>General Conditions of Approval</u>

43. The Applicant shall be responsible for all City map check, plan check and inspection costs. The Applicant shall establish a Developer Deposit Account with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer. Additional funds may be required based upon actual costs.

44. All improvements shall be designed in accordance with the American Canyon Municipal Code (ACMC), City of American Canyon Engineering Standard Plans and Specifications for Public Improvements (City Standards), except as specifically noted otherwise in these conditions.

45. All existing overhead utilities, both on-site and along project frontages, and all new utilities to serve the project, shall be placed underground. Exceptions may be allowed for surface mounted transformers, pedestal mounted terminal boxes and meter cabinets.

46. Unless otherwise explicitly permitted, all existing wells, septic tanks and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Services or other designated agency. If there are none, the project engineer shall provide a letter describing the scope of the search done to make this determination.

47. A detailed Soils Investigation/Geotechnical Report shall be prepared and submitted for review. The report shall address, at a minimum, potential for liquefaction, R-values, expansive soils and seismic risk. The improvement plans shall incorporate all design and construction criteria recommended in the Geotechnical Report.

48. A drainage report prepared by a California Registered Civil Engineer shall be submitted for review with the initial submittal of the Improvement Plans. The report shall include detailed hydrologic and hydraulic calculations to support the design and sizing of all public and private drainage facilities including storm drains and detention facilities. The report shall address existing downstream storm drain facilities and hydraulic conditions which may impact the design of proposed facilities and improvements.

49. A detailed post-construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared and submitted for review and approval. The SWCP shall be prepared in accordance with the latest edition of the *Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual* and the requirements of the State Water Resources Control Board Phase II Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ).

50. A Post Construction Stormwater Operations and Maintenance Plan that includes a plan sheet showing all storm drain and water quality infrastructure that is to be maintained, along with detailed instructions and schedules for the ongoing maintenance and operation of all post-construction stormwater BMPs shall be submitted for review and approval by the City Engineer. Once approved, the property owner(s) shall enter into an agreement with the City that provides the terms, conditions, and security associated with the ongoing requirements of the post-construction Stormwater Best Management Practices.

51. The Applicant shall secure all necessary rights-of-way and public and private easements for both onsite and offsite improvements. The Applicant shall prepare all necessary legal descriptions and deeds.

52. To the extent any offsite public improvements require the acquisition of property not currently owned by the Applicant or the City, the Applicant shall first make a good-faith effort to acquire the necessary property rights, however if the Applicant makes such an effort and is unable to acquire such rights, then the Applicant may request the City acquire the necessary property rights through the exercise of eminent domain provided that the Applicant enters first into an agreement with the City to pay for all costs incurred by the City to acquire such rights and if the City does not acquire the rights necessary to allow the offsite public improvements to be completed by the Applicant within statutory timeline provided by law, then the Applicant shall be relieved of the obligation to construct those off-site improvements only to the extent they require property not currently owned by the Applicant or the City. The Applicant shall make a good-faith effort to identify and acquire the necessary property rights at the earliest opportunity.

53. The Applicant shall submit site Improvement Plans, prepared by a registered Civil Engineer, for review and approval by the City. The final plan set shall include all civil, landscape and joint trench drawings under a single cover sheet. No final grading or other construction shall be performed until the Improvement Plans have been approved. The Applicant shall not begin clearing, grubbing, or rough grading at the site prior to approval of the Improvement Plans, unless explicitly approved by the City of American Canyon through the standard grading and utilities only permit process. An Encroachment Permit is required for any work within City right of way. Encroachment Permits will not be issued prior to the approval of the Improvement Plans.

54. All public water service laterals or services (domestic, recycled and fire water) shall include approved backflow prevention devices.

55. Cathodic protection shall be provided for all water valves, fittings, hydrants, meters, backflow devices, ductile iron pipe, and other metal appurtenances, regardless of the findings of any soils corrosivity analysis.

56. The Applicant shall keep adjoining public and private streets free and clean of project dirt, mud, materials, and debris during the construction period in accordance with an approved SWPPP and Erosion and Sediment Control Plan using appropriate BMPs and as is found necessary by the City Engineer.

57. If any hazardous material is encountered during the construction of this project, all work shall be immediately stopped and the Fire Department, Napa County Department of Environmental Services or other designated agency, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.

58. Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines, shall be installed in a manner that will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.

59. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil and/or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.

60. All new fire hydrants shall be covered with burlap sacks until the hydrants have been tested and found to be in conformance with City flow requirements. No storage of combustible materials or construction of building shall be permitted until all hydrants meet City flow requirements.

61. Prior to placing the final lift of asphalt, all public storm drain and sanitary sewer lines shall be video inspected at the Applicant's expense. All video media (CD, DVD, or portable hard drive) shall be submitted to the City. If any inadequacies are found, they shall be repaired prior to the placement of the final lift of asphalt.

62. All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this Project shall be the responsibility of the Applicant and shall be repaired to the satisfaction of the City at the Applicant's expense.

63. After all of the new underground utilities within existing public streets have been installed, the entire affected areas shall be milled and repaved to present a neat finished pavement area. Multiple trench patches are not acceptable.

64. All construction stormwater pollution prevention best management practices (BMP's) shall be installed as the first order of work and in accordance with the *State Water Resources Control Board's General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2022-0057-DWQ, as amended)*, the Applicant's Storm Water Pollution Prevention Plan (SWPPP), and the City's Erosion and Sediment Control Plan in accordance with the City's MS4 Permit. All stormwater BMP's shall be maintained to the satisfaction of the Qualified SWPPP Developer (QSD), Qualified SWPPP Practitioner (QSP), and the City Engineer.

65. With the exception of water used for loading and testing of potable water lines, all construction water used for the project shall be obtained from a source other than American Canyon potable water sources. The Applicant shall provide verification that an outside source of construction water, e.g., recycled water, has been established and will be available for the duration of the project construction.

66. The development shall comply with the City's Zero Water Footprint policy.

67. All landscaping shall be designed to use recycled water for irrigation. Recycled water landscaping shall be designed to comply with California Code of Regulations Title 22 and shall include design details to prevent runoff of recycled water. The irrigation system shall include an ET/SMART controller.

Public Works Special Conditions of Approval

68. The Applicant shall submit Improvement Plans prepared by a registered Civil Engineer (Engineer of Record) in substantial conformance with the preliminary civil plans titled "SDG Commerce 220 Distribution Center Conditional Use Permit Plans, prepared by RSA+, July 21, 2023 (Preliminary Plans), except as modified by these conditions.

69. Improvement Plans shall be tied to the State of California coordinate system.

70. The Applicant shall construct all of the on-site private water, recycled water, sewer storm drainage and storm quality **"Private Improvements"** generally shown on the Plans and more specifically described below. All private water, sewer, storm drainage and stormwater quality improvements shall be designed in accordance with the City of American Canyon Engineering Standard Plans and Specifications for Public Improvements (City Standards), except as specifically noted otherwise in these conditions.

    a. Storm Drain Facilities:
    Construct private on-site drainage facilities, detention facilities, and other appurtenances to collect and convey all surface drainage to an approved private storm drain facility or outfall. Onsite drainage facilities shall provide for the positive drainage of all adjacent upstream or upgrade properties to prevent ponding. Existing run-on from adjacent properties shall not be obstructed and shall be conveyed onsite. Off-site peak storm water discharge shall not exceed 90% of the undeveloped peak flow from the 24-hour, 100-year event. The storm drains and detention facilities shall be substantially consistent with the Preliminary Plans. However, the sizing of all storm drains and detention facilities shall be determined by the approved final drainage report.

The private storm drain system shall disperse the discharge in such a manner as to simulate the existing sheet flow conveyance. Calculations shall be provided for all spreaders to determine peak discharge velocities and depths for the 10-, 25- and 100-year events.

b. Stormwater Quality Facilities:
Permanent on-site private post-construction stormwater treatment BMPs shall be designed and constructed in accordance with the approved final SWCP. It is understood that minor revisions to the layout of the bio-retention facilities from what is shown on the Plans may be proposed during design and included in the final SWCP.

c. Recycled Water Services:
Separate recycled water services shall be provided for domestic non-potable uses and irrigation uses.

71. Prior to SUBMITTAL OF THE IMPROVEMENT PLANS, the Applicant shall:
   b. Submit the City's "Improvement Plan Checklist".
   c. Pay an initial cash deposit for City plan check services in amount to be determined by the City prior to the time of submittal. The Project engineer shall contact City staff to discuss submittal details to determine initial deposit amount.
   d. Provide the following:
      (1) Public Street Repair Plan
      (2) Utility Plan and Joint Trench Plan
      (3) Construction Storm Water Pollution Prevention Plan (SWPPP) and a City Erosion and Sediment Control Plan (ESCP)
      (4) Drainage Report
      (5) Post-Construction Stormwater Control Plan (SWCP)
      (6) Geotechnical Report
      (7) Construction Traffic Control Plan.
   e. Pothole and physically determine (by way of a survey performed by the Engineer of record) the actual horizontal location and vertical depth of all existing underground utilities throughout the proposed area of work and provide the design of all new utility installations required to serve the project including a schedule for implementation of such work as to prevent disrupting of utility service to adjacent properties.

72. Prior to APPROVAL OF THE IMPROVEMENT PLANS, the Applicant shall:

   a. Provide written acknowledgment by the Geotechnical Engineer of Record that the Plans incorporate all design and construction criteria specified in the Geotechnical Report.
   b. Subject to the terms of Condition 51, furnish proof of the acquisition of all rights of entry and/or temporary and permanent easements necessary to construct the project and the location of all such rights on the Plans.
   c. Furnish proof that all permits that may be required by the California Department of Fish & Game, State and Regional Water Quality Control Board, US Army Corps of Engineers and any other regulatory agencies with jurisdiction over the proposed construction have been obtained.
   d. Complete and submit the City's Erosion and Sediment Control Plan (ESCP) Template. Applicant may refer to a SWPPP, as appropriate, by referencing page number within the SWPPP that addresses the requirements of the ESCP.

e. Submit a copy of the Notice of Intent and WDID# for coverage under the State Water Resources Control Board' General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2022-0057-DWQ).

73. Prior to COMMENCEMENT OF CONSTRUCTION ACTIVITIES, the Applicant shall:

a. Pay off all current account balances with the City of American Canyon.
b. Pay an inspection fee in amount to be determined at the time of commencement for the City's inspection of the Public Improvements.
c. Conduct a pre-construction meeting with representatives of the City whereby the Applicant, the Legally Responsible Party (LRP), Qualified SWPPP Practitioner (QSP), Qualified SWPPP Developer (QSD), and/or the Contractor provides the following:
    (1) One (1) job-site copy of the latest edition of the City Standards for the Contractor use.
    (2) One (1) job-site copy of the SWPPP for use by the LRP, QSP, QSD, and Contractor.
    (3) Electronic copies of Improvement Plans and SWPPP

74. Prior to APPROVAL OF A BUILDING PERMIT, the Applicant shall:

a. Pay all account balances and current City and American Canyon Fire District fees (Mitigation & Capacity) based on the rates in effect at the time of permit issuance. These fees include, but may not be limited to the following: Traffic Mitigation, General Plan Update, Civic Facilities, Fire District, Water Capacity, Zero Water Footprint Mitigation and Wastewater Capacity.

75. Prior to APPROVAL OF CERTIFICATE OF OCCUPANCY, the Applicant shall:

a. Restore all adjacent off-site road surfaces to pre-project conditions.
b. Submit a certification by the Geotechnical Engineer of Record that all the work has been completed in substantial conformance with the recommendations in Soils Investigation/Geotechnical Report.
c. Provide a digital copy of the Improvement Plans that include all as-built or field changes, in digital Portable Document Format (.pdf) and AutoCAD (.dwg), compatible with the City's current Autocad version, and tied to the NAD83 (California Zone 2, feet) coordinate system.
d. Provide a letter stating that all of the Developer’s Conditions of Approval have been met.
e. Provide a letter from the Civil Engineer of Record certifying that all the site improvements were constructed and inspected in substantial conformance with the approved plans and City Standards.
f. Enter into and record a post-construction Stormwater Operations and Maintenance Agreement with the City.
g. Subject to the terms of Condition 14, enter into and record a post-construction Landscape Operations and Maintenance Agreement with the City for the landscaping within the public right-of-way along the project frontage.
h. Record a private access easement over the adjacent lands of SDG 217 and SDG 330. Applicant shall prepare legal description, plat and deed and submit them to the City for review.
i. Establish a shared maintenance agreement or such similar agreement between the owners of SDG 217, SDG 220, and SDG 330, for the long term and ongoing maintenance of the shared access driveway. Submit the draft agreement to the City for review.

Mitigation Measures

76. According to **Mitigation Measure (MM) AIR-1**, the following dust control measures, as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the proposed project and implemented during construction:

    a. All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least two times per day and/or non-toxic soil stabilizers shall be applied to exposed nonpaved surfaces.
    b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard.
    c. All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
    d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
    e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes, as required by the California airborne toxics control measure (ACTM) Title 13, Section 2485 of California Code of Regulations. Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
    f. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. all equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
    g. The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The construction contractor shall take corrective action within 48 hours. The BAAQMD's and the City's phone numbers shall also be visible to ensure compliance with applicable regulations.

77. According to **MM BIO-1a**, prior to ground disturbance that occurs during the nesting season for Swainson's hawk (generally March 20 to July 20), a qualified Biologist shall conduct Swainson's hawk nesting surveys within a 0.5-mile radius of the project site to determine whether nests are occupied. Occupancy shall be determined through observation of all accessible areas, including from public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) on and near the project site.

    The qualified Biologist shall follow the survey protocol outlined in the California Department of Fish and Wildlife (CDFW) *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, which recommends surveys according to the following survey periods:

    a. **January–March 20:** Conduct one survey total.
    b. **March 20–April 5:** Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset.
    c. **April 5–April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset.
    d. **April 21–June 10:** Initiating surveys are not recommended. Monitoring of known nest sites only.
    e. **June 10–July 30:** (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset.

    Pre-construction surveys shall be completed for at least the two survey periods immediately prior to a project's initiation.

78. According to **MM BIO-1b**, following the implementation of MM BIO-1a, if nests are located and determined to be occupied, minimization measures must be implemented, and construction monitoring conducted as follows:

    a. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson's hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment.
    b. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern.
    c. No tree containing an active Swainson's hawk nest shall be removed.

79. According to **MM BIO-1c**, a qualified Biologist shall conduct a habitat assessment for wintering burrowing owl, and surveys if habitat is present. The qualified Biologist shall follow the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation habitat assessment and survey methodology prior to project activities occurring during the burrowing owl wintering season from September 1 to January 31. The habitat assessment and surveys shall encompass a sufficient buffer zone to detect owls nearby that may be impacted, which shall be a minimum of 1,640 feet unless otherwise approved in writing by the CDFW. Surveys shall include four nonbreeding season surveys spread evenly throughout the nonbreeding season pursuant to the CDFW 2012 Staff Report. Time lapses between surveys or project activities shall trigger subsequent surveys, as determined by a qualified Biologist, including but not limited to a final survey within 24 hours prior to ground disturbance and before construction equipment mobilizes to the project area. The qualified Biologist shall have a minimum of 2 years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections.

    Detected burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan shall be subject to CDFW review. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a "take" avoidance, minimization, or mitigation measure; therefore, off-site habitat compensation shall be included in the eviction plan. Habitat compensation acreages shall be approved by CDFW, as the amount depends on site-specific conditions and must be completed before project construction unless otherwise approved in writing by CDFW. Habitat compensation shall also include placement of a conservation easement and preparation and implementation of a long-term management plan prior to project construction.

80. According to **MM BIO-1d**, the applicant shall implement the protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

    a. If the proposed project requires vegetation to be removed during the nesting season (February 1 to August 31), pre-construction surveys shall be conducted no more than 7 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present within the project site and buffer area as appropriate.
    b. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum noise disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and/or yellow

caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).

c. The qualified Biologist shall monitor the active nest during construction activities and modify the protection zone accordingly to prevent project related nest disturbance, until the young have fledged.

81. According to **MM BIO-1e**, the applicant shall conduct Roosting Bat pre-construction surveys and avoidance.

    A qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) within 250 feet of project construction activities (where accessible).

    If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Grading shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

82. According to **MM BIO-1f**, a qualified Biologist (i.e., a Biologist with at least 2 years of experience conducting surveys for western pond turtle detections) shall submit a wildlife exclusion fencing plan to the California Department of Fish and Wildlife (CDFW) for review and approval prior to starting construction. Exclusion fencing shall be installed along the western perimeter of the project site to prevent the species from traveling from North Slough onto the project site during construction. A qualified Biologist shall survey the project site and adjacent habitat within 72 hours of the start of project activities to determine whether western pond turtle or their nests are present and guide the installation of the exclusion fence. If western pond turtles are discovered, a qualified Biologist with experience handling and relocating the species shall move the species to the nearest suitable habitat outside of the project area and exclusion fencing. If western pond turtle nests are found, CDFW shall be notified prior to starting project activities, and the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fence until eggs hatch and young turtles disperse to the adjacent North Slough. In addition, if nest(s) are located during surveys, moth balls (naphthalene) shall be sprinkled around the vicinity of the nest (no closer than 5 feet) to mask human scent and discourage predators. Grading within the nest site's 50-foot buffer area shall be delayed until the young leave the nest as determined by a qualified Biologist. If the CDFW allows translocation of any nestling pond turtles this shall be completed by a qualified Biologist under the direction of the CDFW.

83. According to **MM BIO-1g**, activities such as vegetation removal, grading, or initial ground-disturbing activities shall be conducted between November 1 and July 31 (outside of the overwintering season) to the extent feasible. If such activities must be initiated during the overwintering season (August 1 through October 31), a pre-construction overwintering survey shall be conducted by a qualified Biologist no more than 7 days prior to vegetation removal, grading, or initial ground disturbance. The

survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any colonies that could potentially be affected either directly or indirectly by project activities. If no colonies are present, then project activities can commence as scheduled. If a colony is present, project construction shall cease immediately to avoid all direct and indirect impacts and report the presence of the colony to the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and follow all recommendations provided by USFWS and CDFW.

84. According to **MM CUL-1a**, all construction personnel directly involved with project related ground disturbance shall attend a "tailgate" Worker Environmental Awareness Program (WEAP) training for archaeological resources. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology.

85. According to **MM CUL-1b**, an Archaeological Monitor reporting to the qualified Archaeologist, shall be present during the clearing, grading, and trenching phases of the proposed project to check for the inadvertent discovery of archaeological resources or human remains. Over the course of the proposed project, should the Archaeologist determine that the probability of inadvertent discovery is low, they may make a recommendation to the lead agency that monitoring be reduced to regular periodic or "spot-check" monitoring, or that monitoring may cease altogether.

86. According to **MM CUL-1c**, if buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the lead agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the Master Plan area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA Guidelines.

    If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the lead agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

    No further grading shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the lead agency where they would be afforded long-term preservation to allow future scientific study.

87. According to **MM CUL-3**, in the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

a. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98.
b. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:

    - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
    - The descendant identified fails to make a recommendation.
    - The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

- When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

88. According to **MM GEO-1**, prior to the issuance of the building permit, recommendations from the Geotechnical Engineering Investigation prepared by Krazan & Associates (Environmental Impact Report [EIR] Appendix E) shall be incorporated into all project plans and applicable construction-related permits and submitted to the City of American Canyon for review and approval.

89. According to, **MM GEO-5**, although extremely unlikely, should any significant paleontological resources (e.g., bones, teeth, well-preserved plant elements) be unearthed by the construction crew, their activities shall be diverted at least 15 feet from the find until a professional Paleontologist has assessed it and, if deemed significant, salvaged in a timely manner. Collected fossils shall be deposited in an appropriate repository, such as the University of California Museum of Paleontology (UCMP), where they shall be properly curated and made available for future research.

90. According to **MM HYD-1**, prior to the issuance of grading permits or building permits (whichever occurs first), the project applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) by preparing a Storm Water Pollution Prevention Plan (SWPPP) and submitting it, along

with a Notice of Intent (NOI), to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The City of American Canyon shall confirm that the applicant has prepared a SWPPP and obtained coverage under the General Permit prior to issuance of grading or building permits. The SWPPP shall identify a practical sequence for Best Management Practice (BMP) implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall address both the project site and adjacent parcel where soil stockpiles would be removed and the borrow pit would be created to provide fill for the project site. The SWPPP shall include but not be limited to the following elements:

a. Temporary erosion control measures shall be employed for disturbed areas.
b. No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months. Disturbed areas shall be covered with soil stabilizers, mulch, fiber rolls, or temporary vegetation.
c. Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures. drop inlets shall be lined with filter fabric/geotextile.
d. Discharge from the stormwater system shall be diffused in such a way as to mimic existing overland flow conditions.
e. The construction contractor shall prepare standard operating procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. this may include locating construction-related equipment and processes that contain or generate pollutants in a secure way, away from storm drains, gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities.
f. BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure.
g. In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance as an interim erosion control measure throughout the wet season.

Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a SWPPP in accordance with the requirements of the Statewide General Permit. The SWPPP shall be implemented during construction.

91. According to, **MM TRANS-2**, the proposed project shall develop a Transportation Demand Management (TDM) program to encourage employees to choose non-personal vehicle modes of transportation for commuting. This includes a commute trip reduction marketing initiative, through which the employer would disseminate information about available transportation options. Strategies would include encouraging ride sharing among project employees and linking them to resources to find rideshare partners working nearby, such as through the Napa Valley Transportation Authority (NVTA) V-Commute program or the regional 511.org program. Marketing materials can also inform employees of resources such as the Guaranteed Ride Home Program, which provides free rides home in emergency situations for employees using non-personal vehicle transportation modes.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 24th day of October, 2024, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Brando Cruz, Chair

ATTEST:

_____
Nicolle Hall, Deputy City Clerk

APPROVED AS TO FORM:

_____
William D. Ross, City Attorney

EXHIBITS:
A. CUP Plans
B. Confirmation of Conditions of Approval

SDG Commerce 220 CUP
Attachment 2.1 Exhibit A - CUP Plans

Preliminary Drawing Submission for:

SDG Commerce 220 Distribution Center

1055 Commerce Court
American Canyon, CA 94503
APN 058-030-069

ABBREVIATIONS

AB	ANCHOR BOLT
ABV	ABOVE
AC	ACOUSTICAL
AC	ASPHALT CONCRETE
A/C	AIR CONDITIONING
ADH	ADHESIVE
ADJ	ADJACENT, ADJUSTABLE
AFF	ABOVE FIN FLR
AGGR	AGGREGATE
AL	ALUMINUM
ALT	ALTERNATE
ANOD	ANODIZED
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
@	AT
BBD	BACKERBOARD
BD	BOARD
BEL	BELOW
BTWN	BETWEEN
BL	BUILDING LINE
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM, BENCH MARK
BO	BOTTOM OF
BOTT	BOTTOM
BRG	BEARING
BRK	BRICK
BRKT	BRACKET
BRZ	BRONZE
BS	BACKSPLASH
BUR	BUILT-UP ROOF
BVL	BEVEL
BW	BOTH WAYS
	COURSE
CABT	CABINET
CB	CATCH BASIN
CEM	CEMENT
CHAM	CHAMFER
CBD	CHALK BOARD
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CM	CONST MANAGER
CMU	CONC MASONRY BLOCK
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CPT	CARPET
CNSK	COUNTERSINK
CT	CERAMIC TILE
CY	CUBIC YARD
DTL	DETAIL
DF	DRINKING FOUNTAIN
DI	DRAIN INLET
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVIDER
DL	DEAD LOAD
DN	DOWN
DP	DEEP
DS	DOWNSPOUT
DWG	DRAWING
DWR	DRAWER
ENCL	ENCLOSURE
(E)	EXISTING
EA	EAST
EB	EACH
EDF	EXPANSION BOLT
EJ	ELEC DRINK FOUNTAIN
EL	EXPANSION JOINT
ELEC	ELEVATION
ELEV	ELECTRICAL
	ELEVATOR, ELEVATION

EQ	EQUAL
EQUIP	EQUIPMENT
ESMT	EASEMENT
EW	EACH WAY
EXIST	EXISTING
EXP	EXPANSION, EXPOSURE
EXT	EXTERIOR
EN	EDGE NAIL
FA	FIRE ALARM
FB	FACE BRICK
FBD	FIBERBOARD
FBGL	FIBERGLASS
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	F.E. CABINET
FF	FINISH FLOOR
FG	FIXED GLASS
FH	FIRE HOSE
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FL'G	FLASHING
FLR	FLOOR
FLUOR	FLUORESCENT
FO	FACE OF
FOB	FACE OF BRICK, BLOCK
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FPRF	FIREPROOF
FRP	FBGL REINF PANEL
FRTD	FIRETREATED
FS	FULL SCALE
FT	FOOT, FEET
FTG	FOOTING
FUR	FURRING
FURN	FURNISH(ING)
FUT	FUTURE
FN	FIELD NAIL
GA	GAUGE
GALV	GALVANIZED
GB	GYPSUM BOARD
GC	GENERAL CONTRACTOR
GCMU	GLAZED CMU
GD	GRADE
GL	GLASS
GOVT	GOVERNMENT
GS	GALVANIZED STEEL
GYP	GYPSUM
H	HORIZONTAL
(H)	HANDICAP
HB	HOSE BIBB
HC	HOLLOWCORE
HDBD	HARDBOARD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HR	HOUR
HFS	HALF FULL SCALE
HRU	HEAT RECOVERY UNIT
ID	INSIDE DIAMETER
IN	INCH
INCL	INCLUDED
INST	INSTALL
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
IP	IRON PIPE
JST	JOIST
JT	JOINT
KD	KNOCKDOWN
L	LENGTH
LAM	LAMINATE
LAV	LAVATORY
LB	LAG BOLT

LF	LINEAL FOOT
LKR	LOCKER
LL	LIVELOAD
LVR	LOUVER
LTWT	LIGHTWEIGHT
MACH	MACHINE
MAT	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MC	MEDICINE CABINET
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBRANE
MET	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MANHOLE
MI	MALLEABLE IRON
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
ML	METAL LATH
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MT	METAL THRESHOLD
MTD	MOUNTED
MUL	MULLION
(N)	NEW
N	NORTH
NAT	NATURAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/	OVER
OBS	OBSCURE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHANG
OPNG	OPENING
OPP	OPPOSITE
PBD	PARTICLEBOARD
PCC	PRECAST CONCRETE
PCPL	PORTLAND CEM PLAS
/	PER
PERF	PERFORATED
PF	PREFABRICATED
PFIN	PREFINISHED
PJF	PREFORMED JOINT FILLER
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PM	PRESSED METAL
PNL	PANEL
PNT	PAINT
POL	POLISH
PSI	POUNDS / SQUARE INCH
PRF	PREFORMED
PROP	PROPERTY
PT	POINT
PT	PRESSURE TREATED
PTN	PARTITION
PVC	POLY VINYL CHLORIDE
PVMT	PAVEMENT
PWD	PLYWOOD
QT	QUARRY TILE
R	RISER
RA	RETURN AIR GRILL
RB	RESILIENT BASE
RCP	REINFORCED CONC PIPE
RD	ROOF DRAIN
REF	REFRIGERATER
REINF	REINFORCING
REM	REMOVE
REQD	REQUIRED
RF	RESILIENT FLOOR
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY

RT	RESILIENT TILE
RWD	REDWOOD
RWL	RAINWATER LEADER
S	SOUTH
SA	SUPPLY AIR GRILL
SC	SOLID CORE
SCHED	SCHEDULE
SD	STORM DRAIN
SECT	SECTION
SF	SQUARE FOOT
SH	SHELVE
SHT	SHEET
SIM	SIMILAR
SJ	STEEL JOIST
SK	SINK
SLNT	SEALANT
SMS	SHEET METAL SCREW
SP	STRUCTURAL PLYWOOD
SPEC	SPECIFICATION
SQ	SQUARE
S&R	SHELF & ROD(OR POLE)
SS	SERVICE SK, STNLESS STL
STD	STANDARD
STL	STEEL
STN	STAIN
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
T & TR	TREAD
TA	TOILET ACCESSORY
T&B	TOP & BOTTOM
TBD	TACKBOARD
TEL	TELEPHONE
TEMP	TEMPERATURE
TG	TEMPERED GLASS
THOLD	THRESHOLD
T&G	TONGUE & GROOVE
TH	THICK(NESS)
TLT	TOILET
TO	TOP OF
TOC	TOP OF CURB OR CONC
TOD	TOP OF DECK
TOJ	TOP OF JOIST
TOP	TOP OF PAVEMENT
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRTD	TREATED
TRZO	TERRAZZO
TTB	TEL TERMINAL BD
TYP	TYPICAL
UC	UNDERCUT
UL	UNDERWRITERS LAB
UR	URINAL
UON	UNLESS OTHERWISE NOTED
V	VERTICAL
VAR	VARIABLE
VAT	VINYL ASBESTOS TILE
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VG	VERTICAL GRAIN
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
WB	WOOD BASE
WD	WOOD
WDW	WINDOW
WG	WIRE GLASS
WH	WATER HEATER
WM	WOOD MOULDING
W/O	WITHOUT
WP	WEATHERPROOF
WPT	WORK POINT
WR	WATER RESISTANT
WS	WOOD SCREW
WNST	WAINSCOT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

SYMBOLS

GRID LINE

MATCH LINE

DATUM POINT

WINDOW TYPE

DOOR NUMBER

REVISION

SECTION CUT

DETAIL CUT

SHEET INDEX

ARCHITECTURAL:

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A1 SITE PLAN
A1.1 ENLARGED PARKING LOT PLANS
A1.2 TRASH ENCLOSURE & MONUMENT SIGN
A2 OVERALL BUILDING FLOOR PLAN
A2.1 ROOF PLAN
A3 BUILDING ELEVATIONS
A3.1 PARTIAL BUILDING ELEVATIONS
A4 BUILDING SECTIONS

LANDSCAPE:

L1 LANDSCAPE SITE PLAN
L2 PLANT LEGEND
L3 WATER USAGE HYDROZONE PLAN

CIVIL:

UP1.0 COVER SHEET
UP2.0 PAVING & LAYOUT PLAN
UP3.0 GRADING PLAN: SE
UP3.1 GRADING PLAN: NE
UP3.2 GRADING PLAN: NW
UP3.3 GRADING PLAN: SW
UP3.4 SITE SECTIONS
UP4.0 UTILITY PLAN: SE
UP4.1 UTILITY PLAN: NE
UP4.2 UTILITY PLAN: NW
UP4.3 UTILITY PLAN: SW
UP5.0 EROSION & SEDIMENT CONTROL PLAN

ELECTRICAL:

E1.1 PHOTOMETRIC SITE PLAN

PROJECT CONTACTS

OWNER
SDG COMMERCE 220, LLC
413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906
Contact: John Wojtas

GENERAL CONTRACTOR:
Industrial & Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906
Contact: Jason Scrivner

STRUCTURAL ENGINEER:
Vaziri Structural Engineering
905 4th Street
San Rafael, CA 94901
415 453 0733

CIVIL ENGINEER:
RSA+ Civil Engineers
1515 Fourth Street
Napa, CA 94559
707 252 3301

ELECTRICAL CONTRACTOR:
Bosley Electric Company
935 Arden Way
Sacramento, CA 95815
916 568 5180

GEOTECHNICAL ENGINEER:
Krazan & Associates, Inc.
4320 Orange Grove Avenue St E-F
Sacramento, CA 95841
916 564 2200

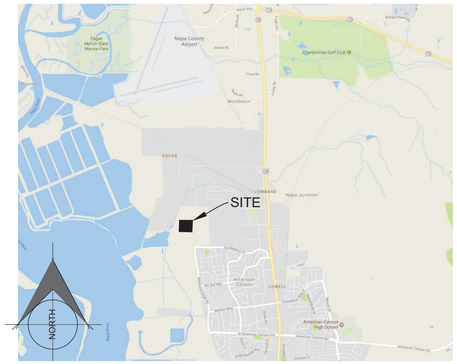
NOTES

1. CONTRACTOR SHALL UTILIZE A CONSTRUCTION WASTE MANAGEMENT PLAN (CWM) IN ACCORDANCE WITH CALGREEN SECTION 5.408, OF RECYCLING OR REUSE OF 65% OF NON HAZARDOUS DEMOLITION WASTE.

2. CONTRACTOR SHALL CONTROL POLLUTANTS DURING CONSTRUCTION IN ACCORDANCE WITH CALGREEN SECTION 5.504. PROVIDE PROTECTION TO DUCT OPENINGS AND MECHANICAL EQUIPMENT, COMPLY WITH AIR POLLUTION CONTROL MEASURES AND VOC LIMIT FOR ALL FINISH MATERIALS, ADHESIVES, SEALANTS AND CAULKS.

3. THE BUILDING SHALL BE EQUIPPED WITH AN ESFR FIRE SPRINKLER SYSTEM.

VICINITY MAP



PROJECT DATA

ADDRESS:	1055 Commerce Court
A.P.N.	058-030-069
ZONING:	REC
GROSS BUILDING AREA:	2 SF
OCCUPANT LOAD:	OCCUPANT LOAD at 1/500 = 439 PERSONS
BUILDING OCCUPANCY:	FUTURE B/S1
BUILDING TYPE:	TYPE III-B, SPRINKLERED
STORIES:	MAX STORIES 3, CBC TABLE 504.4
HEIGHT:	MAX HEIGHT 75', CBC TABLE 504.3
SPRINKLERED:	NEW ESFR TYPE
BUILDING CODES:	2022 CALIFORNIA BUILDING CODE 2022 CALIFORNIA PLUMBING CODE 2022 CALIFORNIA MECHANICAL CODE 2022 CALIFORNIA ELECTRICAL CODE 2022 CAL GREEN BUILDING STANDARDS 2022 CAL ENERGY CODE
WILD LAND URBAN INTERFACE	NO
SPECIAL FLOOD HAZARD ZONE	AE (SEE CIVIL DRAWINGS)

SITE AREA BREAKDOWN:

GROSS SITE AREA	443,005	SF	100 %
BUILDING AREA	219,834	SF	49.6 %
NON PERMEABLE	116,114	SF	26.2 %
LANDSCAPE	40,893	SF	9.2 %
POND AREAS	37,957	SF	8.6 %
WETLANDS and SETBACK	28,207	SF	6.4 %

BUILDING BREAKDOWN:

GROSS BUILDING	219,834	SF
DISTRIBUTION CENTER	219,120	SF
ELECTRICAL ROOM	390	SF
FIRE PUMP ROOM	324	SF

SCOPE OF WORK:

CONSTRUCT A NEW WINE STORAGE DISTRIBUTION CENTER ON AN APPROXIMATE 10.17 ACRE PARCEL ON COMMERCE COURT. THE DEVELOPMENT INCLUDES 23 LOADING DOCKS, 3 GRADE LEVEL OVERHEAD DOORS, AND PROVISIONS FOR FUTURE OFFICES SPACES. INTERIOR WILL INCLUDE WAREHOUSE LIGHTING AND REFRIGERATION.

⚠ PLANNING AND CONDITIONAL USE PERMIT NOTES:
1. CITY OF AMERICAN CANYON, CONDITIONAL USE PERMIT FILE NUMBER PL23-0017
2. PROJECT ENTITLEMENT IS A CONDITIONAL USE PERMIT.

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Phone 707 320 4030

Owner:

SDG Commerce 220, LLC
413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906

Project:

SDG Commerce 220 Distribution Center
1055 Commerce Court
American Canyon, CA 94503

APN 058 030 069

Contractor:

Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637

Sheet:

TITLE SHEET

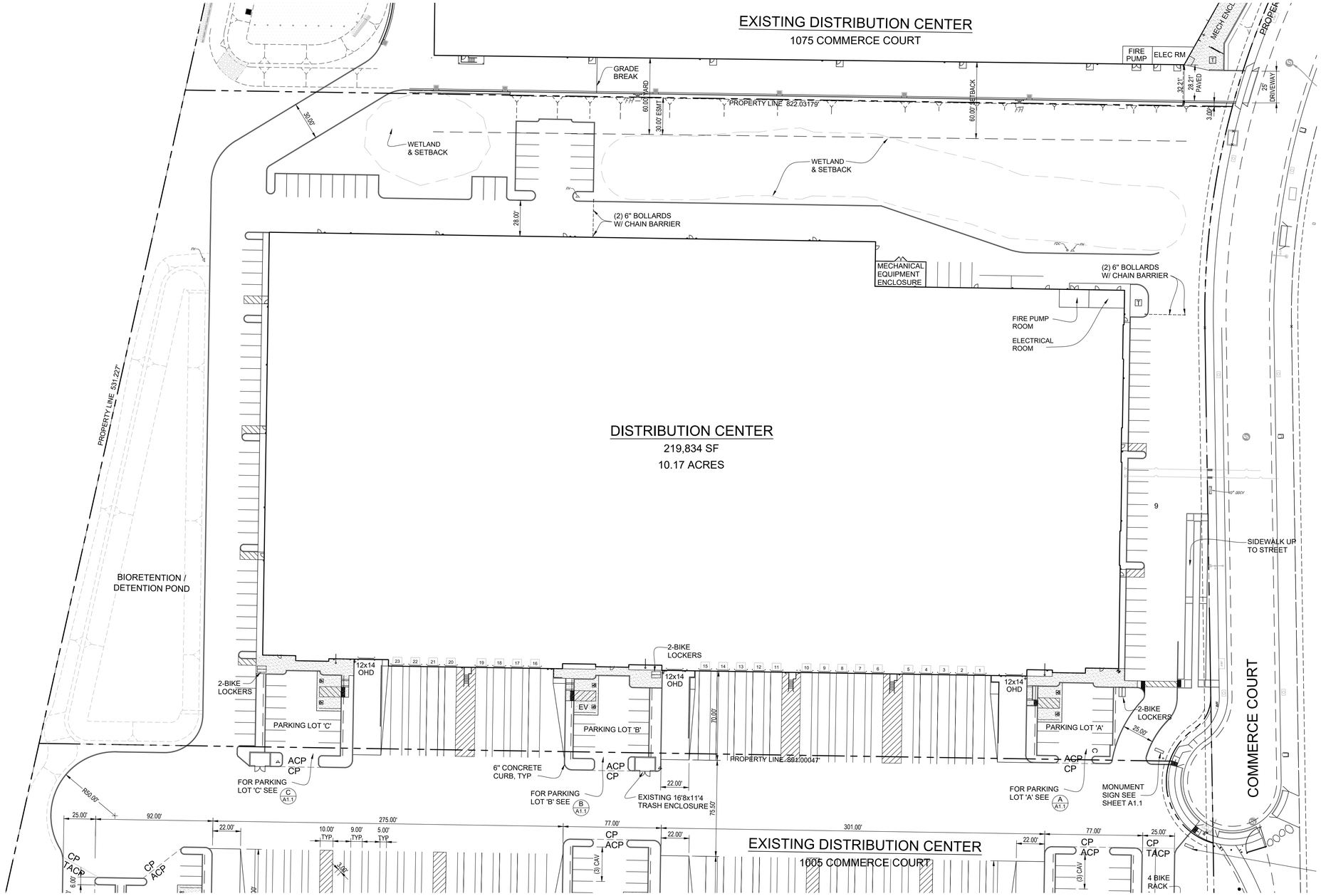
DATE: August 1, 2023

REVISION:
⚠ September 20, 2023

ARCHITECTS STAMP: SHEET:

T1

3346



SITE PLAN

SCALE: 1" = 40'

NORTH

LEGEND:

- LIGHT STANDARD 30' HIGH SEE ELECTRICAL
- FIRE HYDRANT SEE CIVIL
- CONCRETE
- ACP — AUTO ASPHALT PAVING SEE CIVIL
- TACP — FIRE TRUCK ASPHALT PAVING SEE CIVIL
- CP — CONCRETE PAVING SEE CIVIL
- 4" YELLOW PAINTED LINES @ 3' O.C.
- C — DENOTES COMPACT PARKING STALL SEE ALSO SHEET A1.1

PARKING COUNT:

5	ACCESSIBLE STALLS (5) REQ'D
103	REGULAR STALLS
1	COMPACT STALLS

ELECTRIC VEHICLE STALLS

1	VAN ACCESSIBLE (EVSE)
5	ELECTRIC VEHICLE (EVSE)
19	ELECTRIC VEHICLE CAPABLE (EVCS)
134	TOTAL PARKING

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Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
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Sheet:

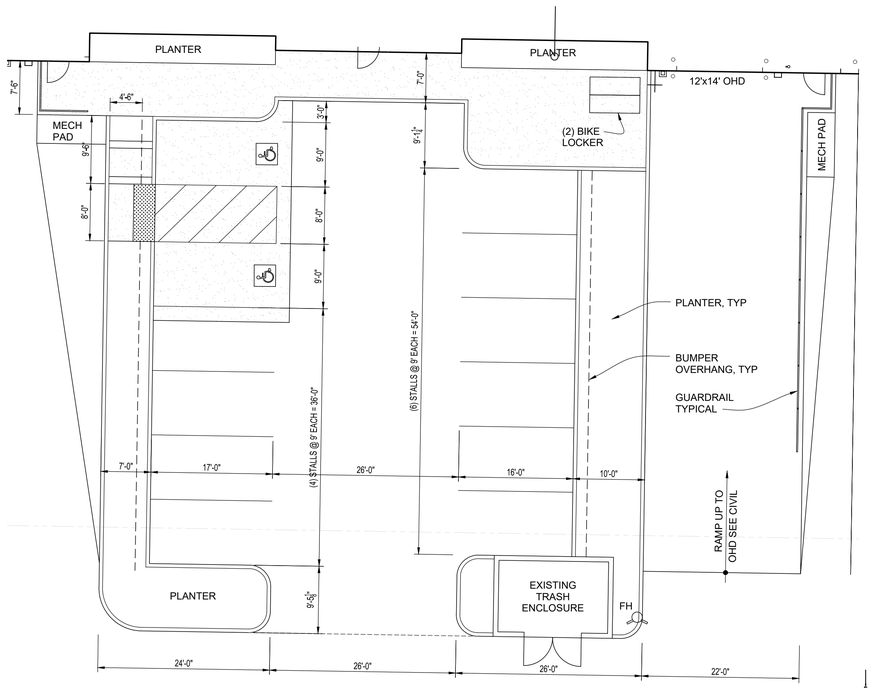
PRELIMINARY SITE PLAN

DATE: August 1, 2023

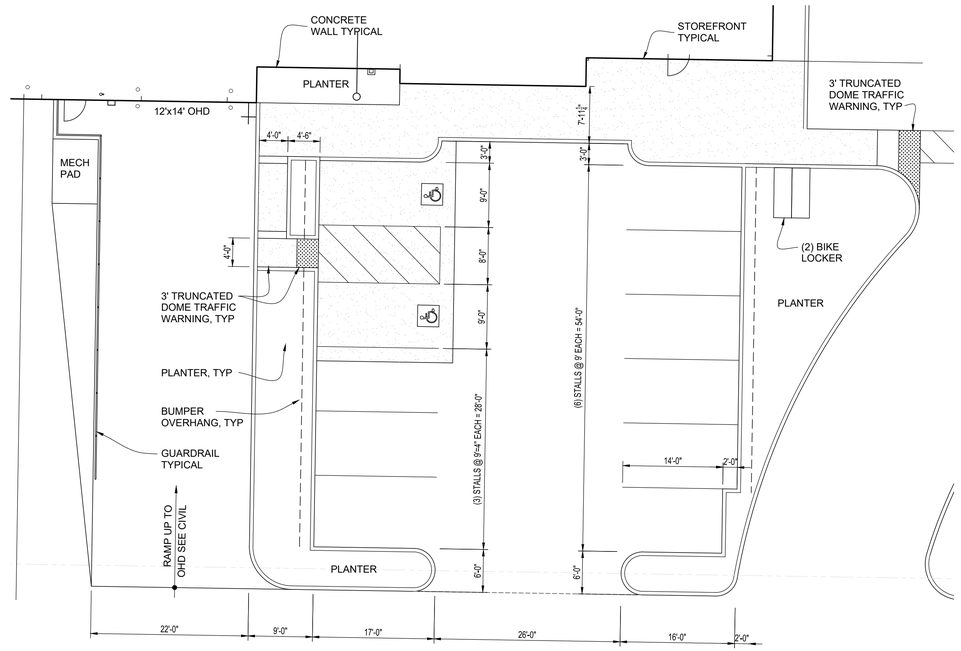
REVISION:

ARCHITECTS STAMP: SHEET:

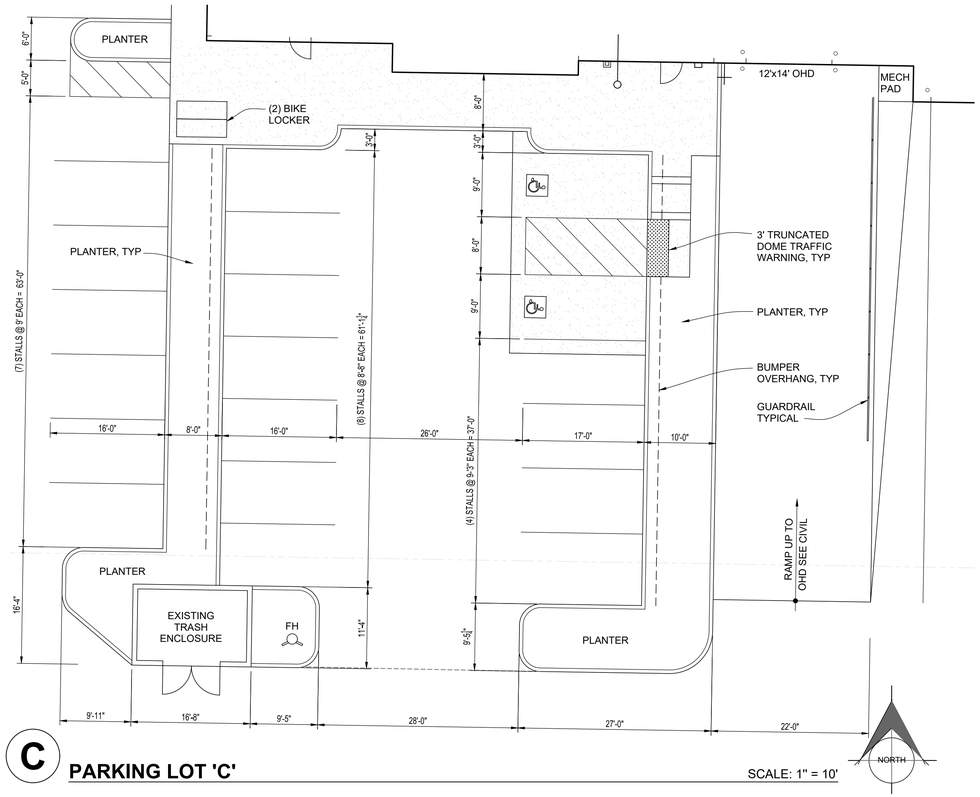
A1



B **PARKING LOT 'B'** SCALE: 1" = 10'



A **PARKING LOT 'A'** SCALE: 1" = 10'



C **PARKING LOT 'C'** SCALE: 1" = 10'

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Owner:

SDG Commerce 220, LLC
413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906

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1055 Commerce Court
American Canyon, CA 94503

APN 058 030 069

Contractor:

Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
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Sheet:

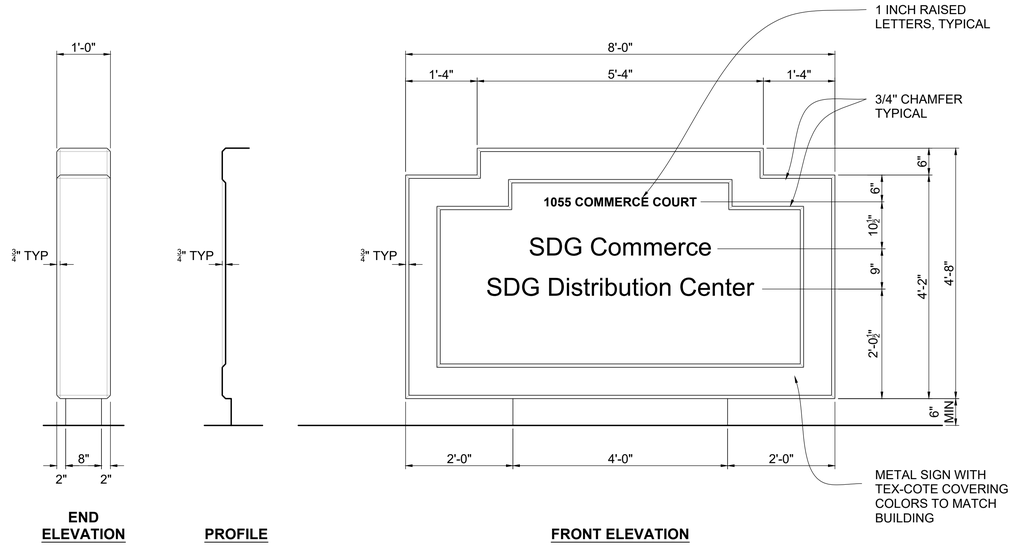
PARKING LOT PLANS

DATE: August 1, 2023

REVISION:

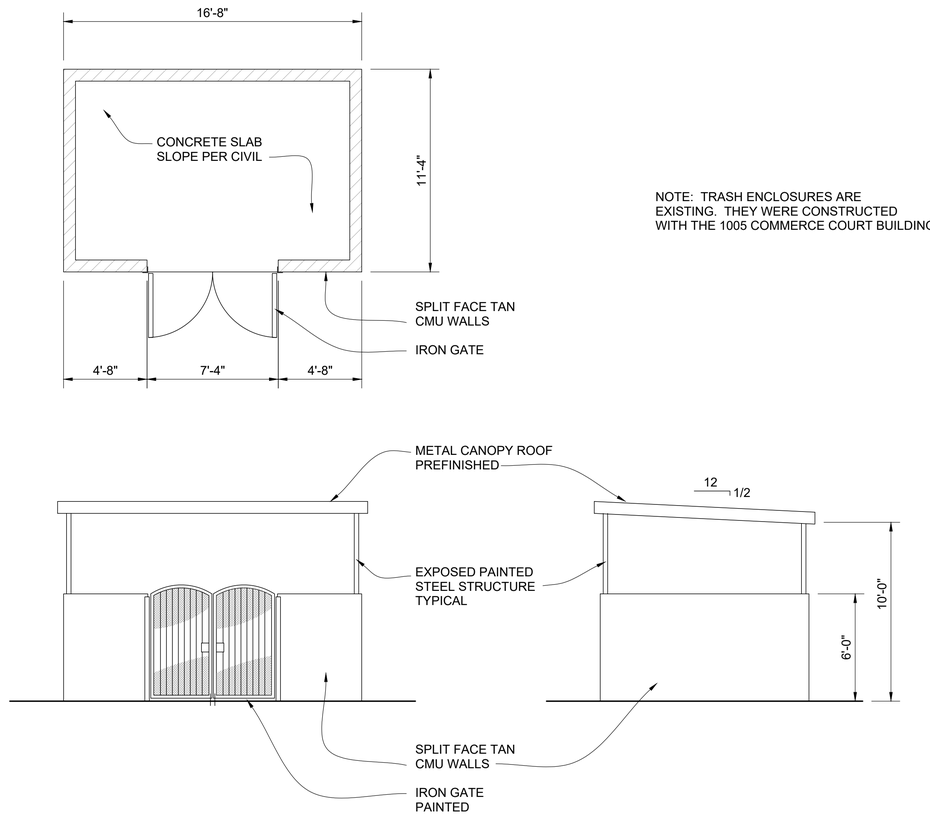
ARCHITECTS STAMP: SHEET:

A1.1



1 MONUMENT SIGN SEPARATE PERMIT REQUIRED

3/4" = 1'-0"



NOTE: TRASH ENCLOSURES ARE EXISTING. THEY WERE CONSTRUCTED WITH THE 1005 COMMERCE COURT BUILDING.

2 EXISTING TRASH ENCLOSURE

SCALE: 1/4" = 1'-0"

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Owner:

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Madera, CA 93637
559 674 0906

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APN 058 030 069

Contractor:

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Sheet:

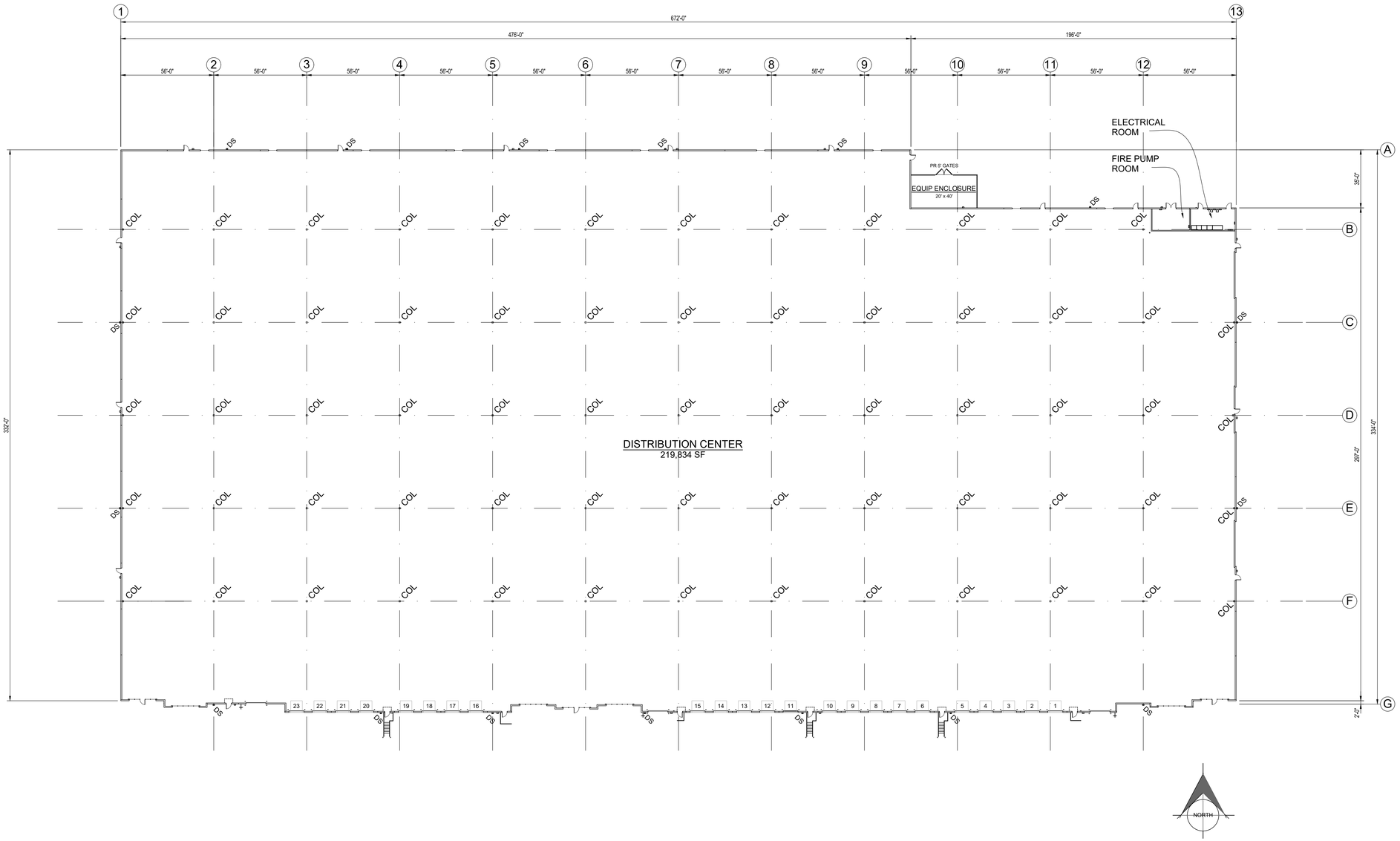
SITE DETAILS

DATE: August 1, 2023

REVISION:

ARCHITECTS STAMP: SHEET:

A1.2



FLOOR PLAN

SCALE: 1/32"" = 1'-0"

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APN 058 030 069

Contractor:

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413 W. Yosemite, Suite 105
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Sheet:

FLOOR PLAN

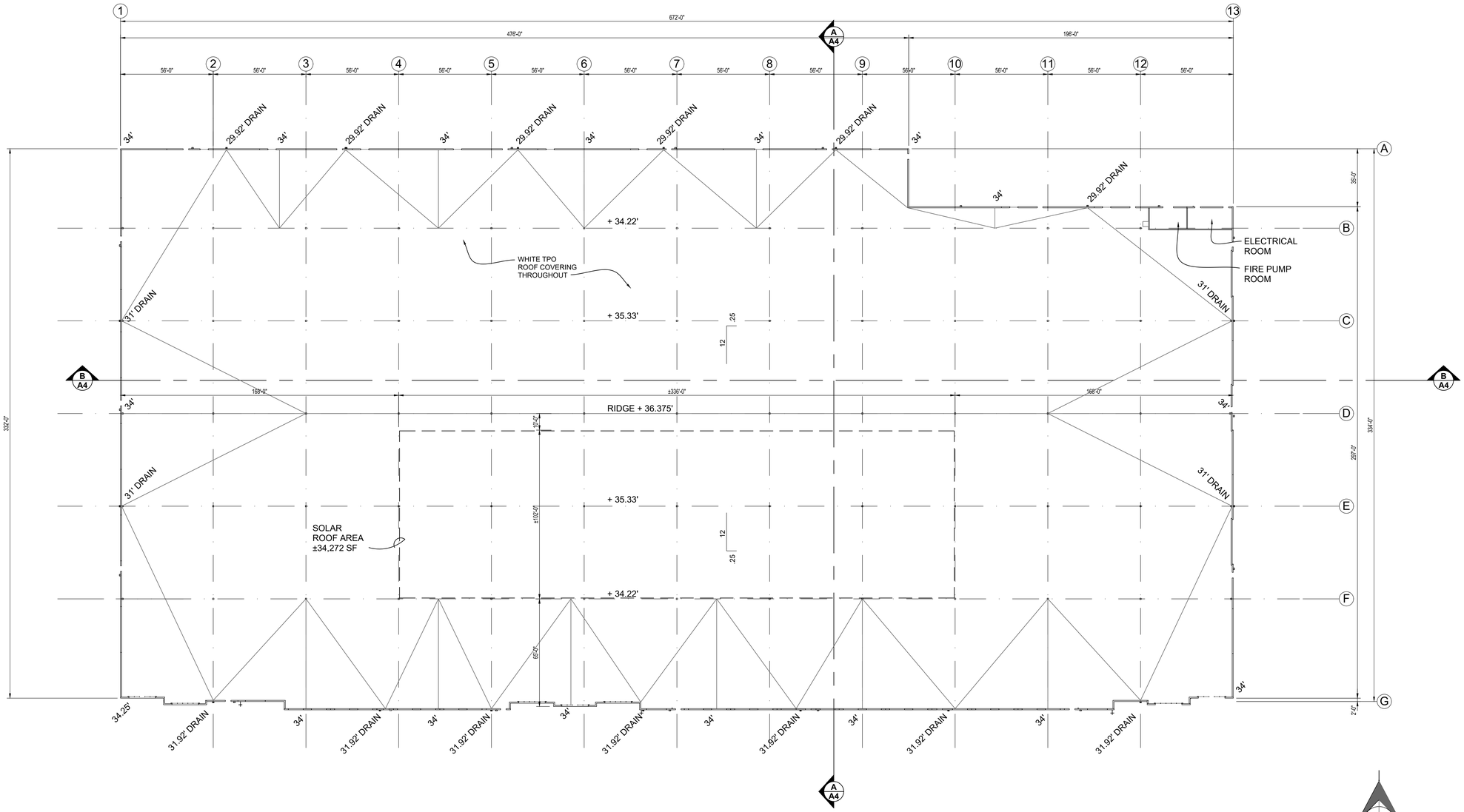
DATE: August 1, 2023

REVISION:
June 27, 2023

ARCHITECTS STAMP: SHEET:

A2

3350



NOTE: TOP OF ROOF ELEVATIONS ARE TO DRAINAGE POINTS.
DRAINAGE POINTS ARE AT TOP OF 5" RIGID INSULATION.

ROOF PLAN

SCALE: 1/32"" = 1'-0"

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Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
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Sheet:

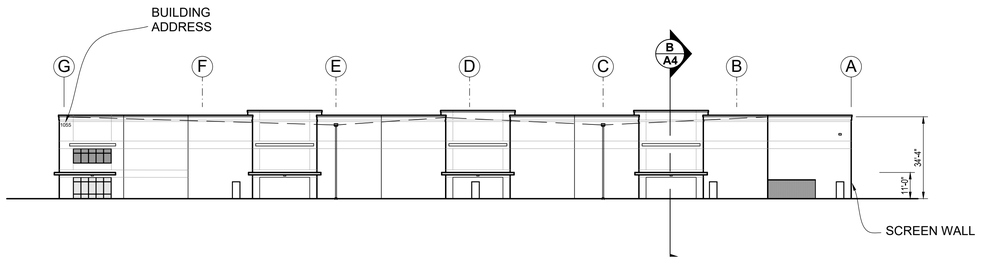
ROOF PLAN

DATE: August 1, 2023

REVISION:
1 September 20, 2023

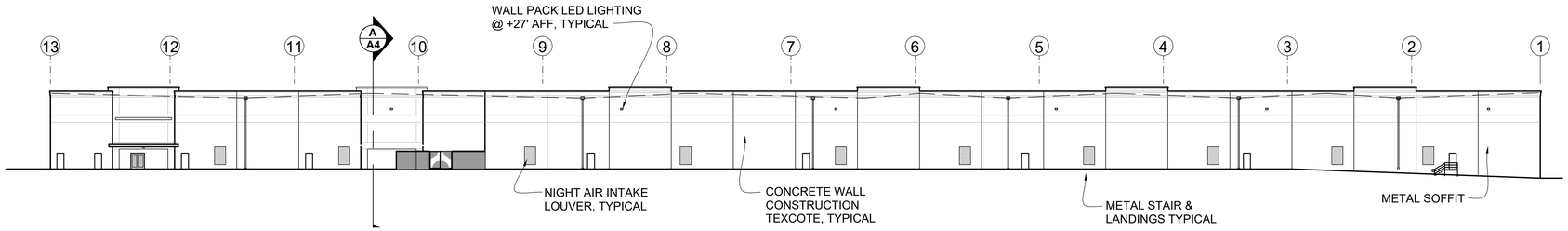
ARCHITECTS STAMP: SHEET:

A2.1



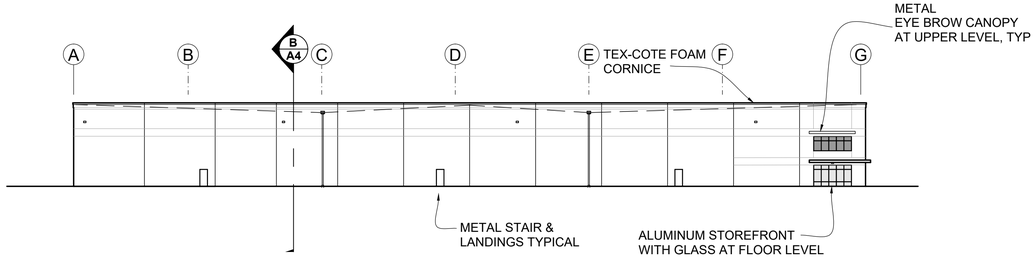
EAST ELEVATION

SCALE: 1" = 30'



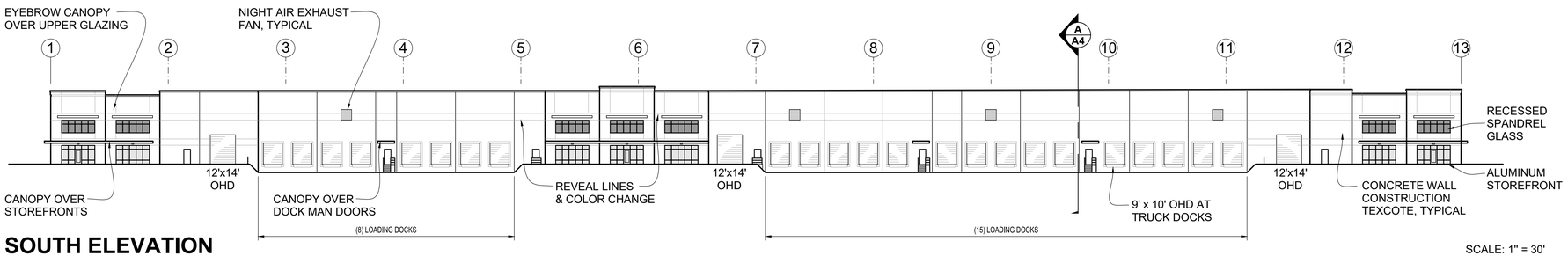
NORTH ELEVATION

SCALE: 1" = 30'



WEST ELEVATION

SCALE: 1" = 30'



SOUTH ELEVATION

SCALE: 1" = 30'

TEXCOTE / PAINT COLOR SCHEDULE:
Colors are Kelley Moore Paint Company

1. ACCENT COLOR #1
   Nectar of the Gods
   KMA48-5
2. ACCENT COLOR #2
   Sacred Vortex
   KM4573
3. BODY COLOR #1
   Cobblestone Street
   KM4571
4. BODY COLOR #2
   Dry Dock
   KM4574

BUILDING HEIGHT
RIDGE + 36.375'
EAVE + 32.2'
AVERAGE ROOF HEIGHT +34.28'

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APN 058 030 069

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Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637

Sheet:

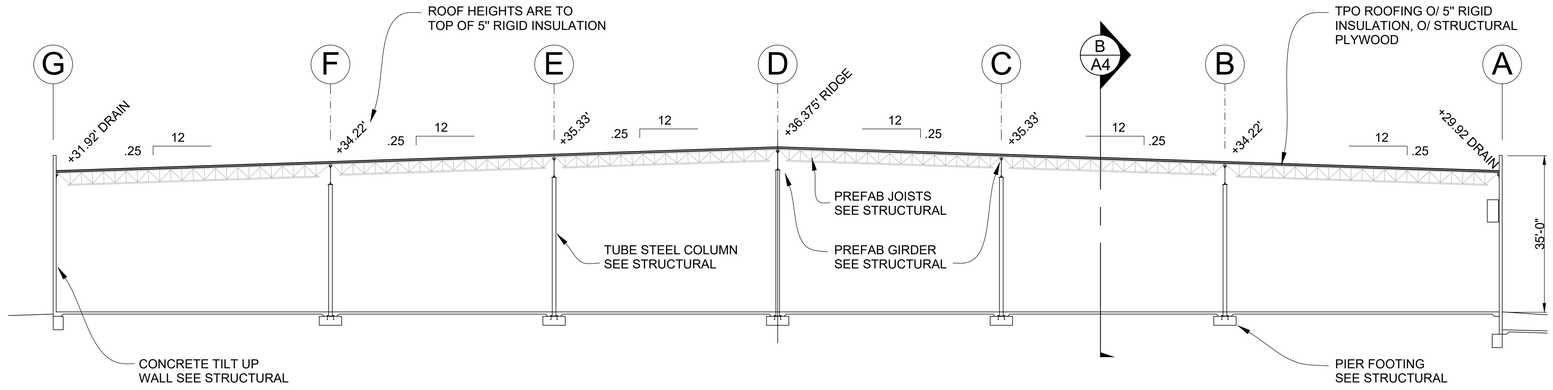
BUILDING ELEVATIONS

DATE: August 1, 2023

REVISION: June 27, 2023

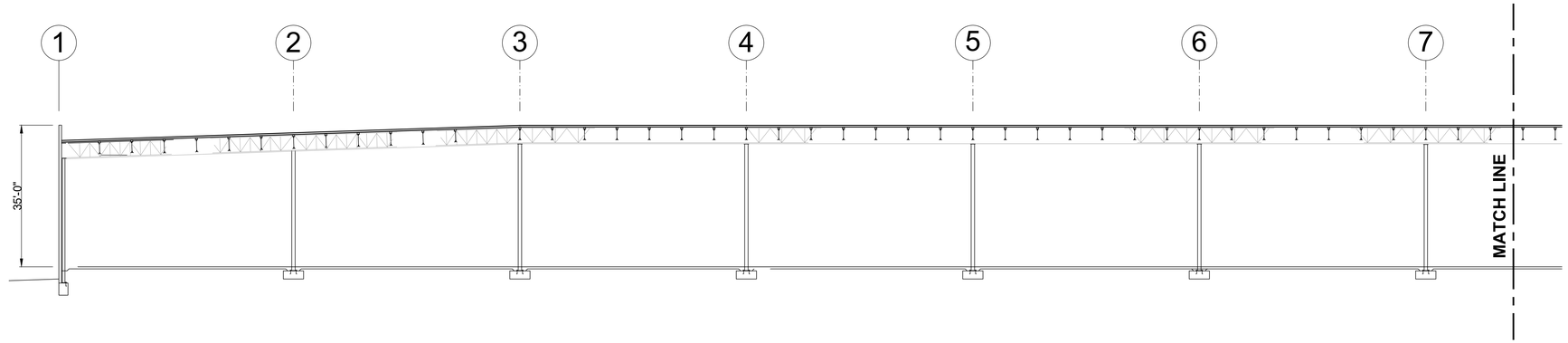
ARCHITECTS STAMP: SHEET:

A3



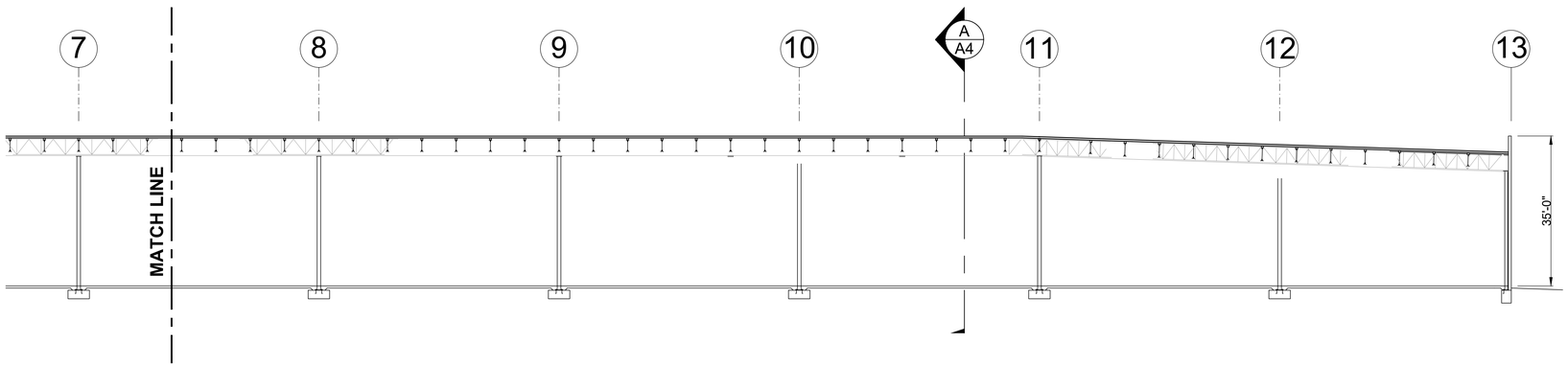
SECTION 'A'

SCALE: 1/16" = 1'-0"



SECTION 'B' - WEST HALF

SCALE: 1/16" = 1'-0"



SECTION 'B' - EAST HALF

SCALE: 1/16" = 1'-0"

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PO Box 1649
Coeur d'Alene, Idaho
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413 W. Yosemite, Suite 105
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Project:

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American Canyon, CA 94503

APN 058 030 069

Contractor:

Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637

Sheet:

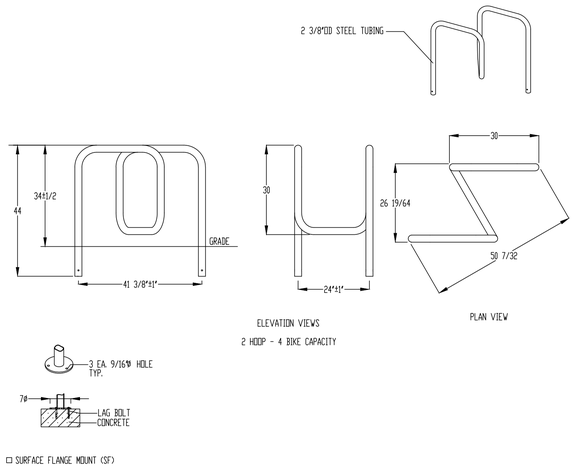
BUILDING SECTIONS

DATE: August 1, 2023

REVISION:

ARCHITECTS STAMP: SHEET:

A4





GENESIS BIKE RACK - GNS-4-SF
4 BIKE, SURFACE MOUNT
POWDER COAT FINISH - CUSTOM COLOR TBS
RAL COLOR TO MATCH BLDG ACCENT COLOR
MANUF. MADRAX 1-800-448-7931

FOUR BIKE - BIKE RACK BY MADRAX

N.T.S.

American Canyon Grassland Mix with Forbes

Lbs. /Acre	Species / Common Name
6.00	Hordeum brachyantherum var. californicum, California Barley (NCN)
12.00	Stipa pulchra, Purple Needlegrass - Santa Clara
9.00	Stipa cernua, Nodding Needlegrass – Contra Costa
6.00	Elymus glaucus, Blue Wildrye – Contra Cost
4.00	Festuca rubra, Molate Red Fescue – Contra Costa
1.50	Clarkia purpurea, Purple Farewell to Spring – Santa Clara
2.00	Eschscholzia californica, Native California Poppy – Alameda
1.00	Collinsia heterophylla, Chinese Houses (NCN)
2.00	Sisyrinchium bellum, Blue Eyed Grass San Mateo

POND — Streambank Retention Basin Mix – Robust - MODIFIED

Lbs./Acre	Species / Common Name – 38.25 lbs per acre
13	Carex barbarea, Santa Barbara Sedge
16	Leymus triticoides, Yolo Creeping Wildrye
4.5	Festuca rubra, Molate Fescue
1.5	Juncus effusus, Pacific Rush
1	Juncus patens, Blue Rush
.25	Artemisia douglasiana, Mugwort
2	Carex divulsa, Berkeley Sedge

NOTE:
HYDROSEED INSTALLATION AND PREPARATION PER MANUFACTURER'S SPECIFICATIONS

NON IRRIGATED HYDROSEED MIXES BY PACIFIC COAST SEED

TRACY, CA 925-373-4417 WWW.PCSEED.COM

PLANT LEGEND

TREES

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	W.U.	P.F.
	ARBUTUS 'MARINA'- STD.	NCN	36" BOX	1	L	0.2
R	ARBUTUS 'MARINA'- STD. -RELOCATED	NCN	X	2	L	0.2
	LAGERSTROEMIA I. 'MUSKOGEE' STD.	CRAPE MYRTLE	15 GAL	19	L	0.2
	LAURUS N. 'SARATOGA' STD.	SWEET BAY	24" BOX	7	L	0.2
	PLATANUS X ACERIFOLIA 'COLUMBIA' STD.	LONDON PLANE TREE	15 GAL	9	M	0.5
R	PLATANUS X A 'COLUMBIA' STD.- RELOCATED	LONDON PLANE TREE	X	11	M	0.5
	PLATANUS RACEMOSA STD.	CALIFORNIA SYCAMORE	15 GAL	5	M	0.5

SHRUBS/PERENNIALS

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	W.U.	P.F.
	ABELIA X GRANDIFLORA' KALEIDOSCOPE'	VARIEGATED GLOSSY ABELIA	1 GAL	4' O.C.	M	0.5
	ABELIA X GRANDIFLORA' CONFETTI'	VARIEGATED GLOSSY ABELIA	1 GAL	4' O.C.	M	0.5
	ABUTILON X HYBRIDUM 'NABOB'	RED FLOWERING MAPLE	5 GAL	5' O.C.	M	0.5
	ARCTOSTAPHYLOS D. 'HOWARD MCMINN'	VINE HILL MANZANITA	5 GAL	8' O.C.	L	0.2
	BERBERIS T. 'ATROPURPUREA'	RED LEAF JAPANESE BARBERRY	5 GAL	6' O.C.	M	0.5
	BERBERIS T. 'ROSE GLOW'	ROSE GLOW JAPANESE BARBERRY	5 GAL	4' O.C.	M	0.5
	CARPENTERIA C. 'ELIZABETH'	BUSH ANEMONE	5 GAL	4' O.C.	M	0.5
	CISTUS LADANIFER	CRIMSON SPOT ROCKROSE	5 GAL	4' O.C.	L	0.2
	COLEONEMA P. 'SUNSET GOLD'	S.G. BREATH OF HEAVEN	1 GAL	5' O.C.	M	0.5
	CORREA P. 'PINK FLAMINGO'	AUSTRALIAN FUCHSIA	1 GAL	3' O.C.	L	0.2
	EUONYMUS J. 'GREEN SPIRE'	GREEN SPIRE EUONYMUS	5 GAL	2' O.C.	L	0.2
	GREVILLEA L. 'MT. TAMBORITHA'	WOOLLY GREVILLEA	1 GAL	4' O.C.	L	0.2
	MAHONIA 'GOLDEN ABUNDANCE'	G.A. OREGON GRAPE	5 GAL	8' O.C.	M	0.5
	NANDINA D. 'MONUM'	PLUM PASSION HEAVENLY BAMBOO	5 GAL	3' O.C.	L	0.2
	PHORMIUM 'BRONZE BABY'	NEW ZEALAND FLAX	1 GAL	4' O.C.	L	0.2
	PHORMIUM 'GUARDSMAN'	NEW ZEALAND FLAX	5 GAL	8' O.C.	L	0.2
	PHORMIUM 'MAORI CHIEF'	NEW ZEALAND FLAX	5 GAL	7' O.C.	L	0.2
	PHORMIUM 'SHIRAZ'	NEW ZEALAND FLAX	1 GAL	4' O.C.	L	0.2
	PHORMIUM 'TONY TIGER'	DWARF NEW ZEALAND FLAX	1 GAL	2' O.C.	L	0.2
	PHOTINIA X FRASERI	FRASER PHOTINIA	5 GAL	10' O.C.	M	0.5
	PITTOSPORUM T. 'MARJORIE CHANNON'	VARIEGATED TOBIRA	5 GAL	8' O.C.	L	0.2
	PITTOPORUM T. 'TURNER'S VARIEGATED DWARF'	DWARF TOBIRA	1 GAL	3' O.C.	L	0.2
	PITTOSPORUM T. 'WHEELER'S DWARF'	DWARF TOBIRA	1 GAL	5' O.C.	L	0.2
	RHAMNUS A. 'VARIEGATA'	VARIEGATED ITALIAN BUCKTHORN	15 GAL	8' O.C.	L	0.2
	RHAMNUS C. 'EVE CASE'	EVE CASE COFFEEBERRY	5 GAL	6' O.C.	L	0.2
	TEUCRIUM F. 'AZUREUM'	AZURE BUSH GERMANDER	5 GAL	5' O.C.	L	0.2
	TEUCRIUM F. 'COMPACTUM'	COMPACT BUSH GERMANDER	1 GAL	3' O.C.	L	0.2
	WESTRINGIA F. 'BLUE GEM'	COAST ROSEMARY	5 GAL	4' O.C.	L	0.2
	WESTRINGIA F. 'SMOKEY'	VARIEGATED COAST ROSEMARY	5 GAL	5' O.C.	L	0.2

GROUND COVERS

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	W.U.	P.F.
	ACACIA R. 'LOW BOY'	ACACIA	1 GAL	10' O.C.	VL	0.1
	ARCTOSTAPYLOS 'PACIFIC MIST'	NCN	1 GAL	10' O.C.	L	0.2
	MYOPORUM P. 'PUTAH CREEK'	NCN	1 GAL	8' O.C.	L	0.2

GRASSES

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	W.U.	P.F.
	CALAMAGROSTIS A. 'KARL FOERSTER'	FEATHER REED GRASS	1 GAL	3' O.C.	M	0.5
	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS	1 GAL	30" O.C.	L	0.2
	FESTUCA CALIFORNICA	CALIFORNIA FESCUE	1 GAL	3' O.C.	L	0.2
	FESTUCA G. 'SISKIYOU BLUE'	BLUE FESCUE	1 GAL	3' O.C.	L	0.2
	LOMANDRA L. 'BREEZE'	DWARF MAT RUSH	1 GAL	4' O.C.	L	0.2
	LOMANDRA L. 'LIME TUFF'	DWARF MAT RUSH	1 GAL	3' O.C.	L	0.2
	LOMANDRA L. 'PLATINUM BEAUTY'	VARIEGATED DWARF MAT RUSH	1 GAL	3' O.C.	L	0.2
	MISCANTHUS S. 'ADAGIO'	ADAGIO MAIDEN GRASS	1 GAL	3' O.C.	M	0.5
	MISCANTHUS S. 'MORNING LIGHT'	EULALIA	1 GAL	4' O.C.	M	0.5
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	5' O.C.	L	0.2
	SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS	1 GAL	2' O.C.	M	0.5

OTHER

NCN - NO COMMON NAME
O.C. - ON CENTER
W.U.- WATER USE (WUCOLS)
P.F. - PLANT FACTOR (WUCOLS)

L- LOW
VL- LOW
M - MODERATE
G - GALLON

NOTES:
ALL LANDSCAPE AREAS TO HAVE 2" DEPTH MEDIUM FIR BARK MULCH.

WAI
Ward Architects, Inc.
www.wardarchitects.com
architecture | landscape architecture
PO Box 1649
Coeur d'Alene, Idaho
Phone 707 320 4030

Owner:
SDG Commerce 220, LLC
413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906

Project:
SDG Commerce 220
Distribution Center
1055 Commerce Court
American Canyon, CA 94503
APN 058 030 069

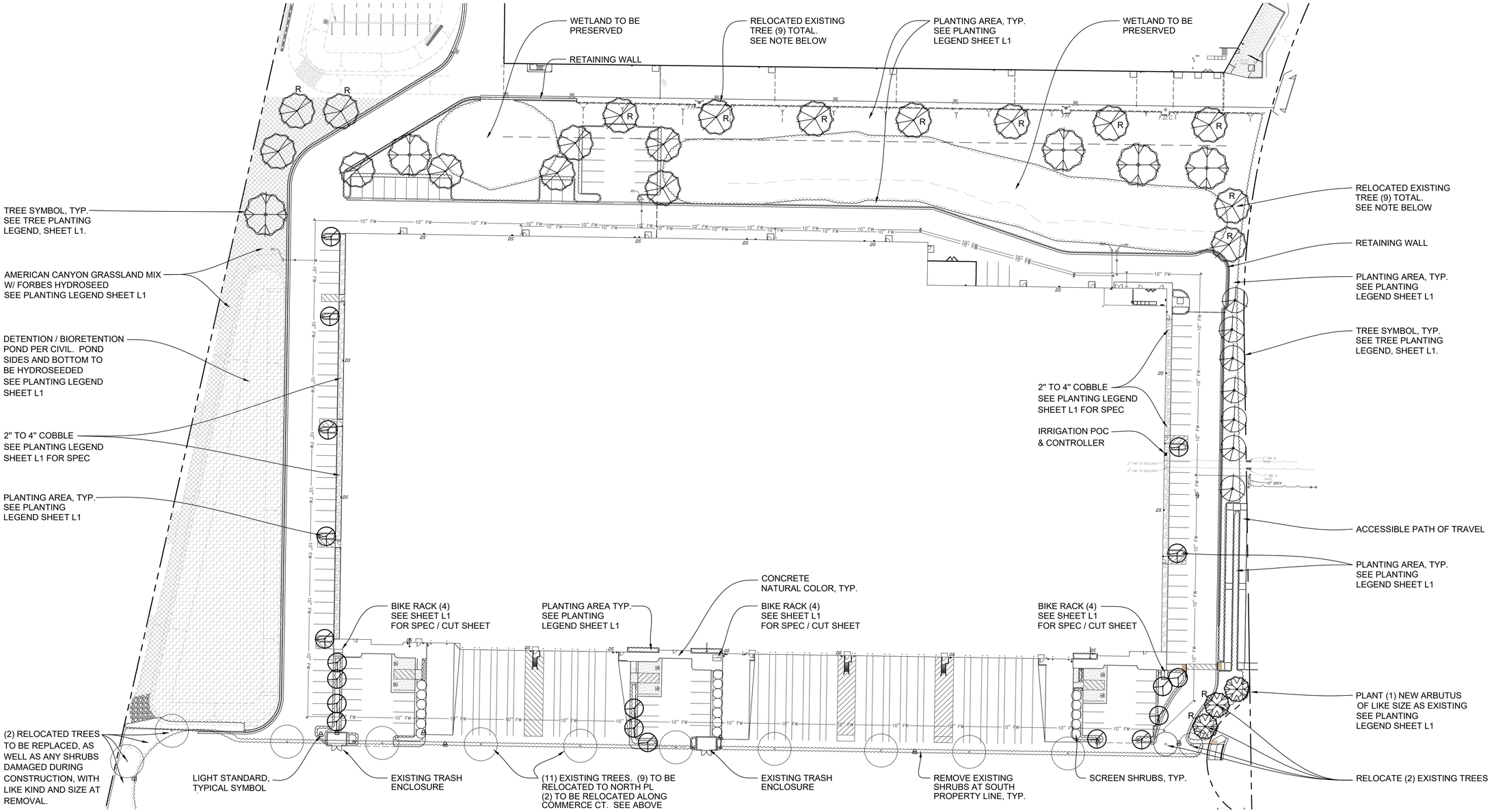
Contractor:
Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637

Sheet:
PLANT LEGEND

DATE: August 1, 2023
REVISION:

ARCHITECTS STAMP: SHEET:

L1



SITE PLAN / TREE PLAN

SCALE: 1" = 40'

SEE PLANTING LEGEND, SHEET L1

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Coeur d'Alene, Idaho
Phone 707 320 4030

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413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906

Project:

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Distribution Center
1055 Commerce Court
American Canyon, CA 94503

APN 058 030 069

Contractor:

Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637

Sheet:

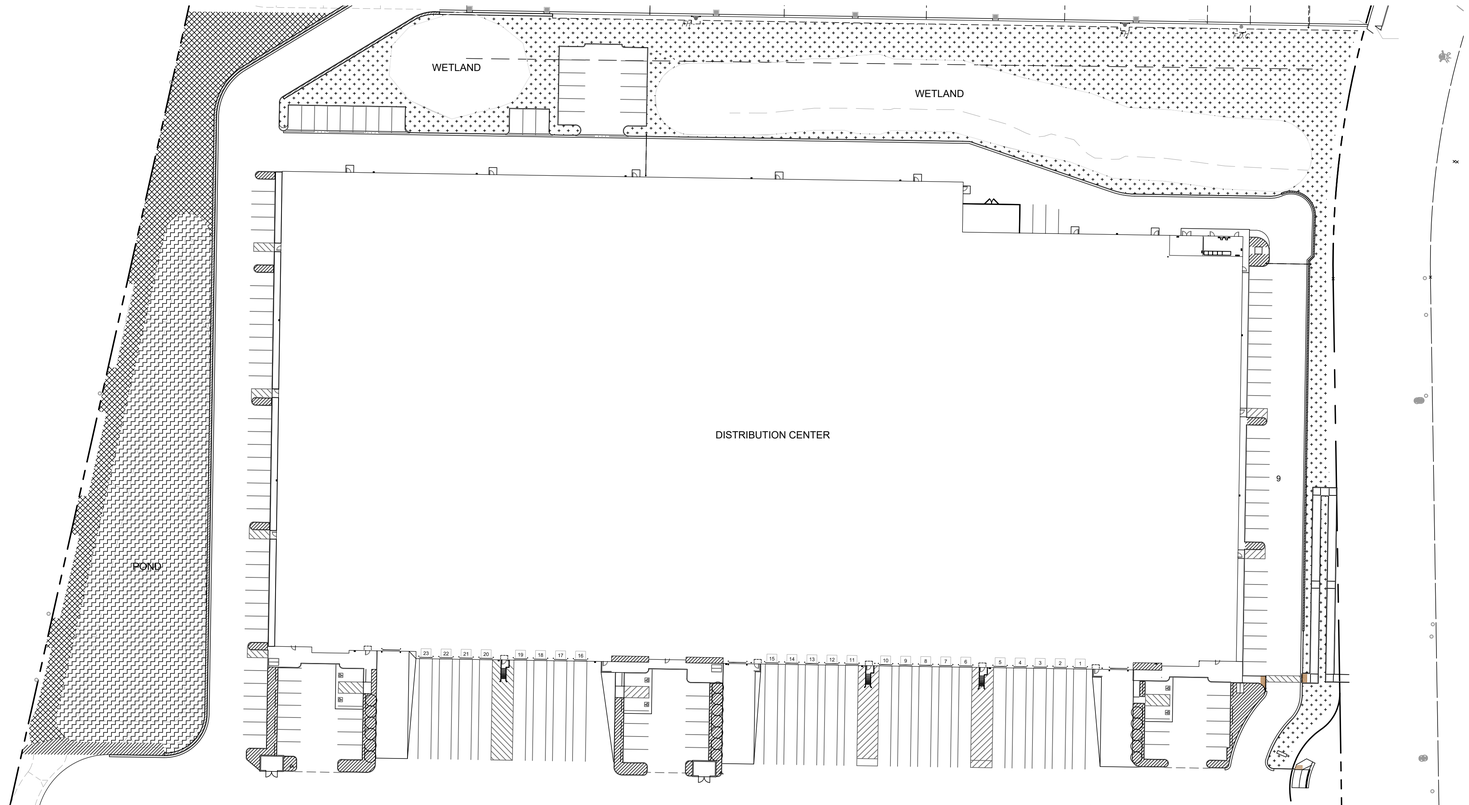
TREE PLANTING PLAN

DATE: August 1, 2023

REVISION:

ARCHITECTS STAMP: SHEET:

L2



HYDROZONE KEY PLAN

SCALE: 1" = 50'

NORTH

LEGEND

SYMBOL	HYDROZONE	LANDSCAPE TYPE	IRRIGATION	PLANT FACTOR	WATER USAGE	AREA
	ZONE 1	SHRUB GROUNDCOVER	AUTOMATIC DRIP	.29	MIXED	35,608 SF
	ZONE 2	SHRUB GROUNDCOVER	AUTOMATIC DRIP	.29	MIXED	5285 SF
	NON HYDROZONE					
	ZONE 3	HYDROSEED	NON IRRIGATED	NONE	NONE	12,634 SF
	ZONE 4	HYDROSEED AT POND	NON IRRIGATED	NONE	NONE	25,323 SF
	SEE ZONES 1 THRU 2	TREES	AUTOMATIC DRIP	N/A	N/A	N/A

WATER USAGE CALCULATION

MAXIMUM APPLIED WATER ALLOWANCE (MAWA):
45.8 x 0.62 x [(0.7 x 40,893 SF) + (0.3 x 40,893 SF)] = 1,145,004 GAL/YEAR

ESTIMATED TOTAL WATER USAGE (ETWU):
45.8 x 0.62 x [(11,859/.71)+11,859] = 811,041.4 GAL/YEAR

ETWU 811,041.4 GPY LESS THAN MAWA 1,145,004 GPY - IRRIGATION COMPLIES

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PO Box 1649
Coeur d'Alene, Idaho
Phone 707 320 4030

Owner:

SDG Commerce 220, LLC
413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906

Project:

SDG Commerce 220
Distribution Center
1055 Commerce Court
American Canyon, CA 94503

APN 058 030 069

Contractor:

Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637

Sheet:

HYDROZONE PLAN
HYDROZONE LEGEND

DATE: August 1, 2023

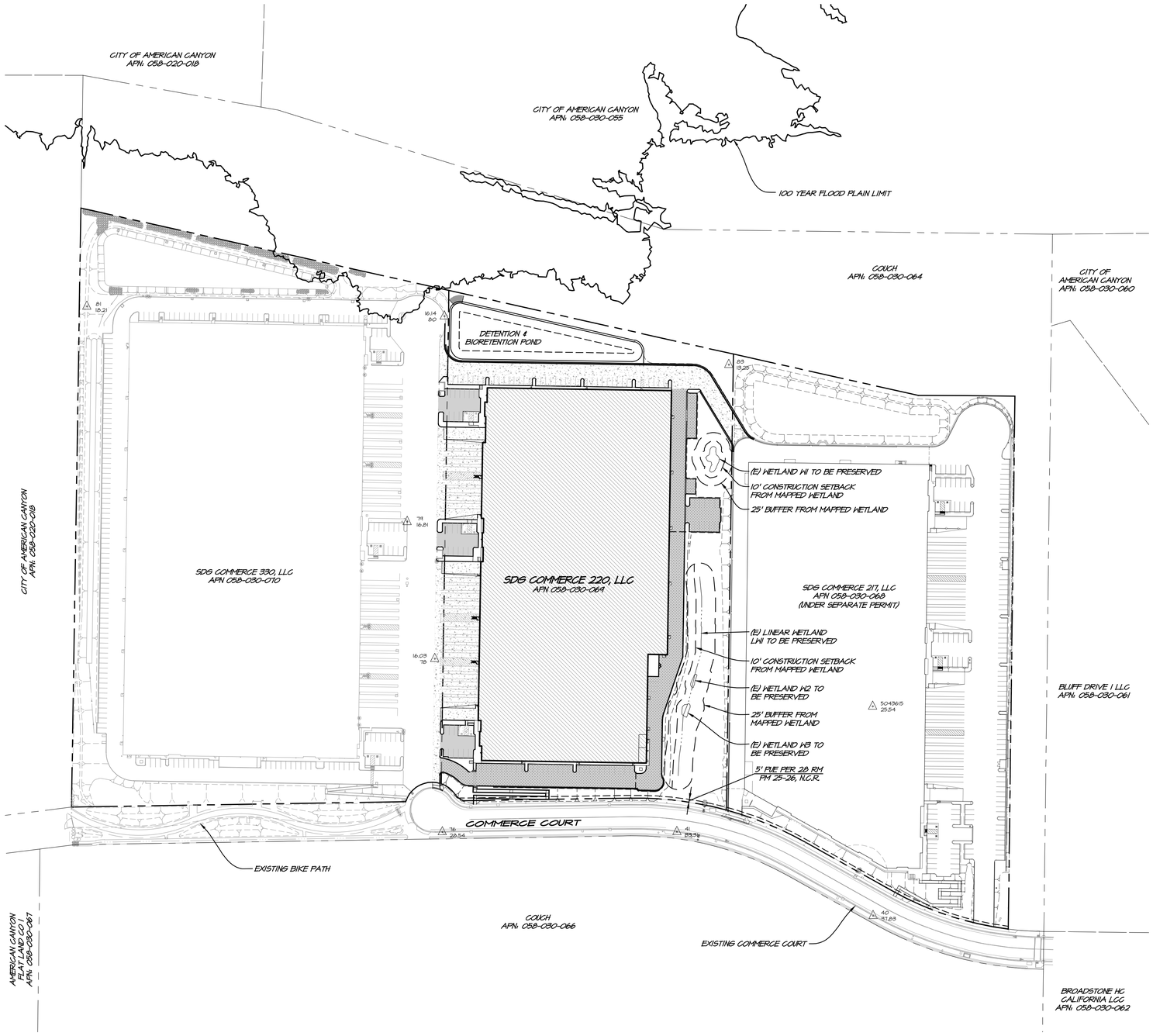
REVISION:

ARCHITECTS STAMP: SHEET:

L3

SDG COMMERCE 220 DISTRIBUTION CENTER

CONDITIONAL USE PERMIT PLANS



SYMBOL LEGEND

EXISTING		PROPOSED	
	SURVEY CONTROL STATION	SD	STORM DRAIN PIPE
	FOUND		DRAIN INLET
	BRASS PIN	DS D	DOWNSPOUT
	FLOW LINE		LEVEL SPREADER
	FENCE		TOP / TOE DAYLIGHT
TREE	TREE (AS NOTED)		RETAINING WALL
W	WELL		CONSTRUCTION FENCE
S	SSMH		SILT FENCE
FH	(E) FIRE HYDRANT		FLUSH CURB
	(E) GATE VALVE		VERTICAL CURB
SSFM	(E) SSFM		CURB & GUTTER
SS	(E) SANITARY SEWER		CURB INLET
RW	(E) RECYCLED WATER	SS	SANITARY SEWER
W	(E) WATER	SSFM	SANITARY SEWER FORCED MAIN
		CO	CLEANOUT
		DW	DOMESTIC WATER
		FW	FIRE WATER
		RW	RECYCLED WATER
		FH	FIRE HYDRANT
			GATE VALVE
			PIV & FDC

ABBREVIATIONS

AB	AGGREGATE BASE ROCK	LLA	LOT LINE ADJUSTMENT
AC	ASPHALTIC CONCRETE	LP	LOW POINT
BGL	BOTTOM OF GRAVEL LAYER	MH	MANHOLE
BOT	BOTTOM	OC	ON CENTER
CB	CATCH BASIN	OR	OFFICIAL RECORD
℄	CENTERLINE	PL	PROPERTY LINE
CI	CURB INLET	(P)	PROPOSED NEW WORK
CO	CLEANOUT	PCC	PORTLAND CEMENT CONCRETE
CONF	CONFORM	PIV	PRESSURE INDICATOR VALVE
DDCV	DOUBLE DETECTOR CHECK VALVE	PUE	PUBLIC UTILITY EASEMENT
DW	DOMESTIC WATER	PW	PROCESS WATER
ELEV	ELEVATION	PWW	PROCESS WASTE WATER
EP	EDGE OF PAVEMENT	R	RADIUS
EV	ELECTRIC VEHICLE	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
EW	EACH WAY	ROW	RIGHT OF WAY
EX / (E)	EXISTING	RW	RECYCLED WATER
FD	FOUND	S	SLOPE (FEET/FOOT)
FDC	FIRE DEPARTMENT CONNECTION	S.A.D.	SEE ARCHITECTS DRAWINGS
		SD	STORM DRAIN
FF	FINISH FLOOR	SDCO	STORM DRAIN CLEANOUT
FG	FINISH GRADE	SF	SQUARE FOOT
FH	FIRE HYDRANT	S.L.A.D.	SEE LANDSCAPE ARCHITECTS DRAWINGS
FL	FLOW LINE	SS	SANITARY SEWER
FW	FIRE WATER	SSCO	SANITARY SEWER CLEANOUT
GB	GRADE BREAK	SSFM	SANITARY SEWER FORCED MAIN
GV	GATE VALVE	STA	STATION
HP	HIGH POINT	TC	TOP OF CURB
HWL	HIGH WATER LEVEL	TGL	TOP OF GRAVEL LAYER
INV	INVERT	TSL	TOP OF SOIL LAYER
IP	IRON PIPE	TYP	TYPICAL
IW	IRRIGATION WATER	WM	WATER METER
LF	LINEAL FEET/FOOT		

GRAPHIC SCALE

100 0 100 200

(IN FEET)
1 inch = 100 FT



VICINITY MAP

SCALE: 1" = 3000'

PROJECT INFORMATION

CLIENT:	SDG COMMERCE 220, LLC 413 W. YOSEMITE AVENUE, STE. 108 MADERA, CA 93637
CONTACT:	GREG POTTER
SITE ADDRESS:	1055 COMMERCE COURT AMERICAN CANYON, CA 94503
CIVIL ENGINEER:	RSA+ 1515 FOURTH STREET NAPA, CA 94559
APN & AREA:	058-030-069 (10.17 ACRES)

SURVEY NOTES

1. TOPOGRAPHY BASED ON A FIELD SURVEY PERFORMED BY RSA+ IN MARCH, 2022, AMENDED OCTOBER, 2022. CONTOURS ARE SHOWN EVERY ONE FOOT (1'), HIGHLIGHTED EVERY FIVE FEET (5').
2. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83) 2011 EPOCH BASED UPON G.P.S. OBSERVATIONS ON NETWORK UTILIZING CONTINUALLY OPERATING REFERENCE STATION (C.O.R.S.) INFORMATION FROM THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.).

   VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
3. BOUNDARY SHOWN IS RECORD INFORMATION PER BOOK 28 OR PARCEL MAPS AT PAGES 25 & 26, NAPA COUNTY RECORDS.

FLOOD NOTES

SPECIAL FLOOD HAZARD AREA "ZONE AE" IS SHOWN AS DESIGNATED ON THE FLOOD INSURANCE RATE MAP (FIRM) 06055C0061F DATED AUGUST 3, 2016.

SHEET INDEX

UP1.0	COVER SHEET
UP2.0	PAVING AND LAYOUT PLAN
UP3.0	GRADING PLAN: SE
UP3.1	GRADING PLAN: NE
UP3.2	GRADING PLAN: NW
UP3.3	GRADING PLAN: SW
UP3.4	SITE SECTIONS
UP4.0	UTILITY PLAN: SE
UP4.1	UTILITY PLAN: NE
UP4.2	UTILITY PLAN: NW
UP4.3	UTILITY PLAN: SW
UP5.0	EROSION & SEDIMENT CONTROL PLAN

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OFFICE | 707.252.3301
+ www.RSAcivil.com +

SDG COMMERCE 220 DISTRIBUTION CENTER
COVER SHEET
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WALKER
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
DRAWN	JFH / LMM
DESIGNED	RRIS / AEP
CHECKED	NAW
JOB NO.	4122068.0
SHEET NO.	UP1.0
	1 OF 12 SHEETS

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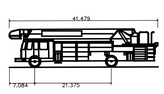
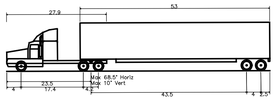
HATCH LEGEND

- CONCRETE WALKWAY: 4" PCC CLASS A OVER 4" CLASS II AB OVER NATIVE SOIL COMPACTED TO MINIMUM 95% RELATIVE COMPACTION.
- CONCRETE PAVEMENT: T.I. = 7, 6.5" PCC WITH #4 REBAR @ 24" O.C.E.W. OVER 1.5" CLASS II AB COMPACTED TO MINIMUM 95% RELATIVE COMPACTION OVER 12" LIME TREATED SELECT MATERIAL COMPACTED TO MINIMUM 95% RELATIVE COMPACTION OR PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- VEHICLE PARKING: T.I. = 5.5, 3" TYPE B AC OVER 4" CLASS II AB COMPACTED TO MINIMUM 95% RELATIVE COMPACTION OVER 12" LIME TREATED SELECT MATERIAL COMPACTED TO MINIMUM 95% RELATIVE COMPACTION OR PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- TRUCK AG: T.I. = 6.5, 3.5" TYPE B AC OVER 5" CLASS II AB COMPACTED TO MINIMUM 95% RELATIVE COMPACTION OVER 12" LIME TREATED SELECT MATERIAL COMPACTED TO 95% RELATIVE COMPACTION OR PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- DETENTION & BIORETENTION AREA
- PROPOSED BUILDING FOOTPRINT



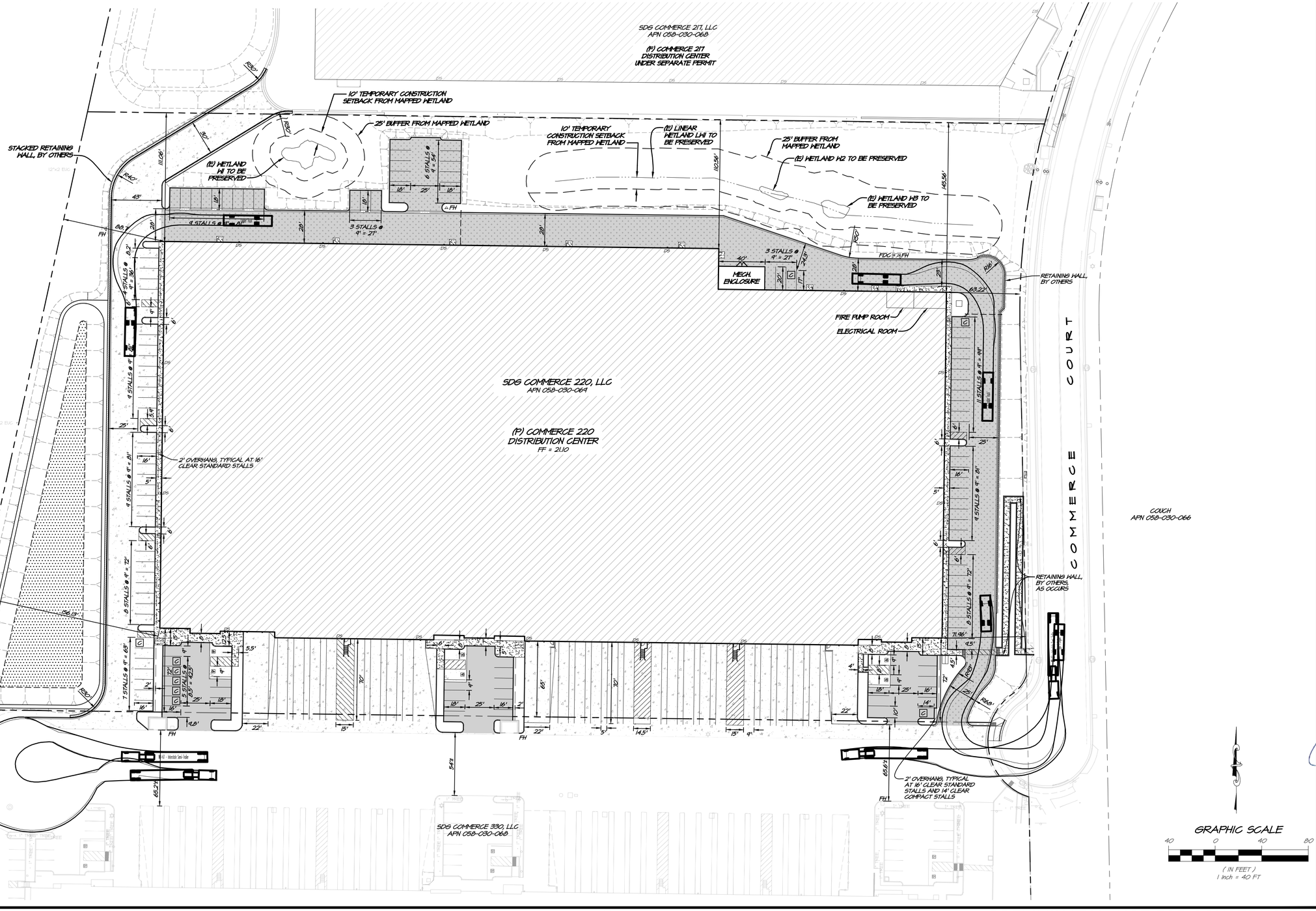
Ladder Truck	
Overall Length	41.479ft
Overall Width	8.750ft
Overall Body Height	10.635ft
Min Body Ground Clearance	1.322ft
Track Width	8.500ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	36.583ft

LADDER TRUCK



WB-67 — Interstate Semi-Trailer	
Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.000ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

SEMI-TRUCK



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PAVING & LAYOUT PLAN
AMERICAN CANYON — CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNICK
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
DRAWN	JFH / LMM
DESIGNED	RRS / EP
CHECKED	NAW
JOB NO.	4122068.0

SHEET NO.
UP2.0
2 OF 12 SHEETS

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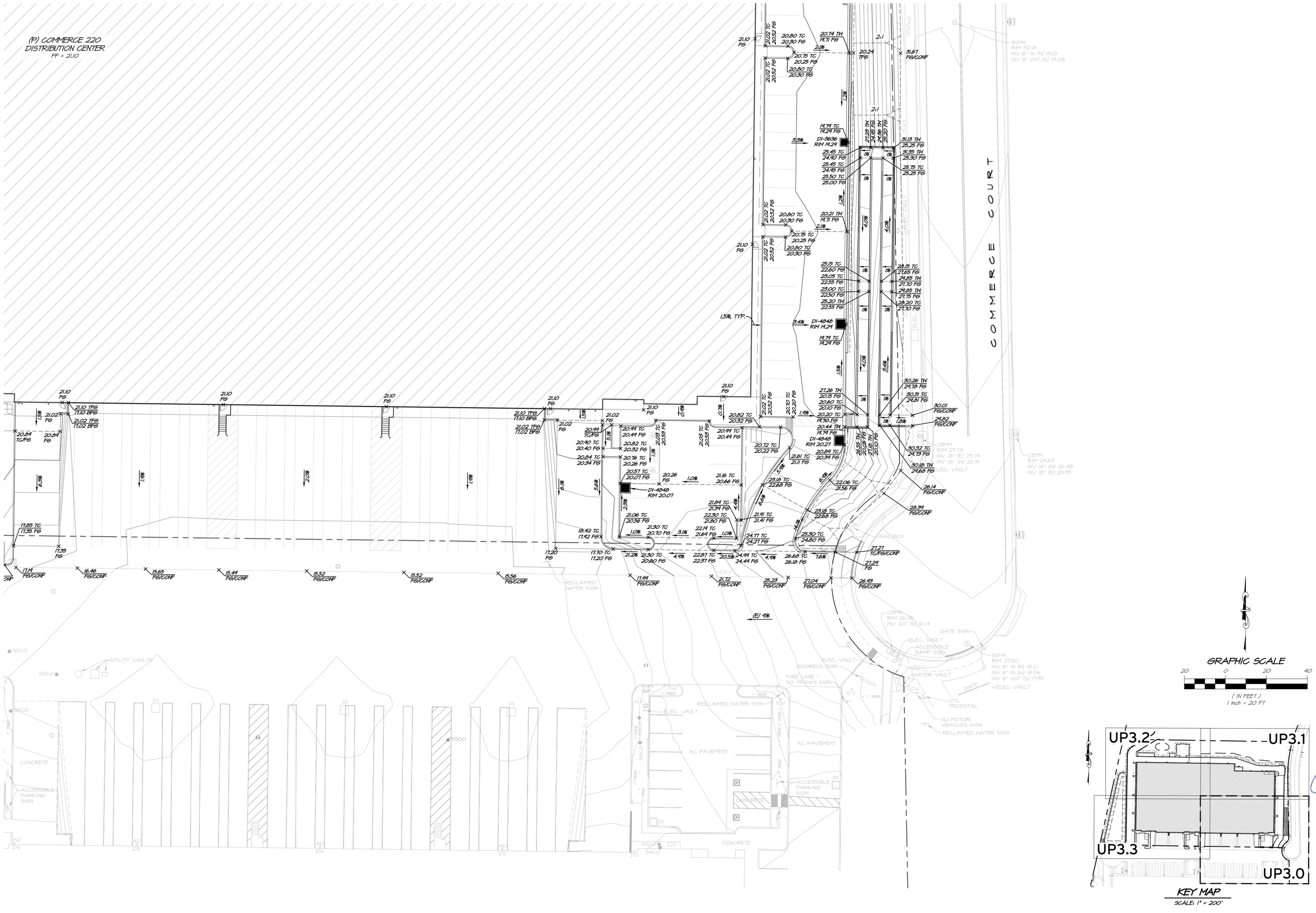

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PAUL SARGENT WARNOCK
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
DRAWN	JFW /LMM
DESIGNED	RRG /EP
CHECKED	NAW
JOB NO.	4122068.0

SHEET NO.
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3 OF 12 SHEETS

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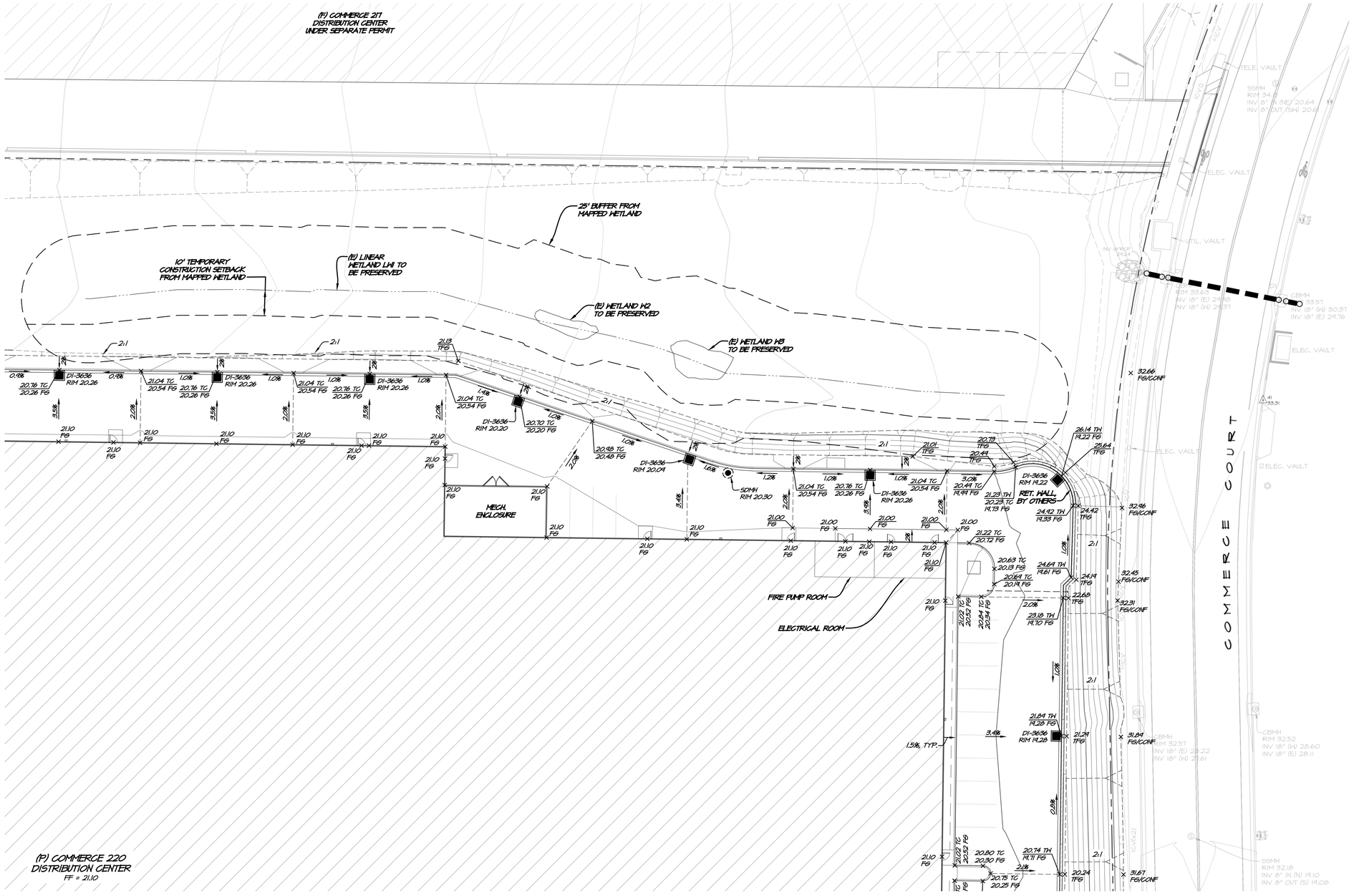

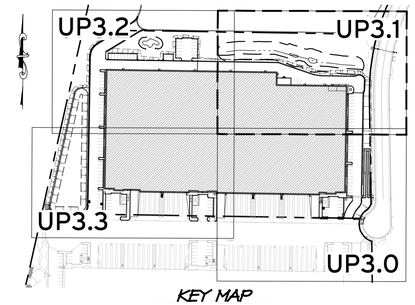

KEY MAP
SCALE: 1" = 200'

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SDG COMMERCE 220 DISTRIBUTION CENTER
GRADING PLAN: NE

AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNER
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
DRAWN	JFH / LMM
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CHECKED	NAW
JOB NO.	4122068.0

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UP3.1
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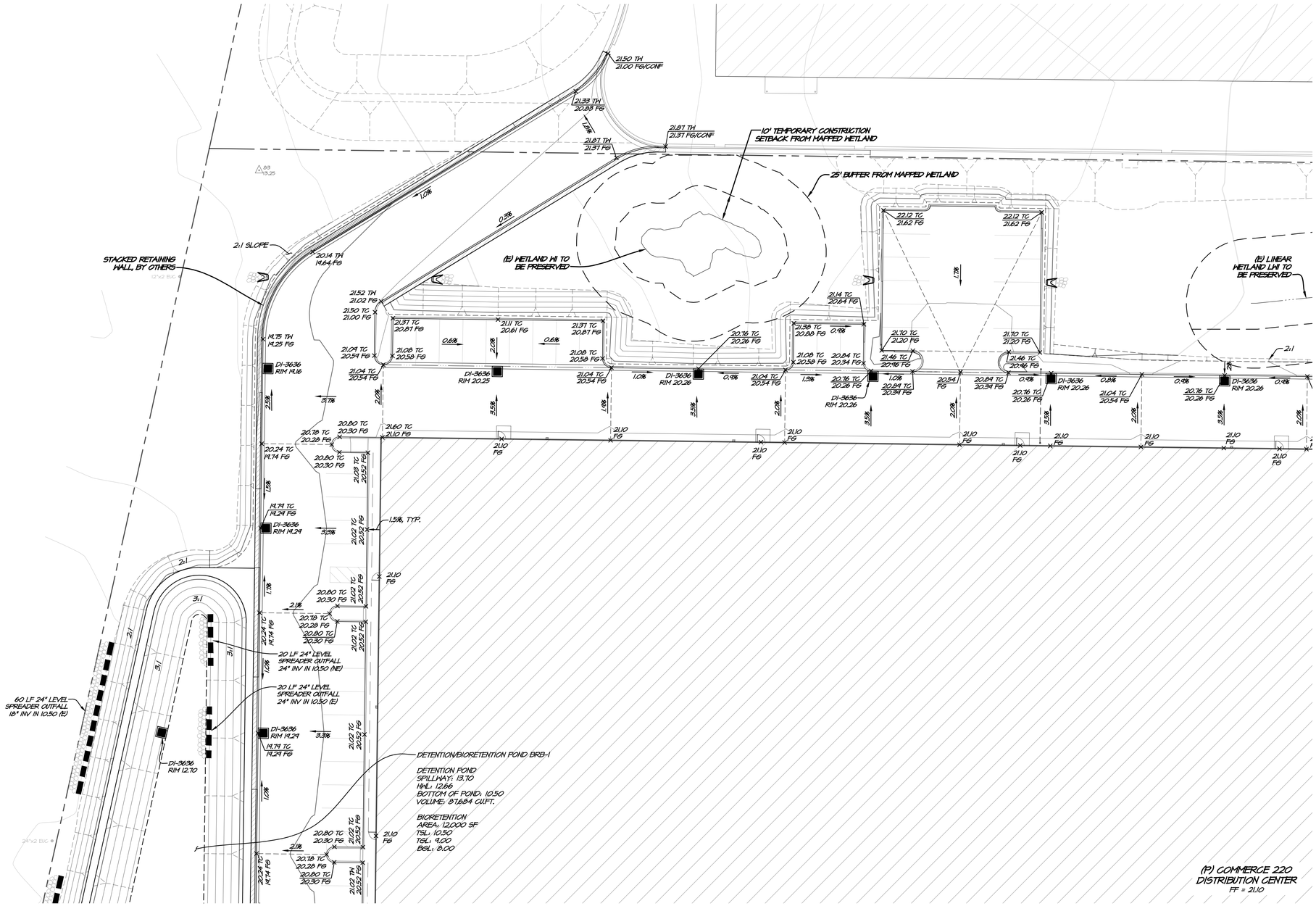
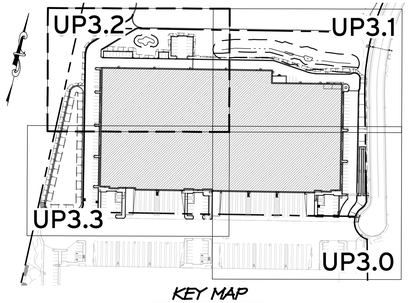


GRAPHIC SCALE

20 0 20 40

(IN FEET)
1 inch = 20 FT



KEY MAP
SCALE: 1" = 200'

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OFFICE (707) 252.3301
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SDG COMMERCE 220 DISTRIBUTION CENTER
GRADING PLAN: NW
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNOCK
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
DRAWN	JFW /LMM
DESIGNED	RRG /EP
CHECKED	NAW
JOB NO.	4122068.0

SHEET NO.
UP3.2
5 OF 12 SHEETS

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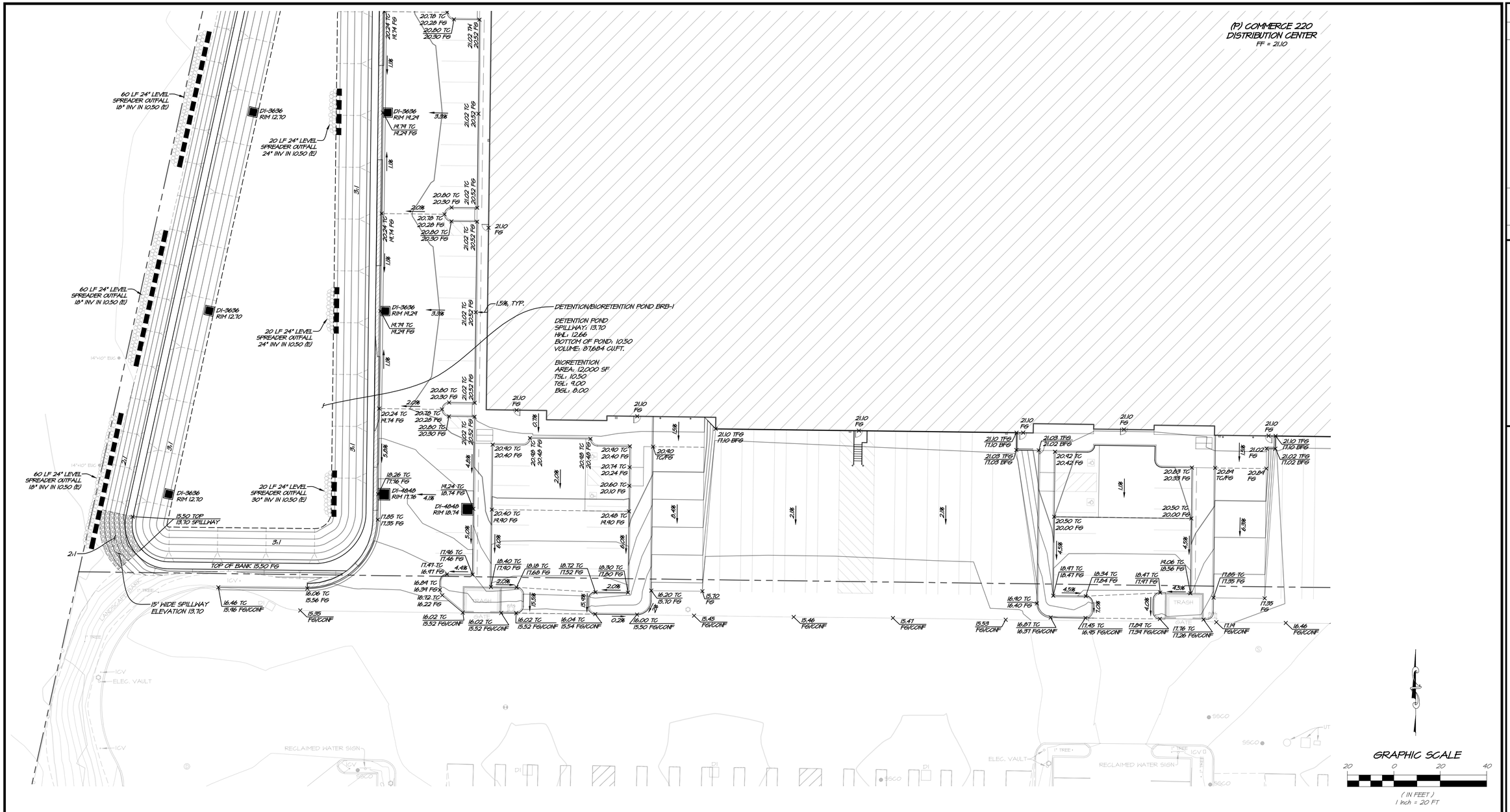
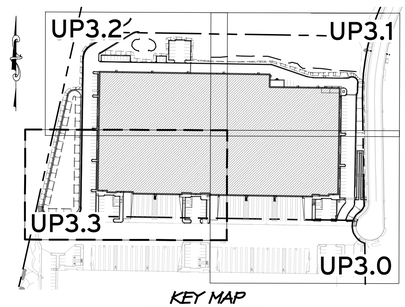
3361





KEY MAP
SCALE: 1" = 200'

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GRADING PLAN: SW
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REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNOCK
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
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DESIGNED	RRG /EP
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SHEET NO.
UP3.3
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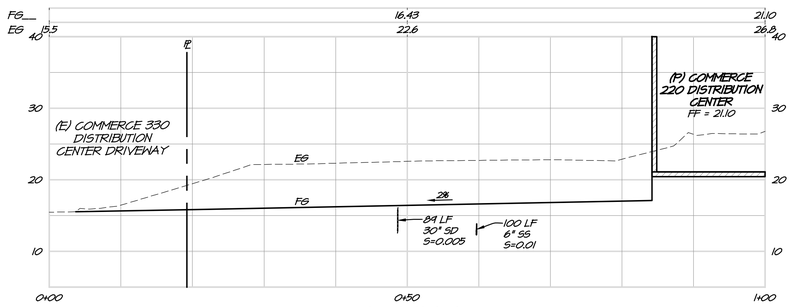
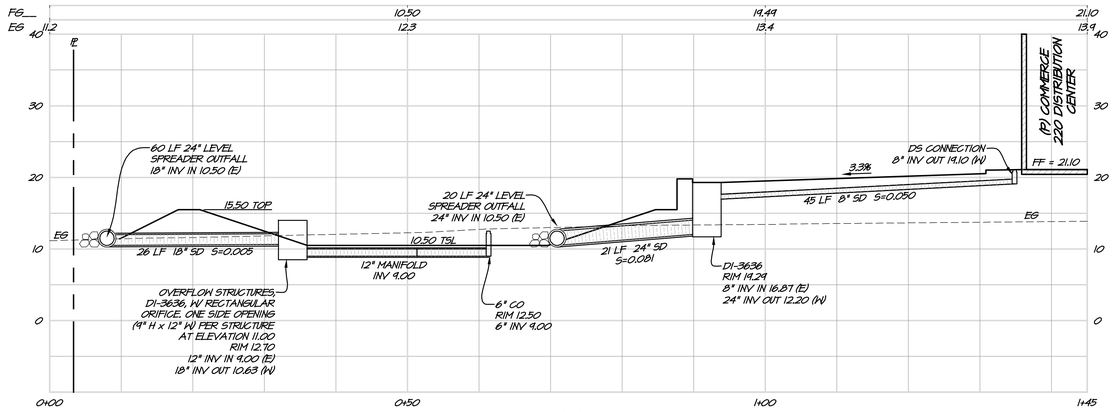
3362



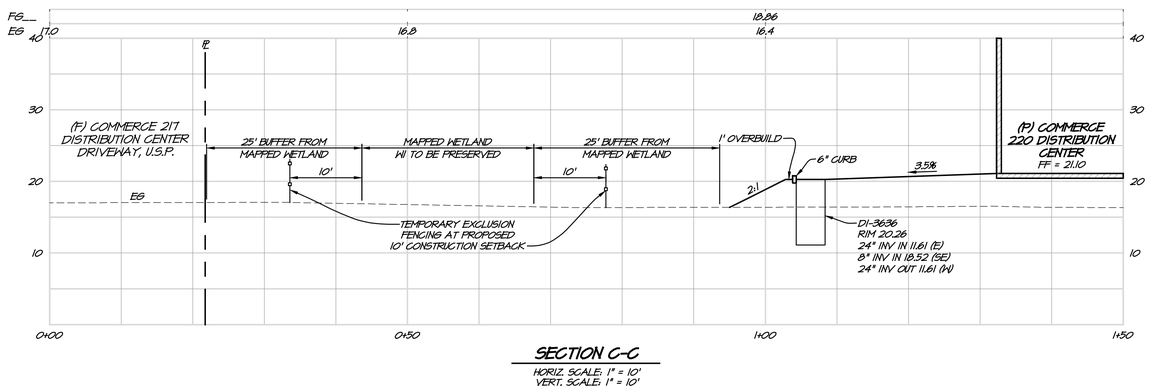
SECTION A-A

HORIZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 10'



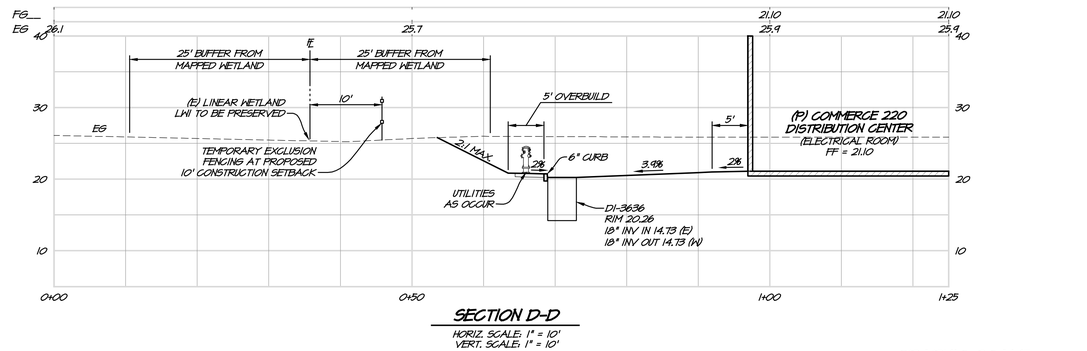
SECTION B-B

HORIZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 10'



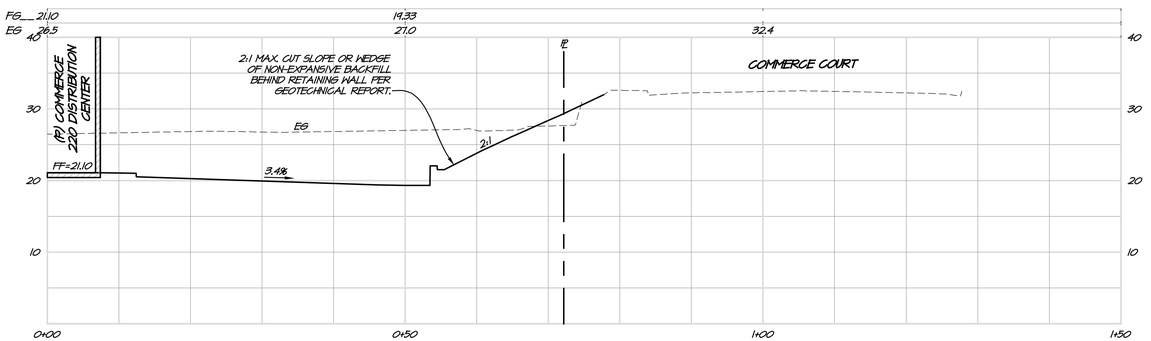
SECTION C-C

HORIZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 10'



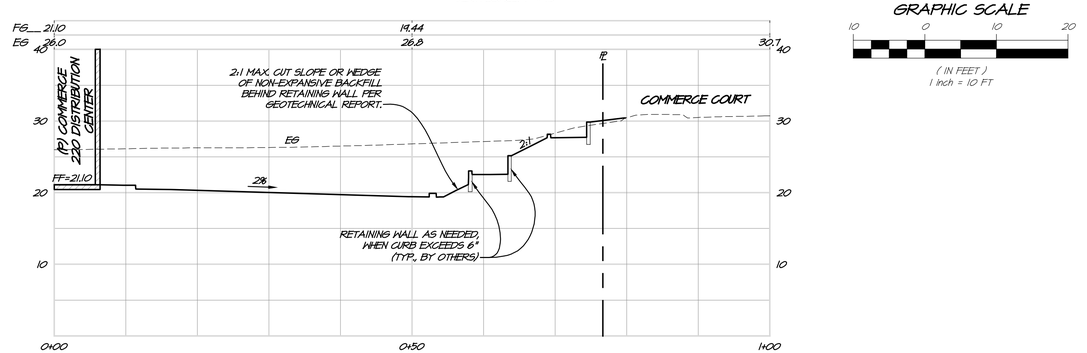
SECTION D-D

HORIZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 10'



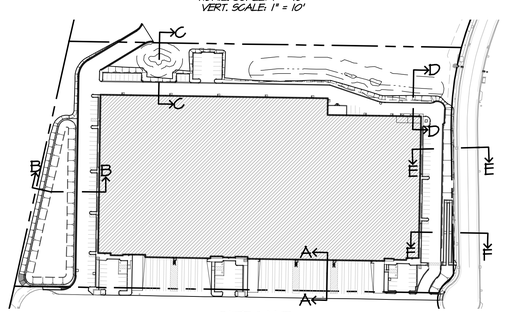
SECTION E-E

HORIZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 10'



SECTION F-F

HORIZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 10'



SITE MAP

SCALE: 1" = 150'

GRAPHIC SCALE
10 0 10 20
(IN FEET)
1 inch = 10 FT

GRAPHIC SCALE
150 0 150 300
(IN FEET)
1 inch = 150 FT

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SDG COMMERCE 220 DISTRIBUTION CENTER
SITE SECTIONS
CALIFORNIA
AMERICAN CANYON

REGISTERED PROFESSIONAL ENGINEER
ROD SARGENT WARNER
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
DRAWN	JFH /LMM
DESIGNED	RRS /EP
CHECKED	NAW
JOB NO.	4122068.0

SHEET NO.
UP3.4
7 OF 12 SHEETS

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(P) COMMERCE 220
DISTRIBUTION CENTER
FF = 21.10

BUILDING FIRE FLOW REQUIREMENT - CFC TABLE B105.2 & B105.1(2)

TABLE B105.1(2) - BUILDING SIZE = 219,834 SF
CONSTRUCTION TYPE = TYPE III-B
FF = 8,000 GPM AT 20 PSI
DURATION = 4 HOURS

TABLE B105.2 - FIRE SPRINKLER ALLOWANCE = 25% OF THE VALUE FROM TABLE B105.1(2)
8,000 X 0.25 = 2,000 GPM
FF = 2,000 GPM AT 20 PSI
DURATION = 4 HOURS

TABLE C102.1 - HYDRANT SPACING FOR NON-SCHOOL BUILDINGS IS PER TABLE C102.1
MINIMUM NUMBER OF HYDRANTS REQUIRED = 2 FOR 2,000 GPM FIRE FLOW
MINIMUM AVERAGE HYDRANT SPACING (BASED ON NINE (9) HYDRANTS) =
(450 FT - 100 FT FOR DEAD-END ROADS)*(1.5 FOR FIRE SPRINKLERS PER 903.1.1) = 525 FEET
MAXIMUM FRONTAGE DISTANCE TO HYDRANT = (225 FT - 50 FT FOR DEAD-END ROADS)*
(1.5 FOR FIRE SPRINKLERS PER 903.1.1)*(1.1 FOR EXISTING FIRE HYDRANTS PER C103.2) = 284 FT

TOTAL HYDRANT TO HYDRANT DISTANCE AROUND BUILDING = 2,300 FT
MINIMUM NUMBER OF HYDRANTS BY SPACING = 2,300 FT/525 FT = 4.4
NUMBER OF HYDRANTS PROVIDED = 9 (INCLUDING THREE EXISTING HYDRANTS ON COMMERCE COURT)
AVERAGE SPACING PROVIDED = 256 FEET (BASED ON SPACING FOR NINE (9) HYDRANTS)
MAXIMUM FRONTAGE DISTANCE TO HYDRANT PROVIDED = 150 FEET

COMMERCE COURT

GRAPHIC SCALE
20 0 20 40
(IN FEET)
1 inch = 20 FT

KEY MAP
SCALE: 1" = 200'

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UTILITY PLAN: SE
AMERICAN CANYON
CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARCHOL
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
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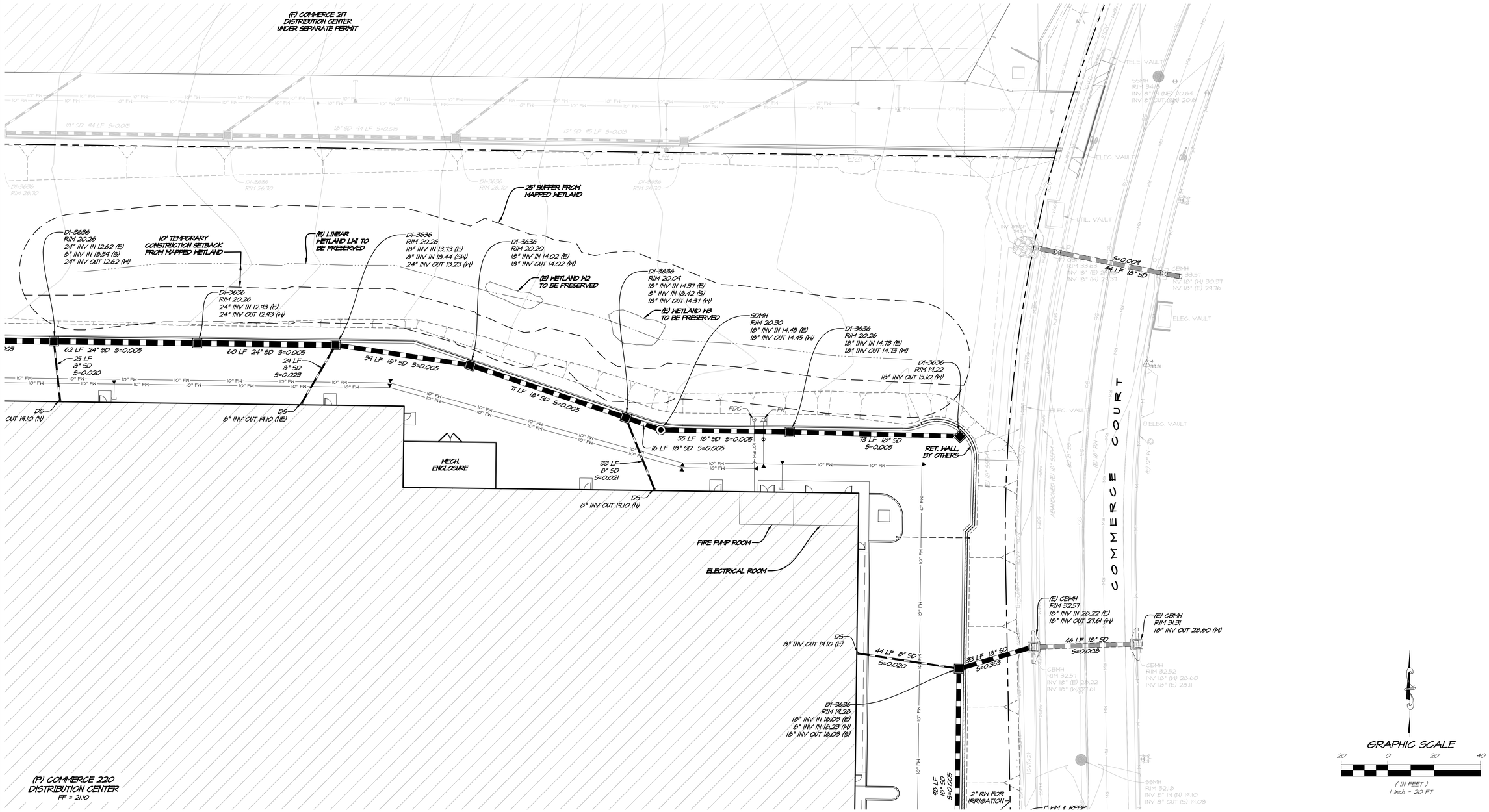
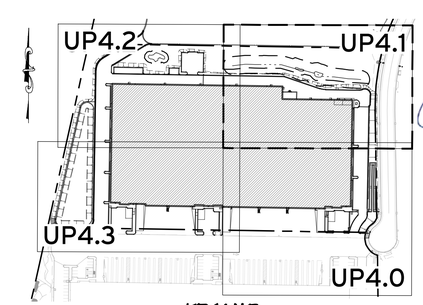
CHECKED	NAW
JOB NO.	4122068.0

SHEET NO.
UP4.0
8 OF 12 SHEETS

R:\2022\4122068.0_SDG_Commerce_220_Distribution_Center\Design\PLANS - CONDITIONAL (PW&PA)\UTIL-SE.dwg 07/03/2023 12:18:11PM jmcgrm CCPI-RIGHT Reclaim Xpence 1 Assoc.

3364





KEY MAP
SCALE: 1" = 200'

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UTILITY PLAN : NE
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER PAUL SARGENT WARNOCK No. 82758 Exp. 9-30-24 CIVIL ENGINEER STATE OF CALIFORNIA

DATE	JULY 21, 2023
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SHEET NO.
UP4.1
9 OF 12 SHEETS

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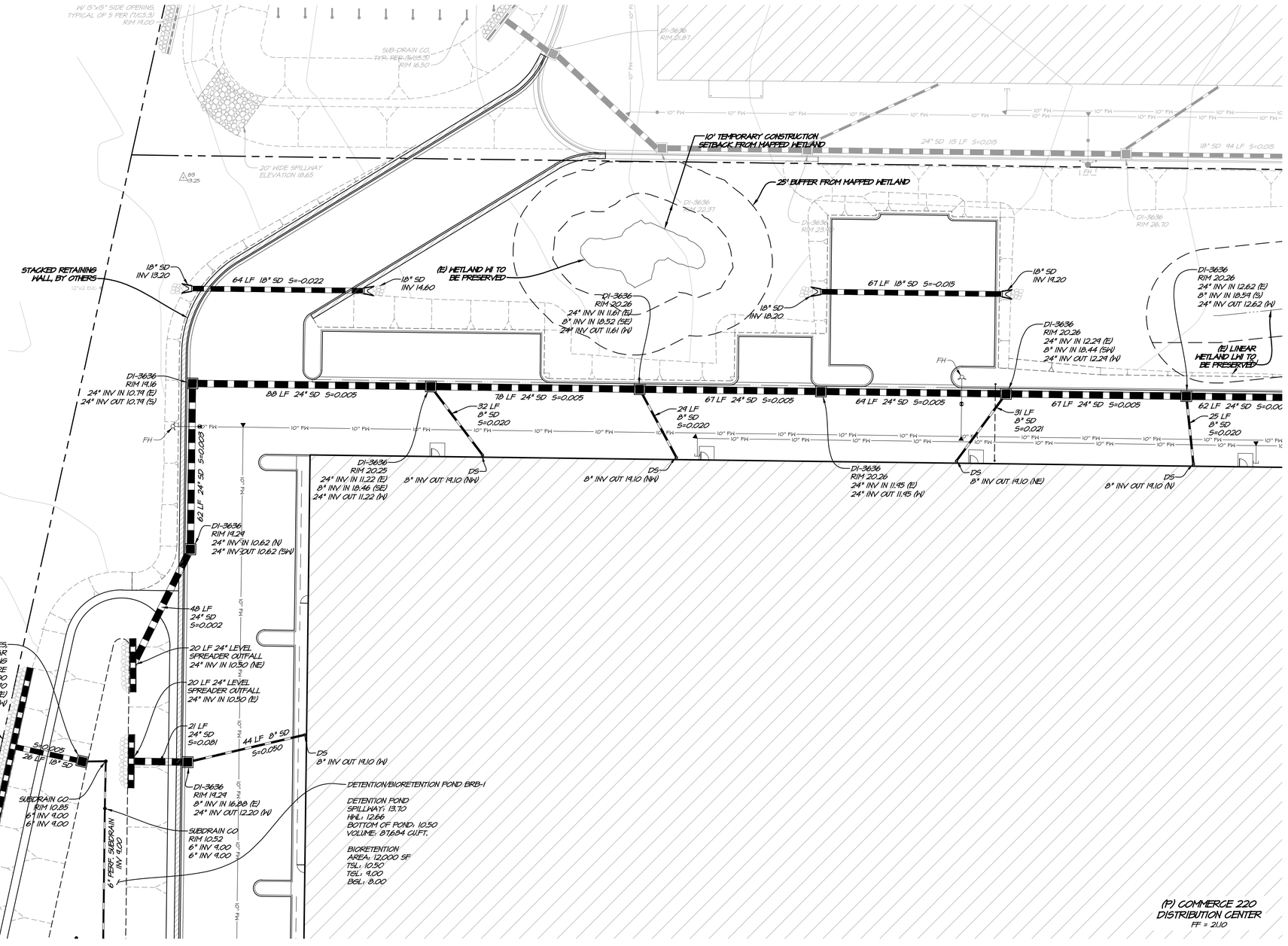
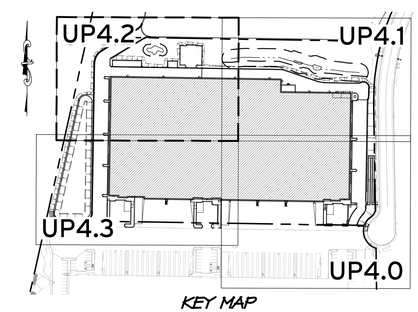


GRAPHIC SCALE

20 0 20 40

(IN FEET)
1 inch = 20 FT



KEY MAP
SCALE: 1" = 200'

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UTILITY PLAN: NW
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER PAUL SARGENT WARNOCK No. 82758 Exp. 9-30-24 CIVIL ENGINEER STATE OF CALIFORNIA

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DESIGNED	RRG /EP
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UP4.2
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(P) COMMERCE 220
DISTRIBUTION CENTER
FF = 21.10

OVERFLOW STRUCTURES, DI-3636, W RECTANGULAR ORIFICE, ONE SIDE OPENING (9" H x 12" W) PER STUCTURE AT ELEVATION 11.00
RIM 12.70
12" INV IN 9.00 (E)
18" INV OUT 10.83 (W)

60 LF 24" LEVEL SPREADER OUTFALL
18" INV IN 10.50 (E)

S=0.005
26 LF 18" SD

6" PERF. SUBDRAIN INV 9.00

DI-3636
RIM 14.29
8" INV IN 10.87 (E)
24" INV OUT 12.20 (W)

45 LF 8" SD S=0.050

DS
8" INV OUT 14.10 (W)

21 LF 24" SD S=0.081

20 LF 24" LEVEL SPREADER OUTFALL
24" INV IN 10.50 (E)

OVERFLOW STRUCTURES, DI-3636, W RECTANGULAR ORIFICE, ONE SIDE OPENING (9" H x 12" W) PER STUCTURE AT ELEVATION 11.00
RIM 12.70
12" INV IN 9.00 (E)
18" INV OUT 10.83 (W)

6" CO
RIM 12.50
6" INV 9.00
TYP. AT END OF EACH MANIFOLD

60 LF 24" LEVEL SPREADER OUTFALL
18" INV IN 10.50 (E)

S=0.005
26 LF 18" SD

DI-3636
RIM 14.29
24" INV OUT 12.20 (W)

21 LF 24" SD S=0.081

20 LF 24" LEVEL SPREADER OUTFALL
24" INV IN 10.50 (E)

DETENTION/BIORETENTION POND BRB-1

DETENTION POND
SPILLWAY: 13.70
HWL: 12.66
BOTTOM OF POND: 10.50
VOLUME: 87,684 CU.FT.

BIORETENTION
AREA: 12,000 SF
TSL: 10.50
TSL: 9.00
BSL: 8.00

OVERFLOW STRUCTURES, DI-3636, W RECTANGULAR ORIFICE, ONE SIDE OPENING (9" H x 12" W) PER STUCTURE AT ELEVATION 11.00
RIM 12.70
12" INV IN 9.00 (E)
18" INV OUT 10.83 (W)

60 LF 24" LEVEL SPREADER OUTFALL
18" INV IN 10.50 (E)

S=0.005
27 LF 18" SD

12" MANIFOLD
INV 9.00

20 LF 24" LEVEL SPREADER OUTFALL
30" INV IN 10.50 (E)

DI-4848
RIM 17.16
30" INV IN 10.59 (E)
30" INV OUT 10.59 (W)

31 LF 30" SD S=0.005

21 LF 30" SD S=0.004

DI-4848
RIM 18.74
30" INV IN 10.76 (E)
30" INV OUT 10.76 (W)

SUBDRAIN CO
RIM 12.50
6" INV 9.00

TOP OF BANK 15.50 FG

15' WIDE SPILLWAY
ELEVATION 13.70

CB3636
RIM 15.15

17.50 H.F. S=0.02

INV 12.15

INV 10.70

IGV

ELEC. VAULT

GATE VALVE, TYP. PER (B)(C5.2)

CB4848
PER (B)(C5.3)
RIM 14.70

INV 11.36

30" SD 20 LF S=0.003

CB4848
RIM 14.70

10" SD BOT 11.65

DS
8" INV OUT 14.10 (S)

SSCO
RIM 21.07
6" INV OUT 14.40 (S)

26 LF 6" SDR 35 PVC SS S=0.01

40 LF 8" SD S=0.020

SSCO
RIM 20.12
6" INV IN 14.08 (N)
6" INV OUT 14.08 (E)

16 LF 6" SDR 35 PVC SS S=0.01

SSCO
RIM 16.61
6" INV IN 13.32 (N)
6" INV OUT 13.32 (E)

35 LF 8" SD S=0.020

100 LF 6" SDR 35 PVC SS S=0.01

8" SD INV 18.62
6" SS INV 13.08

DS
8" INV OUT 14.10 (S)

35 LF 8" SD S=0.020

8" SD INV 18.62
6" SS INV 12.42

SSCO
RIM 18.04
6" INV IN 12.32 (N)
6" INV OUT 12.32 (E)

SSCO
RIM 21.10
6" INV OUT 14.40 (S)

26 LF 6" SDR 35 PVC SS S=0.10

SSCO
RIM 20.01
6" INV IN 11.65 (N)
6" INV IN 11.65 (N)
6" INV OUT 11.65 (E)

67 LF 6" SDR 35 PVC SS S=0.01

33 LF 6" SDR 35 PVC SS S=0.01

619 LF 30" SD S=0.005

8" SD INV 18.62
6" SS INV 11.50

INV 10.84

40' FDHM
RIM 14.40

DS
8" INV OUT 14.10 (S)

35 LF 8" SD S=0.020

SSCO
RIM 20.22
6" INV IN 11.32 (N)
6" INV IN 11.32 (E)
6" INV OUT 11.32 (S)

100 LF
6" SDR 35 PVC SS
S=0.01

30" SD INV 12.42
6" SS INV 11.21

48 LF S=0.01
6" SDR 35 PVC SS

SSCO, CONNECT TO (E) 6" SS STUB
RIM 17.23
6" INV IN 10.84 (N)
6" INV OUT 10.84 (S)

19 LF S=0.05
6" SDR 35 PVC SS

(E) 48" SSMH
RIM 16.5±
6" INV IN 9.90 (N)

TRASH
GATE

10" FM

6" FM

SS

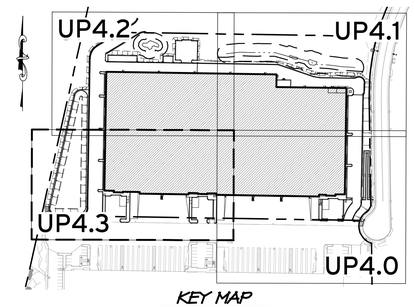
SSCO
10" FM

SSCO
UTILITY

GRAPHIC SCALE

20 0 20 40

(IN FEET)
1 inch = 20 FT



KEY MAP
SCALE: 1" = 200'

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OFFICE (707) 252.3301
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SDG COMMERCE 220 DISTRIBUTION CENTER
UTILITY PLAN : SW
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT MANSOOR
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023	
DRAWN	JFH / LMM	
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CHECKED	NAW	
JOB NO.	4122068.0	

SHEET NO.
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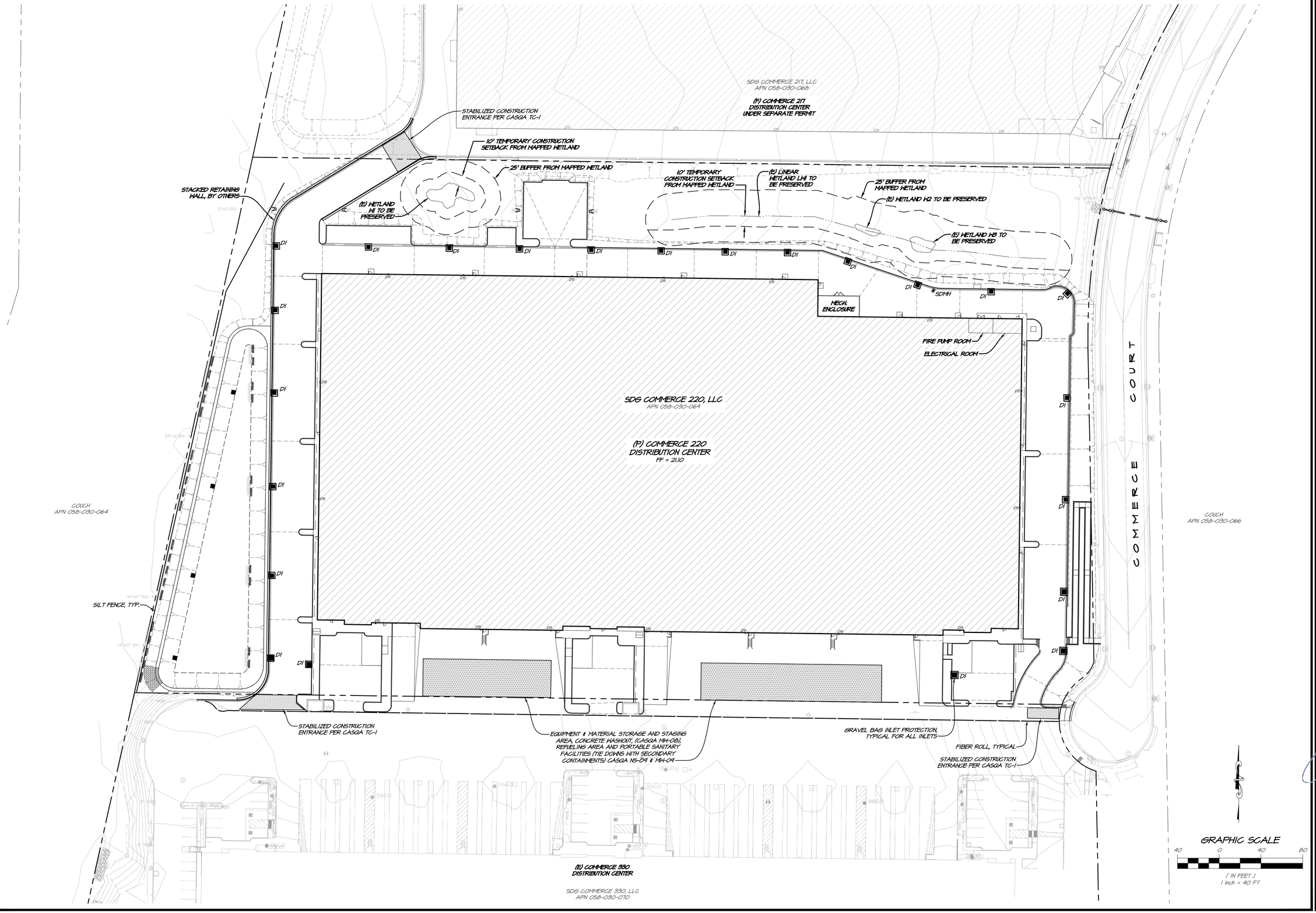
3367



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SDG COMMERCE 220 DISTRIBUTION CENTER
EROSION & SEDIMENT CONTROL PLAN
AMERICAN CANYON CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PAUL SARGENT WARNOCK
No. 82758
Exp. 9-30-24
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JULY 21, 2023
DRAWN	JFW /LMM
DESIGNED	RRG /EP
CHECKED	NAW
JOB NO.	4122068.0

SHEET NO.
UP5.0
12 OF 12 SHEETS

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3368



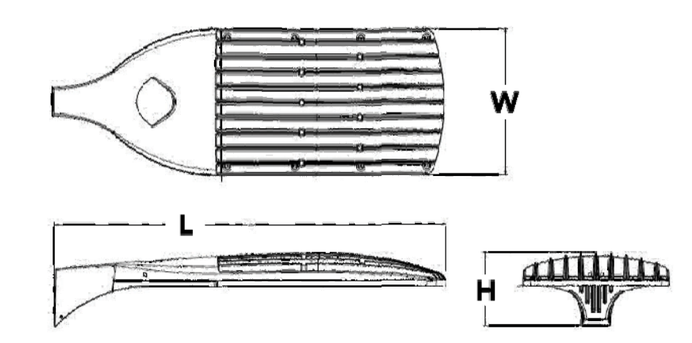
D-Series Size 2
LED Area Luminaire

Catalog Number	
Notes	
Type	P1, P2, W

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 1.1 ft² (0.10 m²)
Length: 40" (101.6 cm)
Width: 15" (38.1 cm)
Height: 7-1/4" (18.4 cm)
Weight (max): 36 lbs (16.3 kg)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information — **EXAMPLE:** DSX2 LED P7 T3M MVOLT SPA DDBXD

DSX2 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX2 LED	**Forward optics** P1 P5, P2 P6, P3 P7, P4 P8; **Rotated optics**[1] P10 P13, P11 P14, P12	30K 3000 K; 40K 4000 K; 50K 5000 K; AMBPC Amber phosphor converted[2,3]	T1S Type I Short; T2S Type II Short; T2M Type II Medium; T3S Type III Short; T3M Type III Medium; T4M Type IV Medium; TFTM Forward Throw Medium; T5VS Type V Very Short; T5S Type V Short; T5M Type V Medium; T5W Type V Wide; BLC Backlight control[2,3]; LCCO Left corner cutoff[2,3]; RCCO Right corner cutoff[2,3]	MVOLT[4,5]; 120[6]; 208[5,6]; 240[5,6]; 277[6]; 347[5,6,7]; 480[5,6,7]	**Shipped included** SPA Square pole mounting; RPA Round pole mounting; WBA Wall bracket; SPUMBA Square pole universal mounting adaptor[8]; RPUMBA Round pole universal mounting adaptor[8]; **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[9]

Control options		Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[10]; PER NEMA twist-lock receptacle only (no controls)[11]; PER5 Five-wire receptacle only (no controls)[11,12]; PER7 Seven-wire receptacle only (no controls)[11,12]; DMG 0-10V dimming extend out back of housing for external control (no controls); DS Dual switching[13,14]; PIR Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enable at 5fc[3,15]; PIRHN Network, Bi-Level motion/ambient sensor[16]	PIRH1FC3V Bi-level, motion sensor, 15'-30' mounting height, ambient sensor enabled at 1fc[3,15]; BL30 Bi-level switched dimming, 30%[3,13,17]; BL50 Bi-level switched dimming, 50%[3,13,17]; PNMTDD3 Part night, dim till dawn[3,18]; PNMT5D3 Part night, dim 5 hrs[3,18]; PNMT6D3 Part night, dim 6 hrs[3,18]; PNMT7D3 Part night, dim 7 hrs[3,18]; FAO Field Adjustable Output[19]	**Shipped installed** HS House-side shield[20]; SF Single fuse (120, 277, 347V)[6]; DF Double fuse (208, 240, 480V)[6]; L90 Left rotated optics[1]; R90 Right rotated optics[1]; **Shipped separately** BS Bird spikes[21]; EGS External glare shield[21]	DDBXD Dark bronze; DBLXD Black; DNAXD Natural aluminum; DWHXD White; DDBTXD Textured dark bronze; DBLBXD Textured black; DNATXD Textured natural aluminum; DWHGXD Textured white

LITHONIA LIGHTING. One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com
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DSX2-LED Rev. 03/21/18 Page 1 of 7

LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

6" LED

REALITY™

Non-IC New Construction

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.

CONSTRUCTION — LP6LN (New Construction): Rugged, 16-gauge galvanized steel mounting frame with torsion spring bracket to mount the finishing module. Vertically adjustable mounting brackets that use 16-gauge flat bar hangers (included), 1/2" conduit or C channel T-bar fasteners. Provides 3-3/4" total height adjustment.

6VL (New Construction): Galvanized steel mounting/plaster frame with torsion spring bracket to mount the finishing module. Integral galvanized bar hangers span up to 24" o.c. and feature built-in T-bar clips and nailers for T-bar or wood joist installations.

6VLR (Remodel): Galvanized steel remodel mounting/plaster frame with torsion spring bracket to mount the finishing module. Four (4) remodel ARC clips included for remodel installation.

All frames are equipped with galvanized steel junction box UL Listed for through wire applications. Junction boxes equipped with two combination 1/2"-3/4" and three 1/2" knockouts for straight-through conduit runs and removable access doors. Capacity: 4 (2 in, 2 out), No. 12 AWG conductors, rated for 90°C.

Post installation adjustment possible from below the ceiling.

Maximum 1-1/2" ceiling thickness.

LED Trim: Rugged, one-piece, die-cast heat sink design for optimum thermal management. Wet location rated lens is tightly fitted to the housing to reduce the ingress of dust.

OPTICS — Elliptical upper reflector and micro prism lens, provides precise beam control. Lower splay recesses optical system into the ceiling to reduce glare and provide a traditional PAR look. Standard fixture has a 0.65 spacing criteria. The luminaire is also available with a 0.95 spacing criteria option for use in general/ambient lighting applications.

CRI>80.

ELECTRICAL — On-board circuitry to ensure against wiring errors.

Thermal protection provided against improper insulation use.

High-efficiency, electronic LED 0-10V dimming driver mounted to the junction box, dims luminaire to 15% light output.

For dimming fixture requires two (2) additional low-voltage wires to be pulled.

The system maintains 70% lumen output for more than 50,000 hours.

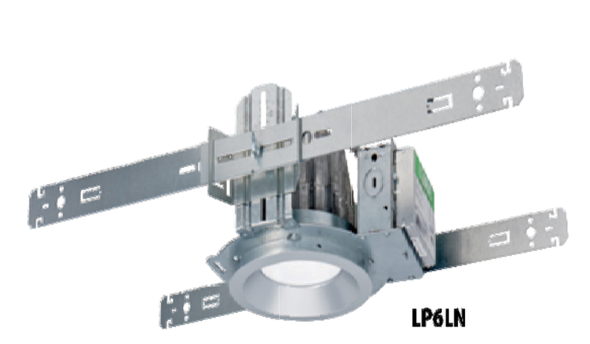
Input wattage for 1000L is 14.2 W, 74 lumens per watt.

Actual wattage may differ by +/-15% when operating between 120-277V +/-10%.

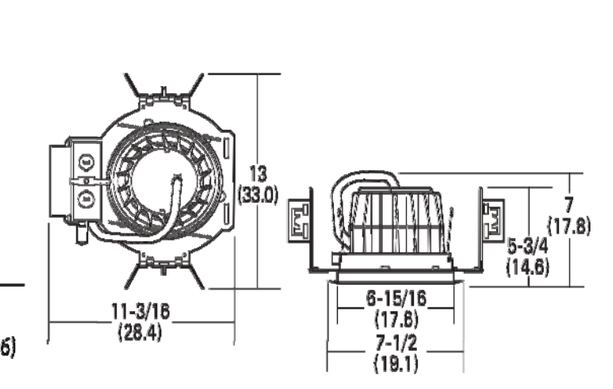
LISTINGS — CSA certified to US and Canadian safety standards. Wet location listed.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



LP6LN



Specifications
Aperture: 4-3/8 (11.1)
Ceiling opening: 6-15/16 (17.6)
Overlap trim: 7-1/2 (19.1)
Height: 7 (17.8)

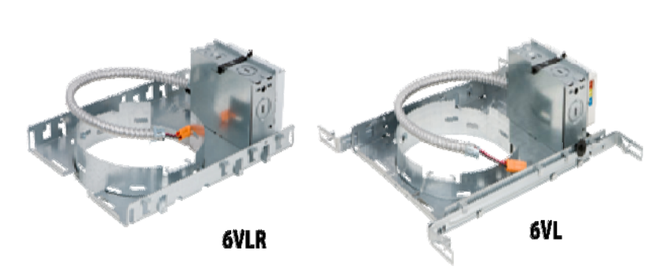
All dimensions are inches (centimeters) unless otherwise noted.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. **Example:** REAL6C D6MW ESL 1500L 35K .95SC 277 LP6LN

REAL6C D6		ESL						
Series/Finish		Type	Lumen output[1]	Color temperature	Distribution	Voltage	Mounting pan	Options
Series: REAL6C D6 6" open downlight	Finish: MW Matte white; A Clear diffuse; AZ Clear specular; BN Brushed nickel; BLZ Black specular; BZA Antique bronze; ORB Oil-rubbed bronze; WT Wheat diffuse	ESL	1000L 14.2W, 1000 lumens	27K 2700K; 30K 3000K; 35K 3500K; 40K 4000K	.65SC .65 Spacing criteria; .95SC .95 Spacing criteria	120; 277; 347[2]	LP6LN 1000L[3]; 6VL 1000L[3]; 6VLR 1000L[3]	PFMW Matte white plastic flange ring; PFBL Black plastic flange ring; ELR Emergency battery pack with remote test switch[4]; GMF Single slow-blow fuse, must specify voltage; ISH Insect shield

Accessories: *Order as separate catalog number.*

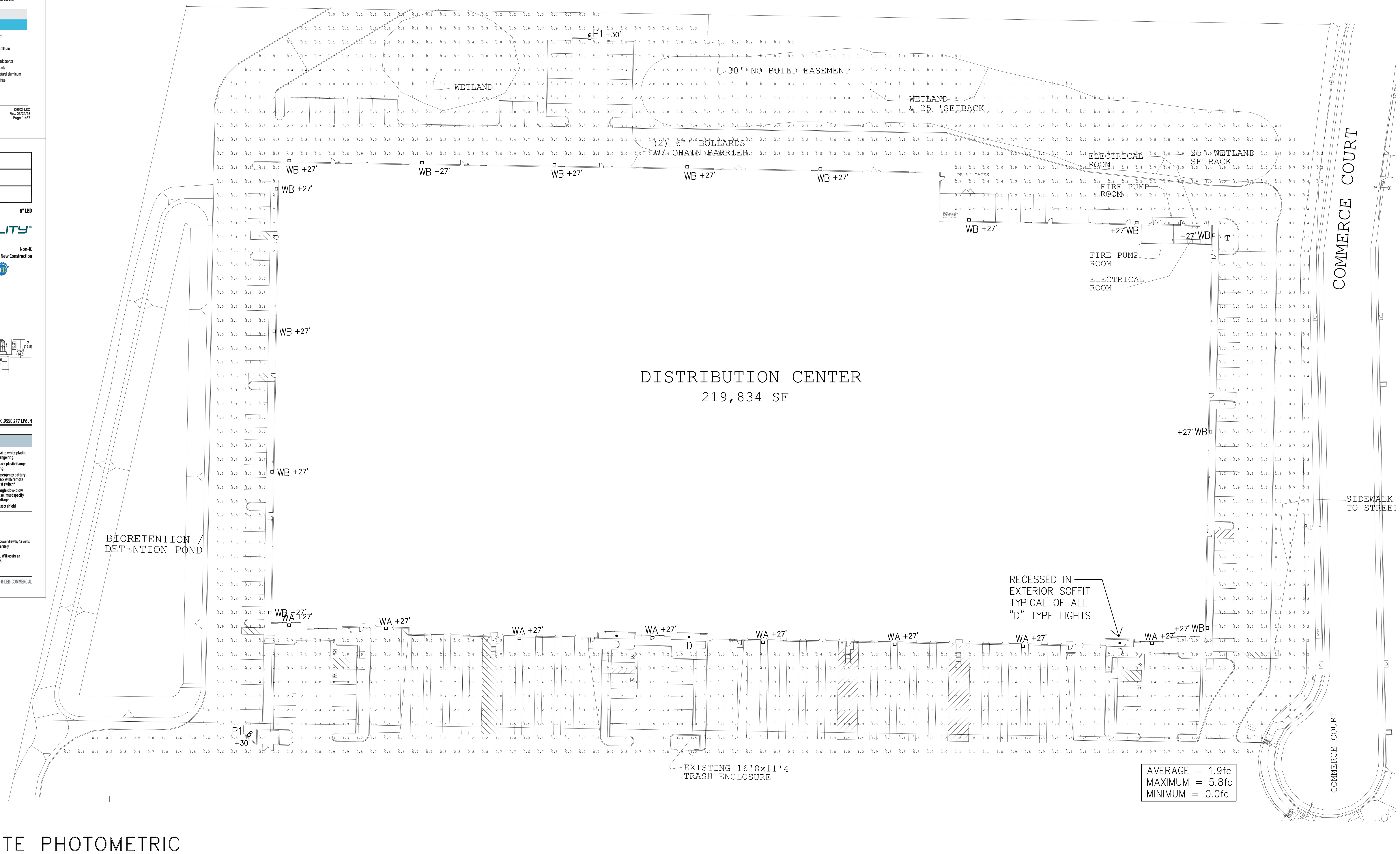
NPP16 D — nLight® network relay pack with 0-10V dimming. Refer to TN-602.
NPP16 D ER — nLight® network relay pack with 0-10V dimming for emergency circuit operation. Refer to TN-602.[5]



6VLR 6VL

Notes
1. Total system nominal delivered lumens.
2. Using step-down transformer increases power draw by 15 watts.
3. Lumens only required when ordered separately.
4. Not available with 347V.
5. For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.

DOWNLIGHTING REALITY-6-LED-COMMERCIAL



SITE PHOTOMETRIC

SCALE: 1" = 40'-1"

Bosley Electric COMPANY
COMMERCIAL AND INDUSTRIAL SERVICE AND CONTRACTING
935 Arden Way (916) 568-5180
Sacramento, CA 95815 FAX (916) 568-5183
CA License No. 379245
NV License No. 0038979

BOSLEY ELECTRIC COMPANY — CLASSIFICATION B C-10 — LICENSE NO. 379245 — STATE OF CALIFORNIA

THESE PLANS HAVE BEEN PREPARED BY BOSLEY ELECTRIC FOR THEIR EXCLUSIVE USE IN ACCORDANCE WITH SECTION 6737.3 OF THE PROFESSIONAL ENGINEERS ACT AND ARE NOT TO BE USED FOR THE PURPOSE OF BIDDING OR INSTALLATION BY ANY OTHER CONTRACTOR.

Project: SDG COMMERCE 220 DISTRIBUTION CENTER
COMMERCE CT.
AMERICAN CANYON, CALIFORNIA

No.	Revision	Date

Client

Sheet Title: SITE PHOTOMETRIC

Date: 3-15-2023	Project No.: 8941-23
Drawn By: KC	Sheet No.: E1.1
Checked By:	

Attachment 2.2 EXHIBIT B
Applicant Confirmation of Conditions of Approval
SDG Commerce 220 EIR and CUP
(FILE NO. PL23-0017)

As shown by my signature below, I confirm that I understand and agree to abide by the conditions of approval included in the Conditional Use Permit Approval dated October 24, 2024.

_____ _____
Applicant's signature Date

_____
Applicant's name

_____ _____
Property Owner's signature Date

_____
Property Owner's name

Please return signed confirmation to the City of American Canyon Community Development Department, 4381 Broadway, Suite 201, American Canyon, CA 94503

Attachment 3: Public Notice Package

CITY OF AMERICAN CANYON PLANNING COMMISSION

NOTICE OF PUBLIC HEARING

On **Thursday, October 24, 2024,** at the hour of **6:30 p.m.,** at **4381 Broadway, Suite 201** (in the Council Chambers of the American Canyon City Hall), a public hearing will be held by the Planning Commission of the City of American Canyon to consider the following:

APPLICATION: The Planning Commission will consider a Resolution recommending the City Council certify the SDG Commerce 220 Distribution Center Final Environmental Impact Report (Final EIR) (State Clearing House Number 2023100842), and a Resolution recommending the City Council to approve a Conditional Use Permit for the SDG Commerce 220 Distribution Center. The SDG Commerce 220 Distribution Center consists of a 219,834 square-foot warehouse with 23 truck doors and approximately 4,400 square feet of office space (File No. PL23-0017).

PROJECT DESCRIPTION: The proposed project being considered for recommendation to the City Council is approval of the Final EIR and Conditional Use Permit as described above to develop a 219,834 square foot wine distribution warehouse on a 10.17-acre site in the Recreation and Open Space (REC) Zoning District. The warehouse has an average roof height of 35 feet and includes 23 truck doors and approximately 4,400 square feet of office space. The site is accessible from Commerce Court.

ENVIRONMENTAL REVIEW: The proposed SDC Commerce 220 Distribution Center was evaluated under the California Environmental Quality Act with an Environmental Impact Report (EIR) (SCH# 2023100842). The EIR provides a project-level analysis of the environmental effects of the Project. The environmental impacts of the proposed project are analyzed in the EIR to the degree of specificity appropriate, in accordance with CEQA Guidelines Section 15146.

PROJECT LOCATION: 1055 Commerce Ct, American Canyon, CA; APN 058-030-069

APPLICANT: SDG Commerce 220, LLC

All interested persons are invited to attend the meeting and be heard on this matter. Copies of all documents that relate to the above-described project may be examined at the Community Development Department office prior to the hearing. The meeting will be conducted in person and by teleconference via a Zoom connection where the Planning Commission and staff will participate with both audio and video presence. The meeting will be accessible for all members of the public to attend via the City's website, YouTube, and Cable TV Channel 28 and public comments enabled via email and phone.

Written comments may be submitted to the Community Development Department at https://www.americancanyon.gov/Projects/Development-Projects-Under-Review/SDG-220-Distribution-

Center-Conditional-Use-Permit or by mail at 4381 Broadway St, Suite 201, American Canyon, CA 94503, prior to the public hearing.

If you challenge the particular proceedings in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City prior to the public hearing.

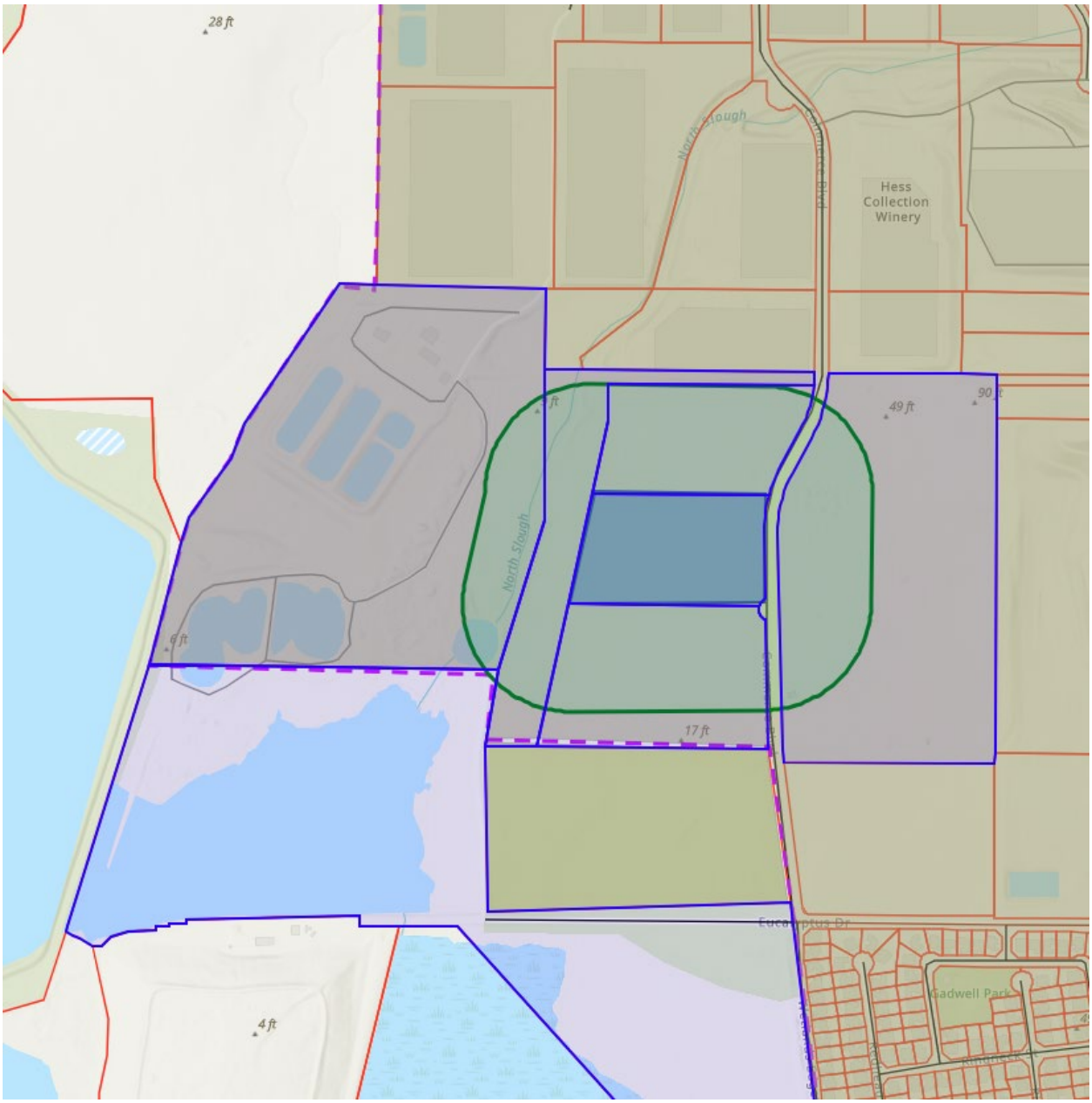
Public meetings/events sponsored or conducted by the City of American Canyon are held in accessible sites. Requests for accommodations may be made by calling (707) 647-4577 (voice) or 711 for the California Relay Service or by e-mailing cityclerk@americancanyon.gov at least 72 hours in advance of the event. Copies of documents distributed at the meeting are available in alternative formats upon request.

_____

Nicolle Hall, Deputy City Clerk

Date: October 11, 2024
Publication Date: October 12, 2024

Attachment 3: Public Notice Package



058030064000
C/o Glen Couch
1009 Shasta Street
Vallejo Ca 94590

058020017000
C/o Accounts Payable
4381 Broadway
American Canyon Ca 94503

058030068000
413 W Yosemite Ave Ste 105
Madera Ca 93637

058030066000
C/o Glen Couch
1009 Shasta Street
Vallejo Ca 94590

058030055000
C/o Accounts Payable
4381 Broadway
American Canyon Ca 94503

058030069000
413 W Yosemite Ave Ste 105
Madera Ca 93637

058030070000
413 W Yosemite Ave Ste 105
Madera Ca 93637

From: William He
To: Yvonne Baginski; Andrew Goff; Davet Mohammed; Crystal Mallare; Brando Cruz; Jason Holley
Cc: Brent Cooper; Nicolle Hall; John Wojtas; Janna Waligorski
Subject: RE: 1055 commerce court, SDG warehouse
Date: Friday, October 18, 2024 10:34:00 AM

Hi Yvonne,

Thank you for your comment on the SDG Commerce 220 Project. I have copied your comment to the applicant and property owner representative, John Wojtas, who can respond to your concerns regarding landscaping and vegetation.

Kind regards,

William He, AICP
Senior Planner
City of American Canyon
Community Development Department
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Office: 707 647 4337

Note: Our website and email addresses have changed!
whe@americancanyon.gov
https://www.americancanyon.gov/

From: Yvonne Baginski <yvonnebaginski@gmail.com>
Sent: Thursday, October 17, 2024 3:55 PM
To: Andrew Goff <agoff@americancanyon.gov>; Davet Mohammed <dmohammed@americancanyon.gov>; Crystal Mallare <cmallare@americancanyon.gov>; Brando Cruz <bcruz@americancanyon.gov>; William He <whe@americancanyon.gov>; Jason Holley <jholley@americancanyon.gov>
Subject: 1055 commerce court, SDG warehouse

[You don't often get email from yvonnebaginski@gmail.com. Learn why this is important at https://url.avanan.click/v2/r01/___https://aka.ms/LearnAboutSenderIdentification___.YXAzOmFtY246YTpvOmMzYmVmYTkzZTJhZTE1N2EzNGM0ZmZiZGZlYzI2YTk1Ojc6MWUyOTo2MmU1ODY0NGE4MTYxMTcyYzE3M2U4YjA0NmRlMDU2NzFlMjc0NWJiY2E3ZmU1ZDc2NjE1MGIwYmE2MTQ3ZTI0OnA6VDpG]

Good afternoon. Today I walked out at Commerce Court to take a look at how SDG cares for the plants and landscaping on the first two warehouses they've built. Remember, they cut down a lot of trees in this land and ripped out the native vegetation and graded the property. Almost every tree they have since planted on this property is dead from neglect. Many of the

plants as well. There has been no watering at all and these plants have been unable to establish themselves to survive
Their first summer. While drought tolerant, these plants are also not native and not the Plants they destroyed to build these warehouses. None of this matters since almost one-third of the plantings are dead.

I also included a photo of wetlands they are “saving” so you can see how limited it is, and that concrete will be surrounding it and with the trucks, will probably annihilate the integrity of the wetlands. They can’t survive this either.

I took many more photos, but I’d recommend you take a walk out there and see for yourself.

Today, too, there were two surveyors on the property measuring the land for the next warehouse, which this commission will be deciding on Oct. 24. They have already started the project, even though there hasn’t been final approval by the planning commission.

Please postpone making a decision on this DEIR until safeguards are in place to protect the animals and vegetation of this bioregion.

Thank you
Yvonne Baginski



























Sent from my iPhone

City of American Canyon
Active Community Development Projects
October 2024

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
1.	Canyon Café Food Truck Design Permit (PL23- 0020)	Michael Lara	Park a Stationary Food Truck at the front of Canyon Café restaurant with operating hours: Mon - Sun, 7am - 11pm	3845 Broadway 0.63 acres	10/2/23 Application submitted 10/12/23 Comments to applicant 4/12/24 Application resubmitted 5/3/24 Comments to applicant 5/20/24 Application resubmitted 6/21/24 Comments to applicant 8/19/24 Application resubmitted 10/4/24 Comments to applicant	William He
2.	SDG 220 Conditional Use Permit (PL23-0017)	SDG Commerce 220, LLC	Conditional Use Permit for a 220,000 square foot wine warehouse.	1055 Commerce Court 10.17 acres	8/3/23 Application submitted 8/30/23 Comments to applicant 10/6/23 Application resubmitted 10/27/23 EIR 30-day NOP Comment period begins 11/7/23 Comments to applicant 11/17/23 EIR NOP Scoping Meeting 11/27/23 EIR NOP Comment Period ends 1/12/24 Meeting with applicant to discuss administrative draft EIR (ADEIR) 3/26/24 ADEIR submitted 4/15/24 ADEIR comments to applicant 5/10/24 ADEIR resubmitted 6/11/24 DEIR Public Comment Period Begins 7/30/24 Public Comment Workshop 9/16/24 Admin FEIR submitted 10/24/24 PC Hearing	William He

Project Applications Under Review

No.	Project Name	Applicant	Description	Location/Area	Application Status	Planner
3.	Crown Hill Minor Modification (PL23-0012)	Crown Hill Stone Supply, LLC	Construct a 4,800 square foot storage building.	650 Green Island Road 5.88 acres	5/22/23 Application submitted 6/13/23 Comments to applicant 1/29/24 Staff checked in with the applicant on project status 6/7/24 Staff checked in with applicant 10/15/24 Application resubmitted	William He
4.	Crawford Way Multifamily Residential (PL23-0003)	Yeh Area Group	A 100-unit Townhome style apartment homes with sixteen 3-story buildings including a mix of 68 two-bedroom and 32 three-bedroom units.	Northwest corner Crawford Way/SR-29 4.276 acres	1/25/23 Application submitted 2/27/23 Comments to applicant 7/19/23 Application resubmitted 8/16/23 Comments to applicant 12/12/23 Staff checked in with the applicant on project status. 1/25/24 Application resubmitted 2/23/24 Comments to applicant 6/26/24 Application resubmitted 7/26/24 Comments to applicant 9/17/24 Application resubmitted 10/23/24 Meeting with applicant	William He
5.	Ibarra Terminal Conditional Use Permit (PL22-0032)	Ibarra Trucking	Convert an existing residential site into a trucking office with equipment and vehicle storage.	1190 Green Island Road 1.56 acres	12/6/22 Application submitted 12/16/22 Comments to applicant 12/12/23 Staff checked in with applicant on project status 6/7/24 Staff checked in with the applicant on project status	William He

Project Applications Under Review

No.	Project Name	Applicant	Description	Location/Area	Application Status	Planner
6.	Residences at Napa Junction (PL22-0011)	American Canyon Ventures LLC	453 multi-family rental dwellings with associated parking and amenities	1000 Reliant Way / 15 acres	5/2/22 Application submitted 6/1/22 Comments to applicant 7/22/22 Application resubmitted 8/19/22 Comments to applicant 1/11/23 Application resubmitted 2/9/23 Comments to applicant 7/11/23 30-Day NOP Completed 8/11/23 Admin Draft EIR Preparation 1/29/24 Staff checked in with the applicant on project status 6/7/24 Staff checked in with the applicant on project status	William He
7.	Sun Square Mixed Use Apts Minor Modification (PL24-0003)	Max Konan	Modify site plan to reduce 1 parking space, revise landscaping plan, and widen sidewalk along front setback.	425 Napa Junction Rd/ 1 acre	1/29/24 Application Submitted 2/28/24 Comments to applicant 4/11/24 Application resubmitted 5/8/24 Comments to applicant 6/10/24 Application resubmitted 7/3/24 Comments to applicant 9/20/24 Application resubmitted	William He
8.	Outfront Billboards Zone Change (PL24-0006)	Outfront Media	Zone Change and Development Agreement to convert existing double-sided billboard sign to LED displays	4301 Broadway and 5747 Broadway	3/14/24 Application submitted 4/17/24 Comments to applicant 4/17/24 Application resubmitted 4/30/24 Comments to applicant 6/24/24 Application resubmitted 8/2/24 Comments to applicant	Brent Cooper
9.	Oat Hill / Domaine Apts Parcel A and B Major Modification (PL24-0009)	Russell Square	Change architecture, grading and landscaping of Oat Hill apartments	100 Chennault Way, 100 Opus Lane	5/1/24 Application Submitted 5/21/24 Comments to applicant 5/31/24 Application resubmitted 7/30/24 PC Hearing (Continued) 8/22/24 PC Hearing (Continued) 9/26/24 PC Hearing Approved 10/01/24 City Council Approved	Brent Cooper

Project Applications Under Review

No.	Project Name	Applicant	Description	Location/Area	Application Status	Planner
10.	Watson Ranch Lot 7 Subdivision Map (PL24-0011)	KB Homes	Development of 136 single-family homes on a 12.86-acre site in the Watson Ranch MDR-16 Zone	West of Marcus Rd and Cartier St intersection / 12.86-acres	6/26/24 Application submitted 7/26/24 Comments to applicant 8/13/24 Application resubmitted 9/13/24 Comments to applicant 10/2/24 Application resubmitted 10/24/24 PC Hearing Scheduled	William He
11.	Watson Ranch Lot 7 Design Permit (PL24-0012)	KB Homes	Development of 136 single-family homes on a 12.86-acre site in the Watson Ranch MDR-16 Zone	West of Marcus Rd and Cartier St intersection / 12.86-acres	6/26/24 Application submitted 7/26/24 Comments to applicant 8/13/24 Application resubmitted 9/13/24 Comments to applicant 10/2/24 Application resubmitted 10/24/24 PC Hearing Scheduled	William He
12.	USAgain Textile Recycling Box Design Permit (PL24-0021)	USAgain	Addition of two unmanned textile recycling boxes on the southeast side of Parry's Pizza Store.	234 American Canyon Rd	8/9/24 Application Submitted 9/10/24 Comments to applicant	William He
13.	Watson Ranch Lot 8 Design Permit	AC-1, LLC	Development of 25 single-family homes on a 2.3-acre site in the Watson Ranch Specific Plan Medium Density 16 Zone.	80 to 212 Cartier St 2.3 acres	8/12/24 Application Submitted 9/6/24 Comments to applicant 9/26/24 PC Hearing	William He

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
1. Hampton Inn Improvement Plans (DV23-0002)	Site improvements for a 3-story, 112 room Hampton Inn Hotel.	3443 Broadway	2.52 acres	1/24/23 Application submitted 3/17/23 Comments to applicant 9/21/23 Water Supply Report approved 12/12/23 Staff contacted applicant for a project status update 2/13/24 1st Submittal Received 3/16/24 1st PC Comments returned 4/3/24 2nd Submittal Received 4/29/24 2nd PC Comments Returned 5/31/24 3rd Submittal Received 6/24/24 3rd PC Comments Returned 8/6/24 4th Submittal Received 9/11/24 4th PC comments returned	Edison Bisnar
2. Hampton Inn (BP24-0124)	Development of a 3-story 112-room Hampton Inn Hotel.	3443 Broadway	2.52 acres	3/5/24 Application submitted 4/2/24 Comments to applicant 9/19/24 Application resubmitted 10/11/24 Comments to applicant	Ron Beehler
3. Napa Valley Ruins and Gardens Building Retrofit (BP23-0010)	Level 1 and level 2 retrofit of Buildings 2, 3, 4, 5, 7 at the American Canyon Ruins.	Southwest corner Rio Del Mar East/Rolling Hills Drive	29 acres	1/4/23 Application submitted 1/20/23 Comments to applicant 9/28/23 Status outreach to applicant	Ron Beehler
4. Oat Hill Domaine Mass Grading (DV22-0004)	Mass grading for Parcel A and B	Western terminus Napa Junction Road	20.8 acres	4/21/22 Application submitted 10/20/22 Grading Permit Approved 7/22/24 Mass Grading in Parcel A in Progress	Edison Bisnar
5. Oat Hill Domaine Residential Building Plan Check (BP22-0733)	Plan check for the 15-Unit Apartment Building (Bldg 100)	Western terminus Napa Junction Road	N/A	1/11/23 Application submitted 2/8/23 Comments to applicant 4/14/23 Permit resubmitted 4/27/23 Comments to applicant 12/12/23 Resubmittal received 12/19/23 Master Plans Approved	Ron Beehler

6. Oat Hill Domaine Residential Building Plan Check (BP22-0736)	Plan check for the 18-Unit Apartment Building (Bldg 200)	Western terminus Napa Junction Road	N/A	1/11/23 Application submitted 2/8/23 Comments to applicant 4/14/23 Permit resubmitted 12/12/23 Resubmittal received 12/19/23 Master Plans Approved	Ron Beehler
7. Oat Hill Domaine Parcel A Improvement Plan (DV22-0006)	Precise grading, utilities for the Oat Hill Residential Project	Western terminus Napa Junction Road	10 acres	12/8/22 Application submitted 12/20/23 Improvement Plans approved 7/22/24 Mass grading in progress	Edison Bisnar
8. Oat Hill Domaine Parcel B Improvement Plan (DV22-0007)	Precise grading, utilities for the Oat Hill Residential Project	Western terminus Napa Junction Road	10.8 acres	12/8/22 Application submitted 8/15/23 Improvement Plans approved 7/22/24 Building construction in progress	Edison Bisnar
9. Oat Hill Domaine Parcel B Clubhouse Building Permit (BP22-0734)	Clubhouse building on Parcel B (Lower Parcel)	100 Chennault Way	N/A	12/15/22 Application submitted 8/15/23 Improvement Plan DV22-0007 approved 1/29/24 Response to Building comments outstanding 2/12/24 Resubmittal received 2/20/24 Comments to applicant 2/26/24 Resubmittal received 2/26/24 Permit Approved	Ron Beehler

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
10. Oat Hill Domaine Parcel A Maintenance Building Permit (BP22-0737)	Maintenance building on Parcel A (Upper Parcel)	801 Opus Way	N/A	12/15/22 Application submitted 9/29/23 Requires Improvement Plan DV22-0006 approval and conditions of approval satisfied 1/4/24 Resubmittal received 1/5/24 Comments to applicant	Ron Beehler
11. Oat Hill Domaine Parcel A Pool Building Permit (BP22-0739)	Pool building on Parcel A (Upper Parcel)	301 Opus Way	N/A	12/15/22 Application submitted 9/29/23 Requires Improvement Plan DV22-0006 approval and conditions of approval satisfied 1/4/24 Application submitted 1/5/24 Comments to applicant	Ron Beehler
12. Oat Hill Domaine Parcel A Clubhouse Building Permit (BP22-0740)	Clubhouse building on Parcel A (Upper Parcel)	300 Opus Way	N/A	12/15/22 Application submitted 9/29/23 Requires Improvement Plan DV22-0006 approval and conditions of approval satisfied 1/9/24 Resubmittal received 1/16/24 Comments to applicant	Ron Beehler
13. Oat Hill Offsite Improvement (DV23-0008)	Napa Junction Road, domestic water, recycled water, sanitary sewer and public water pump station improvements.	Along Napa Junction Rd, north of Oat Hill Apts frontage	N/A	3/6/24 Improvement Plans approved 3/12/24 Offsite Construction at Napa Junction commenced 4/11/24 Recycled Water main installation at Lombard to Hess Drive north commenced. 8/14/24 Recycled Water main installation completed. 07/02/24 Public Water Pump Station coordination. Design in progress 9/19/24 Offsite Improvements construction in progress.	Edison Bisnar
14. SDG 217 Warehouse Building Permit (BP22-0436)	Building Permit for a 217,294 sq ft warehouse	1075 Commerce Ct	10.38 acres	8/18/22 Application submitted 4/10/23 Permit issued 9/17/24 Project Complete	Ron Beehler

				10/16/24 Certificate of Occupancy issued	
15. Napa Cove Improvement Plans and Grading (DV22-0001)	Grading and Improvement plans for the Napa Cove Apartment project.	3787 Broadway	3.48 acres	1/18/22 Application submitted 2/4/22 First Plan check 3/21/22 Grading permit approved 7/22/24 Construction in progress. Removal of existing poles and undergrounding is complete. Highway 29 widening in progress.	Edison Bisnar
16. Napa Cove Building Permits (BP22-0017, 0018, 0019)	Building Permits for the Napa Cove Apartment Project	3787 Broadway	3.48 acres	1/19/22 Application submitted 2/1/22 First Plan check 3/21/22 Permits issued 9/24/24 Bldg B Certificate of Occupancy issued. 10/2/24 Bldg C Certificate of Occupancy issued.	Ron Beehler

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
17. Watson Ranch Lot 10 Harvest Rough grading and Subdivision Improvement Plans (DV21-0014, 0015)	Rough grading and site improvements for WRSP Lot 10 Harvest	Northeast corner Marcus Road/Rio Del Mar East	27.17 acres	11/08/21 Application submitted 12/08/21 First Plan Check 01/03/22 Second Submittal 01/13/22 Second Plan Check 01/21/22 Third Submittal 1/24/22 Rough Grading Permit Approved 7/22/24 construction in progress. All roads and utilities are complete. 83 of 219 houses are occupied. 38% complete.	Edison Bisnar
18. Watson Ranch Lot 10 Harvest Model Home Building Permits (BP21-0522, 0523)	Harvest Model Homes for Watson Ranch Lot 10	Northeast corner Marcus Road/Rio Del Mar East	27.17 acres	12/02/21 Application submitted 12/20/21 First Plan Check 02/10/22 Second Submittal 2/18/22 Second Plan Check 4/5/22 Applicant Submittal 4/7/22 Permit approved 9/2/22 Deferred Submittal 9/7/22 Permit approved 12/31/23 51 homes finaled 5/17/24 70 homes finaled 9/3/24 94 homes finaled	Ron Beehler
19. Napa Valley Casino Temporary Parking (DV20-0012)	Temporary parking with 39 stalls along Donaldson Way.	3466 Broadway		7/19/23 Approved Grading Permit and Improvement Plans. 8/16/24. Temporary parking lot paved. Parking lot lights installed. Drainage and landscaping work in progress.	Edison Bisnar

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
20. Home2Suites Building Permit (BP19-0499)	Building permit for 102 room hotel.	3701 Main Street	2.0 acres	12/3/19 Application submitted 8/9/22 BP Issued	Ron Beehler
21. 236 Canyon Estates Court (BP23-0823)	Building Permit for a new single-family house and ADU.	236 Canyon Estates Court	0.53 acres	12/7/23 Application Submitted 1/2/24 Comments to applicant 3/22/24 Application resubmitted 4/3/24 Comments to applicant	Ron Beehler

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
22. Copart (DV20-0008)	Grading permit for an auto storage lot and office building Conditional Use Permit PL18-0019.	1587 and 1660 Green Island Road	20 acres	4/23/20 On-site private wastewater treatment system application submitted to the County 5/12/22 Grading Permit approved 4/18/24 Civil Improvements are 90% complete 7/22/24 95% Complete	Edison Bisnar
23. Home2Suites Will Serve and Improvement Plan (DV19-0015)	Will serve application and improvement plans for a 102-room hotel.	3701 Main Street	2.0 acres	9/5/19 Will Serve Application submitted 5/25/20 Improvement Plan Application submitted 6/10/21 Improvement Plan approved 4/5/22 Council approved fee reimbursement request 8/10/22 2nd Change Plan Approved 4/18/24 Main Street is 50% complete. Onsite construction in progress. 7/22/24 Construction in progress	Edison Bisnar
24. Chicken Guy Improvement Plan (DV23-0015)	New 2,818 sqft restaurant	200 American Canyon Road	1.03 acres	8/16/23 Application submitted 9/5/23 Plans submitted 3/6/24 Improvement Plans approved 4/18/24 Construction in progress.	Edison Bisnar
25. Chicken Guy Restaurant Building Permit (BP23-0616)	New 2,818 sqft restaurant	200 American Canyon Road	1.03 acres	8/15/23 Application submitted 3/7/24 Permit Issued	Ron Beehler
26. Two-story Four-plex (BP23-0628)	New 5,344 sqft two-story four-plex apartment	6 Donaldson Way	0.3 acres	8/24/23 Application submitted 9/8/23 Comments to applicant 3/1/24 Application resubmitted 3/25/24 Comments to applicant	Ron Beehler

27. Sun Square Mixed Use Buildings Phase I (BP24-0131)	New 5,781 sqft mixed-use building	425 Napa Junction Rd	1.0 acre	3/11/24 Application submitted 4/10/24 Comments to applicant 8/23/24 Application resubmitted 9/10/24 Comments to applicant	Ron Beehler
28. Watson Ranch Lot 7 (DV24-0005)	Mass grading of Watson Ranch Large Lot 7	Vacant lot north of Lemos Pointe Apts in Watson Ranch	12.86 acres	3/26/24 1st Submittal received 4/8/24 1st PC comments returned 4/15/24 2nd Submittal received 4/18/24 2nd PC comments returned 4/22/24 3rd Submittal received 4/25/24 3rd PC comments returned 6/3/24 4th Submittal Received 6/10/24 Grading Permit Approved 7/22/24 Grading in progress	Edison Bisnar
29. Sun Square Improvement Plans (DV23-0013)	Site Improvement for Sun Square	425 Napa Junction Road	1.0 acre	3/29/24 1st submittal received 4/12/24 1st PC comments returned 6/7/24 2nd submittal received 6/21/24 3rd PC comments returned	Edison Bisnar
30. Promontory Subd Rough Grading (DV23-0018)	Mass Grading for 216 single-family lots with 54 junior ADU subdivision	Watson Ranch Newell Property	23 acres	9/13/23 1st submittal received 12/8/23 1st PC comments returned 4/18/24 2nd submittal received 6/9/24 2nd PC comments returned 8/6/24 3rd submittal received 9/5/24 3rd PC comments returned	Edison Bisnar
31. Promontory Subdivision Improvement Plan (DV23-0018)	Improvement Plans for 216 single-family lots with 54 junior ADU subdivision	Watson Ranch Newell Property	23 acres	11/3/23 1st submittal received 1/11/24 1st PC comments returned 5/3/24 2nd submittal received 6/20/24 2nd PC comments returned 8/16/24 3rd submittal received 9/11/24 3rd PC comments returned	Edison Bisnar
32. Napa Junction Solar (DV23-0024)	Improvement Plans for 3 MW solar utility facility with RV and boat storage.	5381 Broadway	6.68 Acres	12/11/23 1st submittal received 2/9/24 2nd submittal received 3/18/24 3rd submittal received 4/29/24 4th submittal received 5/14/24 5th submittal received 6/5/24 Grading Permit approved	Edison Bisnar

				9/4/24 Improvement Plans Approved 9/16/24 Contractor mobilized for grading 10/17/24 Grading work in progress	
33. Napa Junction Mini Storage (DV24-0008)	540 unit mini storage facility	4484 Hess Road	5.84 acres	6/7/24 1st Submittal received 7/10/24 1st PC comments returned 8/30/24 2nd submittal received	Edison Bisnar
34. Giovannoni Mass Grading (DV24-0009)	Mass Grading for the Giovannoni Logistics Center	Green Island Road	70.2 acres	6/17/24 1st submittal received 7/22/24 1st PC comments returned 8/14/24 2nd submittal received 8/26/24 2nd PC comments returned 9/13/24 3rd submittal received	Edison Bisnar

Major City-Initiated Projects					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff**
1. Accessory Dwelling Unit Ordinance update	Amendments to the ADU Ordinance that respond to comments from HCD	Citywide	N/A	10/4/23 Comment letter from HCD 1/10/24 Drafting updates. 2/22/24 PC Hearing Approved 3/19/24 CC Hearing First Reading Approved	Brent Cooper
2. Density Bonus Ordinance Update and Housing Element Implementation	Amendments to the Density Bonus Ordinance and Municipal Code updates to implement the Housing Element	Citywide	N/A	1/10/24 Drafting updates. 2/22/24 PC Hearing Approved 3/19/24 CC Hearing First Reading Approved	Brent Cooper
3. Comprehensive General Plan Update	Review and update to bring the General Plan into conformance with current State standards and community values	Citywide	N/A	7/1/19 Drafting a Request for Proposal (RFP) 1/13/22 Modified “fast-track” technical update scope approved 6/7/22 City Council NOP approved 9/1/22 Administrative draft elements reviewed by staff 3/15/23 Administrative draft EIR received. 9/19/23 CC Land Use Map Review	Brent Cooper

Major City-Initiated Projects					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff**
4. Paoli/Watson Lane Annexation (PL19-0003)	General Plan Amendment, rezoning, and annexation of the Paoli/Watson Lane Property.	Southeast of Paoli Loop/SR-29	80 acres	9/5/17 City Council authorization to proceed 5/28/20 City received a Property Owner notice of intent to circulate a petition to annex the Paoli Loop/Watson Lane Property. 5/16/22 Annexation efforts returned to City initiated. Consultant preparing CEQA scope documents. 9/7/22 NOP Comment period begins 9/21/22 NOP Workshop 3/14/23 45-Day EIR Review period begins. Ends on 4/28/23. 4/27/23 PC EIR Workshop 5/1/23 Preparing Response to Comments 10/26/23 PC Hearing 11/7/23 CC EIR, GPA, ZC First Reading approved 11/14/23 ALUC Application submitted 2/2/24 ALUC Application approved 2/20/24 Prezoning 2nd Reading scheduled	City Manager

Major Regional Projects					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
1. Napa Valley Transportation Authority 2045 Countywide Transportation Plan	Update the 2015 NVTA Countywide Plan with new mobility priorities for the next 25 years.	Napa County	N/A	8/19 Project Kick-off 9/19 – 01/20 Public Input 01/21 Drafting the Plan 5/2021 Plan approved.	Alberto Esqueda (NVTA)
2. Regional Working Group on Climate Change	Countywide Working Group to evaluate efforts to adopt policies that will combat climate change.	Countywide	N/A	1/16/24 City approved a General Fund appropriation for City's share to prepare a Regional climate Action and Adaptation Plan (RCAAP)	Leon Garcia Mark Joseph
3. Napa Valley Transportation Authority Highway 29 PID Study	Project Initiation Document (PID) for Highway 29 through American Canyon	American Canyon	N/A	10/4/21 NVTA and American Canyon workshop 2/16/22 NVTA Board of Directors voted to remove the six-lane option from future study. 1/16/24 City approved Cooperative Agreement 04-2957 with Caltrans and NVTA for Project Approval and Environmental Document phase	Danielle Schmitz (NVTA)
4. Napa County Airport Land Use Compatibility Plan Update	Napa County Airport Land Use Compatibility Plan Update and associated CEQA documentation	Napa County Airport Compatibility Zones	N/A	January 2021 Board of Supervisors initiated Airport Land Use Compatibility Plan update 12/13/22 County selects aviation consultant Mead and Hunt 2/1/23 First working group meeting 4/12/23 Second meeting 6/22/23 Third meeting 11/16/23 Fourth meeting 12/14/23 City comments to Napa County	Brent Cooper