REGULAR PLANNING COMMISSION MEETING AGENDA

City Hall - Council Chambers
4381 Broadway, Ste. 201, American Canyon
October 28, 2021
6:30 PM

Chair: Tyrone Navarro
Vice Chair: Crystal Mallare
Commissioners: Eric Altman, Andrew Goff, Tammy Wong

AMENDED AGENDA
Agenda amended to modify language in the agenda heading in response to new direction from the Governor and remove duplicate attachment in item 3.

Consistent with Government Code Section 54953 and the American Canyon City Council Resolution Declaring the Existence of a Local Emergency due to the COVID-19 Pandemic, City Council, City Council and other public meetings are currently Teleconference Meetings Only to align with local and federal guidelines and social distancing recommendations for the containment of the coronavirus. This meeting will be broadcast live to residents on Napa Valley TV here and on YouTube here.

You may submit public comments for any Agenda Item, Non-Agenda Item or make general public comments by one of the following methods:

Oral comments, during the meeting: A Zoom Webinar has been established for public participation during the meeting related to a specific agenda item, or matters not on the agenda. To give your public comment directly to the legislative body during the meeting, use the Register to Speak feature of eComments or connect via below Zoom link and follow the instructions or by calling 408-638-0968.

Zoom Meeting Link: Click here
Webinar ID: 870 7174 1414 **Passcode: 822004**

Written comments, Via eComments: The eComments link is located on the Meetings & Agendas page of our website here. Comments received before the 3:00 p.m. day-of-meeting cutoff time will be routed to all Councilmembers at that time. eComments will remain open throughout the meeting, and all comments received will be posted online and become part of the meeting record.

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

AGENDA MATERIALS: City Council agenda materials are published 72 hours prior to the meeting, and are available to the public via the City's website at www.cityofamericancanyon.org.

AMERICANS WITH DISABILITIES ACT: The City Council will provide materials in appropriate alternative formats to comply with the Americans with Disabilities Act. Please send a written

request to City Clerk at 4381 Broadway, Suite 201, American Canyon, CA 94503 or by email to cityclerk@cityofamericancanyon.org. Include your name, address, phone number and brief description of the requested materials, as well as your preferred alternative format or auxiliary aid, at least three calendar days before the meeting.

6:30 P.M. REGULAR MEETING

CALL TO ORDER

PLEDGE

ROLL CALL

PUBLIC COMMENT

*This time is reserved for members of the public to address the Planning Commission on items of interest that are not on the Agenda and are within the subject matter jurisdiction of the Planning Commission. Comments are limited to 3 minutes. Comments for items on the Agenda will be taken when the item is called. The Planning Commission is prohibited by law from taking any action on matters discussed that are not on the Agenda, and no adverse conclusions should be drawn if the Planning Commission does not respond to public comment at this time. Speakers are asked to please speak clearly, and provide their name. Any handouts for distribution to the Planning Commission must be emailed by 3:00 p.m. on meeting day. To comment via zoom during the meeting: click the "raise your hand" button if joining by computer, or press *9 if joining by phone, when the item is called. To avoid confusion, hands raised outside of Public Comment periods will be lowered.*

AGENDA CHANGES

CONSENT CALENDAR

1. **Minutes of September 30, 2021**
   Recommendation: Approve Minutes of September 30, 2021 Planning Commission meeting.

2. **PG&E Design Permit Resolution Modified Language**
   Recommendation: Affirm modified Resolution language as approved at the September 30, 2021 Planning Commission meeting.

PUBLIC HEARINGS

3. **Zoning Code Amendment to prohibit new and expanded service stations in all zoning districts in the City of American Canyon that conduct motor vehicle fossil fuel retail sales.**
   Recommendation: Adopt a Resolution of the Planning Commission recommending the City Council of the City of American Canyon adopt an Ordinance to amend the American Canyon municipal code Chapter 19.04 definitions; Chapter 19.05 Commercial Classifications; Chapter 19.11 Commercial Zoning District; Chapter 19.49 Nonconforming Uses, structure, and lots; and Broadway District Specific Plan table 2-3 permitted uses General Plan amendment to prohibit new and expanded service stations in all zoning districts in the City

of American Canyon that engage in the retail sale of motor vehicle fossil fuels (PL21-0028).

4. "Lodging" in the Local Serving Mixed Use (LSMU) Zoning District and a Conditional Use Permit for a Hampton Inn Hotel

Recommendation: Consider three Resolutions:

1. A Resolution of the Planning Commission of the City of American Canyon recommending the City Council of the City of American Canyon: 1) adopt an Addendum to the Broadway District Specific Plan Program Environmental Impact Report for the Hampton Inn Project: consisting of an amendment to the Broadway District Local Serving Mixed Use Zoning District and Conditional Use Permit for a 106-room Hampton Inn Hotel on a 2.53-acre parcel at 3443 Broadway Street; and 2) direct staff to file a Notice of Determination;

2. Adopt a Resolution of the Planning Commission of the City of American Canyon, California, recommending the City Council of the City of American Canyon approve an amendment to the Broadway District Specific Plan Table 2-3 to permit Lodging as a Conditionally Permitted Use in the Local Serving Mixed Use Zoning District (LSMU) Zoning District and add a new Special Development Requirement No. 3 to require Lodging Uses in the LSMU Zoning District qualify for a three Star Forbes Travel Guide Rating (File No. PL20-0030); and

3. Adopt a Resolution of the Planning Commission of the City of American Canyon, California, recommending the City Council of the City of American Canyon approve a Conditional Use Permit for a 106-room Hampton Inn hotel on a 2.53-acre parcel at 3443 Broadway St, APN 058-312-010 (File No. PL20-0029)

MANAGEMENT AND STAFF ORAL REPORTS

5. Active Planning Projects

Recommendation: Review Active Planning Projects List

COMMISSIONER ITEMS

ADJOURNMENT

CERTIFICATION

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

_____

Nicolle Jones, Administrative Technician

CITY OF AMERICAN CANYON
REGULAR PLANNING COMMISSION MEETING

ACTION MINUTES

September 30, 2021

Consistent with the California Governor's Executive Order N-29-20 promoting social distancing, there will be no physical or in person meeting location available to the public. Instead, the meeting will be conducted by teleconference. The meeting will be accessible for all members of the public to attend and give public comment via the City's website, YouTube, and Cable TV Channel 28.

6:30 P.M. REGULAR MEETING

CALL TO ORDER
Meeting Called to order at 6:31 PM

PLEDGE OF ALLEGIANCE

ROLL CALL
Present: Commissioners Eric Altman, Andrew Goff, Tammy Wong, Vice Chair Crystal Mallare, Chair Tyrone Navarro

Absent: None

PUBLIC COMMENT
Speakers:
None

AGENDA CHANGES
None

CONSENT CALENDAR

1) Minutes of August 26, 2021
Action: Approve Minutes of the August 26, 2021 Planning Commission Meeting.

Moved by Commissioner Mallare, second by Commissioner Altman and carried unanimously to approve the consent calendar.

PUBLIC HEARINGS

2) PG&E Regional Service Center Design Permit and Variance

Action: Adopt a Resolution of the Planning Commission of the City of American Canyon, California, approving a Design Permit and Variance for a 98,800 square foot Pacific Gas and Electric (PG&E) Regional Service Center on a 24.51-acre site in the Napa Logistics Park, APN 057-090-083 (File Nos. PL21-0011 and PL21-0022).

Community Development Director, Brent Cooper introduced the item. Associate Planner, William He presented a PowerPoint presentation.

Speakers:
Mark Van Gorder, PG&E
Boris Letuchy, PG&E
Richard Price, PG&E - shared a PowerPoint Presentation.

Disclosures of Ex Parte Communications
Crystal Mallare recused herself from the item due to conflict of interest.

Chair Navarro opened the Public Hearing.

Speakers:
Chris James

Chair Navarro closed the public hearing

Speakers:
Community Development Director, Brent Cooper
Public Works Director, Erica Ahmann Smithies
City Attorney, William Ross

Commissioners discussed the item.

Chair Navarro reopened the public hearing.

Speakers:
Chris James

Chair Navarro Closed the public hearing.

Action:
Moved by Commissioner Wong, second by Commissioner Goff and carried by a vote of 4 - 0 with Vice Chair Mallare abstaining, to approve Resolution Number 2021-19 approving

a Design Permit and Variance for development of a 98,800 square foot Pacific Gas and Electric (PG&E) Regional Service Center on a 24.51-acre site in the Napa Logistics Park, APN 057-090-083 (File No. PL21-0011 and PL21-0022).

MANAGEMENT AND STAFF ORAL REPORTS

3) Active Planning Projects
Action: Review the Active Planning Projects list.

Community Development Director, Brent Cooper reported on active planning projects, including the PG&E design permit, Napa Cove pre-application for design permit, Napa Airport Commerce Center Development Agreement annual review, Giovannoni Logistics Park, Oat Hill project, Rotten Robbie application withdrawal, the upcoming joint City Council Planning Commission meeting on October 5th, SDG 217 project appeal, the Napa Valley Transportation Authority meeting to discuss the future of Hwy 29 to be held Monday, October 4th.

COMMISSIONER ITEMS

Commissioners commented on items of interest.

ADJOURNMENT

Meeting adjourned at 9:07 PM

CERTIFICATION

Respectfully Submitted,

_____
Nicolle Jones, Administrative Technician

TITLE

PG&E Design Permit Resolution Modified Language

RECOMMENDATION

Affirm modified Resolution language as approved at the September 30, 2021 Planning Commission meeting.

CONTACT

William He, AICP, Associate Planner

BACKGROUND & ANALYSIS

On September 30, 2021, the Planning Commission held a public hearing to review the PG&E Regional Service Center design permit and variance project (PL21-0011 and PL21-0022). The project consists of three single-story buildings and a logistics outdoor canopy on a 24.5-acre site in the Business/Industrial Park zoning district of the Napa County Airport Industrial Area Specific Plan (NCAIASP). The applicant's variance application requested reductions in the landscape setbacks. The Planning Commission reviewed the project and recommended additional sustainability features. The applicant agreed to these recommendations. The Planning Commission approved the project and directed staff to modify the conditions of approval to address the additional features in the Resolution. The modified Planning Commission resolution is included in Attachment 1.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Organizational Effectiveness: "Deliver exemplary government services."

FISCAL IMPACT

The PG&E Design Permit and Variance applications required a developer's deposit for review and processing, so there is no fiscal impact for staff's time. If the Planning Commission approves the project, the applicant will develop the last vacant parcel of the Napa Logistics Park, which may bring additional customers to city stores and restaurants.

ENVIRONMENTAL REVIEW

The proposed PG&E Regional Service Center is contemplated in the Napa Logistics Park "Project Approvals" analyzed under the Project FEIR and the Napa Logistics Park Development Agreement. Under CEQA, the Napa Logistics Park Project FEIR is a program EIR and is generally assumed to be used at a "development level." See, e.g., CEQA Guidelines Section 15168. There is no substantial evidence of changed circumstances under CEQA Guidelines section 15162 requiring further CEQA review as the whole of the approvals sought are contemplated under the Project FEIR analysis.

ATTACHMENTS:

1. PG&E Design Permit modified conditions - clean rev3

RESOLUTION NO. 2021-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF AMERICAN CANYON, CALIFORNIA, APPROVING A DESIGN PERMIT AND VARIANCE FOR DEVELOPMENT OF A 98,800 SQUARE FOOT PACIFIC GAS AND ELECTRIC (PG&E) REGIONAL SERVICE CENTER ON A 24.51-ACRE SITE IN THE NAPA LOGISTICS PARK, APN 057-090-083 (FILE NO. PL21-0011 AND PL21-0022)

WHEREAS, on May 19, 2021, Pacific Gas and Electric (PG&E) filed a Design Permit application (File No. PL21-0011) for a 98,800 square foot public utility facility with outdoor storage ("Project") on a 24.5-acre site in the Napa Logistics Park Phase 2 area (NLP 2) in the Napa Airport Industrial Area Specific Plan (SP2) Zone, at APN 057-090-083; and

WHEREAS, on August 16, 2021, PG&E filed a Variance application (File No. PL21-0022) to eliminate the required 10-foot landscape setbacks from the north, west, and south property boundaries, and substitute the east property boundary landscape setback with greater landscaping immediately west of the setback area and greater landscaping in the parking lot; and

WHEREAS, a Conditional Use Permit (CUP) was approved by City Council on December 15, 2015 that authorized the development of the 173–acre NLP 2 site with up to 2,271,000 square feet of warehouse, distribution, E-commerce, manufacturing, and accessory retail/office uses, to allow building heights of up to 100 feet, and to allow the relaxation of front and side yard landscaping requirements; and

WHEREAS, on December 15, 2015 the Planning Commission recommended to the City Council and the City Council certified the Final EIR as adequate to address environmental impacts associated with the NLP 2 Project, adopted a Statement of Overriding Considerations for the Project, and adopted the Mitigation Monitoring and Reporting Program, based on all of the evidence presented, as set out in City Council Resolution 2015-106; and approved the CUP by adopting City Council Resolution 2015-107; and

WHEREAS, the City had an Initial Study/Addendum prepared by First Carbon Solutions dated August 31, 2017 ("2017 Initial Study/Addendum"), to evaluate whether approval of the proposed Development Agreement to allow an additional ten years within which to act upon the approved Conditional Use Permit, had the potential to present any significantly increased or new impacts over the project impacts evaluated and identified in the Final EIR or whether there was any new information of substantial importance, which was not known and could not have been known at the time the Final EIR was certified as complete, that would require additional environmental review pursuant to Public Resources Code Section 21166 and the CEQA Guidelines Sections 15162-15164; and

WHEREAS, on October 17, 2017, the City Council reviewed the 2017 Initial Study/Addendum in conjunction with approving the Development Agreement and found no additional environmental review was required for the Napa Logistics Park Phase 2 Project, and extended the Conditional Use Permit to December 15, 2027; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on September 30, 2021 on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal; and

WHEREAS, the Planning Commission considered all of the written and oral testimony presented at the public hearing in making its decision on September 30, 2021; and

WHEREAS, the Planning Commission, in approving the Design Permit and Variance on September 30, 2021, directed Staff to modify certain conditions of approval set out in Section 4; and

WHEREAS, the Planning Commission finds that the environmental impacts for the Project and alternatives to the Project and its location, have been properly reviewed and assessed by the City pursuant to the California Environmental Quality Act (Public Resources Code section 21000 et seq.; California Code of Regulations Title 14, section 15000 et seq).

NOW THEREFORE BE IT RESOLVED that the American Canyon Planning Commission hereby makes the following CEQA findings, Design Permit findings, and Variance findings set out in Sections 1, 2, and 3 to approve Conditional Use Permit PL21-0011 and Variance Application PL21-0022 for the Project, subject to the conditions of approval set out in Section 4.

SECTION 1: INITIAL STUDY/ADDENDUM FINDINGS

The proposed PG&E Regional Service Center is contemplated in the Napa Logistics Park "Project Approvals" analyzed under the Project FEIR and the Napa Logistics Park Development Agreement. Under CEQA, the Napa Logistics Park Project FEIR is a program EIR and is generally assumed to be used at a "development level." See, e.g., CEQA Guidelines Section 15168. There is no substantial evidence of changed circumstances under CEQA Guidelines section 15162 requiring further CEQA review as the whole of the approvals sought are contemplated under the Project FEIR analysis.

SECTION 2: DESIGN PERMIT FINDINGS

Approval of the Design Permit requires that all of the following findings be made, pursuant to American Canyon Municipal Code Section 19.41.050:

A. The project complies with all applicable provisions of the Zoning Ordinance and any applicable approvals granted for the project by any decision making authority.

The proposed regional service center complies with the height, bulk, and building setbacks regulations that apply to the project site.

B. The project and its design comply with any applicable design guidelines.

The project complies with the design and development principles set out in the General Plan as Policy 1.22.4 and 1.22.7 and in the Napa Airport Industrial Area Specific Plan as Section V.B.3.c, regarding industrial projects, as follows:

- *The architectural façade includes a variety of colors, materials, and articulating features. There are changes in color that varies from gray, dark brown, light brown. The architectural detailing around windows, building corners, parapet, and canopy awnings convey a sense of human scale. There are also horizontal trims on the buildings that breaks up their expanse.*

- *The main entry into the operations building contains store-front like windows at the corner office that capture natural light. The stone veneer, metal canopy awnings, and façade articulation provide visual relief and interest.*
- *The building design includes parapets to screen rooftop structures and the mechanical equipment and a condition of approval requires adequate equipment screening at the time of building permit issuance.*
- *There are clearly marked pedestrian routes in the parking lot and the pedestrian area at the front of the building.*

C. The project and its design complies with all applicable general plan policies.

The project complies with all applicable general plan policies because the proposed use is included in the Industrial use designation; the building and site design comply with the Design Guidelines set out in the General Plan as Policy 1.22.4 and 1.22.7; and the project will contribute to the provision of necessary transportation improvements called for in the 2013 Circulation Element update because it will pay the Traffic Impact Fees adopted by City Council in January 2015, as periodically adjusted.

D. The project complies with applicable policies and development standards of the Napa Airport Industrial Area Specific Plan.

The City's General Plan has been found consistent with the Napa Airport Industrial Area Specific Plan and the proposed use is appropriate for the site's location proximity to the airport. It is in the D-Zone and industrial warehouses and offices are permitted uses in this zone. The proposed project complies with all development standards in the Specific Plan, except for providing landscaped setbacks in the north and east sides of the property, which is addressed with the Variance explained in Section 3. The applicant proposed three buildings on the site and the tallest building has a height of 27'-9". The Napa Logistics Park Conditional Use Permit allows a maximum height of 100', therefore the proposed project complies with the building height requirements.

The project is consistent with the Napa Logistics Phase 2 Project Conditional Use Permit (Resolution No. 2015-107). The Conditional Use Permit provides up to 2,271,000 square feet of allowable uses, including warehouse, distribution, e-commerce, manufacturing, and accessory retail/office uses; on 173 acres. The Project proposes 98,800 square feet of offices and warehouse buildings on 24.51 acres of the overall site. The regional service center fits the industrial character of the Napa Logistics Park.

E. The project's quality and character are compatible with the surrounding area, unless physically deteriorated or blighted, and will not be materially detrimental to existing development.

The project is compatible with the quality and character of the surrounding area because it maintains sufficient setbacks and has landscaped parking areas. Additionally, the building is detailed with appropriate windows, doors, and a roofline with a parapet to screen roof level installations. The white, gray, beige, and red colors match the adjacent warehouse buildings to the east of the site.

F. The proposed design is compatible with existing development in the area in terms of scale, height, bulk, proportion, materials, cohesiveness, color, and the preservation of privacy.

The project is compatible with existing development in the area as adjacent planned buildings have similar design, colors and materials. The PG&E buildings are smaller than neighbors to the east, but they are of similar industrial character. The buildings are setback from Boone Drive, east of the site, and

partially screened from adjacent vantage points by landscaping. The design, exterior materials, and colors are industrial in character, but fit with the palette of other adjacent buildings.

G. The design improves the community's appearance by avoiding both excessive variety and monotonous repetition.

The project avoids monotonous repetition with the use of architectural features around entrances and at the building corners, variation in elevation treatment, and use of a range of compatible colors and trims on the exterior walls. The site also has a decorative wrought iron fence and landscaped parking areas which create separation and interest in the design.

H. The proposed design promotes a harmonious transition in terms of scale and character between areas of different general plan land use designations and zoning districts.

The project consists of three single-story buildings, which are setback from the property line along Boone Drive. The proposed landscaping at the parking lot and the entry from Boone Drive differentiate the site from the adjacent developed parcels. To the south is an existing industrial warehouse site. To the north is a biological wetlands reserve and to the west is vacant land that is outside of the City Limits. To the east is Building 4 of Napa Logistics Park Phase 2. The earth-tone colors proposed warehouses and the decorative fence provides a harmonious transition between sites.

I. The proposed design provides for adequate and safe on-site vehicular and pedestrian circulation.

The site has an entry from Boone Drive. The project has good site lines for the entrance and the parking lot provides ADA accessible parking stalls. The site has a continuous access road around the site, and an accessible path of travel to each building. The site will safely accommodate the protected vehicular and pedestrian movements related to the industrial project.

All the required findings to approve the Design Permit for the Project are made, so the Design Permit is approved subject to the conditions set out in the following section.

SECTION 3. VARIANCE FINDINGS

Approval of the Variance requires that all of the following findings be made, pursuant to American Canyon Municipal Code Section 19.43.030:

A. Special circumstances exist applicable to the subject property, including size, shape, topography, location, existing improvements, or surroundings, such that the strict application of this title deprives such property of privileges enjoyed by other property in the vicinity and in the same zoning district(s).

1. *Eastern property boundary*
   a. *Due to the unique configuration of this parcel, the Eastern boundary will be described in two sections – the Southeast section and the Northeast section.*
   b. *The Southeast section of the Eastern property is connected at a small bulb where Devlin Road turns north and becomes Boone Drive. There is a driveway, with minor landscape area on either side, and a bridge that spans over No Name Creek.*
   c. *The Northeast section of the Eastern property is set back hundreds of feet from the public right of way, on the west side of No Name Creek, which will be planted with riparian habitat native oaks and shrubs. Due to this configuration, this 'Northeast' section of the property is considered a side yard, as it is adjacent to property owned by Orchard Partners Development. There is a 40' easement that is recorded and runs inside the PG&E property along the northeast*

boundary to access the Conservation Area to the north of the PG&E parcel. The easement will be paved, and does not allow for any improvements within that 40'. Due to this paved easement and the setback away from the public way, the Planning Department has agreed that planting of trees, shrubs and groundcover to the west of that easement and in front of (east of) the building and parking on the east side of the project, would be most beneficial and would meet the intent of the ordinance.

2. *Southern property boundary*
   a. *There are two (2) easements along the southern property boundary within the PG&E parcel. These easements are for necessary utility improvements, namely sanitary sewer and storm drainage from parcels to the south of the PG&E parcel. Landscape planting on these easements would nullify the intent of the easements and would be contrary to legal descriptions of maintaining access to those easements.*
   b. *The PG&E southern side yard shares a property boundary with Biagi. The northern (shared) side of the Biagi parcel has shipping warehouse parking and truck docks. This facility currently has no landscape setback or screening, nor does it have anything except an ag style fence, which is in poor condition.*
3. *Western property boundary*
   a. *There is an easement along the western property boundary within the PG&E parcel. This easement is for storm water drainage required from an adjacent undeveloped parcel. Landscape planting on these easements would nullify the intent of the easement, would not survive due to the shallow underground pipes, and would be contrary to legal descriptions of maintaining access to those easements.*
4. *Northern property boundary*
   a. *The northern property boundary is adjacent to the Conservation Easement, designated in perpetuity for wetland mitigation. This land extends north of PG&E property, past the east/west leg of No Name Creek, up to airport Blvd. No development will be allowed within that property, and as such there is nothing to screen from. In discussions with the City Planning Department, the unique situation can be addressed by substituting this landscape area of approximately 11,140 sf with an equivalent area of landscaping in a more beneficial location. This variance proposes the current PG&E substation at American Canyon Road and Broadway would be a logical choice. PG&E proposes that they provide approximately 11,140 SF of enhanced landscaping at that location in order to enhance the public's experience where it would have the most benefit. The additional irrigated landscaping at the substation location would comply with ordinances applicable to that zone and would be fully permitted and installed prior to the completion of, and the certificate of use and occupancy of, the PG&E new Regional Center on Boone Drive.*

B. Granting of the variance does not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district(s) in which such property is located.

The lack of landscaping along these property lines is consistent with current conditions and with the zoning ordinances for the adjacent properties. The Biagi facility was not required to have landscape screening at the time of their development along their land-locked northern property boundary, and currently is not required. The Biagi property is currently zoned General Industrial (GI). This use does not require screening per ACMC 19.14; therefore, a lack of landscaping on the PG&E side of the property boundary is consistent with that parcel. Other parcels include the

Conservation Area for wetlands to the north and east, and another landlocked, non-accessible grassland parcel to the west.
Please note PG&E will have (as indicated in its design application) a decorative wrought iron security fence with added mesh panels along the entire property boundary. This will be a vast improvement over the ag fence currently separating the Biagi parcel and the PG&E parcel. This type of fence has been proven to provide good eye-level visual screening from a distance.

C. Granting of the variance will not be materially detrimental to the public health, safety, or welfare or to property or residents in the vicinity.

As neither the Biagi property nor the PG&E property have public access, nor are they visible from a public way, there is no detriment to public health, safety or welfare or to other properties in the vicinity. There are no residences in the vicinity, as it is an industrial area. Likewise, the property to the west, north and east of the PG&E property is also land-locked, with no street frontage, no access from any public way, no residences in the vicinity, and no visibility from other developments. The lack of landscaping along this interior property line poses no detriment to public health, safety or welfare, or to other properties in the vicinity.

D. Granting of the variance does not allow a use or activity that is not otherwise expressly authorized by the regulations governing the subject parcel.

No unauthorized use or activity is being requested, anticipated or presumed along, or between, the shared property boundary between the PG&E parcel and the Biagi parcel to the south, the Sentinels of Freedom parcel to the west, or the Conservation Area to the north and east.

E. Granting of the variance will not result in an inconsistency with the general plan, including policies related to airport compatibility.

The lack of landscaping along these shared property boundaries will not affect airport compatibility policies, uses, and is not inconsistent with the intent of the general plan as it does not affect any other parcel, use, access, nor does it restrict any future use or development of adjacent parcels.

SECTION 4. CONDITIONS OF APPROVAL

General

1. The Design Permit approval is granted for a new 98,800 square foot regional service center on a 24.5-acre site (APN 057-090-083) at 500 Boone Drive, which shall be substantially as shown on Exhibit A, which is on file in the Community Development Department, except as modified by conditions contained in this approval. Exhibit A includes the following:

    a. Architectural Plans prepared by DGA, dated 8-13-2021, including Proposed Site Plan, Floor Plan, Building Elevations, and Roof Plan.
    b. Landscaping Plans prepared by Environmental Foresight, Inc, dated 9-7-2021, showing the proposed landscaping and planting plan.
    c. Civil plans prepared by BKF, dated 8-13-2021, showing the preliminary grading, utilities, and stormwater quality control plan.

2. The applicant shall defend, indemnify, and hold harmless the City of American Canyon ("City"), its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, consultants, volunteers and agents from and against all claims, actions, including actions to arbitrate or mediate, damages, losses, judgments, liabilities, expenses and other costs, or proceedings against the City, its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, volunteers, or agents to attack, modify, set aside, void, or annul an approval, conditional approval, permit, entitlement, environmental document, environmental clearance, mitigation plan, or any other document or any of the proceedings, acts, or determinations taken, done, or made prior to granting of such approval, conditional approval, permit, entitlement, environmental clearance, environmental document, mitigation plan, or other documents, by the City, including, without limitation, an action against an advisory agency, appeal board, or legislative body within the applicable limitation period.

   The obligation to defend, indemnify and hold the City harmless shall include the payment of all legal costs and attorney's fees (including a third party award of attorney's fees), arising out of, resulting from, or in connection with the City's act or acts leading up to and including approval of any environmental document or mitigation plan granting approvals to the applicant, incurred on behalf of, or by, the City, its elected and appointed officials, officers, employees, representatives, attorneys, boards, commissions, volunteers and agents in connection with the defense of any claim, action, or proceeding challenging the entire or a portion of an approval, conditional approval, permit, entitlement or any other document of any related claim.

   The obligation to defend, indemnify, and hold the City harmless shall include, but not be limited to, the cost of preparation of any administrative record by the City, staff time, copying costs, court costs, or attorney's fees arising out of a suit or challenge contesting the adequacy of a permit, approval, conditional approval, entitlement, environmental document, mitigation plan, environmental clearance, or any other document or approval related to the applicant's project.

   The City will promptly notify the applicant of any claim, action, or proceeding and will cooperate fully in the defense. If the City fails to promptly notify the applicant of any claim, action, or proceeding, or the City fails to cooperate fully in the defense, the applicant shall not be responsible to defend, indemnify, or hold harmless the City.

   In the event a legal challenge to a City permit, approval, conditional approval, environmental document, environmental clearance, mitigation plan, entitlement or any other document, proceeding, determination, or action related to the applicant's project is successful, and an award of attorneys' fees is granted against the City, the applicant shall be responsible to timely pay the full amount of such an award.

3. The approval shall become effective on the expiration of the appeal period, ten calendar days following the decision, unless an appeal to the City Council is filed. An appeal may be filed with the Community Development Director by filling out an Appeal Form accompanied by a fee of $724. This approval is also subject to return of the "Applicant Confirmation of Conditions of Approval" form signed by the property owner. Should an appeal period end on a Saturday, Sunday or holiday, the final day for filing an appeal shall be the following Monday, or the next business day following a holiday. If there is no appeal, this approval will be final on November 1, 2021.

4. The applicant is responsible for paying all charges related to the processing of this discretionary case application within 30 days of the issuance of the final invoice or prior to the issuance of building permits for this project, whichever occurs first. Failure to pay all charges shall result in delays in the issuance of required permits or the revocation of the approval of this application.

5. The date upon which the approval is final shall be considered the day of the imposition of the fees, dedications, reservations and exactions required by these conditions approval for the purposes of protesting the imposition pursuant to California Government Code Section 66020.

6. If no construction permits have been issued and construction commenced within two years of the date upon which this approval is final, the approval shall become null and void and of no effect. An extension of time may be granted by the Community Development Director upon the written request by a responsible party before the expiration of the two-year period, provided that the Director can make the findings that there have been no substantial changes in the approved plans, and that there has been no change of circumstances which would prevent any of the required findings of approval to be made.

Planning

7. The conditions of this Design Permit shall be printed on the first sheet of each plan set submitted for a building permit pursuant to this Design Permit, under the title 'Design Permit Conditions'. The second sheet may also be used if the first sheet is not of sufficient size to list all of the conditions. The sheet(s) containing the conditions shall be of the same size as those sheets containing the construction drawings; 8-1/2" by 11" sheets are not acceptable.

8. All new roof top equipment is required to be screened from view from the public rights-of-way. The plans submitted for building permit shall demonstrate that the building parapet heights are sufficient to provide such screening. Alternative methods and materials for screening will be subject to the review and approval of the Community Development Director.

9. Prior to the issuance of a building permit, the applicant shall identify an additional electric vehicle charging station (EVCS) for a total of two (2), in the visitors parking lot. The two (2) electric vehicle charging stations shall be operational prior to issuance of a certificate of use and occupancy for the Operations Building.

10. Prior to the issuance of a building permit, the applicant shall identify a bicycle charging station. The bicycle charging station shall be operational prior to issuance of a certificate of use and occupancy for the Operations Building.

11. Prior to the issuance of a building permit, the applicant shall identify eight (8) covered bicycle spots on site. The eight covered bicycle spots shall be in addition to the eight (8) short-term bicycle parking spots for a total of sixteen (16) bicycle parking spots on site. The eight (8) covered bicycle spots shall be operational prior to issuance of a certificate of use and occupancy for the Operations Building

12. The applicant shall submit a landscaping permit with plans prepared by a licensed landscape architect for 11,140 square feet of landscaping at the PG&E substation site at 3331 Broadway Street in the City. The landscaping plan, which shall incorporate use of recycled, if feasible, shall include deciduous and evergreen trees 15 gallons in size or larger, shrubs, and ground water, and shall be reviewed and

found satisfactory by the Community Development director. The final landscaping plan will be confirmed and an executed agreement between the applicant and the City which will be reviewed by the Commission. All described actions must be accomplished prior to the issuance of a building permit.

13. Prior to the issuance of a certificate of occupancy for the PG&E Regional Facility, the applicant shall install and receive a final inspection of the 11,140 square feet of landscaping at the PG&E substation site at 3331 Broadway St.

14. Prior to the issuance of the certificate of occupancy, the applicant shall provide a letter of certification from the Project Architect to the Community Development Director certifying that the Operations Building achieves zero net energy.

15. Prior to building permit issuance, the applicant shall submit landscape on-site and off-site plans that comply with the State of California's Water Efficient Landscape Ordinance. The landscape architect shall document and attest to the compliance with the State ordinance on the landscape plans. Proposed trees shall be 15 gallons in size or larger.

16. Prior to the issuance of a certificate of occupancy, the project's landscape architect shall certify that all plant materials have been installed on-site and off-site in accordance with the approved landscape plan.

17. All tree stakes and ties shall be removed within one year following installation or as soon as trees are able to stand erect without support.

18. Clear sight triangles shall be maintained at all driveways. Low-lying plantings and other site fixtures, including signs, shall be no taller than 30 inches within the site's vision triangles.

19. All planting shall be maintained in good growing condition. Such maintenance shall include, where appropriate, pruning, mowing, weeding, cleaning of debris and trash, fertilizing and regular watering. Whenever necessary, planting shall be replaced with other plant materials to insure continued compliance with applicable landscaping requirements. Required irrigation systems shall be fully maintained in sound operating condition with heads periodically cleaned and replaced when missing to insure continued regular watering of landscape areas, and health and vitality of landscape materials.

Building and Safety

20. Construction and grading activities on the site shall be limited to between 7:00 a.m. and 6:00 p.m. Monday through Friday. Work between the hours of 6:00 pm and 7:00 am and work on weekends and holidays requires prior written approval from the Building Official. If weekends and holiday work is approved construction and grading activities on the site shall be limited to between 8:00 a.m. to 6:00 p.m. on Saturdays, and between 10:00 a.m. and 6:00 p.m. on Sundays and State and Federal holidays.

21. Prior to the final inspection, the applicant shall submit a letter of certification to the Building Official from the project architect, civil engineer, and landscape architect certifying that all improvements have been constructed in accordance with the approved building plans. A Certified Access Specialist (CASp) shall also submit a letter certifying that all improvements have been constructed in compliance

with applicable state and federal accessibility standards. Determination of consistency shall be subject to the review and approval of the Building Official.

22. Prior to issuance of building permits, the applicant will demonstrate on building plans that all exterior building, parking lot and yard lights will use "cut-off" shields to ensure that all light rays are contained within the site and there is no glare visible beyond the property lines.

Fire District

The following Fire Protection conditions shall be satisfactorily addressed on the building permit submittal:

23. In accordance with the standard mitigation measures and conditions of approval set forth by the City of American Canyon, the developer shall pay the Fire Impact Fees (see current Standard Fees and Charges adopted by resolution), prior to the issuance of any building permits.

24. New buildings and additions to existing buildings shall conform to requirements set forth in the currently adopted editions of the California Building Code, California Fire Code, City of American Canyon standards and Nationally Recognized Standards.

25. There shall be no deferred submittals for fire protection equipment and related utilities. Fire protection plans shall not be attached to or bound with the building plan submittal package. This includes but is not limited to Automatic Fire Sprinkler, Fire Alarm, Fixed Fire Protection and Civil plans.

26. All Fire related underground piping and fire appurtenances shall be shown on the Civil plan submittal. In addition to the Civil plan submittal, at least (1) plan set under separate cover shall be submitted to American Canyon Building Division for routing to the American Canyon Fire Protection District detailing all underground piping and related fire appurtenances including but not limited to underground piping, underground sweep detail, underground trench details showing depth of burial, type of backfill, manufacturer's specifications of piping, valves joints, fittings and calculated size and locations of thrust blocks, hydrants locations (designate public or private), gate shut-off valves, PIV's, FDC's, fire pumps, fire pump and/or riser rooms. The applicant will need to submit all related Fire information on a separate plan for Fire review. The Fire related portions of the civil plan shall not be bound with the building plan.

27. Underground utility contractor, architect and fire sprinkler contractor shall coordinate the location of risers and control valves prior to the issuance of a building permit.

28. An approved water supply capable of supplying the required fire flow for fire protection systems shall be provided to all premises upon which facilities or buildings are hereby constructed or moved into or within the City. Required fire flow and hydrant distribution shall be in accordance with Appendix B and C of the California Fire Code. Applicant shall demonstrate on plan submittal; square footage of each building on plan and provide the required fire flow information. Applicant shall demonstrate that the number and spacing of onsite fire hydrants meets with requirements of the California Fire Code. ***See sample below regarding fire flow and hydrant detail information needed.***

    BUILDING FIRE FLOW REQUIREMENTS – CFC TABLES B105.2 & B105.1(2)

    INFORMATION BELOW IS A SAMPLE AND FOR REFERENCE ONLY

Table B105.1(2) – Building size = 129, 600 square feet
Construction type = Type IIA
FF = 5,250 gpm at 20 psi
Duration = 4 hours

Table B105.2 – Fire sprinkler allowance = - 50%
5,250 – 2,625 = 2,625 gpm
FF = 2,625 gpm @ 20 psi
Duration = 2 hours

Table CC105.1 – Approximate number of hydrants = 3
Average spacing = 400 feet + 25% allowable increase = 500
Maximum distance from street or frontage = 225 feet = 50% allowable increase = 337.5

29. The fire protection equipment shall be located within an interior room having an approved exterior access door or in an exterior enclosure attached to the building, specifically, for the purpose of housing such equipment.

30. Fire Apparatus Access Roads shall be designed in accordance with provisions set forth in the California Fire Code Chapter 5 and Appendix D as amended by the City of American Canyon and the applicable Public Works Standard.

31. Fire apparatus access roads shall have an unobstructed minimum width of 20 feet (curb to curb) and a minimum unobstructed vertical clearance of 13’ 6”. They shall have an all-weather paved surface capable of supporting a GVW of 71,000 pounds.

32. Access roads shall be completed with all-weather surfaces prior to the stockpiling of combustible materials or beginning combustible construction. Fire apparatus access shall be provided to within 150 feet of the most remote portions of all building from an approved exterior route. If this cannot be achieved fire apparatus turn-arounds will be needed.

33. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. Vertical traffic calming in the form of speed pumps, humps or dips are prohibited along fire access roads without prior approval of the fire Code Official. The minimum width and clearances established in Section 503.2.1 shall be maintained at all times.

34. When required by the Fire Chief, fire apparatus access roads shall be designated as Fire Lanes and appropriate signs and/or markings installed in accordance with the California Vehicle Code and approved City standards.

35. Where applicable, improvement plan submittals for permit shall include locations of fire lane red curbing and fire lane signage. Please refer to and include City Public Works Standard FP-2A & 2B with plan submittals for permitting.

36. The City of American Canyon requires that a fire hydrant be in service within 250 feet of the furthest point of construction prior to the stockpiling of combustible materials for the beginning of construction.

37. Fire Department Connections (FDC) shall be located not more than 100 ft. from the nearest fire hydrant.

Public Works

General Conditions of Approval

38. The Applicant shall be responsible for all City plan check and inspection costs. The Applicant shall establish a Developer Deposit Account with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer. Additional funds may be required based upon actual costs.

39. All improvements shall be designed in accordance with the American Canyon Municipal Code (ACMC), City of American Canyon Engineering Standard Plans and Specifications for Public Improvements (City Standards), except as specifically noted otherwise in these conditions.

40. All existing overhead utilities, both on-site and along project frontages, and all new utilities to serve the project, shall be placed underground. Exceptions may be allowed for surface mounted transformers, pedestal mounted terminal boxes and meter cabinets.

41. Unless otherwise explicitly permitted, all existing wells, septic tanks and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Services or other designated agency. If there are none, the project engineer shall provide a letter describing the scope of the search done to make this determination.

42. A detailed Soils Investigation/Geotechnical Report shall be prepared and submitted for review. The report shall address, at a minimum, potential for liquefaction, R-values, expansive soils and seismic risk. The improvement plans shall incorporate all design and construction criteria recommended in the Geotechnical Report.

43. A drainage report prepared by a California Registered Civil Engineer shall be submitted for review with the initial submittal of the Improvement Plans. The report shall include detailed hydrologic and hydraulic calculations to support the design and sizing of all public and private drainage facilities including storm drains and detention facilities. The report shall be prepared in accordance with Section 4 – Storm Drainage of the City's Engineering Standard Plans and Specifications for Public Improvements except that rainfall intensities shall be taken from the upper limits of the ranges given in NOAA Atlas 14 in lieu of those in Table 2.

44. A detailed post-construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared and submitted for review and approval. The SCWP shall be prepared in accordance with the latest edition of the *Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual* and the requirements of the State Water Resources Control Board Phase II Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ). Bioretention facilities shall be design and constructed consistent with BASMAA Figure 4-5.

45. A Post Construction Stormwater Operations and Maintenance Plan that includes a plan sheet showing all storm drain and water quality infrastructure that is to be maintained, along with detailed instructions and schedules for the ongoing maintenance and operation of all post-construction stormwater BMPs shall be submitted for review and approval by the City Engineer. Once approved, the property owner(s) shall enter into an agreement with the City that provides the terms, conditions, and security associated with the ongoing requirements of the post-construction Stormwater Best Management Practices.

46. The Applicant shall submit site Improvement Plans, prepared by a registered Civil Engineer, for review and approval of the City. The final plan set shall include all civil, landscape and joint trench drawings under a single cover sheet. No final grading or other construction shall be performed until the Improvement Plans have been approved. The Applicant shall not begin clearing, grubbing, or rough grading at the site prior to approval of the Improvement Plans, unless explicitly approved by the City of American Canyon through the standard grading and utilities only permit process. An Encroachment Permit is required for any work within City right of way. Encroachment Permits will not be issued prior to the approval of the Improvement Plans.

47. All public water service laterals or services (domestic, recycled and fire water) shall include approved backflow prevention devices.

48. Cathodic protection shall be provided for all water valves, fittings, hydrants, meters, backflow devices and other metal appurtenances, regardless of the findings of any soils corrosivity analysis.

49. All sanitary sewer manholes shall be epoxy coated on the inside or installed with an exterior seal to limit infiltration.

50. The Applicant shall keep adjoining public and private streets free and clean of project dirt, mud, materials, and debris during the construction period in accordance with SWPPP using appropriate BMPs and as is found necessary by the City Engineer.

51. If any hazardous material is encountered during the construction of this project, all work shall be immediately stopped and the Fire Department, Napa County Department of Environmental Services or other designated agency, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.

52. Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed, and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines shall be installed in a manner that will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.

53. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil and/or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.

54. All new fire hydrants shall be covered with burlap sacks until the hydrants have been tested and found to be in conformance with City flow requirements. No storage of combustible materials or construction of building shall be permitted until all hydrants meet City flow requirements.

55. Prior to placing the final lift of asphalt, all public storm drain and sanitary sewer lines shall be video inspected at the Applicant's expense. All video tapes shall be submitted to the City. If any inadequacies are found, they shall be repaired prior to the placement of the final lift of asphalt.

56. All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this Project shall be the responsibility of the Applicant and shall be repaired to the satisfaction of the City at the Applicant's expense.

57. After all of the new underground utilities within existing public streets have been installed, the entire affected areas shall be milled and repaved to present a neat finished pavement area. Multiple trench patches are not acceptable.

58. All construction stormwater pollution prevention best management practices (BMPs) shall be installed as the first order of work and in accordance with the State Water Resources Control Board's General Construction Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ, as amended), the Applicant's Storm Water Pollution Prevention Plan (SWPPP), and the City's Erosion and Sediment control Plan in accordance with the City's MS4 Permit. All stormwater BMPs shall be maintained to the satisfaction of the Qualified SWPPP Developer (QSD), Qualified SWPPP Practitioner (QSP), and the City Engineer.

59. With the exception of water used for loading and testing of potable water lines, all construction water used for the project shall be obtained from a source other than American Canyon potable water sources. The Applicant shall provide verification that an outside source of construction water, e.g., recycled water, has been established and will be available for the duration of the project construction.

60. All landscaping shall be designed to use recycled water for irrigation. Recycled water landscaping shall be designed to comply with California Code of Regulations Title 22 and shall include design details to prevent runoff of recycled water. The irrigation system shall include an ET/SMART controller.

Public Works Special Conditions of Approval

61. The Applicant shall submit Improvement Plans prepared by a registered Civil Engineer (Engineer of Record) in substantial conformance with the preliminary civil plans included in Exhibit A (Preliminary Plans), except as modified by these conditions.

62. The Applicant shall construct all of the on-site private streets, water, storm drainage and storm quality **("Private Improvements")** generally shown on the Preliminary Plans and more specifically described below. All private street, water, sewer, storm drainage and stormwater quality improvements shall be designed in accordance with the City of American Canyon Engineering Standard Plans and Specifications for Public Improvements (City Standards), except as specifically noted otherwise in these conditions.

    a. Sanitary Sewer Collection Facilities:

Applicant shall comply with Map Condition 40a of the Subdivision Improvement Agreement between the City of American Canyon and DWF IV NLP II, LLC as recorded in December 19, 2018.

b. Storm Drain Facilities:
Construct private on-site drainage facilities, detention facilities, and other appurtenances to collect and convey all surface drainage to an approved private storm drain facility or outfall. Onsite drainage facilities shall provide for the positive drainage of all adjacent upstream or upgrade properties to prevent ponding. Existing run-on from adjacent properties shall not be obstructed and shall be conveyed onsite. Off-site peak storm water discharge shall not exceed 90% of the undeveloped peak flow from the 24-hour, 100-year event. The storm drains and detention facilities shall be substantially consistent with the Preliminary Plans. However, the sizing of all storm drains and detention facilities shall be determined by the approved final drainage report.

c. Stormwater Quality Facilities:
Permanent on-site private post-construction stormwater treatment BMPs shall be designed and constructed in accordance with the approved final SWCP.

63. Prior to SUBMITTAL OF THE IMPROVEMENT PLANS, the Applicant shall:

a. Submit the City's "Improvement Plan Checklist".

b. Pay an initial cash deposit for City plan check services in amount to be determined by the City prior to the time of submittal. The Project engineer shall contact City staff to discuss submittal details to determine initial deposit amount.

c. Provide the following:
   i. Public Street Repair Plan
   ii. Utility Plan and Joint Trench Plan
   iii. Construction Storm Water Pollution Prevention Plan (SWPPP) and a City Erosion and Sediment Control Plan
   iv. Drainage Report
   v. Post-Construction Stormwater Control Plan (SWCP)
   vi. Geotechnical Report
   vii. Construction Traffic Control Plan.

d. Pothole and physically determine (by way of a survey performed by the Engineer of record) the actual horizontal location and vertical depth of all existing underground utilities throughout the proposed area of work and provide the design of all new utility installations required to serve the project including a schedule for implementation of such work as to prevent disrupting of utility service to adjacent properties.

64. Prior to APPROVAL OF THE IMPROVEMENT PLANS, the Applicant shall:

a. Provide written acknowledgment by the Geotechnical Engineer of Record that the Plans incorporate all design and construction criteria specified in the Geotechnical Report.

b. Furnish proof of the acquisition of all rights of entry and/or temporary and permanent easements necessary to construct the project and the location of all such rights on the Plans.

c. Furnish proof that all permits that may be required by the California Department of Fish & Game, State and Regional Water Quality Control Board, US Army Corps of Engineers and any other regulatory agencies with jurisdiction over the proposed construction have been obtained.

d. Fill out and submit the City's Erosion and Sediment Control Plan (ESCP) Template. Applicant may refer to a SWPPP, as appropriate, by referencing page number within the SWPPP that addresses the requirements of the ESCP.

e. Submit a copy of the Notice of Intent and Wastewater Discharge Identification Number (WDID#) for coverage under the State Water Resources Control Board' General Construction Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ).

65. Prior to COMMENCEMENT OF CONSTRUCTION ACTIVITIES, the Applicant shall:

a. Pay off all current account balances with the City of American Canyon.

b. Pay an inspection fee in amount to be determined at the time of commencement for the City's inspection of the Public Improvements.

c. Conduct a pre-construction meeting with representatives of the City whereby the Applicant, the Legally Responsible Party (LRP), Qualified SWPPP Practitioner (QSP), Qualified SWPPP Developer (QSD), and/or the Contractor provides the following:
   i. Six (6) full-size bond copies of the approved Improvement Plans for the City's use.
   ii. One (1) job-site copy of the latest edition of the City Standards for the Contractor use.
   iii. One (1) job-site copy of the SWPPP for use by the LRP, QSP, QSD, and Contractor.

66. Prior to APPROVAL OF A BUILDING PERMIT, the Applicant shall:

a. Pay all account balances and current City and American Canyon Fire District fees (Mitigation & Capacity) based on the rates in effect at the time of permit issuance. These fees include, but may not be limited to the following: Traffic Mitigation, General Plan Update, Civic Facilities, Fire District, Water Capacity, and Wastewater Capacity.

67. Prior to OCCUPANCY OF THE BUILDING, the Applicant shall:

a. Restore all adjacent off-site road surfaces to pre-project conditions.

b. Submit a certification by the Geotechnical Engineer of Record that all the work has been completed in substantial conformance with the recommendations in Soils Investigation/Geotechnical Report.

c. Provide a mylar and digital copy of the Improvement Plans that include all as-built or field changes, in digital AutoCAD (.dwg) and (.pdf) format compatible with the City's current Autocad Civil 3D version, and tied to the City's coordinate system.

d. Provide a letter stating that all of the Developer's Conditions of Approval have been met.

e. Provide a letter from the Civil Engineer of Record certifying that all the site improvements were constructed and inspected in substantial conformance with the approved plans and City Standards.

f. Enter into and record a post-construction Stormwater Operations and Maintenance Agreement with the City.

g. Per Section 2f of the Supplementary Declaration to Covenants, Conditions and Restrictions and Grant of Easements for Napa Logistics Park, County of Napa Official Records 2020-0035054 recorded on December 18, 2020, Parcel 4 owner shall quitclaim any interest in the Sewer Access Easement Agreement once Declarant has satisfied its obligations with respect to the Off-Site Sewer Improvements. Prior to Parcel 4 owner quitclaiming the existing sewer easement, a new sewer easement for access and maintenance of the Off-Site Sewer Facility, similar in size and shape to the existing easement, shall be granted by the Parcel 4 owner to the City. The new sewer easement will be quitclaimed after the Giovannoni Property adjacent to Parcel 4 is fully developed. Applicant shall prepare the legal description, plat and deed and submit them to the City for review.

Napa Logistics Park Phase 2 Conditional Use Permit

68. All conditions of approval in the Napa Logistics Park Phase 2 Conditional Use Permit (Resolution No. 2015-0107) are incorporated as conditions of approval by reference.

Mitigation Monitoring and Reporting Program

Applicable mitigations in the Mitigation Monitoring and Reporting Program for the Napa Logistics Phase 2 Project Environmental Impact Report (Resolution No. 2015-0106, State Clearinghouse No. 2014082033) are incorporated as conditions of approval by reference.

69. **MM AES-2:** Prior to issuance of building permits for the proposed project, the project applicant shall prepare and submit a photometric plan to the City of American Canyon for review and approval. The photometric plan must demonstrate that all exterior light fixtures would be directed downward or employ full cutoff fixtures to minimize light spillage and avoid interference with aviation operations at the Napa County Airport. The approved plan shall be incorporated into the final building plans.

70. **MM AIR-2:** All construction activity: During construction activities, the following air pollution control measures shall be implemented:
    - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day, or more as needed.
    - All haul trucks transporting soil, sand, or other loose material offsite shall be covered.

- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads and surfaces shall be limited to 15 mph.
- All roadways, driveways, and sidewalks shall be paved as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes (beyond the 5 minute limit required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- A publicly visible sign shall be posted with a name and telephone number of the applicant's representative for dust complaints. This person shall respond and take corrective action within 2 business days of a complaint or issue notification. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

71. **MM AIR-3a:** During onsite construction activities, the applicant shall require the use of clean construction equipment. All diesel equipment shall be powered by Tier 3 engines or equivalent. In addition, all off-road equipment idling shall be limited to 2 minutes.

72. **MM BIO-2a:** (Swainson's Hawk) Pre-construction surveys shall be conducted for a half-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to project initiation. The surveys shall be conducted in accordance with CDFW's "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" (CDFG 2000), which identifies different survey windows throughout the pre-nesting and nesting season (ranging from January 1 through July 30/post-fledging) that have different survey methodologies and requirements, as set forth in the "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley."

    If no nesting Swainson's hawks are identified during the April surveys (first survey), project construction can commence. If during the second survey (June), Swainson's hawks are found nesting in the project vicinity and project construction commenced in April/May, it should be assumed that the Swainson's hawks commenced nesting while the project site was under construction and thus, that the hawks are habituated to the ambient level of noise and disturbance emanating from the project site.

    If Swainson's hawks nest on or within the area of influence of the project site (which is generally considered to be within 1,320 feet (1/4 mile) of the project site, impacts to nesting Swainson's hawks would be regarded as significant pursuant to the CEQA, and implementation of avoidance measures below would be necessary to ensure the project does not impact the nesting Swainson's hawks.

    If Swainson's hawks are found to be nesting on or within 1,320 feet (1/4 mile) of the project site, a non-disturbance buffer shall be established that keeps all project activities a minimum of 1,320 feet from the nest site. If the 1,320-foot buffer only partially intersects the project site, that intersecting area shall be demarked in orange construction fencing and will ensure that noise/disturbance related impacts emanating from the project site remains at least 1,320 feet from the nest site. No project activities would be allowed in the orange construction fenced off area constituting the buffer.

    If a qualified raptor biologist makes a determination that the nesting Swainson's hawks are shielded from disturbance by geographic barriers or are well acclimated to higher levels of disturbance (for example if the nesting attempt commenced after the project was under construction, or the nest site

is adjacent to preexisting high levels of disturbance), the biologist may justify a recommendation for a smaller buffer. CDFW shall be consulted regarding the qualified raptor biologists' recommendations for an appropriate non-disturbance buffer. At that time the necessity of acquiring a Fish and Game Section 2081 management authorization would also be determined. A Section 2081 management authorization would be required if there was a valid concern that project activities could result in "take" of adult Swainson's hawks, their nestlings, or eggs.

Under all circumstances the nesting buffer must ensure that all project related disturbance remains far enough away from the Swainson's hawk nest site to ensure that the level of construction related disturbance does not result in deleterious effects on the nesting hawks, their eggs, or nestlings. If the nesting buffer is reduced to less than 1,320 feet, a qualified raptor biologist shall monitor the nesting hawks initially for a period long enough to understand the nesting hawks response to disturbance, and thereafter on a routine basis (at least 3 times a week, or as required by the CDFW) until the nestlings successfully fledge and become independent of the nesting tree. Any buffer that is smaller than 1,320 feet may have to be increased in size again if the nesting hawks respond poorly to a reduced buffer.

No project-related disturbance shall be allowed in the nesting buffer until the young fledge the nest or the nesting attempt is otherwise complete for the year. The buffer should remain in place until the fledglings become independent of the nesting tree. The young can be considered successfully fledged when the hawks no longer return to the nesting tree for several consecutive nights.

Implementation of this mitigation measure would reduce potential impacts to Swainson's hawk to a level considered less than significant pursuant to CEQA.

73. **MM BIO-2b:** (Northern Harrier and Ground Nesting Birds) Prior to ground disturbance a nesting survey shall be conducted for ground nesting raptors and birds, including the northern harrier, during the nesting season, between February 1 and September 1. Typically, the northern harrier builds a grass-lined nest on the ground in grassland habitat. In order to determine if this raptor or other ground-nesting species are nesting on-site, a qualified biologist shall conduct walking transects through the project site's herbaceous and grassland habitats. If a northern harrier nest is identified, a qualified biologist who frequently works with nesting raptors/birds shall prescribe adequate nesting buffers to protect the nesting birds from harm. These buffers shall be established with orange construction fencing. If the nest is located outside of the project site, then the buffer should be demarcated where the buffer intersects the project site. No construction or earth-moving activity shall occur within the established buffer until the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. If a qualified biologist is not hired to monitor the nesting raptors then the buffers shall be maintained in place through the end of August.

74. **MM BIO-2c**: (Tricolored Blackbird and Other Nesting Birds) If construction is to commence between February 1 and September 1, a nesting bird survey shall be conducted 15 days prior to earth moving or the commencement of construction work. If any birds are found nesting on the project site or within a zone of influence of the project site, qualified biologist who frequently works with nesting birds shall prescribe adequate nesting buffers to protect the nesting birds from harm. No construction or earth-moving activity shall occur within any nest protection buffer until it is determined by a qualified biologist that the nesting cycle is complete and any young that fledge have attained sufficient flight skills to avoid being impacted by the proposed project.

75. **MM CUL-1:** If prehistoric or historic-period archaeological resources are encountered, all construction activities within 100 feet of the find shall halt and the City of American Canyon shall be notified.

Prehistoric archaeological materials might include obsidian and chert flakedstone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the City of American Canyon. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the Project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

76. **MM CUL-3:** If potential fossils are discovered during project implementation, all earthwork or other types of ground disturbance within 100 feet of the find shall stop immediately until a qualified professional paleontologist can assess the nature and importance of the find. The paleontologist shall report his/her findings to the City of American Canyon. Based on the scientific value or uniqueness of the find, the paleontologist shall either record the find and recommend that the City of American Canyon allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist shall, if required, propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations will be consistent with Society of Vertebrate Paleontology guidelines and currently accepted scientific practice. If required, treatment for fossil remains shall include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and, if required, shall also include preparation of a report for publication describing the finds.

77. **MM CUL-4:** In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find shall cease until the Napa County Coroner has been contacted to determine that no investigation of the cause of death is required. The Native American Heritage Commission (NAHC) will be contacted within 24 hours if it is determined that the remains are Native American. The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC Section 5097.98), who in turn would make recommendations to the City of American Canyon for the appropriate means of treating the human remains and any associated funerary objects [CEQA Guidelines Section 15064.5(d)].

78. **MM GEO-1b:** Prior to the issuance of building permits for each structure, the project applicant shall submit a design-level Geotechnical Investigation to the City of American Canyon for review and

approval. The investigation shall be prepared by a qualified engineer and identify necessary grading and building practices necessary to achieve compliance with the latest adopted edition of the California Building Standards Code geologic, soils, and seismic requirements, including abatement of expansive soil conditions. The report shall also determine the final design parameters for walls, foundations, foundation slabs, and surrounding related improvements (e.g., utilities roadways, parking lots, and sidewalks). The measures identified in the approved report shall be incorporated into the project plans and all applicable construction-related permits.

79. **MM HAZ-1a:** Prior to construction, all contractor and subcontractor personnel shall receive training regarding the appropriate work practices necessary to effectively comply with the applicable environmental laws and regulations, including, without limitation, hazardous material spill prevention and response measures.

80. **MM HAZ-1b:** Prior to issuance of the certificate of occupancy for any uses that involve the storage or use of acutely hazardous materials, the tenant shall consult with the California Emergency Management Agency to determine the guidelines and regulations applicable to the operations. If required, tenants shall prepare a Risk Management Plan consistent with CalARP prior to undertaking any storage or use of acutely hazardous materials.

81. **MM HAZ-1c:** During construction and operations, hazardous materials shall not be disposed of or released onto the ground, the underlying groundwater, or any surface water. Totally enclosed containment shall be provided for all trash. All hazardous construction waste shall be removed to a hazardous waste facility permitted or otherwise authorized to treat, store or dispose of such materials.

82. **MM HYD-1a:** Prior to the issuance of grading permits for the proposed project, the City of American Canyon shall verify that the applicant has prepared a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the statewide Construction General Permit. The SWPPP shall be designed to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled: (2) where not otherwise required to be under a Regional Water Quality Control Board permit, all non- stormwater discharges are identified and either eliminated, controlled, or treated; (3) site best management practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity; and (4) stabilization BMPs are installed to reduce or eliminate pollutants after construction are completed. The SWPPP shall be prepared by a qualified SWPPP developer. The SWPPP shall include the minimum BMPs required for the identified Risk Level. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook-Construction or the Caltrans Quality Handbook Construction Site BMPs manual.

83. **MM HYD-1b:** Prior to the issuance of building permits for the proposed project, the project applicant shall prepare a Stormwater Control Plan that includes post-construction stormwater controls in the site design to satisfy requirements of the Phase II Small MS4 Permit. This shall include a review of the final Stormwater Control Plan by the City of American Canyon to ensure the required controls are in place.

Provision E. 12. h of the MS4 Permit requires an operation and maintenance program be implemented for post–construction stormwater management features. Responsible parties and
funding for long- term maintenance of all BMPs must be specified. This plan shall specify a regular inspection schedule of stormwater treatment facilities in accordance with the requirements of the MS4 Permit. Reports documenting inspections and any remedial action conducted shall be submitted regularly to the City for review and approval.

84. **MM NOI-1:** During construction activities, the following noise attenuation measures and practices shall be implemented:
    - Construction activities shall be limited to the hours between 7 a.m. to 7 p.m. The City of American Canyon shall have the discretion to permit construction activities to occur outside of allowable hours if compelling circumstances warrant such an exception (e.g., weather conditions necessary to pour concrete).
    - All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. If no noise reduction features were installed by the manufacturer, then the contractor shall require that at least a muffler be installed on the equipment.
    - Construction staging and heavy equipment maintenance activities shall be performed a minimum distance of 300 feet from the nearest residence, unless safety or technical factors take precedence (e.g., a heavy equipment breakdown).
    - During the grading phase of the off-site utility work, temporary sound barriers shall be utilized to block the line of site from operating heavy construction equipment to any residence within 150 feet of an active construction area.

85. **MM PSU-6:** Prior to issuance of building permits, the project applicant shall prepare and submit a Waste Management Plan to the City of American Canyon for review and approval. The plan shall estimate volume or weight of project construction and demolition debris; materials type to be generated; the maximum volume or weight of such materials that can feasibly be diverted via reuse or recycling, the vendor or facility proposed to use, collect, or receive that material; the estimated volume or weight of construction and demolition materials that will be land filled; and project square footage. The approved plan shall be implemented during construction activities.

86. **MM TRANS-1a:** To mitigate this significant impact of greater trip generation from more intense land uses on the project site, the Applicant shall establish a Transportation Demand Management (TDM) program. The intent of the TDM program is to ensure that traffic volumes generated by
Project do not exceed that which would occur from warehouse -only uses. Notwithstanding its intent, the applicant shall implement this mitigation measure regardless of the mix of uses (warehouse - only or warehouse/ industrial/ office) that is eventually built.

    The Applicant shall enter into a TDM Agreement prior to the issuance of the first building permit. The TDM Agreement shall require that an effective TDM program be implemented prior to the first certificate of occupancy and be subjected to on- going periodic monitoring thereafter. The TDM Agreement shall also include a financial guarantee satisfactory to the City. The City will deem the TDM program to be effective if the monitoring results indicate that AM peak - hour volumes are no more than 780 vehicles (and PM peak - hour volumes are no more than 704 vehicles).

    The TDM program shall be implemented at the applicant's cost, with no cost to the City, regardless of the eventual mix of uses and shall at a minimum include a permanent vehicle counting station at the

single public access point. Examples of measures that may be considered as part of an effective TDM program include but are not limited to the following:

- Starting and ending workday shifts during off- peak hours (i.e., not between 7: 00 a. m. to 9: 00 a.m. or 3:00 p.m. to 6:00 p.m.)— if done for the manufacturing use, this would decrease overall AM peak - hour vehicle trips from 1,310 to 510 and PM peak - hour vehicle trips from 1,243 to 479.
- Implement shuttle service to key employment centers or park-and-ride lots in the area for those employees whose workday shift start during peak hours.
- Car-share program
- Shuttles to regional transit
- Transit subsidies
- Carpool/ vanpool subsidies
- Employer- owned/ sponsored vanpools
- Flex -time and telecommute programs
- Use of rail to transport employees and/ or the delivery of goods

The Applicant shall retain a transportation planning/engineering consultant to analyze the effectiveness of the TDM program in a written report. The TDM Report will include data collected from the permanent vehicle counting station and a determination of employee commute methods, which shall be informed by surveying all employees working at the site. The TDM Report shall be submitted to the City on a periodic on- going basis and it shall form the basis of ongoing determinations by the City as to the effectiveness of the TDM program. So long as the City deems the TDM program effective (i. e. when monitoring results indicate that AM peak - hour volumes are no more than 780 vehicles and PM peak - hour volumes are no more than 704 vehicles), the additional, potentially significant traffic impacts related to the mix of warehouse, industrial and office are mitigated to a less than significant level. At any time that the City determines the TDM program is not effective, then this additional significant traffic impact shall be mitigated by the implementation of Mitigation Measure TRANS -1b.

87. **MM TRANS-1b:** If at any point the City determines the TDM program established as part of the Mitigation Measure TRANS-1a is not effective to reduce peak-hour traffic so that it does not exceed the TDM thresholds (780 vehicles during the AM peak hour and 704 vehicles during the PM peak hour), then the Applicant shall pay an additional amount for each and every peak-hour trip that is recorded by the counting device that exceeds the TDM threshold, based on the method described in the EIR Impact Analysis for this mitigation measure. The “on-going TIF” paid pursuant to this mitigation measure is in addition to the “one-time TIF” paid at the time of issuance of the first building permit in accordance with Mitigation Measure TRANS-1c. This mitigation measure shall be incorporated into the TDM agreement required as part of MM TRANS-1a.

88. **MM TRANS-1c:** The project applicant will be responsible for paying the City’s Traffic Impact Fee for the proposed development. The funds collected under this program would be used to make improvements to a number of intersections throughout American Canyon which improvements would lessen the significant cumulative transportation impacts. However, because these projects for which the Applicant would make a fair share contribution pursuant to this mitigation measure rely upon a discretionary funding and approval by a third party (Caltrans), the impact would remain significant and unavoidable.

89. **MM TRANS-1d:** Prior to the issuance of the first certificate of occupancy for the proposed project, the project applicant shall construct the following improvements along South Kelly Road, or, at the sole discretion of the City, enter into an off-site improvement agreement and prove an acceptable guarantee ensuring that these improvements will be completed:

    1) At the intersection of SR-29 at South Kelly Road:
        i. Northbound approach: 3 through lanes, 2 left-turn lanes, 1 right-turn lane
        ii. Southbound approach: 3 through lanes, 1 left-turn lane, 1 right-turn lane
        iii. Eastbound approach: 1 through lane, 2 left-turn lanes, 1 right-turn lane
        iv. Westbound approach: 1 through lane, 2 left-turn lanes, 1 right-turn lane
    2) At the intersection of South Kelly Road and Develin Road:
        i. Northbound approach: 1 through lane, 1 right-turn lane
        ii. Southbound approach: 1 through lane, 1 left-turn lane
        iii. Private driveway: None
        iv. Westbound approach: 1 left-turn lane, 1 right-turn lane
    3) South Kelly Road, between Devlin Road and SR-29 intersections:
        i. 2 westbound receiving lanes, 1 eastbound lane, and 1 two-way left-turn lane.

    The length of the turn lanes on SR-29 shall be in accordance with the Caltrans Highway Design Manual requirements for a 55-mph highway, and shall accommodate sufficient vehicle storage length for STAA vehicles under Existing Plus Background Plus Project conditions such that the intersection operates at least LOS D.

    The length of the turn lanes on South Kelly Road shall accommodate sufficient vehicle storage length under Existing Plus Background Plus Project conditions such that the intersection operates at least LOS D.

    The Applicant shall fund 100 percent of the cost of this improvement. To the extent these improvements represent oversizing that is over and above what would be necessary to mitigate the impacts of the project, the Applicant shall be eligible for reimbursement for costs above its fair share from other nearby private development that will also contribute traffic to this intersection. Prior to incurring any expenses for they may be eligible for reimbursement, the Applicant shall enter into a reimbursement agreement with the City.

    The implementation of this mitigation measure would be done in conjunction with construction that has already been planned and approved. The additional construction activity may incrementally increase construction traffic, noise, and air emissions in the activity area, but would not change the analysis, conclusions, or mitigation measures in this EIR. Construction activity associated with this mitigation measure would be required to comply with all applicable local and
    state laws and regulations such as dust suppression, limitations on hours of construction, stormwater runoff controls, and other similar requirements designed to reduce or avoid environmental impacts.

    Because the South Kelly Road intersection at SR -29 is impacted in the PM peak hour as a result of downstream queues, the impact at this intersection would remain significant and unavoidable with the implementation of this mitigation measure without changes to SR -29 through the
    City of American Canyon (between Napa Junction Road and American Canyon Road).

As a result of the implementation of this mitigation measure, the significant impacts at the South Kelly Road intersection with Devlin Road are reduced to a less than significant level.

90. **MM TRANS-1e:** Prior to issuance of the first construction permit for each building in the proposed project, the project applicant shall pay a fair share contribution of the estimated construction costs for regional projects on the state highway system. The fair share shall be calculated at the time payment is required, based on the projected traffic of the proposed use of the building, and the estimated cost of the construction at that time. Fair share shall be calculated by following the "Method for Calculating Equitable Mitigation Measures" from Caltrans Guide to the Preparation of Transportation Impact Studies (2002.)"

    The SR-12-29/SR221-Soscol Ferry Road Flyover Ramp is currently estimated at $40 million according to the Draft Environmental Impact Report (dated March 2015).

    Because this project for which the Applicant would make a fair share contribution pursuant to this mitigation measure rely upon discretionary funding and approval by a 3rd party (Caltrans), the impact would remain significant and unavoidable. The aforementioned parties (Caltrans, NCTPA, and the City of American Canyon, at minimum) will need to develop formal agreements regarding the funding sources for these projects and the mechanism for collecting and transferring the funds for this mitigation measures to be feasible.

91. **MM TRANS-1f:** Prior to the issuance of the first construction permit for each building in the proposed project, the project applicant shall pay a fair share contribution of the estimated system. The fair share shall be calculated at the time payment is required, based on the projected traffic of the proposed use of the building, and the estimated cost of the construction at that time. Fair share shall be calculated by following the " Method for Calculating Equitable Mitigation Measures" from Caltrans Guide to the Preparation of Transportation Impact Studies (2002.)"

    The grade -separated Airport Boulevard/ SR- 12- 29 Interchange Project planned by Caltrans is currently estimated at $73 million according to the NCTPA SR - 29 Gateway Corridor Improvement Plan (dated February 2014).

    Because this project for which the Applicant would make a fair share contribution pursuant to this mitigation measure rely upon discretionary funding and approval by a third party (Caltrans), the impact would remain significant and unavoidable. The aforementioned parties (Caltrans, NCTPA, and the City of American Canyon, at minimum) will need to develop formal agreements regarding the funding sources for these projects and the mechanism for collecting and transferring the funds for this mitigation measures to be feasible.

92. **MM TRANS-2a:** Prior to the issuance of the first certificate of occupancy for the proposed project or when monitoring determines that it is warranted, the project applicant shall construct improvements at the intersection of South Kelly Road/ Devlin Road (#1). The improvements shall consist of the installation of a signal and a westbound left -turn pocket on South Kelly Road, with a reimbursement agreement for the cost in excess of its fair share of the signal cost, thus improving the intersection LOS to acceptable conditions. The roadway change to westbound South Kelly Road is currently proposed as part of Mitigation Measure TRANS - 1d.

93. **MM TRANS-6:** Prior to the issuance of building permits for each building, the project applicant shall prepare and submit a site plan to the City of American Canyon for review and approval that depicts a

minimum number of ADA-accessible parking spaces at each building; the internal stop signs depicted on Exhibit 3.11-14; and the bike racks or lockers at strategic locations to serve the project buildings. The approved plans shall be incorporated into the improvement plans for the project.

94. **MM TRANS-8:** Prior to issuance of building permits for each building, the project applicant shall prepare and submit a site plan to the City of American Canyon for review and approval that depicts pedestrian facilities and crosswalks that facilitate safe, accessible pedestrian travel between the internal roadways and the building entrances. The approved plans shall be incorporated into the improvement plans for the project.

95. **MM TRANS-9:** The project applicant shall develop and submit a Construction Management Plan (CMP) to the City of American Canyon prior to commencement of any construction activities, including construction activities associated with the transportation mitigation measures. The provisions of a CMP shall specifically address the characteristics of construction-related traffic associated with development. Such plans identify construction phasing and the level and type of construction-related traffic. The CMP shall identify construction truck routes to access the project site, lane closures on existing public streets (if needed) including a plan for any necessary traffic control measures, and on-site staging requirements, and other information as required by the City.

    Once the construction truck routes have been approved, but before construction has started, the applicant shall conduct a survey of existing conditions of pavement along the approved truck routes and submit documentation of the results to the City. When construction has been substantially completed such that there will be no further construction truck trips, the applicant shall re-survey the construction truck routes. The project applicant shall be responsible for repairing damage to roadways used for construction vehicle access to the site and attributable to the project so that the roadway conditions are returned to their pre-construction conditions (or better) as documented in the pre-construction survey along the truck routes following the construction of the project.

PASSED, APPROVED AND ADOPTED at a regular meeting of the Planning Commission on September 30, 2021, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

Tyrone Navarro, Chair

ATTEST:

_____

Nicolle Jones, Administrative Technician

APPROVED AS TO FORM:

_____

William D. Ross, City Attorney

EXHIBITS:

A. PG&E Design Permit Plans
B. Applicant confirmation of Conditions of Approval

This

EXHIBIT B
Applicant Confirmation of Conditions of Approval
PG&E Design Permit and Variance
(FILE NO. PL21-0011 and PL20-0022)

As shown by my signature below, I confirm that I understand and agree to abide by the conditions of approval included in the Planning Commission Resolution dated September 30, 2021.

_____ _____
Applicant's signature Date

_____
Applicant's name

_____ _____
Property Owner's signature Date

_____
Property Owner's name

Please return signed confirmation to the City of American Canyon Community Development Department, 4381 Broadway, Suite 201, American Canyon, CA 94503

TITLE

Zoning Code Amendment to prohibit new and expanded service stations in all zoning districts in the City of American Canyon that conduct motor vehicle fossil fuel retail sales.

RECOMMENDATION

Adopt a Resolution of the Planning Commission recommending the City Council of the City of American Canyon adopt an Ordinance to amend the American Canyon municipal code Chapter 19.04 definitions; Chapter 19.05 Commercial Classifications; Chapter 19.11 Commercial Zoning District; Chapter 19.49 Nonconforming Uses, structure, and lots; and Broadway District Specific Plan table 2-3 permitted uses General Plan amendment to prohibit new and expanded service stations in all zoning districts in the City of American Canyon that engage in the retail sale of motor vehicle fossil fuels (PL21-0028).

CONTACT

Brent Cooper, AICP, Community Development Director

BACKGROUND & ANALYSIS

Climate change represents a growing danger to human health, safety, economic prosperity, basic services, the environment, and natural resources. The State of California as a whole, and Napa County residents, economy, and environment have experienced adverse effects associated with climate change, such as a prolonged wildfire seasons and firestorms, rising temperatures, mudslides, severe droughts, property destruction and damage to infrastructure (Source: American Canyon June 18, 2019 Climate Change Proclamation).

American Canyon has a long history of supporting policies to protect the environment. In 2013, American Canyon's Energy Efficiency Climate Action Plan (EECAP) was the first Climate Action Plan adopted in Napa County. In 2016, American Canyon earned a Beacon Award from the League of California Cities. The Beacon Award is an honor granted to local governments that successfully achieve voluntary efforts to reduce greenhouse gas emissions, save energy and adopt policies that promote sustainability.

The Broadway District Specific Plan (BDSP) is an important land use policy document intended to reduce greenhouse gas emissions with higher density housing served by transit coupled with pedestrian and bicycle facilities near commercial services, retail, and employment (Ordinance 2019-

07 and Ordinance 2020-05). Designated as a Priority Development Area by the Association of Bay Area Governments, the BDSP is an important part of the Bay Area's Sustainable Community Strategy to reduce greenhouse gas emissions through smart growth planning policies.

On February 19, 2019, the City adopted an Electric Vehicle Charging Station streamline permit process (Ordinance 2019-02). The State Governor's Office of Business has assigned American Canyon with "Green" rating to verify the City is consistent with Assembly Bill 1236.

On June 18, 2019, the City Council approved a Countywide Commitment to Address Climate Change Proclamation declaring the City's support of local actions to address climate change including joining the Napa Countywide Climate Action Committee (CAC). Vice-Mayor Joseph and Councilmember Washington represent the City on the CAC.

Due to concerns of greenhouse gas emissions as well as market saturation and BDSP community character, the City Council adopted Ordinance 2021-03 on April 6, 2021. The Ordinance imposes an immediate 10-Month, 15-day moratorium on processing discretionary entitlements to establish, use, and operate new fuel stations within the City of American Canyon. The Urgency Ordinance will expire on Monday, February 21, 2022 unless it is extended by the City Council through a subsequent Urgency Ordinance.

Urgency Ordinance 2021-03 provides time for the City to explore regulations concerning the placement, establishment, and possible operation of Fuel Stations within the City consistent with the community's vision. The first step in considering potentially new fuel stations Zoning Code regulations is to review the General Plan.

The General Plan is a fundamental document that provides local control over the physical development of our City. The legal authority for General Plan policies is derived from the California Constitution that allows Cities to adopt regulations in that protect public health, safety, and welfare. Thus, in California, every City and County is required by law to adopt a comprehensive, long-term General Plan. Policies to implement the General Plan, such as the Zoning Ordinance, Capital Improvement Projects, Development Approvals, Impact Fees, Infrastructure dedications, and Conditions of Approvals must be consistent with the General Plan.

The updated General Plan 2040 will include comprehensive climate change policies to reduce greenhouse gas emissions and improve climate change adaptation. However, General Plan 2040 adoption is not contemplated before the end of Calendar Year 2022. The current General Plan lacks such policies. Thus, an amendment to the current General Plan is necessary before adopting new zoning regulations to limit fuel stations on the basis of reducing greenhouse gas emissions.
On June 24, 2021, the Planning Commission continued the workshop and provided feedback on proposed General Plan Land Use Element policies related to greenhouse gas emission, climate change and adaptation.

On July 22, 2021, the Planning Commission recommended City Council approval of a General Plan amendment to incorporate climate change, adaptation, and greenhouse gas reduction policies into the Land Use Element (Resolution 2021-16). On September 7, 2021, the City Council approved the General Plan amendment (Resolution 2021-60).

American Canyon Fuel Station Status

Currently, there are three existing fuel stations in American Canyon and one approved fuel station in permitting. The existing fuel stations include: Chevron at 401 Napa Junction Road; Union 76 (former Arco) at 3462 Broadway; and Safeway at 103 West American Canyon Road. The approved fuel station in permitting is a Circle K located at 112 Lombard Road.

In addition to the existing and approved fuel stations, the City currently has a Conditional Use Permit (CUP) application for a 7-Eleven fuel station at 218 American Canyon Road. An application for a Rotten Robbie fuel station with a convenience store and carwash at 3519 Broadway was withdrawn by the applicant on September 15, 2021. The 7-Eleven application is on hold pending completion of the Urgency Ordinance and/or new Zoning Code regulations.

Climate Basis for a Fuel Station Prohibition

Government Code Section 65358 allows General Plan Amendments when it is deemed in the public interest to do so. According to the California Air Resources Board (CARB), transportation accounts for about 40% of the state's greenhouse gas (GHG) pollution in the State. This statistic places transportation as the leading source of GHG pollution. Contributions from the transportation sector include emissions from fuel combustion by on-road and off-road vehicles, aviation, rail, and water-borne vehicles, as well as a few other smaller sources.

According to the California Department of Transportation (Caltrans), widespread use of ZEVs will improve California's air quality and help meet California's GHG reductions targets. A ZEV is defined as plug-in hybrid electric, full battery electric, hydrogen, and fuel cell vehicles because they have no greenhouse gas or air pollutant tailpipe emissions.

According to Caltrans, ZEVs are typically cheaper to fuel than gasoline-powered vehicles, and there are an increasing number of models to choose from, including longer-range Battery Electric Vehicles (BEVs), All-wheel-drive vehicles, SUVs, and mini-vans. Existing and proposed fuel stations do not include any Zero Emission Vehicle (ZEV) fueling infrastructure.

In September 2020, as part of an effort to address the impacts of climate change caused by transportation-related greenhouse gas emissions, Governor Newsom issued Executive Order N-79-20 to require all in-state sales of new passenger vehicles be ZEV by 2035. The Executive Order also sets a further goal of the state that 100 percent of medium- and heavy-duty (MD/HD) vehicles in the state be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks.

Further, it sets a goal of the state to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible.

Zoning Code Amendments

The "Zoning Code" is contained in Title 19 of the American Canyon Municipal Code. Discussed below are amendment to the Zoning Code to prohibit new and expanded service stations in all zoning districts in the City of American Canyon that conduct motor vehicle fossil fuel retail sales.

Chapter 19.04 – Definitions
The Zoning Code Use Definition chapter defines terms used throughout the Zoning Code.

Section 19.04.030 – Citywide Definitions (New Definition)
"Zero-Emission Vehicle. A zero-emission vehicle is any type of vehicle that has no tailpipe emissions. Vehicles run on electric motors and are powered by electricity delivered from batteries or hydrogen and fuel cells. In contrast to conventional internal combustion vehicles, zero emission vehicles prevent air pollution, lower greenhouse gas emissions, and help integrate renewable energy into the transportation sector. There are two kinds of zero emission vehicles: plug-in electric vehicles and hydrogen fuel cell electric vehicles."

JUSTIFICATION: A Zero-Emission vehicle definition is needed because it supports the new "Zero Emission Vehicle Service Station" land use classification.

Chapter 19.05 – Use Classifications
The Zoning Code Use Classification chapter defines every use that is Permitted, Conditionally-Permitted, or Prohibited in the City. Service Stations are only permitted in Commercial Zoning Districts and the Broadway District Specific Plan. Discussed below are needed amendments to the Use Classifications. Amendments that remove text are shown in strikeout. Underline is shown for new text.

Section 19.05.050 – Commercial Classifications
This section of the Use Classification chapter defines all Commercial uses in each zoning district.

(Classification to Delete)

Gas stations and automobile service facilities: an establishment engaged primarily in the retail sale of motor fuels and incidentally in the supplying of goods and services required in the operation and maintenance of motor vehicles. This classification includes incidental maintenance and repair of automobiles and light trucks. Should be discouraged at major intersections.

JUSTIFICATION: The Gas stations and automobile service facilities Use Classification is the same as Service Station so it is redundant. Service Station is used throughout the zoning code which makes the Gas Station classification unnecessary.

Service Station is a subcategory of Vehicle/Equipment Sales and Services. Listed below are proposed changes to provide a new Zero Emission service station classification.

(A modification to the Service Station Classification)
Fossil Fuel Service Station: an establishment engaged primarily in the retail of motor vehicle fossil fuels sales and incidentally in the supplying of goods and services required in the operation to operate and maintain maintenance of motor vehicles. This classification includes incidental of automobiles and light trucks repair and maintenance, but excludes body and fender work or repair of heavy trucks or vehicles, upholstery work, auto glass work, painting, tire recapping, auto dismantling, auto storage, and the sale of groceries, dairy products, liquor, garden supplies and similar items.

JUSTIFICATION: The current "service station" classification is divided into two new classifications: Fossil Fuel Service Station and Zero Emission Vehicle Service Station. The language is cleaned up to simplify allowable accessory uses.

Zero Emission Vehicle Service Station: an establishment engaged primarily in retail electric vehicle fuel sales and incidental goods and services required to operate and maintain zero emission motor vehicles. This classification includes incidental maintenance and repair of automobiles and light trucks, but excludes body and fender work or repair of heavy trucks or vehicles, upholstery work, auto glass work, painting, tire recapping, auto dismantling, auto storage, and the sale of groceries, dairy products, liquor, garden supplies and similar items.
This classification does not include electric vehicle charging stations installed as an accessory use (see "Accessory Use" Definition Section 19.04.030).

JUSTIFICATION: The Zero Emission Service Station classification is a new classification. Electric vehicle charging stations installed as a customer or employee service or convenience (i.e.: a charging station in a parking lot of another use) are an Accessory Use and not a Zero Emission vehicle service station.

Chapter 19.11 – Commercial Districts
The Zoning Code Commercial District chapter identifies the development standards and allowable uses in Commercial Zoning districts throughout the city.

Section 19.11.040 – Permitted Uses in Commercial Zoning Districts

Amend Table 1 to with the following changes:

1. Delete Gas Stations and automobile service facilities because this use is redundant with service station.
2. Change Service Station from Conditionally Permitted to Prohibited in the Neighborhood

Commercial and Community Commercial zoning districts.
3. Add Zero Emission Service Station as a Conditionally Permitted use in the Neighborhood

Commercial and Community Commercial zoning districts.

Broadway District Specific Plan
Amend Table 2-3 with the following changes:
1. Delete Gas Stations and automobile service facilities because this use is redundant with service station.
2. Add Zero Emission Service Station as a Conditionally Permitted use in the Business Park zoning district.

JUSTIFICATION: As a land use, the Zero Emission Service Station may appear and function similar to a fossil fuel service station. For this reason, this "automobile-oriented" use would not be permitted in the central part of the Broadway District Specific Plan. Electric vehicle charging stations, typically found in parking lots of commercial uses, would be permitted because it does not meet the definition of a Zero Emission Service Station.

Chapter 19.49 – Nonconforming Uses, Structure, and Lots
The purpose of the Nonconforming chapter is to regulate buildings and uses which do not conform to one or more provisions of the Zoning Code today, but were lawfully established in accordance with the Zoning Code at the time the project was approved.

These new proposed Nonconforming amendments are intended to provide specific ways that Fossil Fuel Service Stations may be modified following adoption of this zoning code amendment.

19.49.090 - Regulation of Fossil Fuel Service Station Uses and Structures (New Section)

A. Purpose.
1. Accommodate continued Fossil Fuel Service Station operation as a legal non-conforming use and describe when they may be deemed abandoned.
2. Allow alterations to Fossil Fuel Service Station when such changes provide greater protection of the environment, safeguard public health and safety, facilitate the use of zero emission vehicles, or enable other uses permitted within the respective zoning district.
3. Prohibit Fossil Fuel Service Station operations from increasing the storage and dispensing capacity of gasoline and any other fossil fuel.

B. Applicability. This section applies to:

1. All lawfully developed and operating Fossil Fuel Service Station uses in existence prior to [insert ordinance effective date; i.e., January 1, 2022].
2. All Fossil Fuel Service Station uses not yet developed and/or operating but subject to an

approved and unexpired land use permit.

C. Modifications to Fossil Fuel Service Station Uses, Generally. Except as provided below, Fossil Fuel Service Station uses and structures shall not be enlarged, extended, reconstructed or moved to a different portion of the lot or parcel of land occupied by such use. Examples of features subject to this provision include, but are not limited to retail fossil fuel sale, storage, conveyance, and dispensing (i.e., storage tanks, pumps, dispensers).

D. Modifications to Improve Public Health and Safety. Fossil Fuel Service Station uses may be modified to conform to current public health and safety standards (i.e.: stormwater quality control regulations or remediate contamination of the soil, groundwater, pedestrian and bicycle access safety, traffic control devices).

E. Modifications to Enable Zero Emission Vehicles (Battery Charging Station). Fossil Fuel Service Station uses may be modified to accommodate battery charging station(s) for Zero Emission Vehicles.

F. Modifications to Enable Zero Emission Vehicles (Hydrogen Fuel Cell Station). Fossil Fuel Service Station uses may be altered to include hydrogen storage, conveyance and dispensing facilities.

G. Discontinuation of a Fossil Fuel Service Station Uses or Structures. A Fossil Fuel Service Station use shall not be re-established if such use has been discontinued for a continuous period of twelve (12) months or more. If the use has discontinued for 12-months or longer because the nonconforming Fossil Fuel Service Station is subject to construction with a valid building permit that has not received final inspection, the nonconforming timeframe will be extended in accordance with the building permit application completion.

Next Steps

The City Council will consider the Planning Commission recommendation along with other public testimony at a public hearing. The City Council may adopt the Zoning Code amendment as proposed or provide direction to revise and/or amend the policies. Once approved, a Zoning Code amendment requires a second reading. If approved, the ordinance would take effect 30 days later.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Infrastructure: "Develop and maintain infrastructure resources to support sustainable growth."

FISCAL IMPACT

N/A

ENVIRONMENTAL REVIEW

Consistent with Public Resources Code Section 21000, et seq., the California Environmental Quality

Act, ("CEQA"), the proposed Zoning Code and Specific Plan Amendments are categorically exempt from environmental review in accordance with CEQA Guidelines Section 15307 Actions by Regulatory Agencies for Protection of Natural Resources, and CEQA Guidelines Section 15308 Actions by Regulatory Agencies for Protection of the Environment. CEQA Guidelines Section 15307 and 15308 are applicable because the proposed amendments are intended to address Climate change impacts that pose an immediate and growing threat to California's economy, environment, safety, and public health.

ATTACHMENTS:

1.Fuel Station ZC PC Reso

PC RESOLUTION NO. 2021-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF AMERICAN CANYON, CALIFORNIA, RECOMMENDING THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON ADOPT AN ORDINANCE TO AMEND TO THE AMERICAN CANYON MUNICIPAL CODE CHAPTER 19.04 DEFINITIONS; CHAPTER 19.05 COMMERCIAL CLASSIFICATIONS; CHAPTER 19.11 COMMERCIAL ZONING DISTRICT; CHAPTER 19.49 NONCONFORMING USES, STRUCTURE, AND LOTS; AND BROADWAY DISTRICT SPECIFIC PLAN TABLE 2-3 PERMITTED USES GENERAL PLAN AMENDMENT TO PROHIBIT NEW AND EXPANDED SERVICE STATIONS IN ALL ZONING DISTRICTS IN THE CITY OF AMERICAN CANYON THAT ENGAGE IN RETAIL SALE OF MOTOR VEHICLE FOSSIL FUELS (PL21-0028)

WHEREAS, Climate change represents a growing danger to human health, safety, economic prosperity, basic services, and natural resources. The State of California as a whole, and Napa County residents, the economy, and environment have experienced adverse effects associated with climate change, such as a prolonged wildfire seasons and firestorms, rising temperatures, mudslides, severe droughts, property destruction and damage to infrastructure; and

WHEREAS, American Canyon has a long history of supporting policies to protect the environment. In 2013, American Canyon's Energy Efficiency Climate Action Plan (EECAP) was the first Climate Action Plan adopted in Napa County; and

WHEREAS, on June 18, 2019, the City Council approved a Countywide Commitment to Address Climate Change Proclamation declaring the City's support of local actions to address climate change including joining the Napa Countywide Climate Action Committee (CAC); and

WHEREAS, on April 6, 2021, due to concerns of greenhouse gas emissions as well as market saturation and Broadway District Specific Plan (BDSP) community character, the City Council adopted Urgency Ordinance 2021-03 to impose an immediate 10-Month, 15-day moratorium on processing discretionary entitlements to establish, use, and operate new fuel stations within the City of American Canyon; and

WHEREAS, according to the California Air Resources Board (CARB), transportation accounts for about 40% of the state's greenhouse gas (GHG) pollution in the State which places transportation as the leading source of GHG pollution in California; and

WHEREAS, as of 2017, the CARB reports that passenger vehicles represent the largest single source of transportation GHG emissions in California; and

WHEREAS, according to the California Department of Transportation (Caltrans), widespread use of Zero Emission Vehicles (ZEVs) will improve California's air quality and help meet California's GHG reductions targets; and

WHEREAS, a ZEV is defined as plug-in hybrid electric, full battery electric, hydrogen, and fuel cell vehicles because they have no greenhouse gas or air pollutant tailpipe emissions; and

WHEREAS, according to Caltrans, ZEVs are typically cheaper to fuel than gasoline-powered vehicles, and there are an increasing number of models to choose from, including longer-range Battery Electric Vehicles (BEVs), All-wheel-drive vehicles, SUVs, and mini-vans; and

WHEREAS, in September 2020, as part of an effort to address the impacts of climate change caused by transportation-related greenhouse gas emissions, Governor Newsom issued Executive Order N-79-20 to require all in-state sales of new passenger vehicles be ZEV by 2035; and

WHEREAS, the Governor's Executive Order sets a further State goal that 100 percent of medium- and heavy-duty (MD/HD) vehicles be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks, and transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible; and

WHEREAS, there are three existing fuel stations in American Canyon and one approved fuel station in American Canyon and the existing and proposed fuel stations do not include any Zero Emission Vehicle (ZEV) fueling infrastructure; and

WHEREAS, pursuant to Section 65300 of the State Planning and Zoning Law, the City of American Canyon (City) has adopted a General Plan to provide comprehensive long-range planning and a blueprint of the City's future form, including land use and circulation maps that specify the roadway network and the distribution of types and intensities of land; and

WHEREAS, the General Plan lacks policies related to greenhouse gas emissions, climate change and adaptation; and

WHEREAS, on July 22, 2021, the Planning Commission recommended City Council approval of a General Plan amendment to incorporate climate change, adaptation, and greenhouse gas reduction policies into the Land Use Element (Resolution 2021-16); and

WHEREAS, on September 7, 2021, the City Council approved the General Plan amendment (Resolution 2021-60); and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), (Public Resources Code Section 21000, *et seq*.), the proposed Zoning Code and Specific Plan Amendment is categorically exempt from environmental review in accordance with CEQA Guidelines Section 15307 *Actions by Regulatory Agencies for Protection of Natural Resources,* and CEQA Guidelines Section 15308 *Actions by Regulatory Agencies for Protection of the Environment.* CEQA Guidelines Section 15307 and 15308 are applicable because the proposed Zoning Code and Specific Plan amendments are intended to address climate change impacts that pose an immediate and growing threat to California's economy, environment, and public health; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on October 28, 2021 on the subject project, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby recommends the City Council of the City of American Canyon approve Zoning Code Amendments as shown below.

Zoning Code Amendments.
Subject to City Council approval, the following policies are hereby incorporated into the American Canyon Chapter 19 ("Zoning Code"):

Chapter 19.04 – Definitions

Section 19.04.030 – Citywide Definitions

***Note to Codifier: Add this new definition**.
"Zero-Emission Vehicle. A zero-emission vehicle is any type of vehicle that has no tailpipe emissions. Vehicles run on electric motors and are powered by electricity delivered from batteries or hydrogen and fuel cells. In contrast to conventional internal combustion vehicles, zero emission vehicles prevent air pollution, lower greenhouse gas emissions, and help integrate renewable energy into the transportation sector. There are two kinds of zero emission vehicles: plug-in electric vehicles and hydrogen fuel cell electric vehicles."

Chapter 19.05 – Use Classifications
The Zoning Code Use Classification chapter defines every use that is Permitted, Conditionally-Permitted, or Prohibited in the City. Service Stations are only permitted in Commercial Zoning Districts and the Broadway District Specific Plan.

Section 19.05.050 – Commercial Classifications

***Note to Codifier: Delete this definition.**
Gas stations and automobile service facilities: an establishment engaged primarily in the retail sale of motor fuels and incidentally in the supplying of goods and services required in the operation and maintenance of motor vehicles. This classification includes incidental maintenance and repair of automobiles and light trucks. Should be discouraged at major intersections.

***Note to Codifier: Add this new definition.**
Fossil Fuel Service Station: an establishment engaged primarily in the retail of motor vehicle fossil fuels sales and incidentally in the supplying of goods and services required in the operation to operate and maintain maintenance of motor vehicles. This classification includes incidental of automobiles and light trucks repair and maintenance, but excludes body and fender work or repair of heavy trucks or vehicles, upholstery work, auto glass work, painting, tire recapping, auto dismantling, auto storage, and the sale of groceries, dairy products, liquor, garden supplies and similar items.

***Note to Codifier: Add this new definition.**
Zero Emission Vehicle Service Station: an establishment engaged primarily in retail electric vehicle fuel sales and incidental goods and services required to operate and maintain zero emission motor vehicles. This classification includes incidental maintenance and repair of automobiles and light trucks, but excludes body and fender work or repair of heavy trucks or vehicles, upholstery work, auto glass work, painting, tire recapping, auto dismantling, auto storage, and the sale of groceries, dairy products, liquor, garden supplies and similar items.

This classification does not include electric vehicle charging stations installed as an accessory use (see "Accessory Use" Definition Section 19.04.030).

Chapter 19.11 – Commercial Districts
The Zoning Code Commercial District chapter identifies the development standards and allowable uses in Commercial Zoning districts throughout the city.

Section 19.11.040 – Permitted Uses in Commercial Zoning Districts

***Note to Codifier: Amend Table 1 to with the following changes:**

1. Delete Gas Stations and automobile service facilities because this use is redundant with service station.
2. Change Service Station from Conditionally Permitted to Prohibited in the Neighborhood Commercial and Community Commercial zoning districts.
3. Add Zero Emission Service Station as a Conditionally Permitted use in the Neighborhood Commercial and Community Commercial zoning districts.

Chapter 19.49 – Nonconforming Uses, Structure, and Lots
***Note to Codifier: Add this new Section 19.49.090.**

19.49.090 - Regulation of Fossil Fuel Service Station Uses and Structures

A. Purpose.
   1. Accommodate continued Fossil Fuel Service Station operation as a legal non-conforming use and describe when they may be deemed abandoned.
   2. Allow alterations to Fossil Fuel Service Station when such changes provide greater protection of the environment, safeguard public health and safety, facilitate the use of zero emission vehicles, or enable other uses permitted within the respective zoning district.
   3. Prohibit Fossil Fuel Service Station operations from increasing the storage and dispensing capacity of gasoline and any other fossil fuel.

B. Applicability. This section applies to:

   1. All lawfully developed and operating Fossil Fuel Service Station uses in existence prior to [insert ordinance effective date; i.e., January 1, 2022].
   2. All Fossil Fuel Service Station uses not yet developed and/or operating but subject to an approved and unexpired land use permit.

C. Modifications to Fossil Fuel Service Station Uses, Generally. Except as provided below, Fossil Fuel Service Station uses and structures shall not be enlarged, extended, reconstructed or moved to a different portion of the lot or parcel of land occupied by such use. Examples of features subject to this provision include, but are not limited to retail fossil fuel sale, storage, conveyance, and dispensing (i.e., storage tanks, pumps, dispensers).

D. Modifications to Improve Public Health and Safety. Fossil Fuel Service Station uses may be modified to conform to current public health and safety standards (i.e.: stormwater quality control regulations or remediate contamination of the soil, groundwater, pedestrian and bicycle access safety, traffic control devices).

E. Modifications to Enable Zero Emission Vehicles (Battery Charging Station). Fossil Fuel Service Station uses may be modified to accommodate battery charging station(s) for Zero Emission Vehicles.

F. Modifications to Enable Zero Emission Vehicles (Hydrogen Fuel Cell Station). Fossil Fuel Service Station uses may be altered to include hydrogen storage, conveyance and dispensing facilities.

G. Discontinuation of a Fossil Fuel Service Station Uses or Structures. A Fossil Fuel Service Station use shall not be re-established if such use has been discontinued for a continuous period of twelve (12) months or more. If the use has discontinued for 12-months or longer because the nonconforming Fossil Fuel Service Station is subject to construction with a valid building permit that has not received final inspection, the nonconforming timeframe will be extended in accordance with the building permit application completion.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Planning Commission of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby recommends the City Council of the City of American Canyon approve amendments to the Broadway District Specific Plan as shown below.

Broadway District Specific Plan

***Note to Codifier: Amend Table 2-3 with the following changes:**

1. Delete Gas Stations and automobile service facilities because this use is redundant with service station.
2. Add Zero Emission Service Station as a Conditionally Permitted use in the Business Park zoning district.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 28th day of October, 2021, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Tyrone Navarro, Chair

ATTEST:

_____
Nicolle Jones, Administrative Technician

APPROVED AS TO FORM:

_____
William D. Ross, City Attorney

TITLE

"Lodging" in the Local Serving Mixed Use (LSMU) Zoning District and a Conditional Use Permit for a Hampton Inn Hotel

RECOMMENDATION

Consider three Resolutions:

1. A Resolution of the Planning Commission of the City of American Canyon recommending the City Council of the City of American Canyon: 1) adopt an Addendum to the Broadway District Specific Plan Program Environmental Impact Report for the Hampton Inn Project: consisting of an amendment to the Broadway District Local Serving Mixed Use Zoning District and Conditional Use Permit for a 106-room Hampton Inn Hotel on a 2.53-acre parcel at 3443 Broadway Street; and 2) direct staff to file a Notice of Determination;
2. Adopt a Resolution of the Planning Commission of the City of American Canyon, California, recommending the City Council of the City of American Canyon approve an amendment to the Broadway District Specific Plan Table 2-3 to permit Lodging as a Conditionally Permitted Use in the Local Serving Mixed Use Zoning District (LSMU) Zoning District and add a new Special Development Requirement No. 3 to require Lodging Uses in the LSMU Zoning District qualify for a three Star Forbes Travel Guide Rating (File No. PL20-0030); and
3. Adopt a Resolution of the Planning Commission of the City of American Canyon, California, recommending the City Council of the City of American Canyon approve a Conditional Use Permit for a 106-room Hampton Inn hotel on a 2.53-acre parcel at 3443 Broadway St, APN 058-312-010 (File No. PL20-0029)

CONTACT

William He, AICP, Associate Planer

BACKGROUND & ANALYSIS

Site Information

General Plan Designation	Local-Serving Mixed-Use (LSMU)
Zoning District	Local-Serving Mixed-Use (LSMU)
Site Size	2.53 acres
Present Use	Residence with an upholstery store

Surrounding Uses	North: LSMU / commercial uses and duplexes South: Community Commercial (CC)/ Canyon Plaza shopping center East: LSMU / Navajo Rug and American Canyon Car Wash West: Resident Rural 10,000 and 20,000 (RR10,000 and RR 20,000) / single-family residences
Access	From southbound Highway 29

Proposed Development

Ajani Management, LLC, AMS Associates Inc. proposed a 106-room, three-story Hampton Inn hotel at 3443 Broadway. The Hampton Inn property is proposed in one of four "Local Serving Mixed Use" (LSMU) zoning district sites. However, lodging uses (*i.e.*: hotels) are not permitted in this zoning district. A Zone Change to the LSMU zoning district would be needed to allow a hotel at this location. A Zone Change is a Legislative Act that requires City Council approval. When considering a Zone Change, the City Council has complete discretion to approve, modify or deny the request. The project includes an Addendum to the Broadway District Specific Plan (BDSP) Program Environmental Impact Report (PEIR), as shown in Attachment 4, with appendixes in Attachment 5.

The proposed site is a 2.52-acre parcel located on the west side of Broadway, south of Donaldson Way, and immediately north of Canyon Plaza. The project includes 113 parking spaces, 8 bicycle parking spaces, and 0.67-acres of landscaping. The hotel features a swimming pool, a meeting room, a and a fitness center. The preliminary civil plans for the project are shown in Attachment 6, the landscaping plans in Attachment 7, and the architecture in Attachment 8. A map depicting the proposed hotel location is included as Attachment 9.

On December 1, 2020, soon after the Zone Change request application was submitted, the City Council conducted a workshop to elevate issues that should be considered before allowing hotels in the LSMU zoning district.Attachment 10 shows the LSMU zoning district sites located on Broadway between Donaldson Way and American Canyon Road. The Hampton Inn is proposed in the yellow portion of "Site 1."

On July 29, 2021, the City Council reviewed a Marketing Study prepared by Economic and Planning Systems, Inc. that concludes the market for hotel rooms in American Canyon is favorable for the next five (5) years.

On October 5, 2021, the City Council and Planning Commission conducted a workshop on the proposed LSMU zone change and hotel Conditional Use Permit.

Analysis of Land Use Issues

The following issues were raised by staff in the December 1, 2020 City Council workshop:

Current Site Conditions: The proposed Hampton Inn property is "ripe" for redevelopment. The property was developed many years before incorporation when American Canyon was a rural community. Given the 2.52-acre size, there are few structures on the property, which informally classifies the site as "underutilized."

Today, the site does not conform to current development standards. For example, several structures are placed too close to the northern property line to conform to the building setbacks. One structure is an older residence converted to commercial use. The property lacks the required 30-foot Broadway landscape setback as mandated by the Broadway District Specific Plan and the structures do not conform to current or previous zoning code design guidelines. An aerial site photograph and Street View is included as Attachment 11.

Potential Hotel Sites: Lodging uses are permitted in the Community Commercial and Business Park zoning districts. However, potential hotel sites generally require a rectangular site between 2-3-acres. At this time, there are two vacant properties in the Community Commercial and Business Park zoning districts large enough to accommodate a hotel. This includes the 4-acre Marshall Honey Farm at 159 Lombard Road and the 15-acre Union Pacific Railroad property north of the Napa Junction III mixed use center. Both of these properties are larger than needed for a typical hotel in American Canyon. The Union Pacific Railroad property has attracted interest over the past few years for multi-family residential and not lodging uses. Hotel interests have inquired, but not pursued the Marshall Honey Farm site.

If lodging is permitted in the LSMU zoning district, the 4-acre LSMU site at the southwest corner of Crawford Way and Broadway could potentially accommodate a hotel, but this site is larger than needed for a hotel. The current property owners have been considering residential uses on this property for several years. A graphic depicting the location of existing, approved, proposed, and potential hotel sites is included as Attachment 12.

Consistency with the LSMU Zoning District Intent: The intent of the LSMU zoning district is to permit a wide variety of Permitted and Conditionally-Permitted uses to support existing and future retail needs. Multifamily residential uses are also allowed in this zoning district as new residents would patronize local retail businesses.

According to many economic studies, hotel patrons provide a boost to local retail and restaurant sales. The nearby Canyon Plaza and other shopping centers in the Broadway District may likely benefit from visitors staying at the nearby Hampton Inn. Given the support a hotel would provide to existing and future local retail and restaurant businesses, there is a fair argument that local spending from hotel patrons would help attract and retain quality businesses that residents would also enjoy. Because hotel patrons improve retail and restaurant services for residents, amending the zoning to allow Lodging would be consistent with the purpose and intent of the LSMU zoning district.

Permitted Use or Conditionally Permitted Use: Uses allowed in each BDSP zoning district are listed in Table 2-3. Each use has a designation of "Permitted" or "Conditionally Permitted." Permitted uses are allowable when the sites comply with development standards *i.e.*: setbacks, height, lot coverage, parking, design guidelines, and so on.

A Conditionally Permitted use adds discretion to the approval process. These uses must comply with the development standards, but must also operate in a manner that is compatible with its neighbors and broader community. As the term implies, the approval could be "conditioned" with modifications or even denied if substantial evidence shows the use may cause harm to public health, safety or welfare. Given the close proximity of LSMU sites to existing residential neighborhoods, staff suggests that the extra discretion from a Conditionally-Permitted designation for hotel uses in the LSMU Zoning District would be appropriate.

A redline amendment to the "Lodging" use in BDSP Table 2-3 is included as Attachment 13. The redline change depicts a "C" in the Lodging row under the Local Serving Mixed Use zoning district. The "C" indicates that a Conditional Use Permit is required for Lodging uses.

City Council Issues

The following issues were raised by the City Council during the December 1, 2020 workshop.

Outreach: As with any development application submittal, transparency and communication with nearby residents, stakeholders, and broader community is an important component of the review process. Because the proposed Zone Change would allow a use that is not permitted today, it is especially important that the community be aware of this potential change and its implications.

The applicant has reached out to surrounding property owners with information that describes the proposed hotel and requested a letter of support. A copy of the applicant's correspondence and letters of support received in response is included as Attachment 14.

Context-Sensitive Architecture: The initial Hampton Inn hotel architecture submittal represents a "Modern" architectural style. The Broadway District Specific Plan (BDSP) Design Guidelines call for a "Modern Farmhouse" or "Modern Industrial" architectural style. Whether the appropriate style is Modern Farmhouse or Modern Industrial depends on the architectural context of neighboring buildings.

The City Council pointed out that the hotel architecture does not reflect the BDSP Design Guidelines and requested the applicant modify the architecture to reflect a more context-sensitive design compatible with the neighboring Canyon Plaza shopping center. In addition, the Council requested incorporating the windmill on the site into a visible outdoor location.

The applicant revised the architecture into a more context-sensitive design and relocated the windmill to a landscape area at the front of the hotel. A photo-simulation depicting the initial and current Hampton Inn architecture is included as Attachment 15 with a portion of neighboring Canyon Plaza included for context.

Overhead Utility Undergrounding: The BDSP requires overhead utilities on-site and along property frontage to be placed underground in conjunction with the development of the site. The Hampton Inn Hotel site contains one overhead utility pole at the southeast property line. A graphic depicting the pole on the proposed Hampton Inn site is shown in Attachment 16.

The BDSP requires existing overhead utilities placed underground because clearing poles and overhead wires from the Broadway "sky view" would provide an enormous visual improvement to the district and potentially enhance property values. Underground utilities enhance public safety and livability for future residents, visitors, and customers because they do not blow over in high winds and are not vulnerable to vehicle collisions or other accidents.

At the October 5, 2021 Joint City Council and Planning Commission workshop, the City Council and Planning Commission reviewed the issue regarding undergrounding the utility pole on the southeast property line and agreed the pole and associated overhead wires are required to be undergrounded. The applicant reviewed the site and found that the existing pole served only the hotel site and no other parcels will be impacted with the removal of the pole. The applicant also learned they can take power from a pole on Donaldson Way. The Hampton Inn Conditional Use Permit includes a condition of approval that requires removal of the existing utility pole and overhead wires across Highway 29.

Pedestrian and Vehicle Connection: BDSP Policy 3-15 requires interconnections with reciprocal access easements between neighboring properties to improve access, and customer convenience, and reduce short vehicle trips on Broadway.

Connection to Canyon Plaza: The Council pointed out that a pedestrian and vehicle connection to the adjacent Canyon Plaza shopping center would encourage visitors to patronize the shopping center. Connecting the hotel site to Donaldson Way would enable visitors to conveniently use the Donaldson Way traffic signal to travel to wine destinations north of American Canyon.

Staff's research shows that there approximately 35-feet between the Canyon Plaza retail buildings adjacent to the Hampton Inn Hotel site. This width provides sufficient room to accommodate two vehicle travel lanes and a pedestrian sidewalk.

With the Canyon Plaza owner's consent, the applicant agreed to construct a pedestrian connection between the Hampton Inn hotel and Canyon Plaza. However, the applicant and Canyon Plaza owner disagree with providing vehicle access between the two sites for these reasons:

- Constructing a bridge to accommodate vehicles over a drainage ditch and grade difference

would cost much more than a pedestrian bridge.

- Visitors at the Hampton Inn hotel would not need to drive to Canyon Plaza because the two sites are close enough they can be easily reached by pedestrians.
- The extra width for vehicles would require removing mature trees on the Canyon Plaza site.
- A vehicle connection between Canyon Plaza and Donaldson Way would bring retail customer traffic through the Hampton Inn parking lot to reach Donaldson Way, thus adding traffic and potential pedestrian safety concerns to hotel patrons.

At the October 5, 2021 City Council/Planning Commission meeting, the general consensus agreed that vehicle connection between the property was problematic. As an alternative, it was recommended that the pedestrian connection be sufficiently wide to accommodate bicycling. To address the Canyon Plaza connection, the Hampton Inn Conditional Use Permit includes a condition of approval that requires a minimum 10-foot wide pedestrian bridge to accommodate pedestrians and bicyclists.

Connection to Donaldson Way: The other potential connection from the proposed hotel is Donaldson Way. The "mid-block" configuration of the Hampton Inn site would present a challenge to hotel guests. "Mid-block" refers to the property with access only from Broadway and no access to a side street.

Adding a vehicle connection to Donaldson Way would benefit the hotel because patrons could easily drive north to Napa Valley wine destinations. As currently designed, hotel patrons heading north would exit the hotel driveway, and travel south on Broadway. From there, they must weave through frequently high speed or congested traffic to make a "U Turn" at the unsignalized Crawford Way intersection or turn right and drive down Crawford Way; right turn on James Road, right turn on Donaldson Way, then use the Donaldson signal to drive north on Broadway.

If visitors miss the Crawford U Turn or Crawford Way right turn, there is no U Turn allowed at American Canyon Drive. If they turn left, they may not U Turn at Silver Oak. The next opportunity to U Turn is Flosden Road. If this happens, many visitors may be pretty frustrated. Especially since a very safe and convenient signal at Donaldson Way is just a few feet from the hotel – but inaccessible from the proposed highway access drive. A graphic displaying the intersection traffic movement options on Broadway near the hotel is included as Attachment 17.

The hotel applicant suggested that adding a driveway onto Donaldson Way would cause a safety concern because Donaldson Way access would be available to non-hotel patrons. Staff disagrees that adding a driveway access onto Donaldson Way would increase safety concerns for hotel patrons. The location is not a high crime area. Normal hotel safety measures (*i.e.*: exterior lighting and surveillance cameras) would mitigate security concerns. Furthermore, in addition to BDSP Policy 3-15, the benefit of a safe and convenient access to a nearby traffic signal as well as reductions in "nuisance" trips on Broadway greatly outweigh a safety perception issue.

The Hampton Inn Conditional Use Permit includes a condition of approval that requires a pedestrian and vehicle connection to Donaldson Way.

Hotel Marketing Study: At the December 1, 2020 workshop, members of American Canyon hoteliers expressed concerns that the proposed Hampton Inn Hotel would add competition to the existing hotels and an approved hotel.

To address this concern, the City Council instructed the applicant to prepare a Hotel Marketing Study. This study answer whether hotel demand in American Canyon could absorb the Hampton Inn hotel without compromising existing and approved hotel viability. A copy of the Hotel Marketing Study is included as Attachment 18.

As discussed at a July 29, 2021 City Council meeting, the applicant submitted a Marketing Study prepared by Economic and Planning Systems, Inc. The Key Findings in the introductory cover memorandum state as follows:

- Napa Valley supports a diverse tourism market, and hospitality demand and supply has been steadily growing in recent years.
- The proposed Hampton Inn is likely to compete most directly with branded "upper midscale" and "upscale" hotels in Southern Napa County.
- The competitive set of hotels in Southern Napa County have historically performed well, though the COVID-19 pandemic had a profound effect on room rates and occupancy.
- With a recovery to pre-pandemic hotel market conditions between 2021 and 2022, and historic trending in hotel demand growth from 2023 onward, this analysis finds unmet demand for an estimated 275 upper midscale and upscale rooms in Southern Napa County by 2025.
- The supply and demand forecast considers the soon-to-open Cambria Hotel in Napa, but leaves open the possibility that the proposed Hampton Inn could be delivered to market before other potentially competitive proposed supply.
- The proposed Hampton Inn would generate approximately 25 jobs onsite totaling over $1 million in employee compensation, stimulate additional economic multiplier effects in American Canyon, and provide tax revenue to the City's General Fund.

Staff recently discussed the Marketing Study with Executive Director of Visit Napa Valley, Linsey Gallagher, who expressed a favorable economic environment for hotel room demand in American Canyon. Visit Napa Valley's perspective of the current South County Hotel market is included as Attachment 19.

Hampton Inn Brand Assurance: At the December 1, 2020 workshop, the City Council noted that the proposed Zone Change would allow hotels in the LSMU zoning district. Because zoning does not require a specific hotel brand, the Council requested applicant assurance that the proposed hotel would be a Hampton Inn hotel or equal quality brand.

To respond to the City Council's concern, the applicant submitted an explanation that they have submitted a franchise agreement with Hampton Inn which requires use of Hampton Inn architects, and financial obligations that are very expensive. This significant commitment between the applicant and Hilton Corporation is represented as the guarantee the hotel will have the Hampton Inn brand.

The Hampton Inn hotels earn a "Three Star" rating in the Forbes Travel Guide Rating System. A "Three Star" rating is generally defined as:

Three Star Hotels: These well-appointed establishments have enhanced amenities that provide travelers with a strong sense of location, whether for style or function. They may have a distinguishing style and ambience in both the public spaces and guest rooms; or they may be more focused on functionality, providing guests with easy access to local events, meetings or tourism highlights.

The complete Forbes Travel Guide Rating System criteria is included as Attachment 20.

To ensure this hotel and any other hotel built in the LSMU zoning district is equal or better in quality to the proposed Hampton Inn, a Special Development Requirement has been added. The new Special Development Requirement #3 reads as follows:

3) Prior to approval of any discretionary application for lodging uses in the LSMU Zoning District, the Applicant shall demonstrate that their proposed project shall meet the criteria to achieve a "Three Star" or higher rating on the Forbes Travel Guide Rating System.

Next Steps: Following the Planning Commission hearing on the proposed Zone Change and Hotel Conditional Use Permit, the next steps include:

- The City Council will hold a public hearing on the proposed Zone Change (first reading)
- The City Council will consider the proposed Zone Change second reading and conduct a public hearing on the Hotel Conditional Use Permit.
- A Notice of Determination will be filed for the BDSP PEIR Addendum the day after the Ordinance Second Reading and Conditional Use Permit Approval.
- The Ordinance and Conditional Use Permit would become effective 30 days following the second reading approval.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Organizational Effectiveness: "Deliver exemplary government services."

FISCAL IMPACT

The Hampton Inn CUP and Zone Change project required a developer's deposit from the Applicant for review and processing, so there is no fiscal impact for staff's time. If the Planning Commission

recommends the project and the City Council approves the project, the applicant will develop a new hotel in the City. The hotel can activate an underutilized parcel, bring jobs to the City, and bring additional customers to City stores and restaurants.

ENVIRONMENTAL REVIEW

The 2019 Broadway District Specific Plan (BDSP) Program Environmental Impact Report (PEIR) (SCH #2017042025) evaluated the development of the 292-acre site area along the Broadway corridor. The City made findings of overriding consideration for significant and unavoidable impacts. Pursuant to Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 and 15164, subd. (a), an Addendum to the BDSP PEIR was prepared to evaluate the proposed project, as only some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. The LSMU zoning district modification, which includes the proposed Hampton Inn project site and the amount of development are consistent with the PEIR.

A copy of the CEQA report is included as Attachment 4 with the appendices as Attachment 5. Applicable mitigation measures from the BDSP PEIR are included in the Hampton Inn Conditional Use Permit Resolution (see Attachment 2).

ATTACHMENTS:

1. LSMU Hotel Addendum Resolution
2. Hampton Inn - Zone Change Resolution
3. Hampton Inn - CUP Resolution
4. LSMU CEQA Addendum
5. LSMU CEQA Addendum Appendixes
7. Hampton Inn Landscape Plans
6. Hampton Inn Civil Plan 07-12-21
8. Hampton Inn Architectural Plan 05-13-21
9. Location Map
10. LSMU Zoning District Sites
11. Aerial Site Photograph and Street View
12. Potential Hotel Sites
13. BDSP Table 2-4 Redline Amendment
14. Outreach Letter and Letters of Support
15. Initial and Proposed Architecture
16. Overhead Utility Pole
17. Intersection Turning Movements
18. Hotel Market Analysis EPS
19. VNV Hotel Expansion Support Letter July 2021
20. Forbes Hotel Star Rating Criteria

ATTACHMENT 1

RESOLUTION NO. 2021-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF AMERICAN CANYON, CALIFORNIA, RECOMMENDING THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON; 1) ADOPT AN ADDENDUM TO THE BROADWAY DISTRICT SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE HAMPTON INN PROJECT; CONSISTING OF AN AMENDMENT TO THE BROADWAY DISTRICT SPECIFIC PLAN LOCAL SERVING MIXED USE ZONING DISTRICT AND CONDITIONAL USE PERMIT FOR A 106-ROOM HAMPTON INN HOTEL ON A 2.53-ACRE PARCEL AT 3443 BROADWAY ST, APN 058-312-010; AND 2) DIRECT STAFF TO FILE A NOTICE OF DETERMINATION, APN 058-380-008 AND 058-320-001 (FILE NO. PL20-0030 AND PL20-0029)

WHEREAS, pursuant to Section 65300 of the State Planning and Zoning Law, the City of American Canyon (City) has adopted a General Plan to provide comprehensive long-range planning and a blueprint of the City's future form, including land use and circulation maps that specify the roadway network and the distribution of types and intensities of land; and

WHEREAS, on August 26, 2020, Anjani Management, LLC and AMS Associates submitted a Conditional Use Permit and Zone Change application to allow for the development of a 106-room Hampton Inn hotel at 3443 Broadway St (APN 058-312-010) (File No. PL20-0030); and

WHEREAS, the project site is located within the Local-Serving Mixed-Use zoning district in the Broadway District and lodging uses are not permitted in this zoning district; and

WHEREAS, on December 1, 2020, the City Council conducted a workshop to discuss issues regarding the Zone Change; and

WHEREAS, on October 5, 2021, the City Council and Planning Commission conducted a joint workshop to discuss the remaining issues regarding the Zone Change; and

WHEREAS, on October 5, 2021, the City Council and Planning Commission conducted a workshop on the proposed LSMU zone change and hotel Conditional Use Permit; and

WHEREAS, the applicant provided assurance that the proposed Hampton Inn Hotel or equivalent quality hotel will be constructed at the 3443 Broadway site; and

WHEREAS, on June 4, 2019, the City Council certified the Broadway District Specific Plan (BDSP) Program Final Environmental Impact Report (SCH #2017042025) ("BDSP PEIR") and made findings of overriding consideration for significant and unavoidable impacts (Ordinance No. 2019-07); and

WHEREAS, on August 23, 2021 an Addendum to the BDSP PEIR was prepared to evaluate the proposed Zone Change and Hampton Inn Conditional Use Permit; and

WHEREAS, the Addendum demonstrates the BDSP PEIR contemplated impacts and mitigation measures sufficiently address the proposed zone change and Hampton Inn project. No new mitigation measures are required. Thus, an Addendum to the BDSP PEIR is appropriate for this application; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on October 28, 2021 on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby recommends the City Council of the City of American Canyon approve an Addendum to the Broadway District Specific Plan Program Environmental Impact Report as incorporated herein as Exhibit A and B; and direct staff to file a Notice of Determination for the Project consistent with the CEQA Guidelines.

PASSED, APPROVED and **ADOPTED** at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 28th day of October 2021, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Tyrone Navarro, Chair

ATTEST:

_____
Nicolle Jones, Administrative Technician

APPROVED AS TO FORM:

_____
William D. Ross, City Attorney

EXHIBITS

A. BDSP PEIR Addendum
B. Appendices

ATTACHMENT 2

PC RESOLUTION NO. 2021-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF AMERICAN CANYON, CALIFORNIA, RECOMMENDING THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON APPROVE AN AMENDMENT TO BROADWAY DISTRICT SPECIFIC PLAN TABLE 2-3 TO PERMIT LODGING AS A CONDITIONALLY PERMITTED USE IN THE LOCAL-SERVING MIXED-USE (LSMU) ZONING DISTRICT AND ADD A NEW SPECIAL DEVELOPMENT REQUIREMENT NO. 3 TO REQUIRE LODGING USES IN THE LSMU ZONING DISTRICT QUALIFY FOR A THREE STAR FORBES TRAVEL GUIDE RATING (FILE NO. PL20-0030)

WHEREAS, pursuant to Section 65300 of the State Planning and Zoning Law, the City of American Canyon (City) has adopted a General Plan to provide comprehensive long-range planning and a blueprint of the City's future form, including land use and circulation maps that specify the roadway network and the distribution of types and intensities of land; and

WHEREAS, on August 26, 2020, Anjani Management, LLC and AMS Associates submitted a Conditional Use Permit and Zone Change application to allow for the development of a 106-room Hampton Inn hotel at 3443 Broadway St (APN 058-312-010) (File No. PL20-0030); and

WHEREAS, the project site is located within the Local-Serving Mixed-Use zoning district in the Broadway District and lodging uses are not permitted in this zoning district; and

WHEREAS, on December 1, 2020, the City Council conducted a workshop to discuss issues regarding the Zone Change; and

WHEREAS, on October 5, 2021, the City Council and Planning Commission conducted a joint workshop to discuss the remaining issues regarding the Zone Change; and

WHEREAS, on July 29, 2021, the City Council reviewed a Marketing Study prepared by Economic and Planning Systems, Inc. that concludes the market for hotel rooms in American Canyon is favorable for the next five (5) years; and

WHEREAS, Visit Napa Valley reviewed the Marketing Study and agrees that the current South Napa County Hotel market has been more resilient to economic cycles and Covid restrictions than the northern neighboring Napa County jurisdictions; and

WHEREAS, on October 5, 2021, the City Council and Planning Commission conducted a workshop on the proposed LSMU zone change and hotel Conditional Use Permit; and

WHEREAS, the applicant provided assurance that the proposed Hampton Inn Hotel or equivalent quality hotel will be constructed at the 3443 Broadway site; and

WHEREAS, on June 4, 2019, the City Council certified the Broadway District Specific Plan (BDSP) Final Environmental Impact Report (SCH #2017042025) and made findings of overriding consideration for significant and unavoidable impacts (Ordinance No. 2019-07); and

WHEREAS, on August 23, 2021 an Addendum to the BDSP Program Environmental Impact Report (PEIR) was prepared to evaluate the proposed Zone Change and Hampton Inn Conditional Use Permit; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on October 28, 2021 on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby recommends the City Council of the City of American Canyon: approve 1) an amendment to the Broadway District Specific Plan to permit lodging uses in the Local Serving Mixed Use Zoning District; and, 2) the Conditional Use Permit PL20-0029 for the Project, subject to the conditions of approval set out in Section 3.

SECTION 1: CEQA FINDINGS

The 2019 Broadway District Specific Plan (BDSP) Environmental Impact Report (EIR) evaluated the development of the 292-acre site area along the Broadway corridor. The City made findings of overriding consideration for significant and unavoidable impacts. Pursuant to Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 and 15164, subd. (a), an Addendum to the BDSP PEIR was prepared to evaluate the proposed Zone Change and Development to evaluate the proposed project as only some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. The Addendum demonstrates that the BDSP PEIR contemplated impacts and mitigation measures sufficiently address the proposed zone change and Hampton Inn project. No new mitigation measures are required. Thus, an Addendum to the BDSP PEIR is appropriate for this application and included as Exhibit A to this Resolution.

SECTION 2. **FINDINGS.** Based on the following evidence and as required by Zoning Ordinance Section 19.48.040 C, the Planning Commission recommends the City Council finds that:

a. The amendment is consistent with the goals and policies of the general plan.

The intent of the Local-Serving Mixed-Use zoning district is to accommodate a range of commercial uses and related services that will serve the local community. Adding "lodging" to the LSMU zone will enable hotels in the zone, which can provide new jobs to the community. All new lodging uses will be required to obtain a Conditional Use Permit, which requires applicants to comply with development standards and operate in a manner that is compatible with its neighbors and the broader community. The CUP process enables the Planning Commission to approve these projects with reasonable "conditions" or deny the project if substantial evidence shows the use may cause harm to public health, safety, or welfare. All lodging projects are subject to the Municipal Code development standards, the General Plan Policies, and the Broadway District Specific Plan development standards.

b. The amendment is consistent with the purposes of this title, as set forth in Chapter 19.01, Authority, Purposes and Effects of the Zoning Ordinance.

The amendment is consistent with the purpose of the Zoning Ordinance to protect and promote the public health, safety, peace, comfort, convenience, aesthetics, prosperity, and general welfare as the zone change will add opportunities for hotel uses in the Local-Serving Mixed-Use zoning district of the Broadway District Specific Plan. The amendment meets the design and development guidelines and standards of the General Plan.

SECTION 3. BROADWAY DISTRICT SPECIFIC PLAN AMENDMENTS

The Planning Commission recommends the City Council approve the following amendments to the BDSP Local-Serving Mixed-Use (LSMU) Zoning district as follows:

A. Amendment to BDSP Table 2-3

TABLE 2-3: BROADWAY ZONING DISTRICT PERMITTED USES

Use Classification (Per ACMC Chapter 19.05)	Broadway District Specific Plan Zoning District				
	Broadway Residential	Business Park[1]	Downtown Core	Local Serving Mixed Use	Home Improvement
Commercial					
Lodging services	-	P	P	**C**	-

B. Addition of a new Special Development Requirement #3 as follows:

3) Prior to approval of any discretionary application for lodging uses in the LSMU Zoning District, the Applicant shall demonstrate that their proposed project shall meet the criteria to achieve a "Three Star" or higher rating on the Forbes Travel Guide Rating System.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 28TH day of October, 2021, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Tyrone Navarro, Chair

ATTEST:

_____
Nicolle Jones, Administrative Technician

APPROVED AS TO FORM:

_____
William D. Ross, City Attorney

EXHIBITS

A. BDSP PEIR Addendum

ATTACHMENT 3

PC RESOLUTION NO. 2021-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF AMERICAN CANYON, CALIFORNIA, RECOMMENDING THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON, APPROVE A CONDITIONAL USE PERMIT FOR A 106-ROOM HAMPTON INN HOTEL ON A 2.53-ACRE PARCEL IN THE LOCAL SERVING MIXED USE ZONING DISTRICT AT 3443 BROADWAY ST, APN 058-312-010 (FILE NO. PL20-0029)

WHEREAS, on August 26, 2020, Anjani Management, LLC and AMS Associates submitted a Conditional Use Permit and Zone Change application to allow for the development of a 106-room Hampton Inn hotel at 3443 Broadway St (APN 058-312-010) (File No. PL20-0029 and PL20-0030); and

WHEREAS, the project site is located within the Local-Serving Mixed-Use (LSMU) zoning district in the Broadway District Specific Plan; and

WHEREAS, on June 4, 2019, the City Council certified the Broadway District Specific Plan (BDSP) Final Environmental Impact Report (EIR) (SCH #2017042025) and made findings of overriding consideration for significant and unavoidable impacts (Ordinance No. 2019-07); and

WHEREAS, on December 1, 2020, the City Council conducted a workshop on the proposed LSMU zone change and hotel conditional use permit; and

WHEREAS, on July 29, 2021, the City Council reviewed a Marketing Study prepared by Economic and Planning Systems, Inc. that concludes the market for hotel rooms in American Canyon is favorable for the next five (5) years; and

WHEREAS, Visit Napa Valley reviewed the Marketing Study and agrees that the current South Napa County Hotel market has been more resilient to economic cycles and Covid restrictions than the northern neighboring Napa County jurisdictions; and

WHEREAS, on October 5, 2021, the City Council and Planning Commission conducted a workshop on the proposed LSMU zone change and hotel Conditional Use Permit; and

WHEREAS, on August 23, 2021 an Addendum to the BDSP Program Environmental Impact Report (PEIR) was prepared to evaluate the proposed Zone Change and Development; and

WHEREAS, a duly-noticed public hearing was held by the City of American Canyon Planning Commission on October 28, 2021 on the subject application, at which time all those in attendance were given the opportunity to speak on this proposal and to submit comments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of American Canyon, having considered all the evidence, including any submitted by member of the public, hereby recommends the City Council of the City of American Canyon approve the Conditional Use Permit PL20-0029 for the Project, based on the findings and subject to the conditions of approval set out in Section 3.

SECTION 1: CEQA FINDINGS

The 2019 Broadway District Specific Plan (BDSP) Environmental Impact Report (EIR) evaluated the development of the 292-acre site area along the Broadway corridor. The City made findings of overriding

consideration for significant and unavoidable impacts. Pursuant to Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 and 15164, subd. (a), an Addendum to the BDSP PEIR was prepared to evaluate the proposed Zone Change and Development to evaluate the proposed project. The Addendum demonstrates that the BDSP PEIR contemplated impacts and mitigation measures sufficiently address the proposed zone change and Hampton Inn project. No new mitigation measures are required. Thus, an Addendum to the BDSP PEIR is appropriate for this application.

SECTION 2: CONDITIONAL USE PERMIT FINDINGS

Approval of the Conditional Use Permit requires that all of the following findings be made, pursuant to American Canyon Municipal Code Section 19.42.020:

A. The proposed use is consistent with the policies and programs of the general plan and any applicable master or specific plan.

The intent of the Local-Serving Mixed-Use (LSMU) zoning district is to accommodate a range of commercial uses and related services that will serve the local community. The proposed hotel will provide new jobs to the community and activate an underutilized parcel within the Broadway District. The hotel complies with the General Plan because the project is designed to convey a high level of design quality. The hotel has architectural treatments on all sides of the building, provides a clear building entrance, screens rooftop equipment, and provides extensive landscaping to support the site.

B. The proposed use is consistent with the purpose(s) and standards of the applicable zoning district(s).

The proposed hotel complies with the height, bulk, and setbacks regulations that apply to the LSMU zoning district. The architecture generally complies to the aesthetic standards described in the BDSP.

C. The proposed use complies with applicable policies of the Napa County Airport land use compatibility plan.

The proposed use is located in the Napa County Airport Land Use compatibility plan E-Zone. Hotels are permitted uses within the E-Zone, as it is the furthest zone from the airport.

D. The project site is physically suitable for the type and intensity of land use being proposed.

The project site consists of four buildings, of which two are actively used. The buildings will be removed or demolished prior to the hotel's construction. The site is relatively flat and utility connections are available. The site is physically suitable for a hotel.

E. The proposed use will not be a nuisance or materially detrimental to the general health, safety, and welfare of the public or to property and residents in the vicinity.

The project, with conditions of approval, will not cause any nuisances or detrimental impacts to the property or residents in the vicinity. The project does not emit any noise, light, or smells that exceed

normal levels from commercial uses. The Applicant conducted public outreach efforts and has received letters of support for the proposed project.

F. The site for the proposed use has adequate access, and meets parking and circulation standards and criteria.

The site takes access from southbound Highway 29. As a condition of approval, the City requires the applicant to provide an additional vehicular access from Donaldson Way. The site will also provide a pedestrian and bicycle path connection southward to the Canyon Plaza shopping center. The hotel requires 117 parking spaces, and they are providing 113 parking spaces. The Applicant provided a parking study and letter of justification from Hilton Hotels that explains the reduction of parking is feasible. As a condition of approval, the hotel agrees that the public right-of-way shall not be used for customer or employee parking.

G. There are adequate provisions for water and sanitary services, and other public utilities to ensure that the proposed use would not be detrimental to public health and safety.

The site will be connected to the City water and wastewater system. The site is ready for dry utilities such as electricity, telephone, and cable connection. In compliance with the Broadway District Specific Plan, the applicant is required to place a utility pole facing Highway 29 underground.

SECTION 3 CONDITIONS OF APPROVAL

General

1. The Conditional Use Permit approval is granted for a new three-story 106-room hotel with 113 parking spaces and 0.67-acres of landscaping on a 2.52-acre lot at 3443 Broadway St, APN 058-312-010, at which is on file in the in the Community Development Department, except as modified by conditions contained in this approval. Exhibit A includes the following:

    a. Architectural Plans prepared by Architectural Dimensions from Oakland, CA, dated May 12, 2021 consisting of 9 sheets, including Proposed Site Plan, Floor Plan, elevations, and Roof Plan.
    b. Landscaping Plans prepared by Batha Design Group from Oakland, CA, dated July 6, 2021, consisting of 2 sheets, showing the proposed landscaping and planting plan.
    c. Civil plans prepared by AMS Associates from Walnut Creek, CA, dated July 12, 2021, consisting of 7 sheets showing grading, utilities, and stormwater quality control.

2. The applicant shall defend, indemnify, and hold harmless the City of American Canyon ("City"), its elected and appointed officials, officers, employees, attorneys, representatives, boards, commissions, consultants, volunteers and agents from and against all claims, actions, including actions to arbitrate or mediate, damages, losses, judgments, liabilities, expenses and other costs, or proceedings against the City, its elected officials, officers, employees, attorneys, representatives, boards, commissions, volunteers, or agents to attack, modify, set aside, void, or annul an approval, conditional approval, permit, entitlement, environmental document, environmental clearance, mitigation plan, or any other document or any of the proceedings, acts, or determinations taken, done, or made prior to granting of such approval, conditional approval, permit, entitlement, environmental clearance, environmental document, mitigation plan, or other documents, by the City, including, without

limitation, an action against an advisory agency, appeal board, or legislative body within the applicable limitation period.

The obligation to defend, indemnify and hold the City harmless shall include the payment of all legal costs and attorney's fees (including a third party award of attorney's fees), arising out of, resulting from, or in connection with the City's act or acts leading up to and including approval of any environmental document or mitigation plan granting approvals to the applicant, incurred on behalf of, or by, the City, its elected and appointed officials, officers, employees, representatives, attorneys, boards, commissions, volunteers and agents in connection with the defense of any claim, action, or proceeding challenging the entire or a portion of an approval, conditional approval, permit, entitlement or any other document of any related claim.

The obligation to defend, indemnify, and hold the City harmless shall include, but not be limited to, the cost of preparation of any administrative record by the City, staff time, copying costs, court costs, or attorney's fees arising out of a suit or challenge contesting the adequacy of a permit, approval, conditional approval, entitlement, environmental document, mitigation plan, environmental clearance, or any other document or approval related to the applicant's project.

The City will promptly notify the applicant of any claim, action, or proceeding and will cooperate fully in the defense. If the City fails to promptly notify the applicant of any claim, action, or proceeding, or the City fails to cooperate fully in the defense, the applicant shall not be responsible to defend, indemnify, or hold harmless the City.

In the event a legal challenge to a City permit, approval, conditional approval, environmental document, environmental clearance, mitigation plan, entitlement or any other document, proceeding, determination, or action related to the applicant's project is successful, and an award of attorneys' fees is granted against the City, the applicant shall be responsible to timely pay the full amount of such an award.

3. This approval is subject to return of the "Applicant Confirmation of Conditions of Approval" form signed by the property owner.

4. The effective date of this approval is subject to the effective date of an amendment to the Local Serving Mixed Use zoning district to allow lodging (hotel) uses.

5. The applicant is responsible for paying all charges related to the processing of this discretionary case application within 30 days of the issuance of the final invoice or prior to the issuance of building permits for this project, whichever occurs first. Failure to pay all charges shall result in delays in the issuance of required permits or the revocation of the approval of this application.

6. The date upon which the approval is final shall be considered the day of the imposition of the fees, dedications, reservations and exactions required by these conditions approval for the purposes of protesting the referenced imposition pursuant to California Government Code Section 66020.

7. If no construction permits have been issued and construction commenced within one (1) year of the date upon which this approval is final, the approval shall become null and void and of no effect. An extension of time may be granted by the Community Development Director upon the written request by a responsible party before the expiration of the one-year period, provided that the Director can

make the findings that there have been no substantial changes in the approved plans, and that there has been no change of circumstances which would prevent any of the required findings of approval to be made.

Planning

8. The conditions of this Permit shall be printed on the first sheet of each plan set submitted for a building permit pursuant to this Conditional Use Permit, under the title "Conditional Use Permit Conditions." The second sheet may also be used if the first sheet is not of sufficient size to list all of the conditions. The sheet(s) containing the conditions shall be of the same size as those sheets containing the construction drawings; 8-1/2" by 11" sheets are not acceptable.

9. In accordance with Broadway District Specific Plan (BDSP) Policy 3-4, existing utility poles on-site and along the property frontage are required to be placed underground. Prior to issuance of the hotel building permit, the applicant shall remove the utility pole on the southeast corner of the site and overhead wires across Broadway. No replacement poles near or on the same site as the removed pole is permitted.

10. In accordance with BDSP Policy 3-15, City Council December 1, 2020 workshop, City Council/Planning Commission October 5, 2021 workshop, and Local Serving Mixed Use Special Development Requirement #3, prior to issuance of a building permit for the hotel, the applicant shall submit applicable permit applications to the City to construct the following:

    a. A 10-foot-wide pedestrian/bike connection path and bridge between the hotel site and Canyon Plaza.
    b. A pedestrian and vehicular and pedestrian access to the hotel site from Donaldson Way.

11. Prior to the occupancy of the Building Permit, the applicant shall complete the construction of the 10-foot-wide pedestrian/bike connection to Canyon Plaza and vehicle and pedestrian connection to Donaldson Way.

12. In accordance to American Canyon Municipal Code (ACMC) Section 19.21.030, the 106-room hotel will require 117 parking spaces. The site plan identifies 113 vehicle parking spaces for the project. If additional parking space is needed for the hotel, the applicant is required to obtain a minor modification permit and submit a revised site plan reviewed and found satisfactory to the Community Development Department. Alternative methods of increasing parking may include stacked parking spaces, valet parking service, or acquiring off-site parking at the property owner's expense. The public right-of-way shall not be used for customer or employee parking.

13. All new roof top equipment is required to be screened from view from the public rights-of-way. The plans submitted for building permit shall demonstrate that the building parapet heights are sufficient to provide such screening. Alternative methods and materials for screening will be subject to the review and approval of the Community Development Director.

14. In accordance to BDSP Section 2.2, all development shall exceed compliance with Title 24 Part 6 Energy Standards by 15 percent. Prior to the issuance of the hotel Building Permit, the applicant shall provide a letter from the architect or energy consultant that certifies the site complies with this standard.

15. This permit does not include approval for signs. The applicant shall obtain a separate sign permit prior to installation of any sign. The signs shall be subject to ACMC Section 19.23.

16. Prior to building permit issuance, the applicant shall submit landscape plans that comply with ACMC Section 19.22.060 Water Efficient Landscape Ordinance (WELO). The landscape architect shall document and attest to the compliance with the landscape plans. The plans shall incorporate the following requirements:

    a. A Water-efficient landscape worksheet that complies with 19.22.060.
    b. Provide cross sections for the north and west landscaping areas showing trees, landscaping, etc. that ensure the proposed trees would not be planted above proposed utilities or inappropriately planted in bio-retention areas. Ensure the landscape plans are reconciled with the civil plans and continue to provide a robust tree palette.

17. Prior to the issuance of a certificate of occupancy, the project's landscape architect shall certify that all plant materials have been installed in accordance with the approved landscape plan.

18. All tree stakes and ties shall be removed within one year following installation or as soon as trees are able to stand erect without support.

19. Clear sight triangles shall be maintained at all driveways. Low-lying plantings and other site fixtures, including signs, shall be no taller than 30 inches within the site's vision triangles.

20. All planting shall be maintained in good growing condition. Such maintenance shall include, where appropriate, pruning, mowing, weeding, cleaning of debris and trash, fertilizing and regular watering. Whenever necessary, planting shall be replaced with other plant materials to insure continued compliance with applicable landscaping requirements. Required irrigation systems shall be fully maintained in sound operating condition with heads periodically cleaned and replaced when missing to insure continued regular watering of landscape areas, and health and vitality of landscape materials.

21. Prior to issuance of the hotel building permit, the applicant shall remove the nonconforming pole sign adjacent to Broadway.

22. To ensure the hotel windows provide shadow and visual interest, prior to issuance of the hotel building permit, the applicant will provide a detail on the building permit plans that clarifies the minimum depth of the window trim shall be one inch thick.

23. Prior to issuance of use and occupancy, the existing windmill on the site shall be installed in a landscape area located at the northeast corner of the hotel building.

Building and Safety

24. The applicant shall have the detailed building and site plans reviewed by a Certified Accessibility Specialist to verify that the proposed construction will comply with accessibility requirements. Each application for site construction or building permit shall be accompanied by a written report from a Certified Accessibility Specialist verifying that the site and building design as shown on the submitted plans comply with all accessibility requirements.

25. Prior to the issuance of a certificate of occupancy, the applicant shall submit a letter of certification to the Building Official from the project architect and civil engineer certifying that all improvements have been constructed in accordance with the approved building plans. Determination of consistency shall be subject to the review and approval of the Building Official.

26. Site Improvement plans shall show slopes of all sidewalks and walkways and paths of travel to use site facilities including trash/recycling facilities. The applicant shall have the detailed building and site plans reviewed by a Certified Accessibility Specialist to verify that the proposed construction will comply with accessibility requirements. Each application for site construction or building permit shall be accompanied by a written report from a Certified Accessibility Specialist verifying that the site and building design as shown on the submitted plans comply with all accessibility requirements.

27. Prior to issuance of a building permit the applicant shall submit a plan for the diversion of at least 70 percent of the debris from the building demolition and construction. The plan shall include the qualified recycler that will be used, the methods of managing diversion of construction materials on site, and the proposed documentation that will be submitted to confirm that the diversion goal has been met.

28. The kitchen is limited to beverage and breakfast service. Prior to any intensification of kitchen uses, such as a restaurant or commercial kitchen, the applicant is required to obtain a minor modification permit from the Community Development Department. Commercial kitchens shall include a grease interceptor and revised trash enclosures with adequate floor drains.

29. Prior to issuance of use and occupancy, the Architect of Record shall submit a letter certifying that all the building permit improvements were constructed and inspected in substantial conformance with the approved plans and City Standards.

30. Construction and grading activities on the site shall be limited to between 7:00 a.m. and 6:00 p.m. Monday through Friday. Work between the hours of 6:00 pm and 7:00 am and work on weekends and holidays requires prior written approval from the Building Official. If weekends and holiday work is approved construction and grading activities on the site shall be limited to between 8:00 a.m. to 6:00 p.m. on Saturdays, and between 10:00 a.m. and 6:00 p.m. on Sundays and State and Federal holidays.

Fire District

31. In accordance with the standard mitigation measures and conditions of approval set forth by the American Canyon Fire Protection District, the developer shall pay the Fire Impact Fees (see current Standard Fees and Charges adopted by resolution), prior to the issuance of any building permits.

32. Buildings in excess of two stories shall pay Aerial Apparatus mitigation fees prior to the issuance of any building permits. (see current Standard Fees and Charges adopted by resolution).

33. New buildings and additions to existing buildings shall conform to requirements set forth in the currently adopted editions of the California Building Code, California Fire Code, City of American Canyon standards and Nationally Recognized Standards.

34. For your information, there shall be no deferred submittals for fire protection equipment and related utilities. Fire protection plans shall not be attached to or bound with the building plan submittal package. This includes but is not limited to Automatic Fire Sprinkler, Fire Alarm, Fixed Fire Protection and Civil plans.

35. All Fire related underground piping and fire appurtenances shall be shown on the Civil plan submittal. In addition to the Civil plan submittal, at least (1) plan set under separate cover shall be submitted to American Canyon Building Division for routing to the American Canyon Fire Protection District detailing all underground piping and related fire appurtenances including but not limited to underground piping, underground sweep detail, underground trench details showing depth of burial, type of backfill, manufacturer's specifications of piping, valves joints, fittings and calculated size and locations of thrust blocks, hydrants locations (designate public or private), gate shut-off valves, PIV's, FDC's, fire pumps, fire pump and/or riser rooms.

36. Underground utility contractor, architect and fire sprinkler contractor shall coordinate the location of risers and control valves prior to the issuance of a building permit.

37. Fire Department plan review shall be based on the information submitted at the time of permit application. Any changes to the approved/permitted scope of work including additions, alterations, demolition, repair or a change in occupancy/use may impact the project requirements, including but not limited to the installation of additional fire protection systems or components.

38. An approved water supply capable of supplying the required fire flow for fire protection systems shall be provided to all premises upon which facilities or buildings are hereby constructed or moved into or within the City. Required fire flow and hydrant distribution shall be in accordance with Appendix B and C of the California Fire Code. Applicant shall demonstrate on plan submittal; square footage of each building on plan and provide the required fire flow information. Applicant shall demonstrate that the number and spacing of onsite fire hydrants meets with requirements of the California Fire Code. ***See sample below regarding fire flow and hydrant detail information needed***.

BUILDING FIRE FLOW REQUIREMENTS – CFC TABLES B105.2 & B105.1(2)

INFORMATION BELOW IS A SAMPLE AND FOR REFERENCE ONLY

Table B105.1(2) – Building size = 129, 600 square feet
Construction type = Type IIA
FF = 5,250 gpm at 20 psi
Duration = 4 hours

Table B105.2 – Fire sprinkler allowance = - 50%
5,250 – 2,625 = 2,625 gpm
FF = 2,625 gpm @ 20 psi
Duration = 2 hours

Table CC105.1 – Approximate number of hydrants = 3
Average spacing = 400 feet + 25% allowable increase = 500
Maximum distance from street or frontage = 225 feet = 50% allowable increase = 337.5

39. Fire Protection systems shall be installed in accordance with provisions set forth in the California Fire Code as amended by the City of Napa and the applicable National Fire Protection Association Standard.

40. The fire protection equipment shall be located within an interior room having an approved exterior access door or in an exterior enclosure attached to the building, specifically, for the purpose of housing such equipment.

41. Fire apparatus access Roads shall be designed in accordance with provisions set forth in the California Fire Code Chapter 5 and Appendix D as amended by the City of American Canyon and the applicable Public Works Standard.

42. Fire apparatus access roads shall have an unobstructed minimum width of 20 feet (curb to curb) and a minimum unobstructed vertical clearance of 13' 6". They shall have an all-weather paved surface capable of supporting a GVW of 71,000 pounds.

43. Access roads shall be completed with all-weather surfaces prior to the stockpiling of combustible materials or beginning combustible construction. Fire apparatus access shall be provided to within 150 feet of the most remote portions of all building from an approved exterior route. If this cannot be achieved fire apparatus turn-arounds will be needed.

44. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. Vertical traffic calming in the form of speed pumps, humps or dips are prohibited along fire access roads without prior approval of the Fire Code Official. The minimum width and clearances established in Section 503.2.1 shall be maintained at all times.

45. When required by the Fire Chief, fire apparatus access roads shall be designated as Fire Lanes and appropriate signs and/or markings installed in accordance with the California Vehicle Code and approved City standards.

46. Where applicable, improvement plan submittals for permits shall include locations of fire lane red curbing and fire lane signage. Please refer to and include City Public Works Standard FP-2A & 2B with plan submittals for permitting.

47. The City of American Canyon requires that a fire hydrant be in service within 250 feet of the furthest point of construction prior to the stockpiling of combustible materials for the beginning of construction.

48. Fire Department Connections (FDC) shall be located not more than 100 ft. from the nearest fire hydrant.

49. Fire hydrants and FDC shall be located as far away from the building as practical. Exact locations will be determined during the review of civil engineering plans. Currently, some hydrants and the FDC are located in planters almost immediately adjacent to the building. These should be relocated to the opposite side of the drive aisle.

Public Works

Public Works General Conditions of Approval

50. The Applicant shall be responsible for all City plan check and inspection costs. The Applicant shall establish a Developer Deposit Account with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer. Additional funds may be required based upon actual costs.

51. All improvements shall be designed in accordance with the American Canyon Municipal Code (ACMC), City of American Canyon Engineering Standard Plans and Specifications for Public Improvements (City Standards), except as specifically noted otherwise in these conditions.

52. All existing overhead utilities, both on-site and along project frontages, and all new utilities to serve the project, shall be placed underground. Exceptions may be allowed for surface mounted transformers, pedestal mounted terminal boxes and meter cabinets. **This condition applies to the existing utility pole along the south property line.**

53. Unless otherwise explicitly permitted, all existing wells, shall be abandoned, septic tanks and/or underground fuel storage tanks shall be removed under permit and inspection of Napa County Department of Environmental Services or other designated agency. If there are none, the project engineer shall provide a letter describing the scope of the search done to make this determination.

54. A detailed Soils Investigation/Geotechnical Report shall be prepared and submitted for review. The report shall address, at a minimum, potential for liquefaction, R-values, expansive soils and seismic risk. The improvement plans shall incorporate all design and construction criteria recommended in the Geotechnical Report.

55. A drainage report prepared by a California Registered Civil Engineer shall be submitted for review with the initial submittal of the Improvement Plans. The report shall include detailed hydrologic and hydraulic calculations to support the design and sizing of all public and private drainage facilities including storm drains and detention facilities. The report shall address existing downstream storm drain facilities and hydraulic conditions which may impact the design of proposed facilities and improvements.

56. A final detailed post-construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared and submitted for review and approval. The SWCP shall be prepared in accordance with the latest edition of the *Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual* and the requirements of the State Water Resources Control Board Phase II Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ). It is the City's discretion whether to accept alternative treatment facilities other than bioretention.

57. A Post Construction Stormwater Operations and Maintenance Plan that includes a plan sheet showing all storm drain and water quality infrastructure that is to be maintained, along with detailed instructions and schedules for the ongoing maintenance and operation of all post-construction stormwater BMPs shall be submitted for review and approval by the City Engineer. Once approved, the property owner(s) shall enter into an agreement with the City that provides the terms, conditions,

and security associated with the ongoing requirements of the post-construction Stormwater Best Management Practices.

58. The Applicant shall secure all necessary rights-of-way and public and private easements for both onsite and offsite improvements. The Applicant shall prepare all necessary legal descriptions and deeds.

59. To the extent any offsite public improvements require the acquisition of property not currently owned by the Applicant or the City, the Applicant shall first make a good-faith effort to acquire the necessary property rights, however if the Applicant makes such an effort and is unable to acquire such rights, then the Applicant may request the City acquire the necessary property rights through the exercise of eminent domain provided that the Applicant enters first into an agreement with the City to pay for all costs incurred by the City to acquire such rights and if the City does not acquire the rights necessary to allow the offsite public improvements to be completed by the Applicant within statutory timeline provided by law, then the Applicant shall be relieved of the obligation to construct those off-site improvements only to the extent they require property not currently owned by the Applicant or the City. The Applicant shall make a good-faith effort to identify and acquire the necessary property rights at the earliest opportunity.

60. The Applicant shall submit site Improvement Plans, prepared by a registered Civil Engineer, for review and approval of the City's Public Works Department. **Please be aware that this is separate submittal from the building permit application.** The final plan set shall include all civil, landscape and joint trench drawings under a single cover sheet. No final grading or other construction shall be performed until the Improvement Plans have been approved. The Applicant shall not begin clearing, grubbing, or rough grading at the site prior to approval of the Improvement Plans, unless explicitly approved by the City of American Canyon through the standard grading and utilities only permit process. An Encroachment Permit is required for any work within City right of way. Encroachment Permits will not be issued prior to the approval of the Improvement Plans.

61. Cathodic protection shall be provided for all water valves, fittings, hydrants, meters, backflow devices, ductile iron pipe, and other metal appurtenances, regardless of the findings of any soils corrosivity analysis.

62. The Applicant shall keep adjoining public and private streets free and clean of project dirt, mud, materials, and debris during the construction period in accordance with an approved SWPPP and Erosion and Sediment Control Plan using appropriate BMPs and as is found necessary by the City Engineer.

63. If any hazardous material is encountered during the construction of this project, all work shall be immediately stopped and the Fire Department, Napa County Department of Environmental Services or other designated agency, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.

64. Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines shall be installed in a manner that will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.

65. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil and/or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.

66. All new fire hydrants shall be covered with burlap sacks until the hydrants have been tested and found to be in conformance with City flow requirements. No storage of combustible materials or construction of building shall be permitted until all hydrants meet City flow requirements.

67. Prior to placing the final lift of asphalt, all public storm drains and sanitary sewer lines shall be video inspected at the Applicant's expense. All video media (CD, DVD, or portable hard drive) shall be submitted to the City. If any inadequacies are found, they shall be repaired prior to the placement of the final lift of asphalt.

68. All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this Project shall be the responsibility of the Applicant and shall be repaired to the satisfaction of the City at the Applicant's expense.

69. After all of the new underground utilities within existing public streets have been installed, the entire affected areas shall be milled and repaved to present a neat, finished pavement area. Multiple trench patches are not acceptable.

70. All construction stormwater pollution prevention best management practices (BMP's) shall be installed as the first order of work and in accordance with the *State Water Resources Control Board's General Construction Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ, as amended)*, the Applicant's Storm Water Pollution Prevention Plan (SWPPP), and the City's Erosion and Sediment Control Plan in accordance with the City's MS4 Permit. All stormwater BMP's shall be maintained to the satisfaction of the Qualified SWPPP Developer (QSD), Qualified SWPPP Practitioner (QSP), and the City Engineer.

71. With the exception of water used for loading and testing of potable water lines, all construction water used for the project shall be obtained from a source other than American Canyon potable water sources. The Applicant shall provide verification that an outside source of construction water, *e.g.*, recycled water, has been established and will be available for the duration of the project construction.

72. The development shall comply with the City's Zero Water Footprint policy.

Public Works Special Conditions of Approval

73. All landscaping shall be designed to use recycled water for irrigation. Recycled water landscaping shall be designed to comply with California Code of Regulations Title 22 and shall include design details to prevent runoff of recycled water. The irrigation system shall include an ET/SMART controller. Property shall connect to recycled water for irrigation once available.

74. The Applicant shall submit Improvement Plans prepared by a registered Civil Engineer (Engineer of Record) in substantial conformance with the preliminary civil plans titled "Hilton Hampton Inn, 3443

Broadway, American Canyon, California 94503, Napa County" prepared by AMS Associates, Inc., dated July 12, 2021 (Preliminary Plans), except as modified by these conditions.

75. Improvement Plans shall be tied to the State of California coordinate system.

76. The Applicant shall design and construct all of the **"Public Improvements"** generally shown on the Preliminary Plans and more specifically described below. Applicant shall be responsible for obtaining a Caltrans encroachment permit for all work within State Route 29.

a. State Route 29 Frontage Improvements:

Curb, gutter, sidewalk and driveway along the State Route 29 frontage beginning from the southern end of the property and extending to the north to connect to the existing curb, gutter and sidewalk. The frontage walk shall have a minimum unobstructed width of 12-feet. Also construct an 8.75-foot wide sidewalk to connect the new frontage sidewalk from the southern end of the property to the existing concrete sidewalk approximately 70 feet south of the property. The applicant shall also install a new streetlight and relocate the existing fire hydrant.

b. Storm Drainage in Donaldson Way

Install approximately 315 lineal feet of a new 12-inch storm drainage to convey onsite drainage to the public storm drainage system in Donaldson Way.

77. The Applicant shall construct all of the on-site private drive isles, parking spaces, walks, water, recycled water, sewer storm drainage and storm quality **"Private Improvements"** generally shown on the Preliminary Plans and more specifically described below. All private drive isles, parking spaces, walks, water, sewer, storm drainage and stormwater quality improvements shall be designed in accordance with the City of American Canyon Engineering Standard Plans and Specifications for Public Improvements (City Standards), except as specifically noted otherwise in these conditions.

a. Storm Drain Facilities:

Construct private on-site drainage facilities, detention facilities, and other appurtenances to collect and convey all surface drainage to an approved private storm drain facility or outfall. Onsite drainage facilities shall provide for the positive drainage of all adjacent upstream or upgrade properties to prevent ponding. Existing run-on from adjacent properties shall not be obstructed and shall be conveyed onsite. Off-site peak storm water discharge shall not exceed 90% of the undeveloped peak flow from the 24-hour, 100-year event. The storm drains and detention facilities shall be substantially consistent with the Preliminary Plans. However, the sizing of all storm drains and detention facilities shall be determined by the approved final drainage report.

b. Stormwater Quality Facilities:

Permanent on-site private post-construction stormwater treatment BMPs shall be designed and constructed in accordance with the approved final SWCP. Runoff from all roof drains shall be conveyed to the onsite stormwater treatment facilities.

c. Landscape Irrigation Water:

In the interim, on-site landscape irrigation water demand can be fulfilled by connecting to the city's potable water system. When the future recycled water system along SR29/Broadway Street, as noted in 2016 City of American Canyon Recycled Water Master Plan, is in place, on-site landscape irrigation water supply shall be converted at the developer's expense. Water demand allocated for irrigation in the interim

shall be returned to the city. On-site landscape irrigation system shall conform to Title 22 of the California Code of Regulations.

d. Pedestrian and Cyclist Connection to Adjacent Property:

Construct a pedestrian and cyclist access connection to the adjacent Canyon Plaza property (APN 058-301-010). The minimum width of this connection shall be 10-feet.

78. Prior to SUBMITTAL OF THE IMPROVEMENT PLANS, the Applicant shall:

e. Submit the City's "Improvement Plan Checklist".

f. Pay an initial cash deposit for City plan check services in amount to be determined by the City prior to the time of submittal. The Project engineer shall contact City staff to discuss submittal details to determine initial deposit amount.

g. Provide the following:
   i. Public Street Repair Plan
   ii. Utility Plan and Joint Trench Plan
   iii. Construction Storm Water Pollution Prevention Plan (SWPPP) and a City Erosion and Sediment Control Plan (ESCP)
   iv. Drainage Report
   v. Post-Construction Stormwater Control Plan (SWCP)
   vi. Geotechnical Report
   vii. Construction Traffic Control Plan.

79. Pothole and physically determine (by way of a survey performed by the Engineer of record) the actual horizontal location and vertical depth of all existing underground utilities throughout the proposed area of work and provide the design of all new utility installations required to serve the project including a schedule for implementation of such work as to prevent disrupting of utility service to adjacent properties.

80. Prior to APPROVAL OF THE IMPROVEMENT PLANS, the Applicant shall:

a. Provide written acknowledgment by the Geotechnical Engineer of Record that the Plans incorporate all design and construction criteria specified in the Geotechnical Report.

b. Irrevocably offer for dedication to the State, right-of-way along the State Route 29 frontage of sufficient width to accommodate the new curb, gutter and sidewalk, storm drain and joint trench. Applicant shall prepare the legal description, plat and deed and submit them to the City and State for review.

c. Record a private storm drain easement over the adjacent Lands of ZZB Growth LLC (APN 058-312-005). Applicant shall prepare the legal description, plat and deed and submit them to the City for review.

d. Subject to the terms of Condition 59, furnish proof of the acquisition of all rights of entry and/or temporary and permanent easements necessary to construct the project and the location of all such rights on the Plans.

e. Furnish proof that all permits that may be required by the California Department of Fish & Game, State and Regional Water Quality Control Board, US Army Corps of Engineers and any other regulatory agencies with jurisdiction over the proposed construction have been obtained.

f. Complete and submit the City's Erosion and Sediment Control Plan (ESCP) Template. Applicant may refer to a SWPPP, as appropriate, by referencing page number within the SWPPP that addresses the requirements of the ESCP.

g. Submit a copy of the Notice of Intent and WDID# for coverage under the State Water Resources Control Board' General Construction Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ).

81. Prior to COMMENCEMENT OF CONSTRUCTION ACTIVITIES, the Applicant shall:

a. Pay off all current account balances with the City of American Canyon.

b. Pay an inspection fee in amount to be determined at the time of commencement for the City's inspection of the Public Improvements.

c. Conduct a pre-construction meeting with representatives of the City whereby the Applicant, the Legally Responsible Party (LRP), Qualified SWPPP Practitioner (QSP), Qualified SWPPP Developer (QSD), and/or the Contractor provides the following:
   i. Six (6) full-size bond copies of the approved Improvement Plans for the City's use.
   ii. One (1) job-site copy of the latest edition of the City Standards for the Contractor use.
   iii. One (1) job-site copy of the SWPPP for use by the LRP, QSP, QSD, and Contractor.
   iv. Electronic copies of Improvement Plans and SWPPP

82. Prior to APPROVAL OF A BUILDING PERMIT, the Applicant shall:

a. Pay all account balances and current City and American Canyon Fire District fees (Mitigation & Capacity) based on the rates in effect at the time of permit issuance. These fees include, but may not be limited to the following: Traffic Mitigation, General Plan Update, Civic Facilities, Fire District, Water Capacity, and Wastewater Capacity.

83. Prior to ACCEPTANCE OF IMPROVEMENTS, the Applicant shall:

a. Restore all adjacent off-site road surfaces to pre-project conditions.

b. Submit a certification by the Geotechnical Engineer of Record that all the work has been completed in substantial conformance with the recommendations in Soils Investigation/Geotechnical Report.

c. Provide a mylar and digital copy of the Improvement Plans that include all as-built or field changes, in digital pdf and AutoCAD Civil 3D (.dwg) format compatible with the City's current version, and tied to the NAD83 (California Zone 2, feet) coordinate system.

d. Provide a letter stating that all of the Developer's Conditions of Approval have been met.

e. Provide a letter from the Civil Engineer of Record certifying that all the site improvements were constructed and inspected in substantial conformance with the approved plans and City Standards.

f. Enter into and record a post-construction Stormwater Operations and Maintenance Agreement with the City.

Mitigation Monitoring and Reporting Program

All applicable mitigations in the Mitigation Monitoring and Reporting Program for the Broadway District Specific Plan Project Environmental Impact Report (Resolution No. 2019-51, State Clearinghouse No. 2017042025) are incorporated as conditions of approval by reference.

84. BDSP EIR AIR-2: Prior to issuance of the first construction permit for projects that occur pursuant to the Specific Plan, the applicant shall submit construction plans to the City of American Canyon with the following notes on them. The dust abatement measures described in the notes shall be implemented during construction.

    During construction activities, the following air pollution control measures shall be implemented:

    a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day, or more as needed.
    b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
    c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
    d. All vehicle speeds on unpaved roads and surfaces shall be limited to 15 miles per hour.
    e. All roadways, driveways, and sidewalks shall be paved as soon as possible.
    f. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
    g. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes (beyond the 5 minute limit required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
    h. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
    i. A publicly visible sign shall be posted with a name and telephone number of the person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

85. BDSP EIR MM AIR-3: Prior to issuance of the first construction permit for development projects that occur pursuant to the Specific Plan, the applicant shall provide documentation to the City of American Canyon demonstrating that all off-road by diesel equipment proposed for use is powered with Tier 3 or cleaner engines.

86. BDSP EIR MM AIR-4a: Prior to issuance of building permits for any sensitive receptor use (residential areas, elementary school, daycare centers, etc.) that would be developed pursuant to the Specific Plan, the applicant shall complete either of the following two options:
    a. Prepare and submit a toxic air contaminant risk screening assessment to the City of American Canyon that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed the Bay Area Air Quality Management District's (BAAQMD's) cumulative risk threshold for toxic air contaminant impacts.
    b. Prepare and submit a Health Risk Analysis to the City of American Canyon, consistent with BAAQMD's recommended methodology, that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed the BAAQMD's cumulative risk threshold for toxic air contaminant impacts. If mitigation is required to reduce a potentially significant risk to less than the cumulative risk threshold, that mitigation shall be clearly identified, and the associated risk reduction quantified. The mitigation must be incorporated into the project and implemented.

87. BDSP EIR MM AIR-4b: Prior to the issuance of grading and building permits, the Project Applicant shall provide the City with documentation, to the City's satisfaction, that demonstrates the use of Tier 4 Final engines for all construction equipment equal to or greater than 100 horsepower, electric equivalents for all equipment less than 100 horsepower, and the prohibition of fossil-fueled generators to power electric equipment with the exception of generators rated at 5 horsepower or less which are intended for powering hand-held tools.

88. BDSP EIR MM BIO-1b: Prior to tree removal activities that occur during the nesting season (February 1 and August 31), the applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey no more than 14 days prior to vegetation removal. If the biologist observes nesting birds to be present, a minimum 250-foot protective buffer shall be established around the nest until the young have fledged. This mitigation measure shall not apply to tree removal activities that occur outside the nesting season (September 1 to January 31).

89. BDP EIR MM CUL-1: If prehistoric or historic-period archaeological resources are encountered during ground disturbing activities associated with new development that occurs pursuant to the Specific Plan, all construction activities within 100 feet of the find shall halt and the City of American Canyon shall be notified. Prehistoric archaeological materials might include obsidian and chert flakedstone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the City of American Canyon. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would

consist of (but would not be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

90. BDSP EIR MM CUL-4: In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find shall cease until the Napa County Coroner has been contacted to determine that no investigation of the cause of death is required. The Native American Heritage Commission (NAHC) shall be contacted within 24 hours if it is determined that the remains are Native American. The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC Section 5097.98), who in turn would make recommendations to the City of American Canyon for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines Section 15064.59(d)).

91. BDSP EIR MM CUL-3: If potential fossils are discovered during project implementation, all earthwork or other types of ground disturbance within 100 feet of the find shall stop immediately until a qualified professional paleontologist can assess the nature and importance of the find. The paleontologist shall report his/her findings to the City of American Canyon. Based on the scientific value or uniqueness of the find, the paleontologist shall either record the find and recommend that the City of American Canyon allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist shall, if required, propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations will be consistent with Society of Vertebrate Paleontology guidelines and currently accepted scientific practice. If required, treatment for fossil remains shall include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and, if required, shall also include preparation of a report for publication describing the finds.

92. BDSP EIR MM GEO-1a: Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan that are located within an Alquist-Priolo Special Study Zone, the City of American Canyon shall verify that the applicant has commissioned a fault investigation. The fault investigation shall be prepared by a licensed geologist or geotechnical engineer and determine the precise location of the West Napa Fault in relation to the proposed project. All recommended fault setbacks set forth in the fault investigation shall be shown on project plans.

93. BDSP EIR MM GEO-1b: Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan, the City of American Canyon shall verify that the applicant has commissioned a design-level geotechnical report. The report shall be prepared by a licensed geologist or geotechnical engineer and determine whether the geologic conditions of the site in question are suitable for development. All recommendations for grading, soil engineering, and construction shall be incorporated into the project plans.

94. BDSP EIR MM HYD-1a: Prior to issuance of grading permits for development projects that occur pursuant to the Specific Plan, the City of American Canyon shall verify that the applicant has prepared a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the

statewide Construction General Permit. The SWPPP shall be designed to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled; (2) where not otherwise required to be under a Regional Water Quality Control Board permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site best management practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity; and (4) stabilization BMPs are installed to reduce or eliminate pollutants after construction are completed. The SWPPP shall be prepared by a qualified SWPPP developer. The SWPPP shall include the minimum BMPs required for the identified Risk Level. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook—Construction or the Caltrans Stormwater Quality Handbook Construction Site BMPs Manual.

95. BDSP EIR MM HYD-1b: Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan, the project applicant shall prepare a Stormwater Control Plan that includes post-construction stormwater controls in the site design to satisfy requirements of the Phase II Small MS4 Permit. This shall include a review of the final Stormwater Control Plan by the City of American Canyon to ensure that the required controls are in place.

    Provision E.12.h of the MS4 Permit requires that an operation and maintenance program be implemented for post-construction stormwater management features. Responsible parties and funding for long-term maintenance of all BMPs must be specified. This plan shall specify a regular inspection schedule of stormwater treatment facilities in accordance with the requirements of the MS4 Permit. Reports documenting inspections and any remedial action conducted shall be submitted regularly to the City for review and approval.

96. BDSP EIR MM NOI-1**:** Prior to issuance of building permits of noise-sensitive land uses within the 65 dBA L_{dn} roadway noise contours or within the 65 dBA L_{dn} roadway noise contours (within 350 feet of the centerline of Broadway Street or 127 feet of the centerline of American Canyon Road), the applicant shall retain an acoustical engineer to conduct a detailed acoustical analysis. The detailed acoustical analysis shall confirm the roadway noise levels impacting the sensitive receptors, and if necessary, shall identify mitigation measures to reduce interior noise levels at the sensitive land uses to within City noise standards.

    The proposed Hampton Inn Hotel shall comply with the City's Municipal Code's construction noise limits provided in Section 8.12.080 of the Municipal Code. Techniques to ensure compliance include, but are not limited to, the following: 1) the proposed 8-foot-high masonry sound wall along the northern and western property lines should be constructed prior to the foundation preparation activities for the proposed hotel structure; 2) no on-site operation of any heavy construction equipment shall be permitted between the hours of 7:00 p.m. and 7:00 a.m.

97. BDSP EIR MM NOI-2a**:** Prior to issuance of grading permits, if construction activities will (1) pile drive within 150 feet or (2) utilize mobile construction equipment within 20 feet of any existing structure with sensitive receptors, the applicant shall retain an acoustical engineer to conduct a vibration analysis for potential impacts from construction-related vibration impacts to the existing structure(s) with sensitive receptors. The vibration analysis shall determine the vibration levels created by construction activities at

the existing structure(s) with sensitive receptors and, if necessary, develop mitigation to reduce the vibration levels to within the Caltrans threshold of 0.25 inch per second PPV.

98. BDSP EIR MM NOI-2B: Prior to issuance of building permits, if new vibration-sensitive land uses are located within 30 feet of a truck route or 80 feet of a rail line, the applicant shall retain an acoustical engineer to conduct a vibration analysis for potential impacts from vibration generated by trucks or trains to the vibration-sensitive land uses. The vibration analysis shall determine the vibration levels impacting the proposed structure(s) with sensitive receptors, and if necessary, develop mitigation to reduce the vibration levels to within the Caltrans threshold of 0.04 inch per second PPV.

PASSED, APPROVED and ADOPTED at a regularly scheduled meeting of the Planning Commission of the City of American Canyon held on the 28TH day of October, 2021, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Tyrone Navarro, Chair

ATTEST:

_____
Nicolle Jones, Administrative Technician

APPROVED AS TO FORM:

_____
William D. Ross, City Attorney

EXHIBITS

A. Hampton Inn CUP Plans
B. Landscape Plans
C. Architecture Plans

Attachment 4

FIRSTCARBONSOLUTIONS™

Initial Study/Addendum to the Broadway District Specific Plan EIR evaluating a proposed amendment to the Local-Serving Mixed Use District and a proposed Hampton Inn Hotel

City of American Canyon, Napa County, California

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ACRONYMS AND ABBREVIATIONS

ug/m^3	micrograms per cubic meter of air
AB	Assembly Bill
ACM	asbestos-containing material
ADA	Americans with Disabilities Act
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
APN	Assessor's Parcel Number
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BDSP	Broadway District Specific Plan
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
dBA	A-weighted decibel
DPM	diesel particulate matter
EECAP	Energy Efficiency Climate Action Plan
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
EV	electric vehicle
FHWA	Federal Highway Administration
GHG	greenhouse gas
GIS	Geographic Information System
gpd	gallons per day
HCP	Habitat Conservation Plan
HI	hazard index
HRA	Health Risk Assessment
I-80	Interstate 80
kBTU	kilo-British Thermal Unit
kWh	kilowatt-hour
lbs	pounds
L_{dn}	day/night average sound level
LID	Low Impact Development
L_{max}	maximum noise/sound level

LSMU	Local Serving Mixed-Use
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MIR	Maximum Impacted Sensitive Receptor
MM	Mitigation Measure
mph	miles per hour
MT	metric tons
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NCMJHMP	Napa County Multi-Jurisdictional Hazard Mitigation Plan
ND	Negative Declaration
NO_X	oxides of nitrogen
NWIC	Northwest Information Center
OEHHA	Office of Environmental Health Hazard Assessment
PG&E	Pacific Gas & Electric Company
PM_{10}	particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter, including dust, 2.5 micrometers or less in diameter
REC	Recognized Environmental Conditions
REL	Reference Exposure Level
ROG	reactive organic gases
SB	Senate Bill
SR	State Route
SWP	State Water Project
TAC	toxic air contaminants
TCR	Tribal Cultural Resources
USGS	United States Geological Survey
VMT	Vehicle Miles Traveled

SECTION 1: INTRODUCTION

1.1 - Background and Purpose

1.1.1 - Purpose of Addendum

This Addendum, checklist, and attached supporting documents have been prepared to determine whether and to what extent the Broadway District Specific Plan (BDSP) Environmental Impact Report (EIR) prepared for the City of American Canyon (City) remains sufficient to address the potential impacts of two discrete actions:

1. A revision to the Local Serving Mixed-Use (LSMU) zoning district to allow hotels as a conditionally permitted use (LSMU Revision).
2. A request by Anjani Management, LLC (Applicant) for approval to construct and operate a new Hampton Inn Hotel on one of the four LSMU sites, or whether additional documentation is required under the California Environmental Quality Act (CEQA) (Public Resources Code [PRC], § 21000, *et seq*.). (Hampton Inn Hotel)

The proposed LSMU Revision along with the proposed development of a Hampton Inn Hotel together are referred to as the "proposed project" throughout this Addendum. Where appropriate, the analysis identifies impacts that would be specific to the Hampton Inn Hotel; otherwise, the discussion addresses potential impacts across all project sites.

The City is considering the following discretionary actions:

- Approval of a Zoning District Amendment
- Adoption of an Addendum to the BDSP EIR
- Approval of a Minor Variation for Height
- Approval of a Conditional Use Permit

For the purposes of this environmental discussion, all of the proposed discretionary actions are considered part of the project.

1.2 - Initial Study/Environmental Checklist

Pursuant to Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 and 15164, subd. (a), the attached Initial Study/Addendum has been prepared to evaluate the proposed project. The attached Initial Study/Addendum uses the standard environmental checklist categories provided in Appendix G of the CEQA Guidelines, but provides answer columns for evaluation consistent with the considerations listed under CEQA Guidelines Section 15162, subd.(a).

1.3 - Environmental Analysis and Conclusions

CEQA Guidelines Section 15164, subd. (a) provides that the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR or Negative Declaration (ND) if some changes or additions are necessary but none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR or ND have occurred (CEQA Guidelines, Section 15164, subd. (a)).

An addendum need not be circulated for public review but can be included in or attached to the Final EIR or ND (CEQA Guidelines § 15164, subd. (c)). The decision-making body shall consider the Addendum with the Final EIR prior to making a decision on the project (CEQA Guidelines § 15164, subd. (d)). An agency must also include a brief explanation of the decision not to prepare a subsequent EIR or ND pursuant to Section 15162 (CEQA Guidelines § 15164, subd. (e)).

Consequently, once an EIR or ND has been certified for a project, no subsequent EIR or ND is required under CEQA unless, based on substantial evidence:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or ND . . . due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; [1]

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or ND . . . due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, or the ND was adopted . . . shows any of the following:

   a. The project will have one or more significant effects not discussed in the previous EIR or ND;
   b. Significant effects previously examined will be substantially more severe than shown in the previous EIR or ND;
   c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
   d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or ND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative (CEQA Guidelines, Section 15162, subd. (a); see also Public Resources Code, Section 21166).

[1] CEQA Guidelines Section 15382 defines "significant effect on the environment" as " . . . a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance . . ." (*see also*, Pub. Resources Code, Section 21068).

This Addendum, checklist, and attached documents constitute substantial evidence supporting the conclusion that preparation of a supplemental or subsequent EIR or ND is not required prior to approval of the above-referenced discretionary actions, and provides the required documentation under CEQA.

1.3.1 - Findings

There are no substantial changes proposed by the project or in the circumstances in which the project will be undertaken that require major revisions of the BDSP EIR. The proposed revisions do not require preparation of a new subsequent or supplemental EIR, due to either the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. As illustrated herein, the proposed project is consistent with the previous EIR and would involve only minor changes; therefore, an Addendum is the appropriate method of documenting CEQA compliance for the project.

1.3.2 - Conclusions

The City may approve the revision to the LSMU zoning district and may also approve the proposed hotel project based on this Addendum. The impacts of the proposed project remain within the impacts previously analyzed in the EIR (CEQA Guidelines § 15164).

The proposed project does not require any major revisions to the EIR. No new significant information or changes in circumstances surrounding the proposed project have occurred since the certification of the EIR. Therefore, the previous CEQA analyses completed for the BDSP remain adequate. The applicable mitigation measures from the EIR would be imposed on the proposed project as described herein.

1.4 - Mitigation Monitoring and Reporting Program

As required by Public Resources Code Section 21081.6, subd. (a)(1), a Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the 2019 BDSP EIR in order to monitor the implementation of the mitigation measures that have been adopted. Any long-term monitoring of mitigation measures imposed on the overall development will be implemented through the MMRP.

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SECTION 2: PROJECT BACKGROUND AND DESCRIPTION

2.1 - Click and type text here. Broadway District Specific Plan and Environmental Impact Report

2.1.1 - Broadway District Specific Plan

The BDSP planning area is located in the City of American Canyon, in Napa County, California (Exhibit 1). The BDSP planning area encompasses 235 acres along both sides of the Broadway corridor (State Route 29 [SR-29]) from the American Canyon/Vallejo city limit (Napa/Solano County line) to the northern city limit. The plan area is bounded by a variety of residential uses (west), unincorporated Napa County (north), the Union Pacific rail line (east), and the City of Vallejo (south).

The BDSP was prepared in order to guide the development of up to 1,200 net new dwelling units and up to 840,000 square feet of net new non-residential uses within the plan area. The BDSP also includes several mobility enhancements, including reduction in SR-29 speed limits from 50 and 55 miles per hour (mph) to 35 mph, street extensions, bicycle and pedestrian facilities, and streetscape improvements.

Based on the key issues identified during the stakeholder outreach process, the BDSP's objectives are identified in Section 2.3 of the certified EIR to include:

1. Positively contribute to the local economy via new capital investment, expansion of the tax base, the development of new housing opportunities, and the creation of new employment opportunities.
2. Create a planning framework that promotes the development of highest- and-best uses on undeveloped and underutilized properties within the Broadway District.
3. Enhance safety on the SR-29 corridor by lowering the speed limit, developing bicycle and pedestrian facilities, and creating parallel routes for local trips.
4. Nurture an environment where the Broadway District can become a destination for American Canyon.
5. Leverage citywide economic benefits from the Broadway District Specific Plan.
6. Increase the number and type of housing opportunities in the Broadway District.
7. Encourage variety in the scale and design of new development.
8. Foster improved community health.
9. Provide new public spaces that includes parks, plazas, private recreational facilities, and other gathering places.

There are nine subareas within the BDSP: Downtown Core, Broadway Residential, Business Park, Medium Density Residential, Home Improvement, Northern Gateway, Southern Gateway, Southeast

Area Specific Plan, and LSMU. Each subarea is further divided into zoning districts to identify specific land uses that are allowed within the subareas and to establish standards that govern future development.

The LSMU subarea is designed to support existing and future retail uses that address local needs and accommodate residential development. The LSMU district does not currently allow lodging services such as a hotel. Table 1 describes the amount of allowable additional development within each sub area of the BDSP, pursuant to the adopted Specific Plan and EIR.

Table 1: Development by Subarea

Subarea	Acres	Maximum Commercial Area[1] (square feet)	Maximum Dwelling Units
Downtown Core	97.7	300,000	180
Broadway Residential	25.0	53,000	275
Business Park	50	263,000	224
Medium Density Residential	23.8	0	276
Home Improvement	10.7	80,000	0
Local Serving Mixed-Use	49.9	127,500	86
Northern Gateway	9.0	16,500	0
Southern Gateway	14.5	0	0
Southeast Area Specific Plan	11.2	0	159
Total	**292**	**840,000**	**1,200**

Notes:
[1] Commercial area includes retail, office, and lodging uses.
Source: City of American Canyon. 2019. Broadway District Specific Plan. Land Use.

2.1.2 - American Canyon Hampton Inn Project Broadway District Specific Plan Environmental Impact Report

The American Canyon City Council certified the 2019 BDSP EIR (State Clearinghouse [SCH] No. 2017042025) on June 18, 2019. The BDSP EIR was prepared in accordance with CEQA to evaluate the potential environmental impacts associated with the implementation of the BDSP. The EIR evaluated the following components:

- The development of up to 1,200 new dwelling units.
- The development of up to 840,000 square feet of new non-residential uses within an approximately 300-acre area along SR-29 within the City of American Canyon.
- The development of number of mobility enhancements, including roadway extensions and improvements, and new bicycle and pedestrian facilities.

Most of the environmental impacts identified in the BDSP EIR were determined to be less than significant or were reduced to a level considered less than significant through either the adoption of mitigation measures or the incorporation of project revisions that would avoid or substantially lessen potential impacts.[2] However, even with implementation of all available mitigation, certain impacts related to Air Quality and Transportation/Traffic were identified as significant and unavoidable impacts in the BDSP EIR; for those environmental impacts, the American Canyon City Council adopted a Statement of Overriding Considerations.[3]

2.2 - Location and Setting

2.2.1 - Project Location

There are currently four sites zoned LSMU, as shown in Exhibit 2. The proposed LSMU Revision, which would allow hotels as a conditionally permitted use within the LSMU Zoning District, would apply to the following four Sites:

- Site 1 includes three single-family residences along Donaldson Way, a retail structure at the corner of Donaldson Way and SR-29, as well as a 2.51-acre property that is proposed for development as a Hampton Inn Hotel. The properties within Site 1 are formally identified as APNs 058-312-005 through 058-312-010. Site 2 is located south of Crawford Way and includes the properties formally identified as APNs 058-290-012 and 058-302-001.
- Site 3 is located southeast of the Broadway and Frisby Lane intersection and includes the properties formally identified as APNs 059-040-003 through 059-040-005, and 059-080-001 through 059-080-003.
- Site 4 is immediately south of Site 3 and includes the properties formally identified as APNs 059-080-004 and 059-080-036 through 059-080-038.

Hampton Inn Hotel Site

The Applicant proposes to develop a 2.51-acre property located within Site 1. Specifically, the proposed hotel would be constructed on APN 058-312-010, located at 3443 Broadway, just south of the intersection of Broadway and Donaldson Way West near the center of the City (Exhibit 2). The Hampton Inn Hotel site is located within the *Cuttings Wharf, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map.

This Addendum will address the environmental effects of the proposed revisions to the LSMU as well as the specific effects associated with the proposed development of a Hampton Inn Hotel on Site 1, consistent with the proposed LSMU revision.

[2] City of American Canyon. 2019. Broadway District Specific Plan Environmental Impact Report.
[3] City of American Canyon. 2019. Resolution No. 2019-15. Website: https://cityofamericancanyon.civicweb.net/document/43347/6%20Att%201%20Reso%20CEQA.pdf?handle=9775DD877CA742E999E04BD5997E45B8. Accessed December 17, 2020.

Sites 1 through 4 are collectively referred to as the "LSMU Revision Sites" for purposes this analysis; The "Hampton Inn Site" refers to the 2.51-acre property within Site 1 that is proposed for development as a Hampton Inn Hotel.

Where appropriate, the analysis identifies impacts that would be specific to the development proposed on Hampton Inn Site; otherwise, the discussion addresses potential impacts across all sites. Accordingly, the proposed LSMU Revision along with the proposed development of a Hampton Inn Hotel together referred to as the "proposed project" and "project site" throughout this Addendum.

2.2.2 - Environmental Setting

LSMU Revision Sites

Of the four LSMU sites, Site 2 is currently undeveloped. Site 3 is comprised of a mix of vacant land and commercial and industrial development. Site 4 is comprised of vacant land, single-family residences, and storage facilities. Site 1 contains the Hampton Inn Hotel property (where appropriate, the planned development on this site is separately addressed in this document under the analysis for the Hampton Inn Site), as well as a retail structure at the corner of Donaldson Way and SR-29, and single-family residential units along the northern boundary.

Hampton Inn Site

The Hampton Inn Site is a rectangular-shaped parcel that is located in a relatively flat, developed area. The site is bounded by two single-family residential units and Donaldson Way to the north; Broadway to the east; a commercial use with various retail stores and a surface parking lot to the south; and single-family residential units to the west. The site is currently occupied by two unoccupied storage structures, one occupied residential structure, one occupied small commercial building, vacant land, a dirt parking area and driveway, and a windmill pump. The site is partially paved and there are three trees and some vegetation located at the center of the site.

2.2.3 - General Plan and Zoning

LSMU Revision Sites

According to the BDSP, the LSMU Revision Sites are all located within the Local Serving Mixed-Use (LSMU) subarea and are zoned LSMU, which is meant to accommodate a range of commercial uses and related services that will serve the local community (Exhibit 3 and Exhibit 4).[4,5] The intent of the LSMU subarea is to strengthen existing local serving retail centers with additional complementary retail uses and new higher density residential developments in a standalone or mixed-use pattern that provide additional customers that live or work nearby.

Currently, lodging is not a permitted use within the LSMU zone district; therefore, the LSMU Revision would require a discretionary zone change to allow hotel uses as part of the LSMU zoning district.

[4] City of American Canyon. 2019. Broadway District Specific Plan. Land Use.
[5] Ibid.

The LSMU zoning district requires a minimum of 1-acre area per site. [6] Additionally, it requires a minimum of a 30-foot setback from Broadway, a minimum 10-foot side yard setback and a minimum 10-foot rear yard setback.[7] There is a maximum number of three stories per building with a maximum building height of 42 feet when setback at least 30 feet from a public right-of-way.[8]

Hampton Inn Site

The 2.51-acre Hampton Inn Site would be compliant with the minimum lot size of 1 acre. The proposed Hampton Inn Hotel, as designed, would comply with the front yard, side yard, and rear yard setback requirements of the LSMU District. The Hampton Inn Hotel would require a Minor Variation approval to exceed the maximum building height allowed in the LSMU zoning district.

2.3 - Project Characteristics

2.3.1 - LSMU Revision

The proposed revisions to the LSMU District would allow hotel uses to be constructed as a permitted use on any of the four LSMU sites. While the specific project characteristics of a future hotel are unknown, the Hampton Inn Hotel described herein reflects the type of development that would likely be proposed.

2.3.2 - Hampton Inn Hotel

The Applicant is proposing to demolish the existing buildings on the Hampton Inn Site and develop a 3-story, 106-room Hampton Inn Hotel. The building footprint would be approximately 19,691 square feet, and the total building area is approximately 59,000 square feet. The proposed site plan is shown in Exhibit 5.

A surface parking lot would surround the hotel building. A pool and an outdoor deck would be located in the northern portion of the project site. The proposed project would include approximately 29,235 square feet of landscaping.

As shown in Exhibit 6a, which shows the floor plans of the proposed hotel, the main entrance, facing Broadway, would lead to the reception and breakfast areas. The ground floor also includes an office area, a market, kitchen and pantry, a meeting room, an employee break room, a fitness room, and restrooms. In addition, 22 guest rooms are provided on the ground floor. The second and third floors would each have a hallway leading to the 42 hotel rooms, a storage room, and a guest laundry room. There would be two elevators on each floor and two stairwells that are located on the eastern and western ends of the building. An existing windmill on the project site would be retained and relocated to the northeast corner of the project site.

[6] City of American Canyon. 2019. Broadway District Specific Plan. Land Use.
[7] Ibid.
[8] Ibid.

Site Access

Regional access to all LSMU Revision sites is provided via Interstate 80 (I-80) from the east and south, SR-12 from the northwest, and SR-37 from the southwest. Local access is provided via Broadway/SR-29.

Local access to the Hampton Inn Site would include a driveway to be constructed in the southeastern corner of the site. Pedestrian access would be provided via a sidewalk connecting to Broadway and through a pedestrian path that connects to the shopping center south of the project site. Development of the Hampton Inn Hotel would include a total of 113 parking spaces, five of which would be Americans with Disabilities Act (ADA) compliant spaces, seven of which would be electric vehicle (EV) spaces, and four of which would be clean air or van pool spaces. Eight bicycle parking spaces would also be provided adjacent to the hotel main entrance.

Architectural Design

The proposed 3-story hotel would be 42 feet tall with pitched roof elements up to 47.5 feet tall. The Hampton Inn Hotel would have a "modern farmhouse" architectural style that is in keeping with the neighboring development characteristics and consistent with the BDSP design guidelines. The building exterior incorporates the use of cognac colored stone veneer, wood siding and trim, recessed windows with aluminum window frames, and smokey grey window glazing, as demonstrated in Exhibit 7a. Roof-mounted mechanical equipment is shielded from off-site views with parapets at least equal in height to the highest mechanical unit. The massing of the façade is broken up by alternating projections and alcoves, and pitched roof elements at varied heights. The Hampton Inn Hotel would feature an illuminated Hampton Inn monument sign and bollard lights at the front of the building leading from the new sidewalk on Broadway to the building entry.

Utilities

The Hampton Inn Hotel would connect to the existing water and sanitary sewer lines that run along Broadway. A proposed 10-foot storm drain easement would be provided on the residential property northwest of the site. Storm drain inlets and pipes would be installed throughout the project boundary.

The Hampton Inn Site is currently served by and would connect to existing utilities from the following providers:

- Electricity–Pacific Gas & Electric Company (PG&E) and Marin Clean Energy (MCE)
- Natural Gas–PG&E
- Sewage, Potable, and Recycled Water–City of American Canyon
- Solid Waste Removal–American Canyon Recology
- Storm Drainage–City of American Canyon Public Works Department

Construction and Operation

For the purposes of the analysis contained in this Addendum, construction of the Hampton Inn Hotel was assumed to start in August 2021, and would be operational by January 2023. Because vehicle

fuel use becomes more efficient through time in compliance with federal and State regulations, these dates support a conservative evaluation of potential impacts. If the actual dates of construction are delayed, associated effects would be reduced accordingly.

2.3.3 - Broadway District Specific Plan Local Serving Mixed-Use Development Zone Change

As part of the proposed project, a BDSP Amendment and zone change are requested to allow lodging services as a permitted use or conditionally permitted use in the LSMU zoning district. As shown in Table 1, above, there are 127,500 square feet allocated for commercial use within the LSMU zoning district.

To maintain the overall growth envisioned by the BDSP, the 127,500 square feet could be used for lodging or commercial use.

The proposed 59,000-square-foot Hampton Inn Hotel would replace an equivalent amount of commercial square footage. In other words, lodging uses, if the proposed revision to the LSMU zoning district is approved, would not increase the overall contemplated commercial square footage within the LSMU zoning district. Table 2, below, reflects the corresponding reduction in commercial square footage to accommodate the proposed LSMU Revision allowing hotel uses within the LSMU zoning district.

Table 2: Proposed Change to the Broadway District Specific Plan Land Use Square Footage

Subzone	Land Use	ITE Code	Units	BDSP Approved Quantity	Proposed Change
Downtown Core	Apartment	220	DU[1]	180	–
	Shopping Center	820	KSF[2]	150	–
	Hotel	310	Rooms[3]	100	–
Broadway Residential	Apartment	220	DU	275	–
	Shopping Center	820	ksf	53	–
Business Park	Apartment	220	DU	210	–
	Shopping Center	820	ksf	63	–
	General Office Building	710	ksf	200	–
Medium Density Residential	Townhome	230	DU	220	–
Home Improvement District	Home Improvement	862	ksf	80	–
Local Serving Mixed Use	Apartment	220	DU	86	–
	Shopping Center	820	ksf	127.5	**68.5**
	Hotel	**310**	**Rooms[3]**	**N/A[6]**	**59**
Northern Gateway	Light Industrial	110	ksf	16.5	–

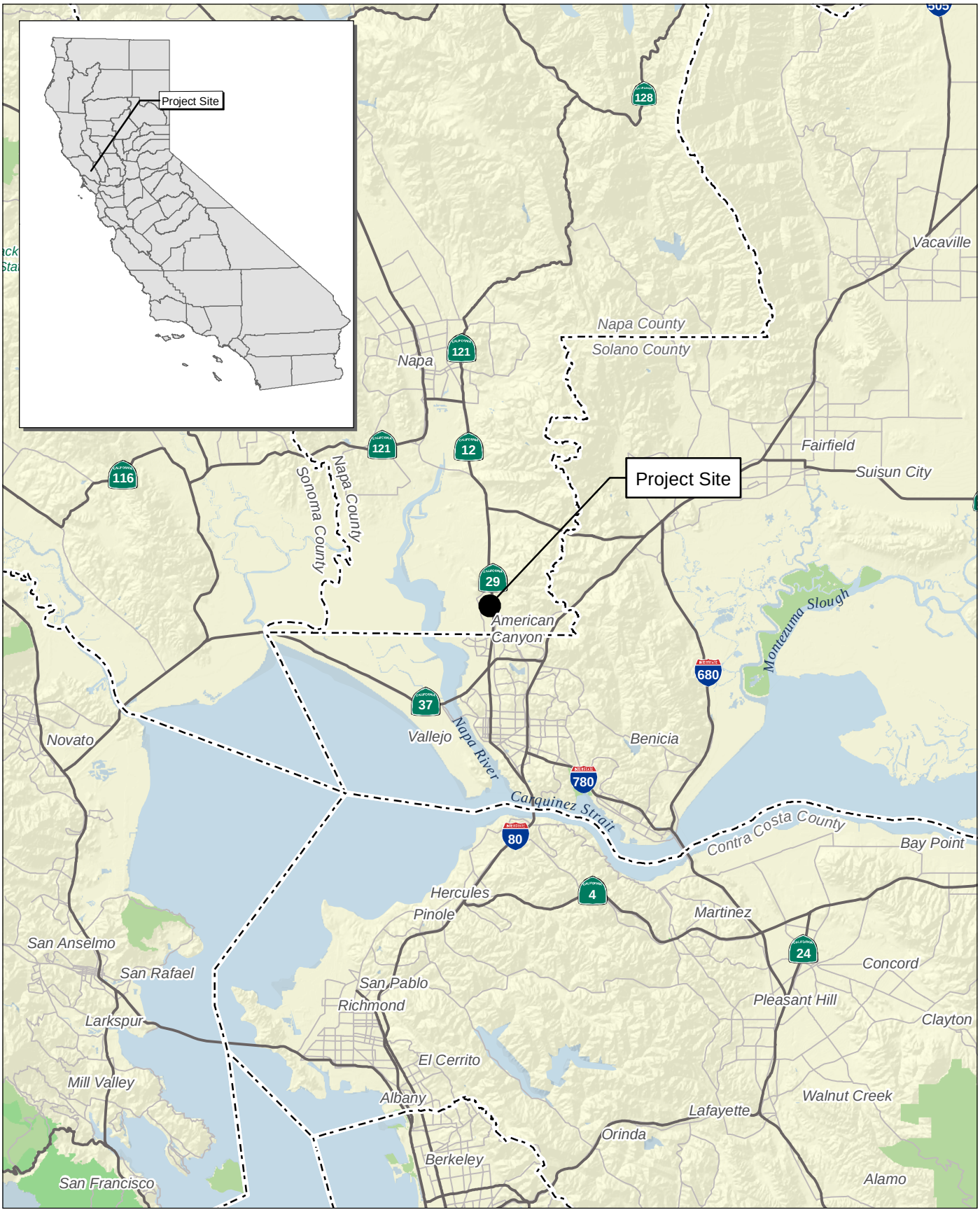
Subzone	Land Use	ITE Code	Units	BDSP Approved Quantity	Proposed Change
Southern Gateway	No trip generating land uses	–	–	–	–
Southeast Area Specific Plan[4]	Apartment	220	DU	0	–

Notes:
ITE = Institute of Transportation Engineers
[1] DU = dwelling units
[2] ksf = thousands of square feet
[3] Number of hotel rooms based on approximation of 1.4 ksf per hotel room
[4] The Village at Vintage Ranch project, located within the Southeast Area Specific Plan, precludes any further buildable land use.
[5] The proposed land use changes are shown in bold.
[6] The adopted BDSP did not include a Hotel category.

2.4 - Discretionary Approvals

The proposed project requires the following discretionary approvals from the City:

- City Council Approval of BDSP Amendment and LSMU Zone Change to Allow Hotel Use
- City Council Adoption of this Addendum
- City Council Approval of a Minor Variation for building height
- City Council Approval of a conditional use permit



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

5 2.5 0 5

Miles

Exhibit 1
Regional Location Map

54760001 • 12/2020 | 1_regional.mxd

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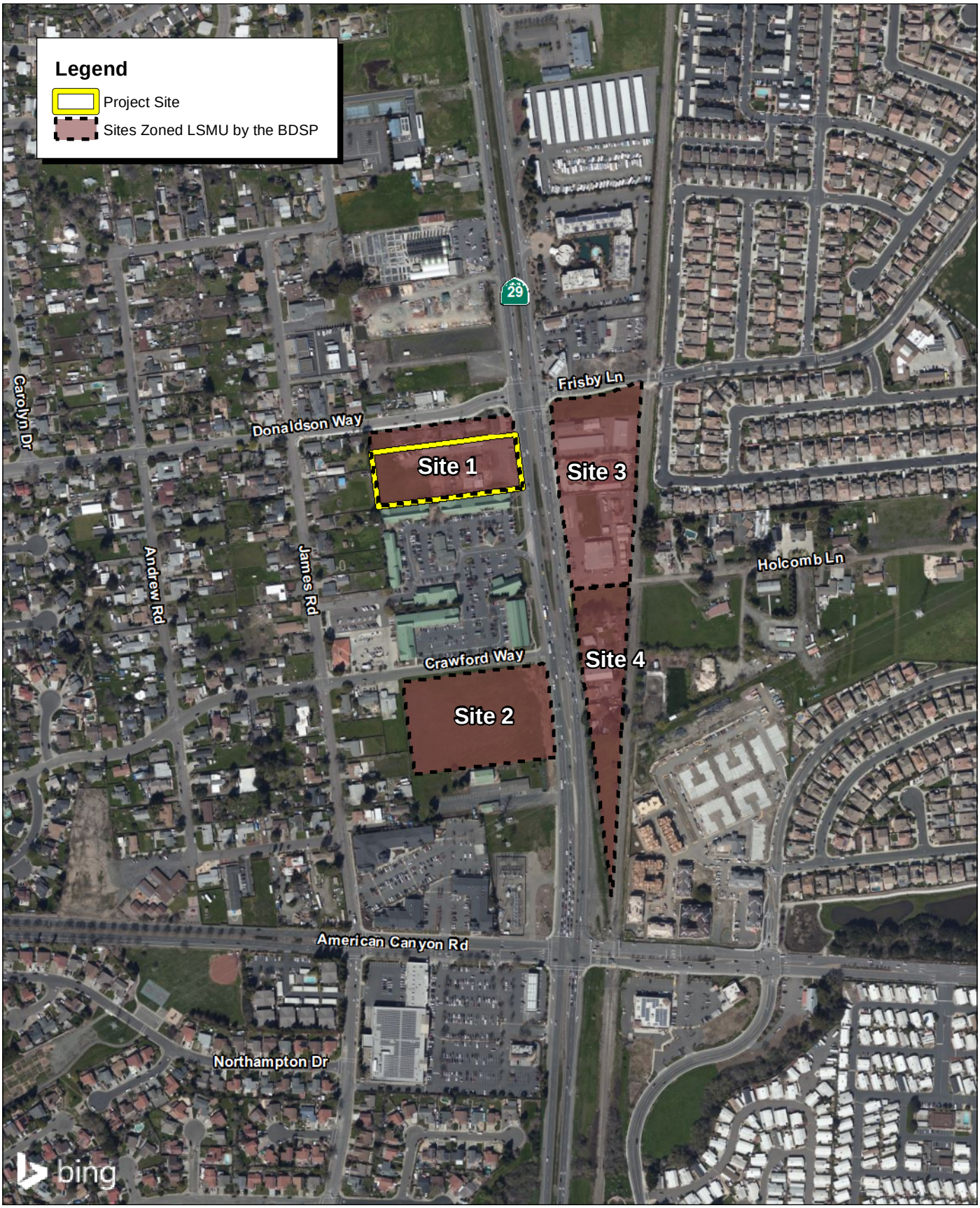

Source: Bing Aerial Imagery. County of Napa.

FIRSTCARBON SOLUTIONS™

500 250 0 500 Feet

Exhibit 2
Local Vicinity Map

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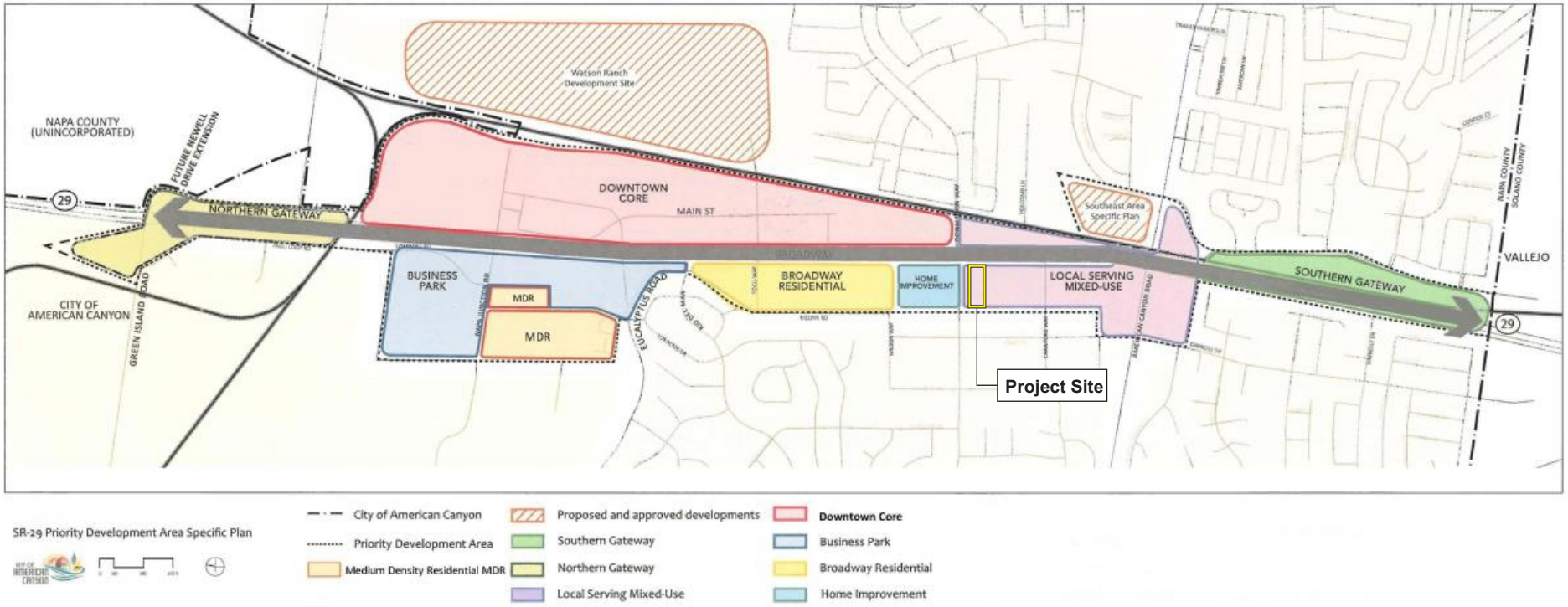

Source: City of American Canyon Community Development Department.

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Exhibit 3
Land Use Map

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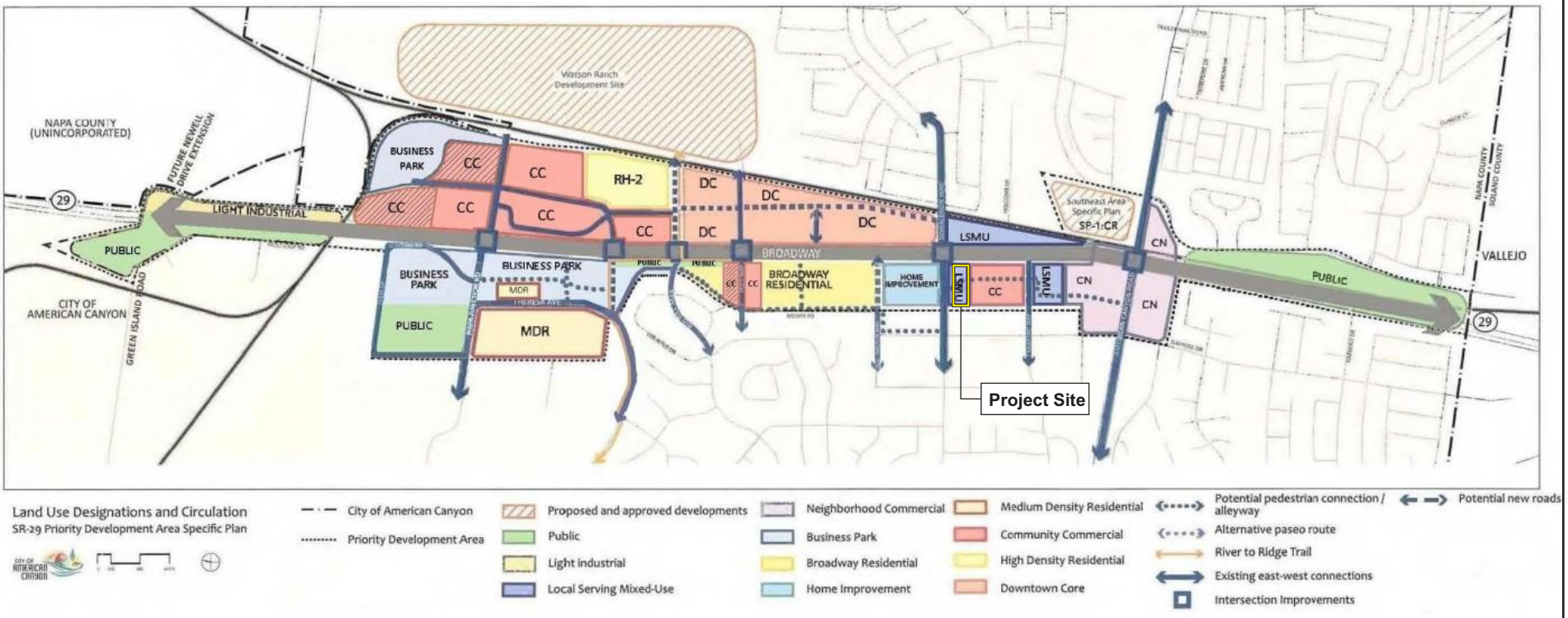

Source: City of American Canyon Community Development Department.

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Exhibit 4
District Zoning Map

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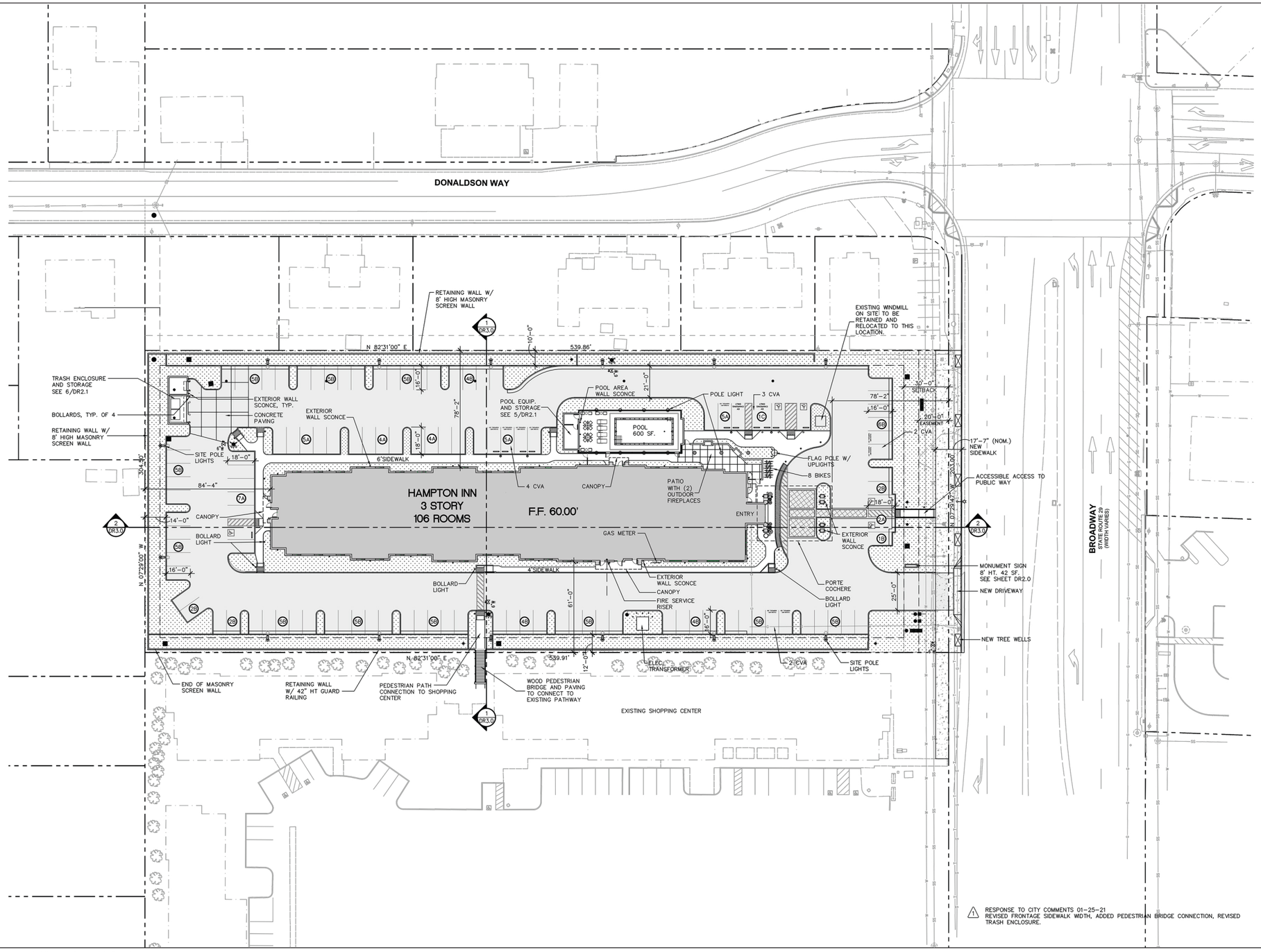

GENERAL INFORMATION

SITE AREA:	109,596 SF. (2.51 ACRES)
APN:	058-312-010
ZONING:	LSMU: LOCAL-SERVING MIXED-USE DEVELOPMENT
SPECIFIC PLAN:	BDSP: BROADWAY DISTRICT SPECIFIC PLAN
PROPOSED USE:	HOTEL: 106 ROOMS, 3 STORIES
BUILDING OCCUPANCY:	MIXED: R-1, A-2, B AND F.
BUILDING CONSTRUCTION:	TYPE VA

PARKING SUMMARY

PARKING REQUIRED:	REQUIRED	PROVIDED
1 SPACE PER GUESTROOM:	106	106
PLUS 1 SPACE PER 10 ROOMS OR UNITS:	11	7
TOTAL	117	113

PARKING PROVIDED

STANDARD SPACES:	97
ACCESSIBLE SPACES:	5
CLEAN AIR/VAN POOL/EV SPACES (CVA):	11 (7 EV SPACES)
TOTAL	113

			PLAN SYMBOL
PARKING SPACE SIZES:	STANDARD TYPE A =	9' WIDE X 18' LONG	(A)
	STANDARD TYPE B = (INCL. 24" OVERHANG AT LANDSCAPE)	9' WIDE X 16' LONG	(B)
	STANDARD VAN TYPE C =	13' WIDE X 18' LONG	(C)

DRIVE AISLE WIDTH: 25' U.N.O.

BICYCLE PARKING REQUIRED

1 SPACE PER 20 CAR SPACES	6 REQUIRED	8 PROVIDED

BUILDING AREAS

GROUND FLOOR:	19,691 S.F.	(AREA OF PORTE COCHERE NOT INCLUDED)
2ND FLOOR:	19,476 S.F.	
3RD FLOOR:	19,476 S.F.	
TOTAL:	58,643 S.F.	
TRASH ENCLOSURE:	442 S.F.	
POOL EQUIPMENT:	275 S.F.	
TOTAL:	717 S.F.	

BUILDING HEIGHT

MAXIMUM ALLOWED BUILDING HEIGHT:	42 FEET PER LSCMU ZONING
PROPOSED BUILDING HEIGHT:	47'-5" FEET

SITE AREAS

BUILDING COVERAGE:	20,564 S.F.	18.8%
HARDSCAPE AREA:	9,139 S.F.	8.3%
PAVEMENT AREA:	50,658 S.F.	46.2%
LANDSCAPE AREA:	29,411 S.F.	26.7%
TOTAL	109,772 S.F.	100.0%

F.A.R. .54

GUESTROOM SUMMARY

	GROUND FLOOR	2ND FLOOR	3RD FLOOR	TOTAL	%
KING	14	19	19	52	49%
KING ACCESSIBLE	1	1	1	3	3%
DBL. QUEEN	6	20	20	46	43%
DBL. QUEEN ACCESSIBLE	1	2	2	5	5%
TOTAL	22	42	42	106	

ACCESSIBILITY REQUIREMENTS	REQUIRED	PROVIDED	C.B.C. REF.
MOBILITY FEATURES (SHOWER)	2	3	TABLE 11B-224.2
MOBILITY FEATURES (TUB)	5	5	TABLE 11B-224.2
COMMUNICATION FEATURES	12	19	TABLE 11B-224.4

LEGEND

- POLE MOUNTED SITE LIGHT – 25' HEIGHT
- BOLLARD LIGHT – 42" HEIGHT
- POLE MOUNTED POOL LIGHT – 15' HEIGHT
- WALL MOUNTED BUILDING LIGHT
- FIRE HYDRANT

TRUNCATED DOMES
PAINTED STRIPING
DECORATIVE PAVING
DECORATIVE PAVING
LANDSCAPE
ASPHALT PAVING

Source: Architectural Dimensions, 03/11/2021.

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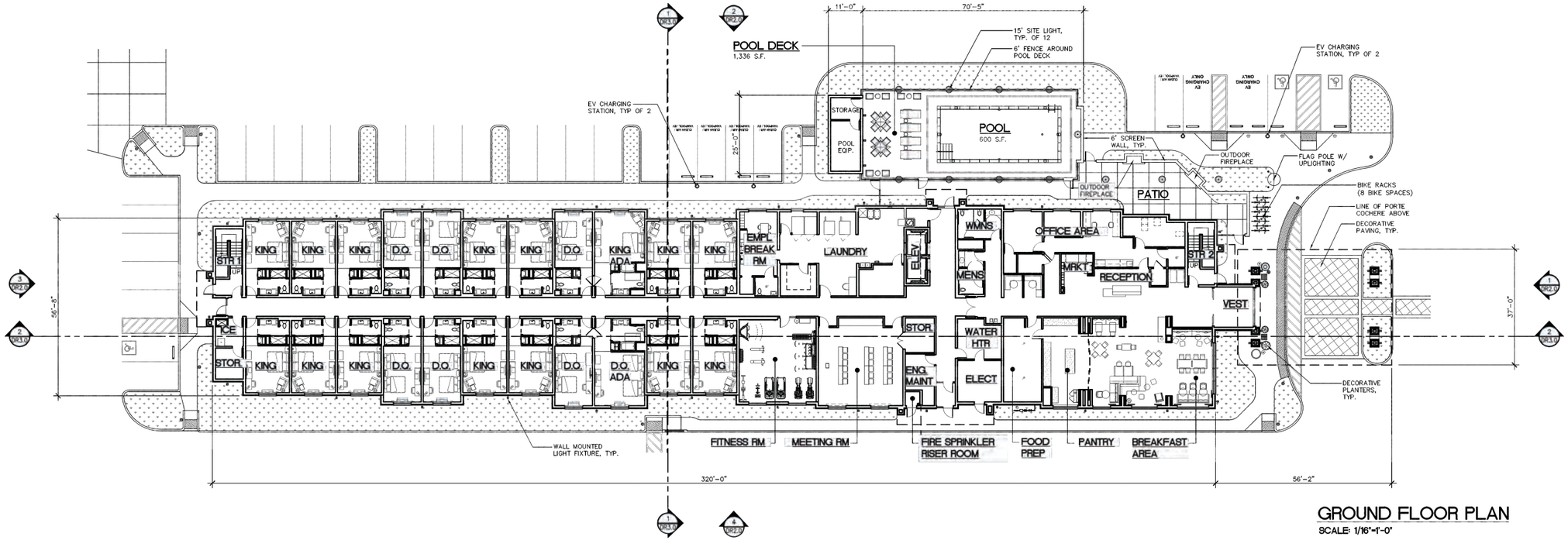
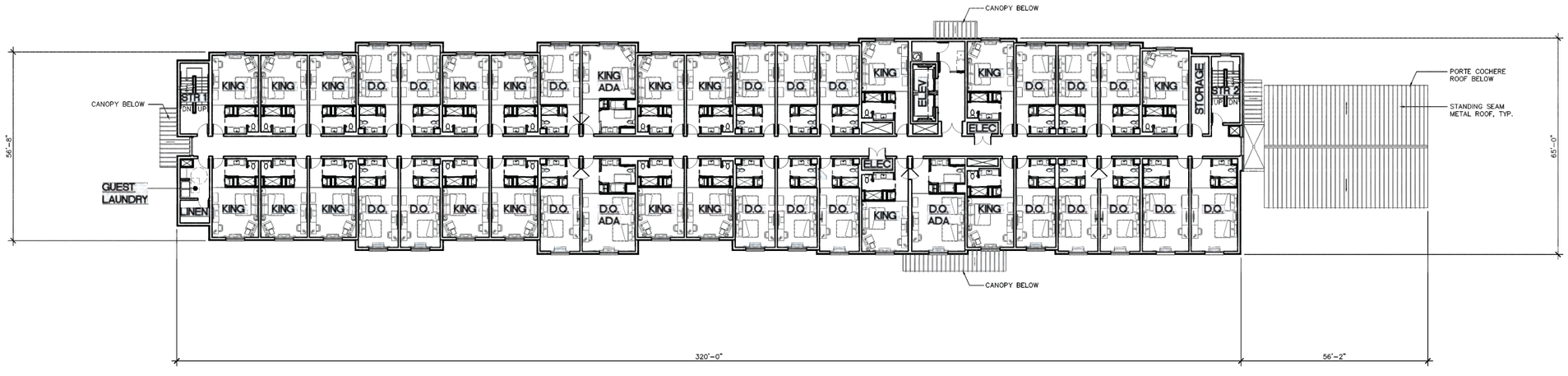


GROUND FLOOR PLAN

SCALE: 1/16"=1'-0"



SECOND FLOOR PLAN

SCALE: 1/16"=1'-0"

N
PLAN NORTH

Source: Architectural Dimensions, 11/19/2020.

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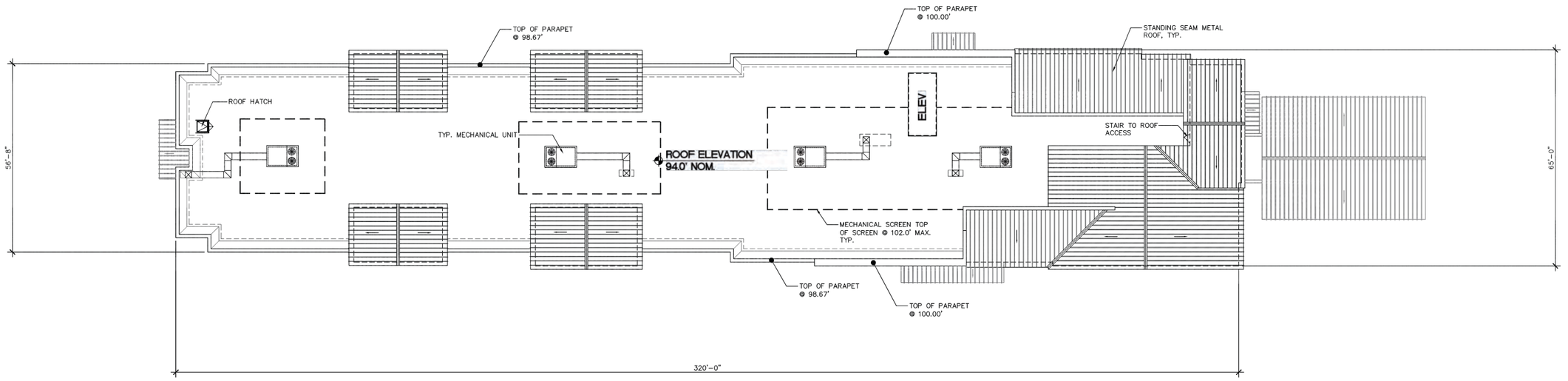
THIRD FLOOR PLAN

SCALE: 1/16"=1'-0"



ROOF PLAN

SCALE: 1/16"=1'-0"

N
PLAN NORTH

Source: Architectural Dimensions, 11/19/2020.

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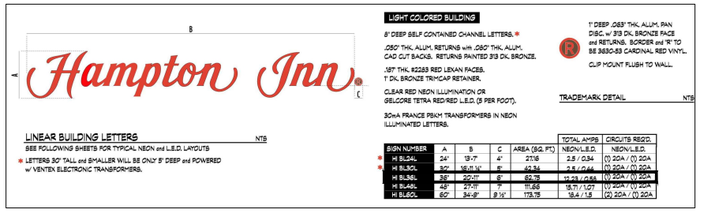
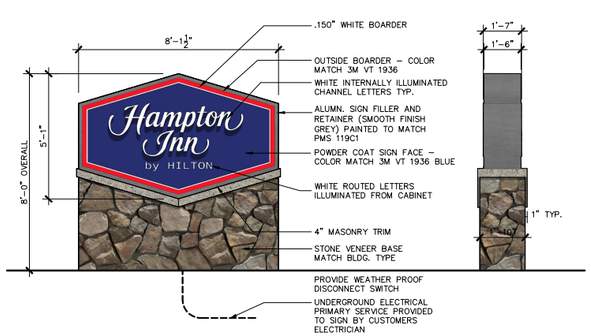


BUILDING SIGN - HI BL36L (62.75 SQ.FT.)

SCALE: N.T.S.



MONUMENT SIGN (42 SQ.FT.)

SCALE: 3/8" = 1'-0"

SHEET NOTES

1. ALUMINUM WINDOW SYSTEM
2. PAINTED METAL GUTTER AND DOWNSPOUT
3. POOL EQUIPMENT BUILDING BEYOND
4. STONE VENEER POOL AND PATIO PRIVACY WALL
5. PORTE COCHERE
6. SIDE ENTRANCE CANOPY BEYOND
7. E.V. CHARGING STATION
8. PAINTED METAL LOUVER
9. BOARD AND BATTEN PATTERN
10. HORIZONTAL SIDING
11. POOL AREA POLE LIGHT BEYOND
12. WALL LIGHT SCONE
13. ALUMINUM STOREFRONT SYSTEM
14. OPEN WEB WOOD TRUSS
15. METAL WALL COPING
16. WINDOW TRIM - TERRANEO
17. BOLLARD LIGHT
18. FLAG POLE
19. RAISED PANEL
20. 6'-0" HIGH METAL FENCE BEYOND
21. ENTRY AREA PLANTER
22. BIKE RACK
23. BUILDING SIGN WITH BACKLIT CHANNEL LETTER
24. WALL COPING - TERRANEO

LEGEND

- WOOD SIDING - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: AGED WHISKEY (DET686)
  MANUF: DUNN EDWARDS
- FASCIA - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: GRAY MATTERS
  MANUF: SHERWIN WILLIAMS (7066)
- PAINTED METAL: GUTTER / DOWNSPOUT / COPING
  COLOR: GEORGIA CLAY (DE5181)
- TERRANEO WINDOW TRIM / WALL COPING
  COLOR: GLAZIER 207
  MANUF.: DRYVIT SYSTEM INC.
- ALUMINUM WINDOW FRAME
  COLOR: DARK BRONZE
  ALUMINUM STOREFRONT
  COLOR: DARK BRONZE
  MANUF: KAWNEER
- GLAZING
  COLOR: SMOKE GREY / OCEAN GREY VANCEVA
  MANUF.: GUARDIAN GLASS SUPERNEUTRAL 68
- STONE VENEER
  COLOR: COGNAC
  MANUF.: EL DORADO
- STANDING SEAM METAL ROOF
  COLOR: A606-4 WEATHERING STEEL
  MANUF.: CORTEN ROOFING

MONUMENT AND BUILDING SIGN DETAILS

SCALE: AS NOTED

GENERAL NOTES

1. COLORS INDICATED ON THIS DRAWING ARE APPROXIMATE AND WILL VARY DEPENDING ON PRINTER/MONITOR DISPLAY SOURCE. REFER TO COLORS AND MATERIALS BOARDS FOR TRUE REPRESENTATION OF ALL PROPOSED FINISHES.
2. ALL LANDSCAPING INDICATED ON THIS DRAWING IS DIAGRAMMATIC AND INTENDED ONLY TO CONVEY A SENSE OF GENERAL LANDSCAPED AREAS. REFER TO ACTUAL LANDSCAPE PLAN FOR ALL PROPOSED LANDSCAPING.

Source: Architectural Dimensions, 03/11/2021.

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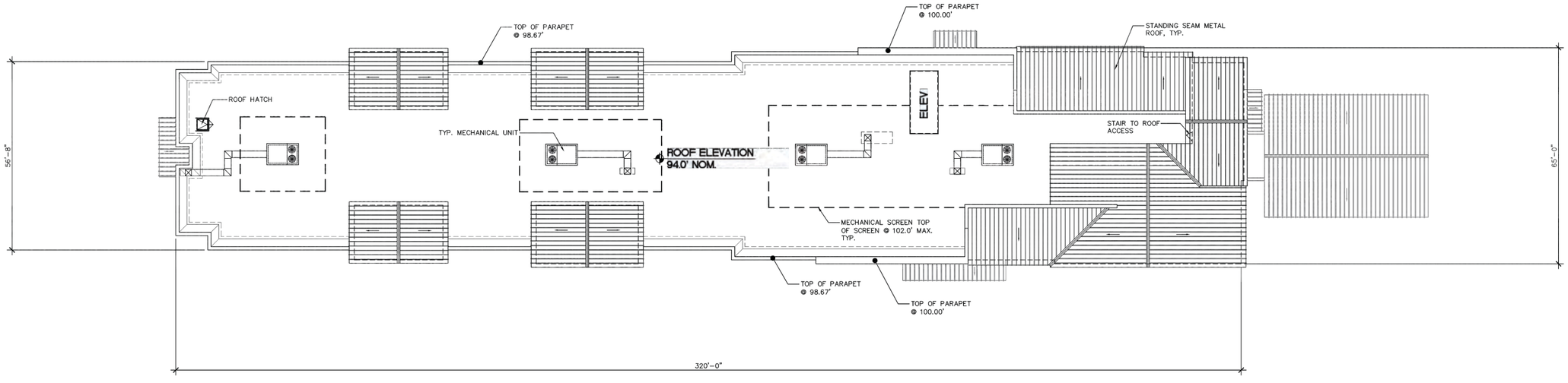
THIRD FLOOR PLAN
SCALE: 1/16"=1'-0"



ROOF PLAN
SCALE: 1/16"=1'-0"

N
PLAN NORTH

Source: Architectural Dimensions, 11/19/2020.

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SECTION 3: CEQA CHECKLIST

The purpose of the checklist is to evaluate the categories in terms of any changed condition (e.g., changed circumstances, project changes, or new information of substantial importance) that may result in a changed environmental result (e.g., a new significant impact or substantial increase in the severity of a previously identified significant effect) (CEQA Guidelines § 15162).

The questions posed in the checklist come from Appendix G of the CEQA Guidelines. A "no" answer does not necessarily mean that there are no potential impacts relative to the environmental category, but that there is no change in the condition or status of the impact since it was analyzed and addressed with mitigation measures in the Final EIR. These environmental categories might be answered with a "no" in the checklist, since the proposed project does not introduce changes that would result in a modification to the conclusion of the previously approved CEQA document.

This Addendum addresses the conclusions of the previously certified CEQA document.

3.1 - Explanation of Checklist Evaluation Categories

(1) Conclusion in Prior Final EIR and Related Documents

This column summarizes the conclusion of the Prior Final EIR relative to the environmental issue listed under each topic.

(2) Do the Proposed Changes Involve New Impacts?

Pursuant to CEQA Guidelines Section 15162, subd. (a)(1), this column indicates whether the changes represented by the proposed project will result in new significant environmental impacts not previously identified or mitigated by the Final EIR or whether the changes will result in a substantial increase in the severity of a previously identified significant impact.

(3) New Circumstances Involving New Impacts?

Pursuant to CEQA Guidelines Section 15162, subd. (a)(2), this column indicates whether there have been substantial changes with respect to the circumstances under which the Project is undertaken that will require major revisions to the Final EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

(4) New Information Requiring New Analysis or Verification?

Pursuant to CEQA Guidelines Section 15162, subd. (a)(3)(A-D), this column indicates whether new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the Final EIR was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous Final EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous final EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

If the additional analysis completed as part of this environmental review were to find that the conclusions of the Final EIR remain the same and no new significant impacts are identified, or identified impacts are not found to be substantially more severe, or additional mitigation is not necessary, then the question would be answered "no" and no additional environmental document would be required.

(5) Mitigation Measures Implemented or Address Impacts

Pursuant to CEQA Guidelines Section 15162, subd. (a)(3), this column indicates whether the Final EIR provides mitigation measures to address effects in the related impact category. Any previously adopted mitigation measures will be identified. The response will also address proposed revisions to previously adopted mitigation measures. These mitigation measures will be implemented with the construction of the project, as applicable. If "NA" is indicated, the Final EIR has concluded that the impact either does not occur with this Project or is not significant, and therefore no additional mitigation measures are needed.

3.2 - Discussion and Mitigation Sections

(1) Discussion

A discussion of the elements of the checklist is provided under each environmental category in order to clarify the answers. The discussion provides information about the particular environmental issue, how the project relates to the issue, and the status of any mitigation that may be required or that has already been implemented.

(2) Mitigation Measures

Applicable mitigation measures from the Final EIR that apply to the project are listed under each environmental category.

(3) Conclusions

A discussion of the conclusion relating to the analysis is contained in each section.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
1. Aesthetics, Light, and Glare *Except as provided in Public Resources Code Section 21099, would the project:*					
a) Have a substantial adverse effect on a scenic vista?	Less than significant impact	No	No	No	None
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	Less than significant impact	No	No	No	None
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than significant impact	No	No	No	None
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than significant impact	No	No	No	None

Discussion

a) Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would not have a substantial adverse effect on a scenic vista because the development would simply add to the existing development within the existing urban footprint and would not adversely affect views of any scenic vista from Oat

Hill or from the former basalt plant/future Watson Ranch. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project's potential impacts would be consistent with what was analyzed in the BDSP EIR. neither the proposed project's revisions to the LSMY to allow hotel uses within the LSMU zone district, nor the construction of a hotel on one of the four LSMU sites, would alter scenic views such as Oat Hill or the basalt plant beyond what was analyzed in the BDSP EIR. All project sites are located more than 1 mile southeast of Oat Hill and, therefore, are located too distantly to alter public views from Oat Hill or of the former basalt plant/Watson Ranch.

Similarly, any construction within the LSMU Revision sites, including construction of the proposed Hampton Inn Hotel on Site 1, would be of a similar scale and mass to the commercial and apartment uses already permitted in the LSMU district. Currently, the maximum allowed building height within the LSMU district is 42 feet. The proposed Hampton Inn Hotel would require a Minor Variation for a building height of 47 feet and 5 inches. However, the height increase would only be incorporated into pitched roof element (approximately 5 feet and 5 inches) and would not create a dramatic difference from the permitted uses allowed in the LSMU district. In addition, the proposed Hampton Inn Hotel on Site 1 would have a "modern farmhouse" architectural style that is in keeping with the neighboring development characteristics and consistent with the BDSP design guidelines and with the commercial plaza south of Site 1. Therefore, the proposed project would not introduce environmental impacts related to a scenic vista or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway because the Specific Plan would promote improvements in the SR-29 viewshed consistent with the roadway's status as an "Eligible" State Scenic Highway.

LSMU Revisions and Hampton Inn Analysis and Conclusions

All project sites are located along SR-29 which is eligible for designation as a State Scenic Highway.[9] The existing visual attributes of the SR-29 viewshed within American Canyon displays a fragmented mix of commercial, industrial, and residential uses without a coherent aesthetic or sense of place visual appearance.

Consistent with the BDSP EIR, the development of a hotel on the Hampton Inn Site or on any of the LSMU Sites would adhere to the Specific Plan's development standards and design guidelines, which would result in improvements to the appearance of the SR-29 viewshed by

[9] California Department of Transportation (Caltrans). 2019. List of eligible and officially designated State Scenic Highways (XLSX). Website: https://dot.ca.gov/-/media/dot-media/programs/design/documents/desig-and-eligible-aug2019_a11y.xlsx. Accessed March 5, 2021.

facilitating new development that provides visually appealing buildings, landscaping, underground utilities, and pedestrian/bicycle facilities.

Therefore, the proposed project would lead to improvements in the SR-29 viewshed consistent with the roadway's status as an "Eligible" State Scenic Highway.

None of the project sites contain scenic resources such as trees, rock outcroppings, or historic buildings. Therefore, the proposed project would not introduce environmental impacts related to scenic resources or a State Scenic Highway or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would not substantially degrade the existing visual character or quality of the site and its surroundings because the Specific Plan would guide the development of undeveloped properties and underutilized properties to support modern residential and non-residential uses that would be designed in accordance with the Specific Plan's development standards and design guidelines. This would improve appearance of the Broadway District by facilitating new development that provides visually appealing buildings, landscaping, underground utilities, and pedestrian/bicycle facilities.

LSMU Revisions and American Canyon Hampton Inn Analysis and Conclusions

Consistent with the BDSP EIR, the LSMU revisions would improve the visual character and quality of the LSMU sites by implementing the BDSP development standards and design guidelines. Although the proposed project includes a BDSP Amendment and zone change and a request to allow hotel uses in a zoning district that previously only allowed commercial and apartment uses, all subsequent development would be required to adhere to applicable zoning and other regulations governing scenic quality. As discussed previously, the LSMU Revision sites are all located more than 1 mile southeast of Oat Hill and, if a hotel rather than commercial use is developed on any of the sites, it would result in similar scale and massing as already evaluated and disclosed in the BDSP EIR, and would not alter public views from Oat Hill or of the former basalt plant/Watson Ranch.

The development of the Hampton Inn Hotel would feature elements such as stone veneer, wood siding and wood trim with a landscaping plan that would include groundcover, shrubs, and flowering deciduous and evergreen trees. The Hampton Inn Hotel development would increase the amount of landscaping and trees from the existing conditions and would be a visual improvement over the existing condition of the site. Furthermore, as discussed previously, the Hampton Inn Site is located more than 1 mile southeast of Oat Hill and would not alter public views from Oat Hill or of the former basalt plant/Watson Ranch. Therefore, the proposed project would not introduce environmental impacts related to applicable zoning and other regulations governing scenic quality or the visual character and quality of the site or public views of the site, or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

d) Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area because lighting would be required to employ full cut-off fixtures or be directed downward to avoid spillage onto adjoining properties or streets. This would serve to minimize the increase in light and glare that would occur from a net increase in residential and non-residential development within the Broadway District.

LSMU Revisions and Hampton Inn Analysis and Conclusions

Consistent with the BDSP EIR, the development within all project sites would use lighting consistent with the development standards and design guidelines of the BDSP, which call for high-quality, attractive development projects. Lighting for the development of the Hampton Inn Hotel or a hotel on any of the LSMU Revision sites would be required to employ full cut-off fixtures or be directed downward to avoid spillage onto adjoining properties or streets. Therefore, the proposed project would not introduce environmental impacts related to the visual character or quality of the site and its surroundings or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to aesthetic resources beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
2. Agriculture and Forestry Resources *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.* *Would the project:*					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No impact	No	No	No	None
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No impact	No	No	No	None
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No impact	No	No	No	None
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No impact	No	No	No	None

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No impact	No	No	No	None

Discussion

a) Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP boundaries do not currently support agricultural land use activities and therefore, buildout of the BDSP would not convert Important Farmland to non-agricultural use. While there is "Farmland of Local Importance" in BSDP boundaries, this does not fall within the Important Farmland umbrella. It was determined that no impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The entire project site is within the BDSP boundaries, which do not support agricultural land use activities. The California Department of Conservation considers the project site urban and built-up land, and there are no agriculture land uses identified.[10] Therefore, the proposed project would not introduce environmental impacts related to the conversion of farmland land uses to nonagricultural land uses or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP boundaries do not currently support agricultural land use activities, and, therefore, none of the sites within the BDSP boundaries would be eligible for a Williamson contract. Therefore, no impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

All four LSMU Sites, including the Hampton Inn Site are zoned as LSMU, and none of the Sites support agricultural uses. Thus, there would be no impact with development of a hotel on any of the LSMU Sites, including the Hampton Inn Site. The proposed project would not introduce

[10] California Department of Conservation. 2021. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed May 11, 2021.

environmental impacts that would conflict with existing agriculture zoning or a Williamson Act contract or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP boundaries do not contain forest land and that the American Canyon Zoning Ordinance does not have a forest zoning district. Therefore, it was determined that no impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

All four LSMU Sites, including the Hampton Inn Site are zoned as LSMU, and do not include any forest or timberland uses. No impact would occur with development of a hotel on any of the LSMU Sites, including the Hampton Inn Site. Therefore, the proposed project would not introduce any new environmental impacts. No additional analysis is required.

d) Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP boundaries contain no forest land. This condition precludes the possibility of the BDSP converting forest land to non-forest use. Therefore, it was determined that no impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

All four LSMU Sites, including the Hampton Inn Site, consist of urban and built up land and do not contain forest uses. These conditions preclude the possibility of loss or conversion of forestlands to non-forest uses. No impacts would occur with development of a hotel on any of the LSMU Sites, including the Hampton Inn Site. Therefore, the proposed project would not introduce any new environmental impacts. No additional analysis is required.

e) Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP boundaries contain mostly urbanized land, with areas of undeveloped or underutilized land. Areas adjacent to the BDSP boundaries do not contain and agricultural or forest land, which precludes the possibility of adverse impacts to agricultural or forest resources. Therefore, it was determined that no impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

None of the four LSMU Sites, including the Hampton Inn Site, contain agricultural or forest uses, which precludes the possibility of loss or conversion of agricultural or forestlands to non-agricultural or non-forest uses. No impacts would occur with development of a hotel on any of the LSMU Sites, including the Hampton Inn Site. Therefore, the proposed project would not introduce any new environmental impacts. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to agricultural resources beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
3. Air Quality *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.* *Would the project:*					
a) Conflict with or obstruct implementation of the applicable air quality plan?	Significant and unavoidable impact	No	No	No	MM AIR-2, MM AIR-3, MM AIR-4b
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Significant and unavoidable impact	No	No	No	MM AIR-2, MM AIR-3
c) Expose sensitive receptors to substantial pollutant concentrations?	Less than significant impact	No	No	No	MM AIR-4b
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	Less than significant impact	No	No	No	None

The analysis in this section is based, in part, on project-specific emissions modeling completed using California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The modeling data is provided in its entirety in Appendix A.

Discussion

a) Summary of BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would not conflict with the applicable provisions of the 2017 Clean Air Plan, and the BDSP's percent increase in residential units would be greater than the percent increase in Vehicle Miles Traveled (VMT). However, as the BDSP EIR disclosed, the BDSP would not further all of the primary goals of the 2017 Clean Air Plan as a result of significant and unavoidable impacts related to construction equipment and

vehicle exhaust emissions. Because construction-generated impacts would remain significant after incorporation of mitigation, this impact would be significant and unavoidable. The City made appropriate findings and adopted a statement of overriding considerations.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As discussed in the Traffic Impact Analysis (TIA) Addendum prepared by W-Trans, the proposed Hampton Inn Hotel, and any potential future hotel uses within the LSMU zone, would be offset by an equivalent reduction of the shopping center square footage that was analyzed in the BDSP EIR. While the total allowable square footage of development within the LSMU zone would be unchanged, the proposed land uses are associated with different trip generation rates, so an analysis was conducted to determine the net change to the number of trips resulting from the change in land use. As discussed in the TIA Addendum, the proposed Hampton Inn Hotel and potential hotel uses within the LSMU zone would result in an estimated 1,871 daily vehicle trips. Compared to the commercial land use originally anticipated for the LSMU sites in the BDSP EIR, construction of the proposed Hampton Inn Hotel and potential hotel uses within the LSMU sites would result in a reduction of 2,778 daily trips, with an increase of 40 trips during the AM peak-hour, and a decrease of 273 trips during the PM peak-hour. This incremental change in AM peak-hour trips does not result in any more significant impacts comparted to those disclosed in the BDSP EIR.

Moreover, the proposed Hampton Inn Hotel would source employment from the immediate area. The proposed Hampton Inn Hotel would not introduce an increase in residential units or otherwise represent an increase in population growth. As illustrated by the TIA Addendum, the proposed project would result in an overall reduction in vehicle trips when compared with that analyzed in the BDSP EIR. In general, the proposed project would not introduce growth in population or VMT beyond what was analyzed in the BDSP EIR. In addition, as discussed under Impact (b) and Impact (c), the proposed project would result in less than significant impacts after incorporation of identified mitigation. Therefore, with incorporation of mitigation, the proposed project, including both the LSMU Revision and the Hampton Inn Hotel, would not conflict with the goals or control measures of the 2017 Clean Air Plan. Due to the reduction in trip generation rates associated with the change in land use proposed in the LSMU Revision, subsequent applications for hotel development on any of the LSMU Sites would result in a reduction in trips from what was assumed in the BDSP for Shopping Center uses. Accordingly, the LSMU Revisions, including development of hotel uses up to the remaining square footage assigned to the LSMU Sites for Shopping Centers, are appropriately analyzed in the BDSP EIR and this Addendum. As this impact would be less than previously disclosed no additional analysis is required.

b) Summary of BDSP EIR Analysis

Construction Fugitive Dust

It was stated in the BDSP EIR that construction activities associated with buildout of the BDSP would include demolition, site preparation, grading, building construction, paving, and architectural coating. Generally, one of the most substantial air pollutant emissions would be

fugitive dust during construction activities. If uncontrolled, these emissions could lead to both health and nuisance impacts. Construction activities would also temporarily create emissions of equipment exhaust and other air contaminants. It was determined in the BDSP EIR that Mitigation Measure (MM) AIR-2 would be required to reduce impacts from fugitive dust emissions to less than significant levels.

Construction Equipment Exhaust

The timing and components of individual construction projects were not known at the time of the analysis. The BDSP EIR determined that construction facilitated by the BDSP could exceed Bay Area Air Quality Management District (BAAQMD) preliminary screening guidance. Therefore, construction-related air quality impacts were determined in the BDSP EIR to be potentially significant. Incorporation of MM AIR-3, which would require the use equipment meeting Tier 3 or higher off-road engine standards, would reduce construction impacts; however, MM AIR-3 would not guarantee reductions in impacts from large construction projects involving extensive equipment and/or material transport necessary to be less than significant. This impact was determined to be significant and unavoidable.

Operational Emissions

The BDSP EIR determined that the BAAQMD Clean Air Plan accounted for regional operational emissions, including those generated in the City of American Canyon, and that operational criteria pollutant emissions impacts would be less than significant.

Operational Carbon Monoxide Hotspot

Based on the Traffic Impact Study prepared for the BDSP by Fehr & Peers, the intersection of SR-29 and American Canyon Road would experience the highest cumulative peak-hour traffic volumes among the BDSP study intersections, with 6,940 vehicles per hour during the PM peak-hour. The BDSP EIR determined that the future projects would generate peak-hour vehicle trips below the BAAQMD screening threshold for carbon monoxide hotspots and would result in a less than significant impact.

LSMU Revisions Analysis and Conclusions

Construction Fugitive Dust, Construction Equipment Exhaust, Operational Emissions, and Operational Carbon Monoxide Hotspot

As discussed above, construction activity on the LSMU Sites was anticipated and analyzed in the BDSP EIR. The change in land use proposed with the LSMU Revision does not result in more intense construction activity compared to the land uses identified in the BDSP EIR. Based on the project-specific analysis for the construction of the Hampton Inn Hotel, construction of a hotel on any of the LSMU Sites would result in similar conclusions of less than significance related to construction fugitive dust, construction equipment exhaust, operational emissions, and operational carbon monoxide hotspots.

Therefore, the proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. As noted in the BDSP and re-confirmed below, development of a hotel use on any of

the LSMU Sites would result in less than significant impacts with the incorporation of identified mitigation measures and best practices.

Hampton Inn Hotel Analysis and Conclusions

Construction Fugitive Dust

As previously stated, the proposed Hampton Inn Hotel development would result in the demolition of existing structures, including a small commercial building, a garage/storage building, and driveway, and would develop a 3-story, 106-room Hampton Inn Hotel. Construction of the proposed Hampton Inn Hotel would be required to incorporate MM AIR-2 from the BDSP EIR to ensure that impacts from fugitive dust emissions during construction activities would be less than significant.

Construction Equipment Exhaust

Construction of the proposed Hampton Inn Hotel is expected to start in August 2021 and conclude in January 2023. For the purpose of this analysis, construction of the proposed Hampton Inn Hotel was assumed to begin August 1, 2021, and conclude January 6, 2023. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements on construction equipment. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as provided by the project Applicant.

As shown in Table 3, the proposed Hampton Inn Hotel would be constructed over a total of 375 workdays. Per information provided by the Applicant, dated April 9, 2021, the proposed Hampton Inn Hotel would involve landscaping and irrigation activities; however, the Applicant indicated at that time that this activity would not involve the use of any equipment. Therefore, while this activity is shown in Table 3, this activity was not included in the proposed Hampton Inn Hotel construction models.

Table 3: Preliminary Construction Schedule

Phase	Phase Start Date	Phase End Date	Total Number of Working Days per Week	Total Number of Working Days
Demolition	8/1/2021	8/13/2021	5	10
Site Preparation	8/14/2021	9/10/2021	5	20
Hauling	9/11/2021	10/1/2021	5	15
Grading	9/11/2021	11/12/2021	5	45
Building Construction	11/13/2021	1/6/2023	5	300
Paving	11/13/2021	3/11/2022	5	85
Landscaping & Irrigation	2/11/2022	3/28/2022	5	30
Architectural Coating	8/22/2022	1/6/2023	5	100

Phase	Phase Start Date	Phase End Date	Total Number of Working Days per Week	Total Number of Working Days
Notes: At the time of air quality modeling, construction of the Hampton Inn Hotel was assumed to start in August 2021, and would be operational by January 2023. Because vehicle fuel use becomes more efficient through time in compliance with federal and State regulations, these dates support a conservative evaluation of potential impacts. If the actual dates of construction are delayed, associated effects would be reduced accordingly. Source: AMS Associates, Inc. 2021. Request for Information. April 7.				

CalEEMod, Version 2016.3.2, was used to estimate the proposed Hampton Inn Hotel's construction emissions. CalEEMod is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. Construction activities associated with the proposed Hampton Inn Hotel would generate criteria pollutant emissions, which are provided in Table 4 and compared with the applicable BAAQMD significance thresholds. Note that the emission estimates displayed in Table 3 include incorporation of dust control measures and the use of Tier 3 engines required under BDSP EIR MMs AIR-2 and AIR-3. For a more detailed description of the construction parameters used in the air pollutant emissions modeling, please refer to Appendix A.

Table 4: Construction Emissions (Mitigated with BDSP EIR MMs AIR-2 and AIR-3)

Parameter	Air Pollutants[1] (tons)			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Project Construction (2021)				
Demolition	< 0.01	0.08	< 0.01	< 0.01
Site Preparation	0.01	0.12	< 0.01	< 0.01
Hauling	0.01	0.19	< 0.01	< 0.01
Grading	0.01	0.23	0.01	0.01
Building Construction	0.02	0.29	0.01	0.01
Paving	0.01	0.16	0.01	0.01
2021 Total (tons)	**0.05**	**1.06**	**0.04**	**0.04**
Project Construction (2022)				

Parameter	Air Pollutants[1] (tons)			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Building Construction	0.13	2.11	0.11	0.11
Paving	0.01	0.22	0.01	0.01
Architectural Coating	0.31	0.07	< 0.01	< 0.01
2022 Total (tons)	**0.46**	**2.40**	**0.13**	**0.13**
Project Construction (2023)				
Building Construction	< 0.01	0.04	< 0.01	< 0.01
Architectural Coating	0.02	< 0.01	< 0.01	< 0.01
2023 Total (tons)	**0.02**	**0.04**	**< 0.01**	**< 0.01**
Total Emissions (tons)	***0.53***	***3.50***	***0.17***	***0.17***
Daily Average				
Total Emissions (lbs)	1,058	7,007	343	342
Average Daily Emissions (lbs/day)[2]	2.82	18.69	0.91	0.91
Significance Threshold (lbs/day)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
lbs = pounds ROG = reactive organic gases NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns in diameter $PM_{2.5}$ = particulate matter 2.5 microns in diameter
[1] Totals may not add up due to rounding. Calculations use unrounded totals.
[2] Calculated by dividing the total lbs of emissions by the total number of nonoverlapping working days of construction (375 workdays).
Source: CalEEMod Output (see Appendix A).

As shown in Table 4 the construction emissions from all construction activities related to the proposed Hampton Inn Hotel are below the recommended thresholds of significance; therefore, the construction of the proposed project would have less than significant impact related to emissions of reactive organic gas (ROG), oxides of nitrogen (NO_X), exhaust particulate matter, including dust, 10 micrometers or 2.5 micrometers or less in diameter, PM_{10}, and exhaust $PM_{2.5}$, respectively. As previously discussed, the proposed Hampton Inn Hotel would implement BDSP EIR MM AIR-2 and MM AIR-3 for the dust control BMPs recommended by the BAAQMD to reduce potential impacts related to fugitive dust emissions and the use of Tier 3 engines during project construction. Therefore, construction of the proposed Hampton Inn Hotel would have a less than significant impact and would not result in any new or more severe

impacts related to construction emissions beyond what was previously analyzed in the BDSP EIR. No additional analysis is required.

Operational Emissions

Operation of the proposed Hampton Inn Hotel was modeled using CalEEMod, Version 2016.3.2. The modeling results shown in Table 5 and Table 6 represent the maximum daily and annual operational emissions generated by the proposed Hampton Inn Hotel. The operational emission estimates provided below also display the estimated emissions generated by the existing land uses. Existing land uses estimated below only account for on-site land uses which appeared to be operational at the time of this analysis, including the residence, garage/storage building, and a small commercial building. Detailed modeling assumptions and outputs are contained in Appendix A.

Table 5: Daily Operational Emissions (Unmitigated)

Emissions Source	Pounds per Day			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area	1.49	< 0.01	< 0.01	< 0.01
Energy	0.08	0.70	0.05	0.05
Mobile	1.45	6.99	5.23	1.43
Estimated Maximum Daily Emissions	3.01	7.69	5.28	1.48
Existing Daily Emissions	*1.31*	*0.42*	*0.19*	*0.19*
Net Daily Emissions	1.71	7.27	4.87	1.23
Thresholds of Significance	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
ROG = reactive organic gases NO_X = nitrous oxides
PM_{10} = particulate matter 10 microns or less in diameter $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
Source: CalEEMod Output (see Appendix A).

Table 6: Annual Operational Emissions (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area	0.27	0.00	0.00	0.00
Energy	0.01	0.13	0.01	0.01
Mobile	0.23	1.25	0.92	0.25
Estimated Annual Emissions	0.52	1.37	0.93	0.26
Existing Annual Emissions	*0.05*	*0.06*	*0.03*	*0.01*

Emissions Source	Tons per Year			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Net Annual Emissions	0.47	1.31	0.89	0.25
Thresholds of Significance	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
ROG = reactive organic gases NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns or less in diameter $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
Source: CalEEMod Output (see Appendix A).

As displayed in Table 5 and Table 6, the proposed Hampton Inn Hotel's net operational emissions would not exceed BAAQMD significance thresholds. Therefore, the proposed Hampton Inn Hotel would not result in any new or more severe impacts related to operational emissions beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Operational Carbon Monoxide Hotspot

As discussed in the TIA Addendum prepared by W-Trans for the proposed project,[12] the proposed Hampton Inn Hotel and LSMU revisions to allow hotel use on the LSMU sites would result in an estimated 1,871 daily vehicle trips. Compared to the commercial use that was originally anticipated for the LSMU sites in the BDSP EIR, the proposed project would result in a reduction of 2,778 daily trips, with an increase of 40 trips during the AM peak-hour, and a decrease of 273 trips during the PM peak-hour. The incremental increase in the AM peak-hour does not exceed any thresholds.

As previously discussed, the BDSP EIR determined that the intersection of SR-29 and American Canyon Road would experience the highest cumulative peak-hour traffic volumes among the BDSP study intersections, with 6,940 vehicles per hour during the PM peak-hour. The TIA Addendum prepared for the proposed Hampton Inn Hotel did not include an assessment of intersection or roadway segment volumes resulting from development of the proposed Hampton Inn Hotel; however, the TIA Addendum determined that the proposed project would result in a reduction of 273 PM peak-hour vehicle trips when compared with the BDSP EIR. As a result, the intersection of SR-29 and American Canyon Road would not experience greater than 44,000 vehicles per hour, which is the BAAQMD's carbon monoxide (CO) hotspot screening threshold.

Nonetheless, CO hotspots can occur when a transportation facility's design or orientation prevents the adequate dispersion of CO emissions from vehicles, resulting in the accumulation of local CO concentrations. The design or orientation of a transportation facility which may prevent the dispersion of CO emissions include tunnels, parking garages, bridge underpasses, natural or urban canyons, below-grade roadways, or other features where vertical or horizontal atmospheric mixing is substantially limited. Adjacent roadways that would receive new vehicle

[12] W-Trans, 2021. Addendum to the EIR for the Broadway District Specific Plan. June 4.

trips generated by the proposed Hampton Inn Hotel do not include roadway segments where vertical or horizontal atmospheric mixing is substantially limited. Therefore, the proposed project would not result in any new or more severe impacts related to operational CO emissions beyond what was analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

Toxic Air Contaminant and $PM_{2.5}$ Risk

According to the BDSP EIR, future commercial or industrial projects within the BDSP planning area may locate new sources of toxic air contaminants (TAC) in proximity to existing or proposed sensitive receptors. Therefore, the level of risk associated with future projects in the BDSP planning area cannot be evaluated with certainty. The BDSP EIR determined that MMs AIR-4a and AIR-4b would reduce potential impacts to a less than significant level.

Asbestos from Demolition

According to the BDSP EIR, there is a high potential for asbestos-containing materials (ACM) to be present within the area due to the presence of structures that predate the federal prohibition of ACMs. Any demolition of existing buildings and structures would be subject to BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing), which is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the national emissions standards for asbestos along with some additional requirements. The rule requires the Lead Agency and its contractors to notify BAAQMD of any regulated renovation or demolition activity. This notification includes a description of structures and methods utilized to determine whether ACMs are potentially present. All ACM found on the site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, including specific requirements for surveying, notification, removal, and disposal of ACMs. Therefore, projects that comply with BAAQMD Regulation 11, Rule 2 would ensure that ACMs would be removed and disposed of appropriately and safely. By complying with BAAQMD Regulation 11, Rule 2, thereby minimizing the release of airborne asbestos emissions, demolition activity would not result in a significant impact to air quality.

LSMU Revisions Analysis and Conclusions

Toxic Air Contaminant and $PM_{2.5}$ Risk, and Asbestos from Demolition

As discussed above, the BDSP EIR addressed potential impacts associated with developing the LSMU Sites for commercial uses. The change in land use proposed with the LSMU Revisions does not result in any significant change to the previous analysis. As discussed in detail below, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to toxic air contaminant and $PM_{2.5}$ Risk, and asbestos from demolition.

Therefore, the proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district.

Hampton Inn Hotel Analysis and Conclusions

A sensitive receptor is defined by the BAAQMD as the following: "Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas." As specified by the BAAQMD, health risk and hazard impacts should be analyzed for sensitive receptors within a 1,000-foot radius of the project site.[13] The closest sensitive receptor to Site 1 is a single-family residence approximately 20 feet north of Site 1. The American Canyon Family Resources Community School also exists approximately 325 feet south of Site 1. No other sensitive receptor types, as defined by the BAAQMD, are found within 1,000 feet of Site 1. It should be noted that the maximum impacted sensitive receptor during the proposed Hampton Inn Hotel construction could be a nearby sensitive receptor that is not the previously identified receptors due to the combination of the prevailing meteorological conditions, the direction of the maximum impacted sensitive receptor relative to the proposed Hampton Inn Hotel site, and the amount of emissions generated at Site 1 during construction of the proposed Hampton Inn Hotel.

The following four criteria were applied to determine the significance of project emissions to sensitive receptors:

- **Criterion 1:** Construction of the project would not result in an exceedance of the health risk significance thresholds.
- **Criterion 2:** The cumulative health impact would not result in an exceedance of the cumulative health risk significance thresholds.
- **Criterion 3:** Operation of the project would not result in an exceedance of the health risk significance thresholds.
- **Criterion 4:** A CO hotspot assessment must demonstrate that the project would not result in the development of a CO hotspot that would cause an exceedance of the CO ambient air quality standards.

Criterion 1: Project Construction Toxic Air Pollutants

An assessment was made of the potential health impacts to surrounding sensitive receptors resulting from the emissions of TAC during construction. A summary of the assessment is provided below, while the detailed assessment is provided Appendix A.

Diesel particulate matter (DPM) has been identified by the California Air Resources Board (ARB) as a carcinogenic substance. Major sources of DPM include off-road construction

[13] Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 11, 2021.

equipment and heavy-duty delivery truck and worker activities. For purposes of this analysis, DPM is represented as exhaust emissions of $PM_{2.5}$.

Estimation of Construction DPM Emissions

Construction DPM emissions (represented as $PM_{2.5}$ exhaust) were estimated using CalEEMod, Version 2016.3.2. Construction of Hampton Inn Hotel is expected to begin in August 2021 and conclude in January 2023. Construction emissions were assumed to be distributed over the project area with a working schedule of 8 hours per day, 5 days per week. Table 7 summarizes the emission rates of DPM during construction of the proposed Hampton Inn Hotel with and without implementation of BDSP EIR MM AIR-4b.

As previously mentioned, the proposed Hampton Inn Hotel would be required to implement BDSP EIR MM AIR-4b, which requires any potential source of TACs (e.g., project construction) prepare a health risk analysis and identify any necessary mitigation to ensure a less than significant impact. As previously discussed, DPM emissions generated by construction of the Hampton Inn Hotel would result in an exceedance of cancer risk thresholds and would require the implementation of mitigation to ensure impacts are less than significant. As a result, BDSP EIR MM AIR-4b has been expanded upon for the proposed Hampton Inn Hotel to include the requirement for construction equipment equal to or greater than 100 horsepower to meet United States Environmental Protection Agency (EPA) Tier 4 Final engine standards, electric equivalents for all equipment less than 100 horsepower, and the prohibition of fossil-fueled generators to power electric equipment with the exception of generators rated at 5 horsepower or less which are intended for powering hand-held tools. It should be noted that the proposed Hampton Inn Hotel on-site DPM emissions displayed below take into account the requirement for all off-road equipment meeting Tier 3 engine standards or cleaner, as required under BDSP EIR MM AIR-3.

Table 7: Hampton Inn Hotel DPM Construction Emissions

Scenario	On-site DPM—Area (tons/year)	Off-site DPM—Road Segments (tons/year)[1]	Total Local DPM Emissions (tons/year)
Proposed Hampton Inn Hotel[2]	0.00474	< 0.00001	0.00474
Mitigated (BDSP EIR MM AIR-4b)[3]	0.00008	< 0.00001	0.00008

[1] The off-site emissions are adjusted to represent construction vehicle travel routes from within approximately 1,000 feet of the proposed Hampton Inn Hotel site.
[2] Reflects implementation of BDSP EIR MM AIR-3 (Tier 3 engines).
[3] Reflects implementation of BDSP EIR MM AIR-4b (Tier 4 & electric engines).
Source: CalEEMod Output and Construction Health Risk Assessment Calculations; see Appendix A.

To assess potential health risk impacts to off-site sensitive receptors, the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) air dispersion model was used to estimate the DPM emission concentrations at nearby sensitive receptors within 1,000 feet of the proposed Hampton Inn Hotel site.

Estimation of Cancer Risks

The BAAQMD has developed a set of guidelines for estimating cancer risks resulting from exposure to TACs.[14] These guidelines require the use of the Hotspots Analysis and Reporting Program (HARP2) software to identify the cancer risk associated with DPM generated during construction activities. The cancer risk estimations using HARP2 are provided below in Table 8 and Table 9.

Estimation of Non-Cancer Chronic Hazards

An evaluation of the potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate reference exposure limit. Available reference exposure limits promulgated by the OEHHA were considered in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index. The Hazard Index is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the reference exposure limit. The hazard index assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity reference exposure level. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1, a health hazard is presumed to exist. For purposes of this assessment, the TAC of concern is DPM for which the OEHHA has defined a reference exposure limit for DPM of 5 micrograms per cubic meter of air ($\mu g/m^3$). The principal toxicological endpoint assumed in this assessment was through inhalation.

Table 8 summarizes the cancer risk and hazard index results for unmitigated construction of the Hampton Inn Hotel at the maximally impacted receptors (MIR), a single-family residence approximately 20 feet north of the proposed Hampton Inn Hotel site and the American Canyon Family Resources Community School approximately 325 feet south of Site 1. It should be noted that the construction cancer risk and chronic non-cancer hazards shown in Table 7 account for the requirement for use of equipment meeting Tier 3 off-road engine standards, as required under BDSP EIR MM AIR-3.

[14] Bay Area Air Quality Management District (BAAQMD). 2020. BAAQMD Health Risk Assessment Modeling Protocol. Website: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol_august_2020-pdf.pdf?la=en. Accessed April 11, 2021.

Table 8: Estimated Cancer Risks and Chronic Non-Cancer Hazards (Proposed Hampton Inn Hotel + BDSP EIR MM AIR-3)

HARP2 Scenario	Cancer Risk (risk per million)[1]	Chronic Non-Cancer Hazard Index[2]	TAC Concentration (from AERMOD In µg/m³)[3]
Residential Receptor Scenario	193.33	0.12	0.62
School Receptor Scenario	2.60	< 0.01	0.02
Thresholds of Significance	**10**	**1**	**0.3**
Exceeds Individual Source Threshold?	**Yes**	**No**	**Yes**

Notes:
[1] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the DPM reference exposure level of 5 µg/m³.
[3] TAC concentration taken from AERMOD is always at the MIR identified during the original construction air dispersion model (a single-family residence approximately 20 feet north of Site 1 and a community school approximately 325 feet south of Site 1).
REL = Reference Exposure Level MIR = Maximally Impacted Sensitive Receptor µg/m³ = micrograms per cubic meter
Emissions Source: Appendix A.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 15, 2021.

As shown in Table 8, the construction of the Hampton Inn Hotel would emit DPM emissions that would result in an exceedance of BAAQMD cancer risk threshold. As such, the proposed Hampton Inn Hotel would be required to implement BDSP EIR MM AIR-4b, which has been supplemented to require the use of Tier 4 Final engines for all construction equipment equal to or greater than 100 horsepower, the use of electric equivalents for all equipment less than 100 horsepower, and the prohibition of fossil-fueled generators to power electric equipment with the exception of generators rated at 5 horsepower or less which are intended to power hand-held power tools. As shown in Table 9 below, implementation of BDSP EIR MM AIR-4b would ensure that construction DPM emissions generated by the proposed Hampton Inn Hotel would not result in an exceedance of BAAQMD cancer risk thresholds at the MIRs. Therefore, this impact would be less than significant with mitigation.

Table 9: Estimated Cancer Risks and Chronic Non-Cancer Hazards (Hampton Inn Hotel + BDSP EIR MM AIR-3 and MM AIR-4b)

HARP2 Scenario	Cancer Risk (risk per million)[1]	Chronic Non-Cancer Hazard Index[2]	TAC Concentration (from AERMOD In µg/m³)[3]
Residential Receptor Scenario	3.47	<0.01	0.01
School Receptor Scenario	0.05	<0.01	<0.01
Thresholds of Significance	**10**	**1**	**0.3**

HARP2 Scenario	Cancer Risk (risk per million)[1]	Chronic Non-Cancer Hazard Index[2]	TAC Concentration (from AERMOD In µg/m³)[3]
Exceeds Individual Source Threshold?	**No**	**No**	**No**

Notes:
ug/m³ = micrograms per cubic meter of air REL = Reference Exposure Level
MIR = Maximally Impacted Sensitive Receptor
[1] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the reference exposure level of 5 µg/m³.
[3] TAC concentration taken from AERMOD is always at the MIR identified during the original construction air dispersion model (a single-family residence approximately 20 feet north of Site 1 and a community school approximately 325 feet south of Site 1).
Emissions Source: Appendix A.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 15, 2021.

Criterion 2: Cumulative Health Risk Assessment

The BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project. For a project-level analysis, BAAQMD provides several tools for use in screening potential sources of TACs. The BAAQMD-provided tools used to assess the potential cumulative impacts from TACs are described below:

- **Health Risks for Local Roadways.** The BAAQMD pre-calculated concentrations and the associated potential cancer risks and $PM_{2.5}$ concentration increases for each county within their jurisdiction for roadways that carry at least 30,000 average daily trips. For certain areas, the BAAQMD also includes local roadways that meet BAAQMD's "major roadway" criteria of 10,000 vehicles or 1,000 trucks per day. The latest available screening tool is in the form of a Geographic Information System (GIS) raster file.
- **Freeway Screening Analysis Tool**. The BAAQMD prepared a GIS tool that contains pre-estimated cancer risk and $PM_{2.5}$ concentration increases for highways within the Bay Area.
- **Stationary Source Risk and Hazard Screening Tools**. The BAAQMD prepared a web-based tool[15] with the location of permitted stationary sources. For each emissions source, the BAAQMD provides conservative estimates of cancer risk and $PM_{2.5}$ concentrations. Based on information from the GIS tool, two BAAQMD-permitted stationary sources exist within 1,000 feet of Site 1.
- **Rail Screening Tools.** The BAAQMD prepared GIS tools that contains estimated cancer risks and $PM_{2.5}$ concentrations from railroad operations at any point within the Air Basin.

[15] Bay Area Air Quality Management District (BAAQMD). 2018. Permitted Stationary Sources Risk and Hazards. Permitted Stationary Sources Risk and Hazards. Website: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65. Accessed April 16, 2021.

Cumulative Health Risk Assessment at the Maximum Impacted Sensitive Receptor

A cumulative Health Risk Assessment (HRA) was performed that examined the cumulative impacts of the Hampton Inn Hotel's construction emissions and sources of TAC emissions within 1,000 feet of Site 1.

The cumulative health risk results, including health risks from the existing stationary source, are summarized during construction of the Hampton Inn Hotel in Table 10. Cumulative health risk results shown therein are representative of the health risks to the residential MIR, which would experience the highest concentration of pollutants.

Table 10: Summary of the Cumulative Health Impacts at the MIR during Construction

Source	Source Type	Distance from MIR[1] (feet)	Cancer Risk (per million)	Chronic HI	$PM_{2.5}$ Concentration ($\mu g/m^3$)
Proposed Hampton Inn Hotel					
Mitigated Hampton Inn Hotel Construction	Diesel Construction Equipment	20	3.47	< 0.01	0.01
Existing Stationary Sources (BAAQMD Facility Number)[2]					
Facility ID 100327: Mike's Mart	Gas Dispensing Facility	295	< 0.01	0.01	0.00
Facility ID 108413: American Canyon Fire Department	Gas Dispensing Facility	450	< 0.01	0.00	0.00
Roadways					
Existing Local Roadway Network		–	0.41	ND	0.01
Rail					
Existing Rail Lines (California Northern Railroad)		575	4.87	ND	0.01
Freeways					
Existing Freeways (State Route 29)		100	5.99	ND	0.11
Cumulative Health Risks					
Cumulative Total with Unmitigated Construction			**14.74**	**0.01**	**0.14**
BAAQMD's Cumulative Thresholds of Significance			**100**	**10**	**0.8**
Threshold Exceedance?			**No**	**No**	**No**

Notes:
ug/m^3 = micrograms per cubic meter of air
BAAQMD = Bay Area Air Quality Management District
HI = hazard index
ND = no data available
MIR = Maximum Impacted Sensitive Receptor
[1] The maximum impacted sensitive receptor (MIR) represents single-family residences approximately 20 feet southeast of Site 1.
[2] Assumes emissions remain constant with time.
Source: Appendix A.

As noted in Table 10, the cumulative impacts from the construction of the proposed Hampton Inn Hotel and existing sources of TACs would be less than the BAAQMD's cumulative thresholds of significance. Thus, the cumulative health risk impacts from construction would be less than significant.

Criterion 3: Project-Specific Operation Toxic Air Pollutants

On-site TACs during operation of the proposed Hampton Inn Hotel would principally consist of vehicle emissions from employees and visitors traveling to and from Site 1. As described in the TIA Addendum, the proposed project is estimated to generate 1,871 average daily vehicle trips. The daily travel trips to and from Site 1 would primarily be generated by passenger vehicles. Because nearly all passenger vehicles are gasoline-combusted, the proposed Hampton Inn Hotel would not generate significant amount of DPM emissions during operation. Therefore, the proposed Hampton Inn Hotel would not result in significant health impacts to nearby sensitive receptors during operation.

Criterion 4: CO Hotspot

As discussed under Impact 2, the operational CO hotspot impact from operations would be less than significant.

d) Summary of the BDSP EIR Analysis

According to the BDSP EIR, buildout of the BDSP would include the development of 1,200 net new dwelling units and 840,000 square feet of net new non-residential uses (commercial and office) by 2036. Buildout of the BDSP may include restaurants and/or food vendors. Although the BAAQMD does not list restaurants as a typical source of odor in their screening guidance or in the significance determination guidance, the BAAQMD's Guidance document does discuss potential mitigation measures to reduce the potential for odor impacts from food services. Restaurants can generate odor from cooking processes and waste disposal. The future restaurant tenants, if any, are currently unknown, as are the cooking methods, putrescible waste generation, and disposal methods.

The residential, general office, and shopping center land uses are not expected to produce any offensive odors that would result in odor complaints. During construction activities, diesel powered vehicles and equipment used on-site could create localized odors, but these would be temporary in nature and would dissipate. As such, construction-period and operation-period odor impacts were determined in the BDSP EIR to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As stated in the BAAQMD 2017 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard and the ability to detect odors varies considerably among the populations and overall is subjective. The BAAQMD does not have a recommended odor threshold for construction activities. However, the BAAQMD recommends operational screening criteria based on the distance between receptors and types of sources known to generate odors.

Two circumstances have the potential to cause odor impacts:

1. A source of odors is proposed to be located near existing or planned sensitive receptors, Or
2. A sensitive receptor land use is proposed near an existing or planned source of odor.

Projects that would site an odor source or a receptor farther than the applicable screening distance, shown in Table 11 below, would not likely result in a significant odor impact.

Table 11: Odor Screening Distances

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Source: Bay Area Air Quality Management District (BAAQMD). 2017. CEQA Air Quality Guidelines. May. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 28, 2021.	

Proposed Hampton Inn Hotel Construction

Diesel exhaust and ROGs would be emitted during construction of the proposed Hampton Inn Hotel which may be objectionable to some; however, emissions would disperse rapidly from the proposed Hampton Inn Hotel site and therefore would not create objectionable odors affecting a substantial number of people. As such, construction odor impacts would be less than significant. Therefore, the proposed Hampton Inn Hotel would not result in any new or more severe construction odor impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Proposed Hampton Inn Hotel Operation

Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, agricultural operations, or other land uses listed in Table 10. The proposed Hampton Inn Hotel would introduce a new hotel and is not expected to produce any offensive odors that would result in odor complaints. During operation of the proposed Hampton Inn Hotel, odors would primarily consist of exhaust from passenger vehicles traveling to and from the site. These occurrences would not produce objectionable odors affecting a substantial number of people. Furthermore, the proposed Hampton Inn Hotel would not be placing sensitive receptors near existing odor sources. Therefore, operational impacts associated with the proposed Hampton Inn Hotel's potential to create odors would be less than significant. As such, the proposed Hampton Inn Hotel would not result in any new or more severe operational odor impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Based on the project-specific analysis provided above for the construction of the Hampton Inn Hotel, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to construction and operational odor impacts. Therefore, the proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district.

Mitigation Measures

Clarification on project-specific implementation of a mitigation measure from BDSP EIR is in **bold** text.

BDSP EIR MM AIR-2

Prior to issuance of the first construction permit for projects that occur pursuant to the Specific Plan, the applicant shall submit construction plans to the City of American Canyon with the following notes on them. The dust abatement measures described in the notes shall be implemented during construction.

During construction activities, the following air pollution control measures shall be implemented:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day, or more as needed.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads and surfaces shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks shall be paved as soon as possible.

- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes (beyond the 5 minute limit required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- A publicly visible sign shall be posted with a name and telephone number of the person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

BDSP EIR MM AIR-3

Prior to issuance of the first construction permit for development projects that occur pursuant to the Specific Plan, the applicant shall provide documentation to the City of American Canyon demonstrating that all off-road by diesel equipment proposed for use is powered with Tier 3 or cleaner engines.

BDSP EIR MM AIR-4a

Prior to issuance of building permits for any sensitive receptor use (residential areas, elementary school, daycare centers, etc.) that would be developed pursuant to the Specific Plan, the applicant shall complete either of the following two options:

1. Prepare and submit a toxic air contaminant risk screening assessment to the City of American Canyon that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed the Bay Area Air Quality Management District's (BAAQMD's) cumulative risk threshold for toxic air contaminant impacts.
2. Prepare and submit a Health Risk Analysis to the City of American Canyon, consistent with BAAQMD's recommended methodology, that demonstrates the potential risk from roadways, rail, and stationary sources would not exceed the BAAQMD's cumulative risk threshold for toxic air contaminant impacts. If mitigation is required to reduce a potentially significant risk to less than the cumulative risk threshold, that mitigation shall be clearly identified, and the associated risk reduction quantified. The mitigation must be incorporated into the project and implemented.

BDSP EIR MM AIR-4b

Prior to issuance of building permits for any potential source of toxic air contaminants that would be developed pursuant to the Specific Plan, the applicant shall complete either of the following two options:

1. Prepare and submit a toxic air contaminant risk screening assessment to the City of American Canyon that demonstrates the proposed development would not expose sensitive receptors to levels of risk that exceed the BAAQMD's project level and cumulative risk threshold for toxic air contaminant impacts.
2. Prepare and submit a Health Risk Analysis to the City of American Canyon consistent with BAAQMD's recommended methodology, which demonstrates the proposed development would not expose sensitive receptors to levels of risk that would exceed the BAAQMD's project level and cumulative risk threshold for toxic air contaminant impacts. If mitigation is required to reduce a potentially significant risk to less than the cumulative risk threshold, that mitigation shall be clearly identified, and the associated risk reduction quantified. The mitigation must be incorporated into the project and implemented.

Proposed Hampton Inn Mitigation as part of BDSP EIR MM AIR-4b:

The Health Risk Assessment prepared for the proposed Hampton Inn Hotel identifies the following requirements to ensure that the proposed Hampton Inn Hotel would result in less than significant impacts to sensitive receptors.

Prior to the issuance of grading and building permits, the Project Applicant shall provide the City with documentation, to the City's satisfaction, that demonstrates the use of Tier 4 Final engines for all construction equipment equal to or greater than 100 horsepower, electric equivalents for all equipment less than 100 horsepower, and the prohibition of fossil-fueled generators to power electric equipment with the exception of generators rated at 5 horsepower or less which are intended for powering hand-held tools.

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to air quality. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
4. Biological Resources *Would the project:*					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Less than significant impact with mitigation	No	No	No	MM BIO-1a
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Less than significant impact with mitigation	No	No	No	None
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Less than significant impact with mitigation	No	No	No	None

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	Less than significant impact	No	No	No	None
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than significant impact	No	No	No	None
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No impact	No	No	No	None

A Biological Resources Evaluation Memorandum has been prepared by FirstCarbon Solutions (FCS) for the proposed Hampton Inn Hotel on May 12, 2021 (Appendix B).

Discussion

a) Summary of BDSP EIR Analysis

According to the BDSP EIR, special-status plant species occurrences have been recorded in the "Downtown Core" subarea near the California Northern Railroad wye and special-status wildlife species have been recorded in the "Southern Gateway" subarea. Additionally, several special-status plant and wildlife species occurrences have been recorded within 0.25 mile of the BDSP boundaries. MM BIO-1a requires applicants proposing development activities on undeveloped properties to retain a qualified Biologist to prepare a reconnaissance-level biological assessment. MM BIO-1b requires that pre-construction nesting bird surveys be conducted during the nesting season. With the implementation of MM BIO-1a and MM BIO-1b, impacts to candidate, sensitive, or special status species would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As discussed in the BDSP EIR, construct on the LSMU Sites was anticipated and mitigation measures were identified to address potential impacts to biological resources. The LSMU Sites contain mature trees and shrubs, which could provide suitable nesting habitat for resident and migratory bird species protected under the Migratory Bird Treaty Act (MBTA) and/or Fish and Game Code. Site 1 contains over a half a dozen mature trees and shrubs, which could provide suitable nesting habitat for resident and migratory bird species protected under the MBTA and/or Fish and Game Code. Accordingly, development of the proposed Hampton Inn Hotel and/or hotels on any of the LSMU Sites, has the potential to impact protected bird nests due to the removal of this vegetation or indirectly harm birds though the generation of noise, light, and other disturbances that could result in the abandonment of eggs or young. Therefore, if work takes place during nesting season (February 1 and August 31), BDSP MM BIO-1b would be implemented in order to avoid potential impacts to nesting birds. With the implementation of BDSP MM BIO-1b, impacts to candidate, sensitive, or special status species during the construction of the proposed Hampton Inn Hotel would be less than significant.

Construction of a hotel on any of the LSMU Sites would result in similar conclusions with the incorporation of BDSP EIR MM BIO-1a and MM BIO-1b. Therefore, the proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. As such, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR Analysis

Development activities that occur near American Canyon Creek, North Slough, and the smaller drainage features within the BDSP boundaries have the potential to impact sensitive natural communities and riparian habitat. Such activities may involve direct impacts to these features (e.g., to install a bridge or culvert) or indirect impacts to these features (e.g., disturbance within 10 feet of these features).

Accordingly, MM BIO-2 requires applicants proposing development activities within properties that contain blue line drainage or wetland features to retain a qualified Biologist to conduct a jurisdictional assessment (or other applicable evaluation). If the assessment determines that the feature falls under the jurisdiction of a federal or state resource agency, the applicant shall obtain the requisite approvals and implement the appropriate mitigation measures. With the implementation of MM BIO-2, impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Construction and development on the LSMU Sites were anticipated in the BDSP EIR. The Hampton Inn Site is mostly developed or has been subjected to man-made disturbances and does not contain any sensitive natural communities nor does it contain or lies adjacent to any riparian habitat. Subsequent applications for hotel development on any of the other LSMU Sites would require the implementation of BDSP EIR MM BIO-2 if blue line drainage or wetland

features exist on-site, which requires the preparation of a jurisdictional assessment, obtainment of applicable permits, and implementation of appropriate mitigation measures. Therefore, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

Development activities that occur near American Canyon Creek, North Slough, and the smaller drainage features within the BDSP boundaries have the potential to impact sensitive natural communities and riparian habitat. Such activities may involve direct impacts to these features (e.g., to install a bridge or culvert) or indirect impacts to these features (e.g., disturbance within 10 feet of these features).

Accordingly, MM BIO-2 requires applicants proposing development activities within properties that contain blue line drainage or wetland features to retain a qualified Biologist to conduct a jurisdictional assessment (or other applicable evaluation). If the assessment determines that the feature falls under the jurisdiction of a federal or state resource agency, the applicant shall obtain the requisite approvals and implement the appropriate mitigation measures. With the implementation of MM BIO-2, impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

No wetlands or other aquatic features that meet criteria as waters of the United States or State were observed within Site 1 during the reconnaissance-level survey. Subsequent applications for hotel development on any of the other LSMU Sites would require the implementation of BDSP EIR MM BIO-2 if blue line drainage or wetland features exist on-site, which requires the preparation of a jurisdictional assessment, obtainment of applicable permits, and implementation of appropriate mitigation measures. Therefore, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

d) Summary of BDSP EIR Analysis

According to the BDSP, the BDSP area contains mostly urban, built-up land and is bisected by SR-29. Although there are undeveloped properties within the plan boundaries, they are disconnected and fragmented from each other and surrounded by urban development and infrastructure. Moreover, the presence of SR-29 serves as a formidable barrier to terrestrial wildlife movement within the BDSP area. To the extent that development and land use activities contemplated by the BDSP would involve disturbance to American Canyon Creek or North Slough, it would not impair localized wildlife movement by these species because of their adaptability to urban environments. Impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The LSMU is surrounded in all directions by extensive urban development, roadways and other man-made structures that serve as barriers to wildlife movement. Additionally, none of the

LSMU Sites contain or are adjacent to any riparian corridors either. Therefore, Site 1 does not include a wildlife movement corridor. Consistent with the BDSP EIR and the above project-specific analysis, construction of a hotel on any of the LSMU Sites would result in similar conclusions. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

e) Summary of BDSP EIR Analysis

American Canyon Municipal Code Chapter 19.24.040 sets forth restrictions on development and land use activities that affect riparian corridors. Generally, permitted uses must further the biological and hydrologic functions of the riparian corridor and be in the public interest (protect public health safety and welfare; provide public access, etc.). Additionally, any development activities that occur within riparian corridors must implement protective measures for fish, wildlife, vegetation, and water within in the drainage feature.

The only two riparian corridors within the BDSP area that could potentially be affected by development and land use activities are American Canyon Creek and North Slough. To the extent that development and land use activities contemplated by the BDSP would involve disturbance to American Canyon Creek or North Slough, they would be subject to the requirements of Chapter 19.24.040. Impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

None of the sites contain, or are adjacent to, any riparian corridors. The American Canyon Municipal Code does not contain an ordinance regulating the removal of trees that would be applicable to the proposed project. The Municipal Code concerns exclusively the removal of street trees, none of which are present on-site.[16] Consistent with the BDSP EIR and the above project-specific analysis, construction of a hotel on any of the LSMU Sites would adhere to American Canyon Municipal Code Chapter 19.24.040 related to riparian corridors and regulations related to tree removal, and would result in similar conclusions. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

f) Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP area is not within the boundaries of an adopted habitat conservation plan or natural community conservation plan. This condition precludes the possibility of the BDSP conflicting with the provisions of such a plan. No impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The project sites do not lie within the boundaries of any adopted Habitat Conservation Plan (HCP) Natural Community Conservation Plan (NCCP), or other approved local, regional, or State

[16] City of American Canyon. 2021. American Canyon Municipal Code. Website: https://qcode.us/codes/americancanyon/. Accessed April 21, 2021.

habitat conservation plan.[17] The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM BIO-1b

Prior to tree removal activities that occur during the nesting season (February 1 and August 31), the applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey no more than 14 days prior to vegetation removal. If the biologist observes nesting birds to be present, a minimum 250-foot protective buffer shall be established around the nest until the young have fledged. This mitigation measure shall not apply to tree removal activities that occur outside the nesting season (September 1 to January 31).

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to air quality. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required.

[17] California Department of Fish and Wildlife (CDFW). 2021. NCCP Plan Summaries. Website: https://wildlife.ca.gov/conservation/planning/nccp/plans. Accessed April 21, 2021.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
5. Cultural Resources *Would the project:*					
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to §15064.5?	Less than significant impact with mitigation	No	No	No	MM CUL-1
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less than significant impact with mitigation	No	No	No	MM CUL-1
c) Disturb any human remains, including those interred outside of formal cemeteries?	Less than significant impact with mitigation	No	No	No	MM CUL-4
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
d) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	Less than significant impact with mitigation	No	No	No	MM CUL-1
e) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less than significant impact with mitigation	No	No	No	MM CUL-1

Descriptions and analysis in this section are based on information provided by the California Native American Heritage Commission, Northwest Information Center (NWIC), National Register of Historic Places, California Register of Historical Resources, California Historic Landmarks list, California Points of Historical Interest list, California Historical Resources Inventory, and University of California Museum of Paleontology. Non-confidential records search results and other correspondence is included in Appendix C.

Discussion

Cultural Resources

a) Summary of BDSP EIR Analysis

According to the BDSP EIR, 12 historic structures (i.e., more than 45 years old) located within the BDSP and nine historic structures located within a 0.5-mile radius of the BDSP area. The 12 resources located within the BDSP area include three historic sites (foundations and privies), one farm/ranch, six residential homes, and two commercial buildings that were recorded between 1977 and 2015. These structures were evaluated for listing in the California Register of Historical Resources and National Register of Historic Places and were determined not to be eligible for listing. Therefore, these resources do not meet the definition of a "historical resource" for the purposes of CEQA. Although there are no listed historic resources within the BDSP area, it is possible that subsurface excavations may encounter previously undiscovered historic resources during development activities. The implementation of standard cultural resource construction mitigation (MM CUL-1) would ensure that this impact is less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

According to an updated records search conducted at the NWIC on February 11, 2021, there are no recorded resources within the LSMU Sites, and there are 12 historic-era buildings/structures have been recorded 0.5-mile of the Site 1 boundary. Site 1 contains two residential structures constructed in 1950s (3439 Broadway Street and 3443 Broadway Street). A historic assessment has been prepared for the proposed Hampton Inn Hotel. It was found that Site 1 (which includes the two residential structures) is not a historical resource because it does not meet the eligibility requirements for listing on the California Register of Historical Resources (CRHR) and is not currently listed on any national, State, or local register of historic resources. Therefore, the proposed Hampton Inn Hotel would not impact any historic resources. Construction of a hotel on any of the LSMU Sites would not have impacts that are more severe or beyond the impacts of the commercial and residential uses originally anticipated for the LSMU zoning, which were analyzed in the BDSP EIR. Therefore, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR Analysis

According to the BDSP EIR, no known prehistoric archaeological resources have been recorded within the BDSP area. However, it is possible that subsurface excavations may encounter previously undiscovered archaeological resources within the BDSP and the off-site development areas. The implementation of standard cultural resource construction mitigation (MM CUL-1) would ensure that this impact is less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The BDSP EIR anticipated development of the LSMU Sites. The change in land uses being developed does not result in more intense or extensive construction activity nor does it result in any change to the analysis or conclusions in the BDSP EIR. Consistent with the BDSP EIR, while there are no prehistoric archaeological resources recorded within the LSMU Sites, it is possible that subsurface excavations during construction of the proposed Hampton Inn Hotel would encounter previously undiscovered archaeological resources. The implementation of standard cultural resource construction mitigation (BDSP EIR MM CUL-1) would ensure that this impact is less than significant. Construction of a hotel on any of the LSMU Sites would not have impacts that are more severe or beyond the impacts of the commercial and residential uses originally anticipated for the LSMU zoning, which were analyzed in the BDSP EIR. Therefore, the proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

The BDSP area includes areas previously inhabited by Native American tribes and, thus, there is always the possibility that subsurface construction activities associated with buildout of the BDSP, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. However, if human remains are discovered, implementation of MM CUL-4 would reduce this potential impact to a less than significant level.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Consistent with the BDSP EIR, if human remains are discovered, implementation of BDSP EIR MM CUL-4 would reduce this potential impact to a less than significant level. The BDSP EIR anticipated development of the LSMU Sites. The change in land uses proposed by the LSMU Revision does not result in more intense or extensive construction activity nor does it result in any change to the analysis or conclusions in the BDSP EIR. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

d) Summary of BDSP EIR Analysis

According to the BDSP EIR, the BDSP area is not listed on any national, State, or local registers of historic places (including those for Tribal Cultural Resources [TCRs]). Additionally, no TCRs have been previously recorded within the BDSP boundaries. However, in the event of the

inadvertent discovery of TCRs, MM CUL-1 would serve to reduce the impact to a level of less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The BDSP EIR anticipated development of the LSMU Sites. The change in land uses proposed by the LSMU Revision does not result in more intense or extensive subsurface excavation activity; accordingly, it does not result in any change to the analysis or conclusions in the BDSP EIR. Consistent with the BDSP EIR, while there are no prehistoric archaeological resources recorded within the LSMU Sites, it is possible that subsurface excavations during construction would encounter previously undiscovered archaeological resources. The implementation of standard cultural resource construction mitigation (BDSP EIR MM CUL-1) would ensure that this impact is less than significant. Construction of a hotel on any of the LSMU Sites would also implement BDSP EIR MM CUL-1. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

e) Summary of BDSP EIR Analysis

On July 20, 2016, the Yocha Dehe Wintun Nation replied with a letter indicating that the BDSP could impact undiscovered archaeological deposits and requested a site visit. The City of American Canyon responded to the Tribe and scheduled a consultation meeting with Yocha Dehe representatives on August 24, 2017, at American Canyon City Hall. Yocha Dehe representatives were provided information about the BDSP and provided recommendations to City staff. This concluded the tribal consultation process.

In the event of the inadvertent discovery of TCRs, MM CUL-1 would serve to reduce the impact to a level of less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Consistent with the BDSP EIR, in the event of the inadvertent discovery of TCRs, BDSP EIR MM CUL-1 would serve to reduce the impact to a level of less than significant. The proposed project would not result in any new or more severe impacts beyond what was analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM CUL-1

If prehistoric or historic-period archaeological resources are encountered during ground disturbing activities associated with new development that occurs pursuant to the Specific Plan, all construction activities within 100 feet of the find shall halt and the City of American Canyon shall be notified. Prehistoric archaeological materials might include obsidian and chert flakedstone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone

tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the City of American Canyon. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

BDSP EIR MM CUL-4

In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find shall cease until the Napa County Coroner has been contacted to determine that no investigation of the cause of death is required. The Native American Heritage Commission (NAHC) shall be contacted within 24 hours if it is determined that the remains are Native American. The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC Section 5097.98), who in turn would make recommendations to the City of American Canyon for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines Section 15064.59(d)).

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to air quality. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
6. Energy *Would the project:*					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than significant impact with mitigation	No	No	No	None
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than significant impact with mitigation	No	No	No	None

Environmental Evaluation

a-b) Summary of BDSP EIR Analysis

The BDSP EIR did not separately analyze the energy consumption resulting from the buildout of the BDSP; however, it was addressed in several relevant topical areas of the EIR. As discussed in Section 3.2, Air Quality and Greenhouse Gases, and Section 6, Other CEQA Considerations, of the BDSP EIR, buildout of the BDSP planning area would result in the consumption of electricity, natural gas, and transportation fuels during construction and operational activities. The BDSP EIR ultimately determined that buildout of the BDSP would be consistent with the City's Sustainability Best Practice Activities,[18] which largely encompasses energy efficiency measures through the reduction of fossil fuel consumption such as promoting infill development, alternative modes of transportation, and higher density development.

In particular, according to the energy efficiency and conservation activities goals identified within the Sustainability Best Practices Activities, the City of American Canyon joined Marin Clean Energy (MCE) in November of 2015. MCE provides renewable energy without replacing PG&E's infrastructure, maintenance, or billing systems. On September 1, 2016, the entire City of American Canyon was automatically enrolled in the light green program; at which time, users began utilizing a minimum of 52 percent renewable energy. In addition, the MCE Deep

[18] City of American Canyon. 2019. City of American Canyon Sustainability Best Practices. Accessed April 1, 2021.

Green Program was also provided as an option to customers, allowing for 100 percent renewable energy consumption.[19]

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As discussed under Section 3.3, Greenhouse Gas Emissions, development on the LSMU Sites, including the proposed Hampton Inn Hotel, would be consistent with the City's Sustainability Best Practices Activities by promoting infill development and alternative modes of transportation. Specifically, the proposed Hampton Inn Hotel would include bicycle parking and EV supply equipment to ensure that a portion of parking spaces are "EV-ready." Furthermore, the proposed Hampton Inn Hotel would be required to adhere to the requirements of the 2019 California Building Code, including the applicable regulatory standards for energy efficiency, sustainable development, and the enhancement of environmental quality such as providing bicycle parking for employees and visitors. Nonetheless, energy resources would be consumed during project operation, including natural gas for space and water heating and appliance operation, electricity for lighting and building operation, and transportation fuel from vehicle trips to and from the proposed Hampton Inn Hotel. For informational purposes, the electricity, natural gas, and transportation fuel consumption during proposed Hampton Inn Hotel operation are displayed in Table 12.

Table 12: Estimated Annual Project Energy Consumption

Energy Type	Annual Consumption
Electricity	464,590 kWh/year
Natural Gas	2,598,470 kBTU/year
Vehicle Fuel Consumption	88,714 gallons

Notes:
kWh = kilowatt-hour kBTU = kilo-British Thermal Unit VMT = Vehicle Miles Traveled
[1] Operational Fuel Consumption based on EMFAC2021 Emissions Inventory, Vehicle Classification (Fleet Mix) EMFAC2007 Categories. The calculations are for the year 2023, the proposed Hampton Inn Hotel's first full year of operation, and for Napa County where the proposed project is located (Appendix A).

Compared to the commercial uses anticipated for the project site in the EIR, the change in land use proposed in the LSMU Revision would result in an overall reduction in daily vehicle trips. Specifically, as discussed in the TIA Addendum prepared for the proposed project,[20] the proposed Hampton Inn Hotel, and any potential future hotel uses within the LSMU zone, would be offset by an equivalent reduction of the shopping center square footage that was analyzed in the BDSP EIR. While the total proposed square footage of development would be unchanged, the proposed land uses are associated with different trip generation rates, so analysis was conducted to determine the net change to the number of trips resulting from the change in land use. In addition, as discussed in the TIA Addendum, the proposed Hampton Inn Hotel and potential hotel uses within the LSMU zone would result in an estimated 1,871 daily

[19] City of American Canyon. 2019. City of American Canyon Sustainability Best Practices. Accessed April 1, 2021.
[20] W-Trans, 2021. Addendum to the EIR for the Broadway District Specific Plan. June 4.

vehicle trips. Compared to the commercial land use originally anticipated for the LSMU sites in the BDSP EIR, construction of the proposed Hampton Inn Hotel and potential hotel uses within the LSMU sites would result in a reduction of 2,778 daily trips, with an increase of 40 trips during the AM peak-hour, and a decrease of 273 trips during the PM peak-hour. The reduction in daily vehicle trips would result in an overall reduction in fossil fuel consumption.

Furthermore, the proposed Hampton Inn Hotel would be served by the Vine bus system, operated by the Napa Valley Transportation Authority. The Vine provides transit opportunities throughout Napa County. All LSMU Sites are within close proximity to Donaldson Way and Benton Way, which hosts northbound and southbound bus stops for the Vine bus route 11. All LSMU Sites are also near for the Route 11x and Route 29 stops at the American Canyon Post Office. Route 11 and 11x extend from the Redwood Park n Ride in Napa, CA to the Vallejo Ferry Terminal. Route 29 extends from the Redwood Park n Ride to the El Cerrito Del Norte Bay Area Rapid Transit (BART) station. The proposed project's proximity to these existing transit services would provide employees and visitors with access to public transportation and would subsequently result in reductions in transportation fuels.

As illustrated above, development under the proposed LSMU Revision, including the proposed Hampton Inn Hotel would consume energy resources during operation; however, compliance with the applicable California Building Code standards and proximity to existing transit services would ensure that the proposed project would not result in wasteful, unnecessary, or inefficient consumption of energy to the extent practicable.

The BDSP EIR anticipated and analyzed development on the LSMU Sites. The change in land use proposed by the LSMU Revisions does not result in any significant change with respect to consumption of energy. Based on the project-specific analysis provided for the construction and operation of the Hampton Inn Hotel, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to energy. Therefore, the proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. The proposed project would not result in any new or more severe building operation energy impacts beyond what was previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to energy. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
7. Geology, Soils, and Seismicity *Would the project:*					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Less than significant impact with mitigation	No	No	No	MM GEO-1a
ii) Strong seismic ground shaking?	Less than significant impact with mitigation	No	No	No	MM GEO-1b
iii) Seismic-related ground failure, including liquefaction?	Less than significant impact	No	No	No	None
iv) Landslides?	Less than significant impact	No	No	No	None
b) Result in substantial soil erosion or the loss of topsoil?	Less than significant impact with mitigation	No	No	No	MM HYD-1a
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than significant impact	No	No	No	None

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than significant impact with mitigation	No	No	No	MM GEO-1b
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No impact	No	No	No	None
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than significant impact with mitigation	No	No	No	

The analysis in this section is based on the Earthquake Fault Investigation Report prepared for the proposed Hampton Inn Hotel by Ryan Geological Consulting, Inc., on October 31, 2020, and a Geotechnical Investigation Report was prepared for the proposed Hampton Inn Hotel by Ryan Geological Consulting, Inc., on December 15, 2020 (Appendix D).

Discussion

a) Summary of BDSP EIR Analysis

i) Fault Rupture

According to the BDSP EIR, the West Napa Fault is located within the BDSP area and that future development activities that occur pursuant to the BDSP within an Alquist-Priolo Special Study Zone would require the preparation of a fault investigation to determine the precise location of the West Napa Fault and establish appropriate setbacks for new structures. This requirement was reflected in MM GEO-1a. The BDSP EIR concluded that buildout of the BDSP may expose people or structures to potential substantial adverse effects associated with seismic hazards.

ii) Strong seismic ground shaking

According to the BDSP EIR, the areas within the BDSP could be subject to "strong" and "very strong" ground shaking, and that future development activities that occur pursuant to the BDSP would be required to prepare a design-level geotechnical report at the time building permits are sought. Such a report would provide recommendations on the appropriate level of soil engineering and building design necessary to minimize ground-shaking hazards. This requirement was reflected in MM GEO-1b. The BDSP EIR concluded that implementation of MM GEO-1b would ensure that development consistent with the BDSP is not exposed to strong ground shaking hazards, and that impacts would be less than significant with mitigation incorporated.

iii) Seismic-related ground failure, including liquefaction

The BDSP EIR determined that the BDSP area is underlain by sandstone bedrock, relatively strong and incompressible alluvial subsoils, and a topsoil layer of clayey soils. These characteristics indicate that development consistent with the BDSP would not be susceptible to ground failure, liquefaction, or liquefaction-related phenomena. The BDSP EIR concluded that impacts would be less than significant.

iv) Landslides

The BDSP EIR determined that the BDSP area contains mostly flat relief and that most, if not all, of the properties with the Specific Plan boundaries either support urban development or have been rough graded, which makes the likelihood of landsliding very low. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

i) Fault Rupture

An Earthquake Fault Investigation Report was prepared for the proposed Hampton Inn Hotel in compliance with BDSP MM GEO-1a. According to the Earthquake Fault Investigation Report, Site 1 is in an area considered to have a relatively high seismicity due to the proximity of several active faults in the region and is located within a State of California designated Earthquake Zones of Required Investigation for the active West Napa Fault.

Based on the results of this project, we conclude that the West Napa Fault crosses through the northeast corner of the property (Exhibit 8). No indications of active or potentially active faulting were encountered during trenching. The West Napa Fault is located just east of the end of the trench and could not be reached due to the presence of utility lines near the property boundary. This trench, in addition to the existing trenches to the south effectively shadow the site within the State of California designated Zone of Required Investigation for the West Napa Fault.

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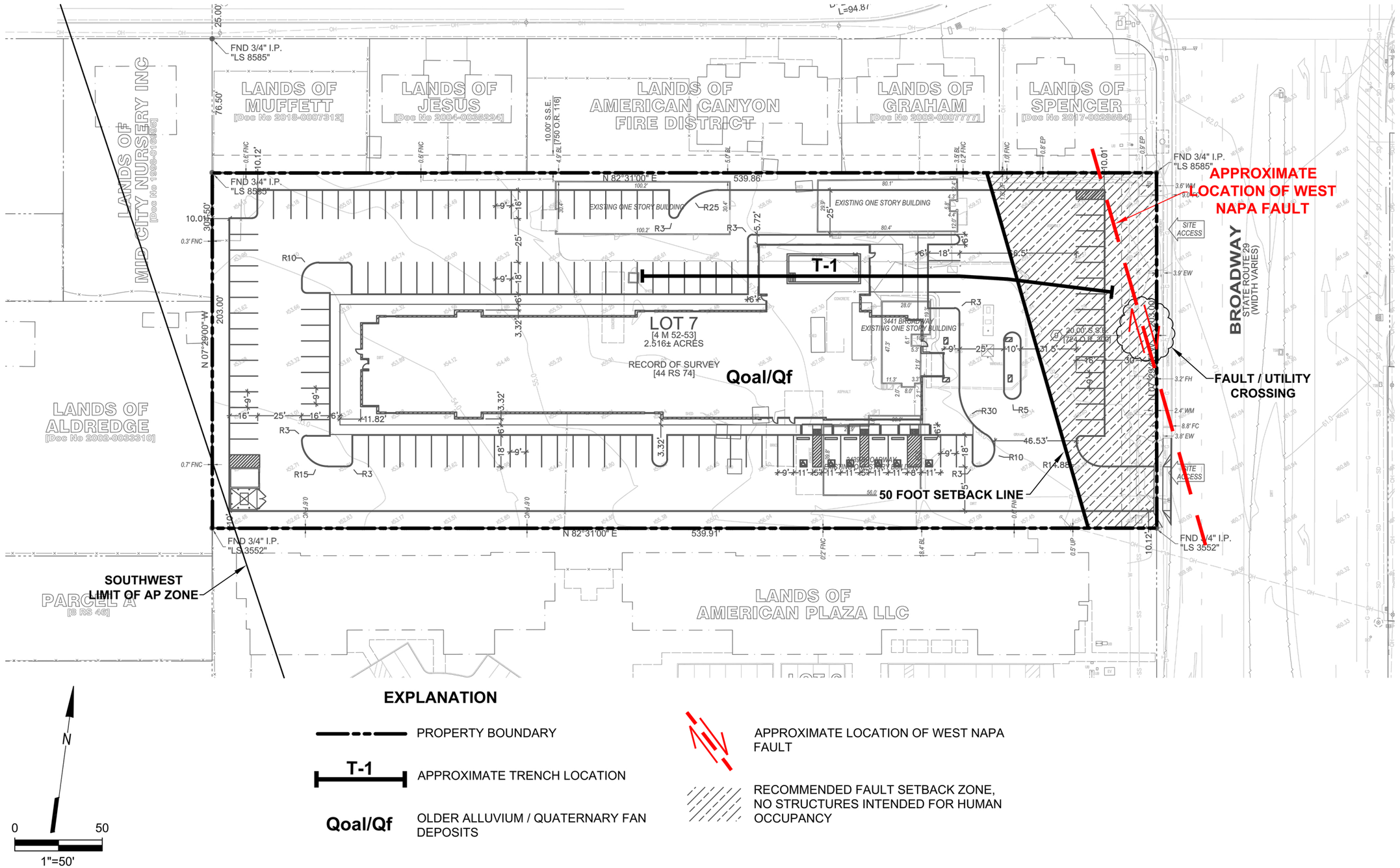

Source: Ryan Geological Consulting, Inc., 10/31/2020.

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Exhibit 8
Earthquake Fault Investigation

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Establishing setbacks from active faults should take into account the location of the fault as well as the area of anticipated ground deformation from any given earthquake event. Based on the results of this investigation, a 50-foot setback for buildings intended for human occupancy is recommended; the design of the proposed project complies with this 50-foot setback.

The report also noted that the fault crosses municipal water line at the east end of the site. Due to the fault water line crossing, we recommend that any utilities entering the property enter from the southeast corner to avoid the fault at the connections. Additionally, measures should be taken to protect the water main where it will be breached by fault movement. Methods to protect the water main could include placing the pipe in a protective sleeve or providing flexible connections.

The Earthquake Fault Investigation Report concluded that the proposed Hampton Inn Hotel development is feasible with compliance with the recommended setbacks and protective measures for utility entering the site. The proposed Hampton Inn Hotel would comply with the recommended 50-foot fault setbacks and the protective measures for utilities entering the site.

ii) Strong seismic ground shaking

The BDSM EIR analyzed development on the LSMU Sites. The change in land uses proposed by the LSMU Revision would adhere to the mitigation measures identified in the BDSM EIR. Consistent with MM GEO-1b, a Geotechnical Investigation Report was prepared for the proposed Hampton Inn Hotel. According to the Geotechnical Investigation Report, the effects of strong seismic ground shaking can be reduced by observation of sound construction practices and observance of current seismic design codes in accordance with Section 6.9 of the Geotechnical Investigation Report. The proposed Hampton Inn Hotel would implement the seismic design codes to reduce the effects of seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction

According to the Geotechnical Investigation Report, there are very thin (less than 6 inches thick), discontinuous layers of medium dense sand, silty sand and sandy silt below the groundwater on Site 1 that are susceptible to liquefaction. The Geotechnical Investigation Report concluded that considering the depth, thickness, and relative density of the potentially liquefiable layers, the potential for liquefaction-induced ground settlement or lateral spreading is nonexistent.

iv) Landslides

As analyzed in the BDSP EIR, Site 1 is located in a relatively flat, developed area and is not located on or near significant slopes. Therefore, the risk of landslides would be consistent with what was analyzed in the BDSP EIR.

Similarly, subsequent applications for hotel development on any of the other LSMU Sites would require the implementation of BDSP EIR MM GEO-1a and MM GEO-1b to

mitigate any potential impacts. Therefore, the proposed project would not introduce environmental impacts related to fault rupture, strong seismic ground shaking, liquefaction, and landslides or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR Analysis

According to the BDSP EIR, development activities that occur pursuant to the BDSP would involve grading, building construction, paving, and utility installation activities that could result in erosion and sedimentation. Left unabated, the accumulation of sediment in downstream waterways could result in the blockage of flows, potentially causing increased localized ponding or flooding. As such, MM HYD-1a would require the implementation of stormwater quality control measures during construction activities to prevent pollutants from entering downstream waterways. The BDSP EIR concluded that implementation of MM HYD-1a would reduce impacts to less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As discussed in greater detail in Section 9, Hydrology and Water Quality, the proposed Hampton Inn Hotel would include implementation of stormwater quality control measures consistent with MM HYD-1a and would not result in greater impacts than what was analyzed in the BDSP EIR. Similarly, subsequent applications for hotel development on any of the other LSMU Sites would require the implementation of BDSP EIR MM HYD-1a to mitigate any potential impacts. Therefore, the proposed project would not introduce environmental impacts related to soil erosion or loss of topsoil or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

The BDSP EIR concluded that development within the BDSP area would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of development consistent with the BDSP, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse because the Geotechnical Investigation prepared for the BDSP EIR determined that the soils on the BDSP area are suitable to support urban development, provided that standard grading and soil engineering practices are implemented. It was concluded in the BDSP EIR that the development within the BDSP area would not be susceptible to or cause landslides, lateral spreading, subsidence, collapse, ground failure, liquefaction, or liquefaction-related phenomena, and that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The Geotechnical Investigation Report prepared for the proposed Hampton Inn Hotel determined that the depth, thickness, and relative density of the potentially liquefiable layers indicate that the potential for liquefaction-induced ground settlement, surface manifestations (i.e., sand boils) and lateral spreading is nonexistent. Consistent with the BDSP EIR, the

Geotechnical Investigation Report indicated that the proposed development of the site is feasible from a geologic hazards and geotechnical engineering perspective. As such, the proposed Hampton Inn Hotel would not result in any impacts beyond what was analyzed in the BDSP EIR. Similarly, subsequent applications for hotel development on any of the other LSMU Sites would require the implementation of BDSP EIR MM GEO-1a and MM GEO-1b to mitigate any potential impacts. The proposed project would not introduce environmental impacts related to on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

d) Summary of BDSP EIR Analysis

It was concluded in the BDSP EIR that the BDSP area would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property, but that MM GEO-1b, which requires the preparation of a design-level geotechnical study that complies with the applicable requirements of the latest adopted edition of the California Building Standards Code to identify grading and soil engineering practices, would ensure that expansive soil conditions are abated. With the implementation of MM GEO-1b, impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Consistent with MM GEO-1b, a Geotechnical Investigation Report was prepared for the proposed Hampton Inn Hotel. According to the Geotechnical Investigation Report, soil materials underlying the site are considered highly expansive. There are several methods available for reducing the adverse effects of expansive soils. These include removing the expansive soils, replacing expansive soils with non-expansive engineered fill, deepening foundations to develop support below the zone of significant seasonal moisture change (about 24 to 36 inches), designing foundation/slab systems to resist uplift pressures generated by swelling soils, and/or providing drainage and landscaping to minimize seasonal moisture fluctuations in the near-surface soils. Drainage and landscaping improvements adjacent to slabs and foundations should be designed to promote efficient runoff during the rainy season and to provide sufficient irrigation in landscaped areas to prevent drying of the upper soils during the summer. Consistent with the BDSP EIR, implementation of the recommendations on pages 11 through 19 of the Geotechnical Investigation Report would reduce impacts associated with expansive soils. Similarly, subsequent applications for hotel development on any of the other LSMU Sites would require the implementation of BDSP EIR MM GEO-1a and MM GEO-1b to mitigate any potential impacts. Therefore, the proposed project would not introduce environmental impacts related to expansive soil or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

e) Summary of BDSP EIR Analysis

New development that occurs pursuant to the Broadway District Specific Plan would be served by sanitary sewer service provided by the City of American Canyon. No septic systems or wastewater disposal systems would be used. No impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Consistent with the BDSP EIR, the development under the LSMU Revision, including the Hampton Inn Hotel, would not use septic tank systems or other alternative wastewater disposal systems. No new impacts associated with septic tank systems or alternative wastewater disposal would occur. Therefore, the proposed project would not introduce environmental impacts related to septic tank or alternative wastewater disposal systems or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

f) Summary of BDSP EIR Analysis

The paleontological records search commissioned through the University of California Berkeley Museum of Paleontology indicate that there are no vertebrate fossil localities that have been previously recorded within the BDSP boundaries. However, there has been one fossil locality that is located within a 0.5-mile radius of the BDSP area, or more than 1 mile away from the LSMU Sites. The one fossil locality (D8020) was located east of Oat Hill and has been identified as Paleocene invertebrates from the Purisima Formation. The implementation of MM CUL-3 would reduce this potential impact to a less than significant level.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The BDSP EIR anticipated development of the LSMU Sites. The change in land uses proposed by the LSMU Revision does not result in more intense or extensive construction activity. Accordingly, it does not result in any change to the analysis or conclusions in the BDSP EIR. The implementation of MM CUL-3 would be required as specified by the MMRP for the BDSP EIR.

A Paleontological Records Search was conducted for the proposed Hampton Inn Hotel and its 0.5-mile radius (Appendix C). The paleontological records search focused on the Pleistocene alluvium and Cretaceous Great Valley Sequence. No vertebrate or plant localities are recorded for Napa County. There are no significant paleontological resources recorded from the Great Valley Sequence (or Group) in Napa County. Although highly unlikely, should any significant paleontological resources be unearthed during project construction, BDSP EIR MM CUL-3 would be implemented to reduce project impacts to less than significant. Similarly, subsequent applications for hotel development on any of the other LSMU Sites would require the implementation of BDSP EIR MM CUL-3 to mitigate any potential impacts. Therefore, the proposed project would not introduce environmental impacts related to paleontological resources or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM CUL-3

If potential fossils are discovered during project implementation, all earthwork or other types of ground disturbance within 100 feet of the find shall stop immediately until a qualified professional paleontologist can assess the nature and importance of the find. The paleontologist shall report his/her findings to the City of American Canyon. Based on the scientific value or uniqueness of the find, the paleontologist shall either record the find and recommend that the City of American Canyon allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist shall, if required, propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations will be consistent with Society of Vertebrate Paleontology guidelines and currently accepted scientific practice. If required, treatment for fossil remains shall include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and, if required, shall also include preparation of a report for publication describing the finds.

BDSP EIR MM GEO-1a

Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan that are located within an Alquist-Priolo Special Study Zone, the City of American Canyon shall verify that the applicant has commissioned a fault investigation. The fault investigation shall be prepared by a licensed geologist or geotechnical engineer and determine the precise location of the West Napa Fault in relation to the proposed project. All recommended fault setbacks set forth in the fault investigation shall be shown on project plans.

BDSP EIR MM GEO-1b

Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan, the City of American Canyon shall verify that the applicant has commissioned a design-level geotechnical report. The report shall be prepared by a licensed geologist or geotechnical engineer and determine whether the geologic conditions of the site in question are suitable for development. All recommendations for grading, soil engineering, and construction shall be incorporated into the project plans.

BDSP EIR MM HYD-1a

Prior to issuance of grading permits for development projects that occur pursuant to the Specific Plan, the City of American Canyon shall verify that the applicant has prepared a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the

requirements of the statewide Construction General Permit. The SWPPP shall be designed to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled; (2) where not otherwise required to be under a Regional Water Quality Control Board permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; (3) site best management practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity; and (4) stabilization BMPs are installed to reduce or eliminate pollutants after construction are completed. The SWPPP shall be prepared by a qualified SWPPP developer. The SWPPP shall include the minimum BMPs required for the identified Risk Level. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook—Construction or the Caltrans Stormwater Quality Handbook Construction Site BMPs Manual.

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts related to geology and soils. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
8. Greenhouse Gas Emissions *Would the project:*					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant.	No	No	No	None
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	Less than significant.	No	No	No	None

Discussion

a) Summary of BDSP EIR

It was concluded in the BDSP EIR that development and land use activities contemplated by the BDSP would generate direct and indirect GHG emissions; however, these emissions would not result in a significant impact on the environment.

Construction

The BAAQMD does not presently provide a construction-related GHG significance threshold but recommends that construction-generated GHGs be quantified and disclosed. The BAAQMD also recommends that lead agencies (in this case, the City of American Canyon) determine the level of significance of construction GHG emissions in relation to meeting AB 32 GHG reduction goals. As discussed in the BDSP EIR, buildout of the BDSP EIR would emit GHGs from upstream emission sources and direct sources. However, the BAAQMD does not have a recommended assessment methodology or threshold for plan-level, construction-generated GHGs. Upstream emissions were not estimated because they were not within the control of the project and to do so would have been speculative.

Operation

The BDSP EIR calculated operational GHG emissions with CalEEMod, Version 2016.3.2 using the trip generation estimates provided in the TIA and compared them to the BAAQMD's 4.6 metric tons (MT) of carbon dioxide equivalent (CO_2e) per service population per year for project-level GHG generation from operation of the proposed Hampton Inn Hotel. The full buildout of the

BDSP is expected in 2036. Because 2036 is not offered as an operational year in CalEEMod Version 2016.3.2, emissions were estimated in 2035. Operation after full buildout in 2035 was estimated to generate approximately 23,153 MT CO_2e per year. The operational emissions were less than the BAAQMD's applicable GHG emissions threshold. The BDSP's GHG impact was determined to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Both construction and operational activities have the potential to generate GHG emissions. Development consistent with the LSMU Revision, including the proposed Hampton Inn Hotel would generate GHG emissions during temporary (short-term) construction activities such as demolition, site grading, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from the site, asphalt paving, and construction worker vehicle trips similar to the construction activities analyzed in the BDSM EIR. On-site construction activities would vary depending on the level of construction activity.

Long-term, operational GHG emissions that would result from development of the LSMU Sites, including the proposed Hampton Inn Hotel would include generated vehicular traffic, operation of any landscaping equipment, off-site generation of electrical power over the life of the proposed development, the energy required to convey water to and wastewater from site, and emissions associated with the hauling and disposal of solid waste.

Neither the City of American Canyon nor BAAQMD has an adopted threshold of significance for construction-related GHG emissions. Because construction would be temporary and would not result in a permanent increase in emissions, development consistent with the LSMU Revision, including the proposed Hampton Inn Hotel would not interfere with the implementation of Assembly Bill (AB) 32, or Senate Bill (SB) 32. In the absence of a construction emission threshold, to determine the total emissions from the proposed Hampton Inn Hotel, the total emissions generated during construction were amortized based on the assumed life of the development (30 years) and added to the operational emissions. Finally, the net change in GHG emissions was determined by subtracting the GHG emissions from the existing site operations from the proposed Hampton Inn Hotel's GHG emissions.

The 2017 BAAQMD CEQA Guidelines[21] contain the following thresholds for operational GHG emissions:

> For land use development projects (including residential, commercial, industrial, and public land uses and facilities), the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons (MT) per year of carbon dioxide equivalent (CO_2e); or 4.6 MT CO_2e/service population (residents plus employees)/year.

[21] Bay Area Air Quality Management District. 2017. California Environmental Quality Act Air Quality Guidelines. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 6, 2021.

To determine significance, the proposed Hampton Inn Hotel's GHG emissions are assessed against the 2020 BAAQMD bright line threshold of 1,100 MT CO2e/year.

Proposed Hampton Inn Hotel Construction

The proposed Hampton Inn Hotel would emit GHG emissions during construction from the off-road equipment, worker vehicles, and any vendor and hauling trips that may occur. Appendix A of this Addendum includes the detailed construction assumptions. The BAAQMD does not presently provide a construction-related GHG generation threshold but recommends that construction-generated GHGs be quantified and disclosed. Table 13 shows the total GHG emissions generated during all phases of construction.

Table 13: Construction Greenhouse Gas Emissions

Construction Activity	MT CO_2e
Demolition—2021	16.3
Site Preparation—2021	22.2
Grading—2021	42.5
Building Construction—2021	54.5
Paving—2021	29.1
Building Construction—2022	402.2
Paving—2022	41.5
Architectural Coating—2022	15.8
Building Construction—2023	7.7
Architectural Coating—2023	0.8
Total Construction Emissions	**684.3**
Emissions Amortized Over 30 Years[1]	**23**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
[1] Construction GHG emissions are amortized over the 30-year lifetime of the Hampton Inn Hotel.
Source: CalEEMod Output (Appendix A).

As shown in Table 12, the proposed Hampton Inn Hotel 's construction is estimated to generate a maximum of approximately 684 MT CO_2e over the construction time-period. As discussed above, the GHG emissions generated during the construction of the proposed Hampton Inn Hotel were amortized over the development's 30-year lifetime resulting in an annual construction total of 23 MTCO_2e per year and added to the estimated annual GHG emissions during operation of the proposed Hampton Inn Hotel.

Proposed Hampton Inn Hotel Operation

Operational or long-term emissions occur over the life of the proposed Hampton Inn Hotel. The major sources for operational GHG emissions include:

1. **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the hotel site. Vehicle trips associated with operations would primarily include visitor trips to and from the proposed Hampton Inn Hotel. Trip generation rates used in estimating mobile-source emissions were consistent with those presented in the traffic analysis prepared for the proposed Hampton Inn Hotel by W-Trans.[22]
2. **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the proposed Hampton Inn Hotel. The proposed Hampton Inn Hotel would be served with electricity by MCE.[23] The electricity would be generated by MCE and delivered by PG&E.[24] Per AB 117, which establishes an auto-enrollment requirement for community choice aggregators, the proposed Hampton Inn Hotel would be automatically enrolled in the MCE Program, unless they opt out and choose to be served by PG&E. The CO_2 intensity factors in the operational runs were adjusted to match the most recent data available for PG&E.[25]
3. **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the hotel site. Biogenic GHG emissions generated from water treatment and transport emission sources are not included in this analysis, consistent with the BAAQMD's 2017 CEQA Air Quality Guidelines.[26]
4. **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the proposed Hampton Inn Hotel. Biogenic GHG emissions generated from waste emission sources are not included in this analysis, consistent with the BAAQMD's 2017 CEQA Air Quality Guidelines.[27]

Operational GHG emissions of the proposed Hampton Inn Hotel are shown in Table 14. The proposed Hampton Inn Hotel 's net long-term operations would generate approximately 867 MT CO_2e per year starting in 2023. The estimated net operational emissions for the proposed Hampton Inn Hotel were compared with the BAAQMD threshold of 1,100 MT CO_2e per year to determine significance when the proposed Hampton Inn Hotel first becomes operational in the year 2023. Appendix A of this analysis provides the full assumptions and detailed modeling results.

[22] W-Trans, 2021. Addendum to the EIR for the Broadway District Specific Plan. June 4.

[23] Marin Clean Energy (MCE). 2021. Website: https://www.mcecleanenergy.org/ Accessed April 6, 2021.

[24] Marin Clean Energy. 2021. Terms & Conditions of Service. Website: https://www.mcecleanenergy.org/terms_and_conditions/ Accessed April 6, 2021.

[25] Pacific Gas and Electric Company (PG&E). 2020. *Corporate Responsibility and Sustainability Report 2020*. Website: https://www.responsibilityreports.com/HostedData/ResponsibilityReports/PDF/NYSE_PCG_2020.pdf. Accessed April 2, 2021.

[26] Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en Accessed April 6, 2021.

[27] Ibid.

Table 14: Operational Land Use-Related Greenhouse Gas Emissions

Emission Source	Year 2023 Total Emissions (MT CO_2e per year)
Area	0
Energy	183
Mobile (Vehicles)	686
Waste	18
Water	4
Amortized Construction Emissions	23
Total Hampton Inn Hotel Emissions	*915*
Existing Emissions	*48*
Annual Net Hampton Inn Hotel Emissions	*867*
Applicable BAAQMD Threshold (MT CO_2e/year)	**1,100**
Does the proposed Hampton Inn Hotel exceed threshold?	**No**
Notes: MT CO_2e = metric tons of carbon dioxide equivalent. Unrounded results used to calculate totals.	

As shown in Table 14, the proposed Hampton Inn Hotel's net long-term operational GHG emissions would not exceed the BAAQMD recommended threshold of 1,100 MT CO_2e per year; therefore, operational GHG emission impacts would be less than significant. The BDSP EIR anticipated development of the LSMU Sites with commercial uses. The change in land uses proposed by the LSMU Revision does not result in more intense or extensive construction activity or increased operational emissions. Accordingly, it does not result in any change to the analysis or conclusions in the BDSP EIR. Based on the project-specific analysis provided above for the proposed Hampton Inn Hotel, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to GHG emissions during construction and operation. Therefore, the proposed project would not introduce new environmental impacts related to GHG emissions or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR

The BDSP EIR concluded that development and land use activities contemplated by the Specific Plan would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of GHGs. The BDSP EIR states that the program and policy recommendations contained in the City of American Canyon Energy Efficiency Climate Action Plan (EECAP) were reviewed to determine if development of the project would conflict with any of the recommendations. The EECAP outlines a course of action to reduce community-wide GHG emissions generated within the City of American Canyon.

The American Canyon General Plan Circulation Element contemplates mobility improvements that would promote the development of mobility enhancements are intended to improve both motorized and non-motorized circulation within the Broadway District. Consistent with these objectives, the BDSP's design encourages development that results in reduced GHG emissions.

If a project is less than BAAQMD's threshold of significance for GHGs, it stands to reason that the project would not substantially conflict with existing California legislation adopted to reduce statewide GHG emissions. As described in question a), buildout of the BDSP would not exceed BAAQMD's threshold of significance for GHG emissions and would result in a less than significant impact. Therefore, the BDSP would not substantially conflict with the emission reduction requirements of AB 32.

The BDSP was found to be consistent with all applicable plans, policies, and regulations adopted for the purpose of reducing emissions of greenhouse gases, including the City's EECAP. As a result, it was determined that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The principal state plan and policy for GHG emission reduction targets are set forth in Executive Order S-03-05, AB 32, the California Global Warming Solutions Act of 2006, and the subsequent SB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. AB 32 required the ARB to develop a Scoping Plan that describes California's approach to reduce GHGs to achieve the 2020 emission target. The 2017 Scoping Plan Update reflects the 2030 target of a 40 percent reduction below 1990 levels as set by Executive Order B-30-15 and codified by SB 32. Significance of impact is determined by compliance with the City of American Canyon EECAP and project consistency with the ARB 2017 Climate Change Scoping Update.

Site 1 is adjacent to SR-29. The proposed Hampton Inn Hotel would be served by the Vine bus system, operated by the Napa Valley Transportation Authority. The Vine provides transit opportunities throughout Napa County. Site 1 is approximately 0.5 mile east of Donaldson Way and Benton Way, which hosts northbound and southbound bus stops for the Vine bus route 11. Site 1 is 0.2 mile northeast from the closest northbound and southbound stops for route 11x and route 29 stops at the American Canyon Post Office. Route 11 and 11x extend from the Redwood Park n Ride in Napa, CA to the Vallejo Ferry Terminal. Route 29 extends from the Redwood Park n Ride to the El Cerrito Del Norte BART station.

City of American Canyon EECAP

The City of American Canyon adopted its EECAP in 2012.[28] The EECAP identifies reduction measures and implementation responsibilities that the City used to achieve the State-recommended GHG emissions reduction target of 15 percent below 2005 emission levels by the year 2020 to fulfill the requirements of AB 32 and SB 375. Many of these measures are not mandatory or apply to government agencies rather than a project applicant or lead agency.

[28] City of American Canyon. 2012. Energy Efficiency Climate Action Plan. Website: https://www.cityofamericancanyon.org/home/showdocument?id=5024 Accessed April 7, 2021.

The City would impose the requirements of these measures as applicable through the proposed Hampton Inn Hotel's Conditions of Approval. Table 15 shows the proposed Hampton Inn Hotel's compliance with all relevant measures.

Table 15: Consistency with American Canyon EECAP

CAP Measure	Description	Applicability and Compliance
Community Strategy 1. Existing Uses–Non-Residential. Increase voluntary energy efficiency efforts and participation in PG&E energy efficiency programs by targeting sectors that are responsible for the largest portions of energy use, currently have low or medium participation rates, and/or have low savings-to-use ratios.		
Community Measure C-1: Targeted Energy Efficiency Outreach to Non-Residential Energy Customers.	Use PG&E data to target specific Non-Residential customer sectors for participation in PG&E programs or other local, regional, or state programs.	**Not Applicable**. This measure applies to the City and/or PG&E outreach effort.
Community Measure C-2: Develop of Voluntary Non-Residential Energy Efficiency Checklist.	Build upon the energy disclosure requirements of AB 1103 to develop a voluntary Non-Residential energy efficiency checklist that will be available at the time of building sale.	**Not Applicable**. This measure applies to the City's responsibility to develop a non-residential energy efficiency checklist.
Community Measure C-3: Participate in a Non-residential Property Assessed Clean Energy Program.	Provide additional financing opportunities for energy efficiency improvements for commercial structures by participating in a Property Assessed Clean Energy program.	**Not Applicable**. This measure applies to the City's responsibility to provide financing opportunities for participation in energy efficiency programs.
Community Strategy 3: New Development–Non-Residential. Ensure new development exceeds California's Title 24 energy efficiency standard by 15 percent or more.		
Community Measure C-6: Savings By Design for New Non-Residential Construction.	Require participation in PG&E's Savings by Design Program (or future iterations of such a program) for all new Non-Residential new construction projects.	**Not Applicable**. This measure applies to the City's responsibility for requiring participation in PG&E's Savings by Design Program, which is currently not accepting new applications.[29]
Community Measure C-7: Require Energy Efficiency Beyond State Code for New Non-Residential Construction	Through 2013, provide a streamlined permit process for new Non-Residential construction projects that incorporate energy efficiency improvements over Title 24, include all items on a voluntary energy efficiency checklist, or include renewable energy	**Consistent.** As a condition of approval, the Applicant shall provide a letter from an energy consultant that confirms the proposed Hampton Inn Hotel would exceed compliance with the Title 24 Part 6 Energy standards by 15 percent (pursuant to BDSP section 2.2).

[29] Pacific Gas & Electric Company (PG&E). 2021. Explore the Savings By Design Program. Website: https://www.pge.com/en_US/large-business/save-energy-and-money/facility-improvement/savings-by-design.page?WT.mc_id=Vanity_savingsbydesign. Accessed April 28, 2021.

CAP Measure	Description	Applicability and Compliance
	improvements. Starting in 2014 or 2017, require that all new construction achieve Tier 1 of Title 24 standards (15 percent more stringent than the mandatory standards.)	
Community Strategy 6. Renewable Energy. Increase the number of distributed renewable energy installations on residential and Non-Residential properties to 3 new non-residential sites/year and 15 residential sites/year by 2020.		
Community Measure C-11: Solar Ready Roofs for New Construction	Require solar ready roofs that are pre-wired and ready for the installation of solar photovoltaic panels and solar water heating systems.	**Consistent.** The proposed Hampton Inn Hotel would be required to comply with Title 24, Part 6, Subchapter 2 of the 2019 California Building Code, which requires that new hotel/motel developments with 10 or fewer habitable floors design rooftops to accommodate future installation of solar equipment.
Community Strategy 7. Water Conservation. Reduce per capita community water use 20 percent by 2020 from the 2005 baseline.		
Community Measure C-13: Community Water Reduction	Reduce community water use through building and landscape design and improvements.	**Consistent**. The proposed Hampton Inn Hotel would include a Smart System to reduce water usage. The proposed Hampton Inn Hotel site would have an Estimate Total Water Use (ETWU) of 356,819 gallons per year.
Source of Measures: City of American Canyon. 2012. Energy Efficiency Climate Action Plan. Website: https://www.cityofamericancanyon.org/home/showdocument?id=5024 Accessed April 7, 2021.		

As shown in Table 15, the proposed Hampton Inn Hotel incorporates a number of features that would minimize GHG emissions. With these features, the proposed Hampton Inn Hotel would not conflict with the applicable measures and implementing actions identified by the City of American Canyon EECAP.

SB 32 2017 Scoping Plan Update

As discussed above, the 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017, and is used herein along with the City's EECAP as the basis for determining the impact significance resulting from the proposed Hampton Inn Hotel. Table 16 provides an analysis of the proposed Hampton Inn Hotel's consistency with the 2017 Scoping Plan Update measures. As shown in Table 16, none of the measures are applicable to the proposed Hampton Inn Hotel.

Table 16: Consistency with SB 32 2017 Scoping Plan Update

2017 Scoping Plan Update Reduction Measure	Project Consistency
SB 350 50 Percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	**Not Applicable.** This measure would apply to utilities and not to individual development projects. The proposed Hampton Inn Hotel would purchase electricity from a utility subject to the SB 350 and SB 100 Renewable Portfolio Standards requirements.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	**Not Applicable**. This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time. The proposed Hampton Inn Hotel would comply with BDSP section 2.2 which requires the Hampton Inn Hotel to exceed compliance with the Title 24 Part 6 Energy standards by 15 percent (pursuant to BDSP section 2.2).
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Not Applicable.** This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the buildings at the proposed Hampton Inn Hotel site would benefit from the standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million Zero Emission Vehicles (ZEVs) on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Not Applicable.** This measure is not applicable to the proposed Hampton Inn Hotel; however, vehicles accessing the buildings at the proposed Hampton Inn Hotel site would benefit from the increased availability of cleaner technology and fuels.
Sustainable Freight Action Plan The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Not Applicable.** The proposed Hampton Inn Hotel would not have any major freight vehicles operational.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Not Applicable.** The proposed Hampton Inn Hotel would not include major sources of black carbon.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities' strategy for reduction of per capita vehicle miles traveled.	**Not Applicable.** The proposed Hampton Inn Hotel does not include the development of a Regional Transportation Plan.

2017 Scoping Plan Update Reduction Measure	Project Consistency
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Not Applicable.** The proposed Hampton Inn Hotel is not one targeted by the cap-and-trade system regulations, and, therefore, this measure does not apply to the proposed Hampton Inn Hotel.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the Governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not Applicable**. The proposed Hampton Inn Hotel is in a built-up urban area and would not be considered natural or working lands.
Source: California Air Resource Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. November. Website: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed April 28, 2021.	

As shown in Table 16, implementation of the proposed Hampton Inn Hotel would not conflict with the reduction measures proposed in SB 32.

As displayed in Table 15 and Table 16, the proposed Hampton Inn Hotel would not result in a significant impact related to conflicting with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The BDSP EIR anticipated development of the LSMU Sites. The change in land uses proposed by the LSMU Revision to allow hotels does not result in conflicts. Accordingly, it does not result in any change to the analysis or conclusions in the BDSP EIR. Based on the project-specific analysis provided above for the proposed Hampton Inn Hotel, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to conflicts with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, the proposed project would not introduce new environmental impacts related to GHG emissions or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

There is no new information identifying new significant effects, nor is there an increase in the severity of previously identified impacts in the BDSP EIR related to GHG emissions. The conclusions from the BDSP EIR remain unchanged when considering the changes to the proposed project. No additional analysis is required.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
9. Hazards and Hazardous Materials *Would the project:*					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than significant impact	No	No	No	None
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than significant impact	No	No	No	None
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less than significant impact	No	No	No	None
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less than significant impact	No	No	No	None

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Less than significant impact	No	No	No	None
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than significant impact	No	No	No	None
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No impact	No	No	No	None

Discussion

a–b) Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that buildout of the BDSP would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. According to the BDSP EIR, hazardous materials such as such as gasoline, diesel, oil, grease, mechanical fluids, paints, and cleaning solvents could be present during construction activities. Additionally, cleaning solvents, diesel, gasoline, grease/degreasers, mechanical fluids and oil would be present on-site as part of daily operations.

The BDSP boundaries contain numerous structures that predate the federal prohibition of ACMs. Thus, it was determined that there is a high potential for ACMs to be present within the BDSP area.

Additionally, it was determined that the buildout of the BDSP would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Land uses that handle large quantities of hazardous materials are generally agricultural, industrial, or resource extraction in nature. These types of land uses were not contemplated by the BDSP. These materials would not be considered a potential risk to human health or the environment and that releases that could potentially expose substantial numbers of people or the environment to harm is not anticipated by any of the BDSP land uses. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Consistent with the BDSP EIR, development consistent with the LSMU Revisions, including the proposed Hampton Inn Hotel would utilize hazardous materials such as such as gasoline, diesel, oil, grease, mechanical fluids, paints, and cleaning solvents during construction activities. Development of the LSMU Sites, including construction of the proposed Hampton Inn Hotel would occur within the area analyzed in the BDSP EIR, would involve similar types of construction as what was analyzed in the BDSP EIR, would use the same hazardous materials, and would be subject to similar conditions with respect to hazards and hazardous materials as what was analyzed in the BDSP EIR. Therefore, neither the LSMU Revision nor the proposed Hampton Inn Hotel would introduce any hazardous materials that were not analyzed previously in the BDSP EIR, and neither the LSMU Revision nor the proposed Hampton Inn Hotel would result in a new or substantially greater significant impact with regard to hazards and hazardous materials. Construction of a hotel on any of the LSMU Sites would result in similar conclusions related to hazards and hazardous materials. Therefore, the proposed project would not introduce environmental impacts through the routine transport, use, or disposal of hazardous materials or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that buildout of the BDSP would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. According to the BDSP EIR, Napa Junction Elementary School is located within the BDSP boundaries and is within the "Business Park" subarea. Additionally, Canyon Oaks Elementary School, Donaldson Way Elementary School, and American Canyon High School are within 0.35 mile, 0.40 mile, and 0.65 mile of the BDSP boundaries, respectively. During preparation of the BDSP EIR, Napa Valley Unified School District was in the process of finding a new location for Napa Junction Elementary School. The BDSP EIR determined that because land uses that emit hazardous emissions or handle hazardous materials, such as agricultural, industrial, or resource extraction are not contemplated by the BDSP, buildout of the BDSP would not emit hazardous emissions or handle hazardous materials within 0.25 mile of a school. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The nearest school is Donaldson Way Elementary School, located at 430 Donaldson Way, 1 mile west of the LSMU Sites. Therefore, none of the LSMU Sites are located within 0.25 mile of a school. Consistent with the BDSP EIR, construction of a hotel on any of the LSMU Sites would not create land uses that emit hazardous emissions or handle hazardous materials, such as agricultural, industrial, or resource extraction. This precludes the possibility that the proposed project would result in the emission of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to hazardous emissions or materials within 0.25 mile of a school than those previously analyzed in the BDSP EIR. No additional analysis is required.

d) Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that the BDSP would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. According to the BDSP EIR, there are eight recorded sites within the BDSP boundaries that are listed on hazardous materials databases compiled pursuant to Government Code Section 65962.5. All of the sites are associated with leaking underground storage tanks. At the time of BDSP EIR preparation, seven of the sites were listed as "Closed," signifying that they have been remediated to the satisfaction of the agency with oversight. The lone site listed as "Open" was located at Caltrans Route 29 Post-Mile 1.13 (3466 Broadway Street); this site is listed as closed as of May 24, 2019.[30] Therefore, the BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The BDSP EIR anticipated development of the LSMU Sites. None of the LSMU Sites are included on a list of hazardous materials sites. The change in land uses proposed by the LSMU Revision does not result in more intense or extensive construction activity. Accordingly, it does not result in any change to the analysis or conclusions in the BDSP EIR regarding hazardous sites. A Phase I Environmental Site Assessment (Phase I ESA) prepared for the proposed Hampton Inn Hotel by Environmental Resource Group, Inc., in April 2016 (Appendix E) determined that Site 1 was undeveloped prior to the 1950s and was developed with the existing buildings between the early 1950s and 1984. Structures built before the 1970s were constructed typically with ACM. Demolition and construction activities would be required to adhere to BAAQMD Regulation 11, Rule 2, which governs the proper handling and disposal of ACM for demolition, renovation, and manufacturing activities in the Bay Area. With required adherence to BAAQMD regulations regarding ACM, impacts would be less than significant.

[30] California State Water Resources Control Board (State Water Board). 2021. GeoTracker – Caltrans Route 29 Post Mile 1.13 (at Napa Casino) (T10000004917). Website: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000004917. Accessed July 12, 2021.

According to the assessment conducted as part of the Phase I ESA, which included a records review of environmental and hazardous sites databases, an analysis of the site's current and historical uses, and a site reconnaissance, there is no evidence of adverse Recognized Environmental Conditions (RECs) or potential RECs[31] associated with Site 1. Additionally, there was no evidence of Historical RECs[32] or Controlled RECs.[33] Additionally, the Phase I ESA determined that a former irrigation water supply well exists on the site; however, sampling indicated that no petroleum hydrocarbon contaminants are present in groundwater beneath the site. The proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to hazardous materials sites than those previously analyzed in the BDSP EIR. No additional analysis is required.

e) Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that for a future development located within an airport land use plan or, where such a plan has not been adopted, within 2.0 miles of a public airport or public use airport, the future development would not result in a safety hazard for people residing or working the project area. The BDSP determined that the northern portion of the BDSP area is within 2.0 miles of Napa County Airport, but that buildout of the BDSP would not result in safety hazards for persons residing or working in the BDSP vicinity. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The LSMU sites are 4.6 miles south of Napa County Airport. According to the Airport Land Use Compatibility Plan, the LSMU sites are not located within the boundaries of the airport influence area.[34] Because the sites are not located within 2.0 miles of a public or public use airport, and because the sites are not in an airport influence area, the proposed project would not result in safety hazards or excessive noise beyond those analyzed in the BDSP EIR. Additionally, there are no private airstrips in the vicinity of the project site. Therefore, the proposed project would not have any impacts related to a private airstrip and would not create any hazards for people in the area. Therefore, the proposed project would not introduce

[31] REC is defined as, "the presence or likely presence of any hazardous substances or petroleum products, in, on, or at a Target Property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

[32] Historic REC is defined as, "a past release of any hazardous substances or petroleum products that has occurred in connection with the Target Property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the Target Property to any required controls."

[33] Controlled REC is defined as, "a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a No Further Action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (e.g. Target Property use restrictions, AULS, institutional controls, or engineering controls) . . . a Controlled REC shall be listed in the Findings Section of the Phase I ESA Report, and as a REC in the Conclusions Section of the . . . report."

[34] Napa County, California. 1999. Napa County Airport Land Use Commission Airport Land Use Compatibility Plan, Figure 3a, Compatibility Plan. Website: https://www.countyofnapa.org/DocumentCenter/View/1980/Airport-Land-Use-Compatibility-Plan-PDF. Accessed March 9, 2021.

environmental impacts related to a public or public use airport or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

f) Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that the BDSP would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. According to the BDSP EIR, the BDSP included several mobility enhancements and new connections that improve mobility within the subareas, and by extension, emergency response and evacuation. The BDSP EIR determined that other improvements, such as trail connections, would have no impact on emergency access or evacuation. The BDSP EIR concluded that development consistent with the Specific Plan would not impair emergency response or evacuation in the BDSP vicinity and that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed Hampton Inn Hotel would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed Hampton Inn Hotel would comply with the California Fire Code requirements for emergency access. The proposed Hampton Inn Hotel does not include changes that could potentially interfere with an emergency response plan or an emergency evacuation plan. Furthermore, the city traffic engineer would review and approve the site plan prior to approval. Similarly, the proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. Therefore, the proposed project would not introduce environmental impacts related to an adopted emergency response plan or emergency evacuation plan or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

g) Summary of the BDSP EIR

According to the BDSP EIR, the BDSP boundaries are surrounded by urban uses and infrastructure on three sides and undeveloped land on the fourth. These characteristics preclude the possibility of the BDSP boundaries being exposed to wildland fires. It was determined that no impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The LSMU sites are not in a High Fire Hazard Severity Zone or in a Very High Fire Hazard Severity Zone as mapped by California Department of Forestry and Fire Protection (CAL FIRE), and the LSMU sites are not located in a State Responsibility Area.[35] The LSMU sites are urbanized and is not adjacent to wildland areas. As such, the proposed project would not directly or indirectly expose people or structures to a significant risk of loss, injury or death involving wildland fires. Therefore, the proposed project would not introduce environmental

[35] California Department of Forestry and Fire Protection (CAL FIRE.) 2021. FHSZ Viewer. Website: https://egis.fire.ca.gov/FHSZ/. Accessed March 9, 2021.

impacts related to wildland fires or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to hazards and hazardous materials beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
10. Hydrology and Water Quality *Would the project:*					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than significant with mitigation	No	No	No	MM HYD-1a, MM HYD-1b
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than significant impact	No	No	No	None
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	Less than significant impact.	No	No	No	None
(i) result in substantial erosion or siltation on- or off-site;	Less than significant impact	No	No	No	None
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	Less than significant impact	No	No	No	None
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Less than significant impact	No	No	No	None

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
(iv) impede or redirect flood flows?	Less than significant impact	No	No	No	None
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No impact	No	No	No	None
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	None	No	No	No	None

Discussion

a) Summary of BDSP EIR Analysis

The BDSP EIR determined that construction and operational activities associated with the BDSP have the potential to degrade water quality in downstream water bodies. According to the BDSP EIR, buildout of the Specific Plan has the potential to degrade water quality arising from (1) short-term land disturbance from construction activities and presence of contaminants associated with construction machinery, and (2) long-term changes to land use and drainage patterns that may increase the delivery of sediments, nutrients, organic compounds, trash/debris, and other contaminants to waterways tributary to the Napa River. MM HYD-1a and MM HYD-1b were proposed, which would require implementation of a Stormwater Control Plan and an operation and maintenance program to ensure stormwater controls. The BDSP EIR concluded than impacts would be less than significant with the implementation of MM HYD-1a and MM HYD-1b.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The BDSP EIR anticipated development of the LSMU Sites. The change in land uses proposed by the LSMU Revision does not result in more intense or extensive construction or operational activity that has the potential to degrade water quality in downstream water bodies. Accordingly, it does not result in any change to the analysis or conclusions in the BDSP EIR. According to the Hydrology/Hydraulic Study prepared for the proposed Hampton Inn Hotel (Appendix F), under the existing conditions, runoff from Site 1 drains to the southwest corner of the site, which drains to an existing ditch on the southern property. The proposed Hampton Inn Hotel would include five bioretention areas that would be used to detain and treat runoff and reduce the peak flow rate from impervious areas, as well as construction of a new storm system through the northwest property and construction of a 12-inch storm drainpipe on

Donaldson Way that would connect to the City's existing storm drain system at the intersection of Donaldson Way and James Road. According to the Hydrology/Hydraulic Study, the peak discharge of Site 1 would be reduced under the proposed conditions. Additionally, the proposed Hampton Inn Hotel would implement BDSP EIR MM HYD-1a and MM HYD-1b by implementing a Stormwater Control Plan and an operation and maintenance program. Moreover, construction of a hotel on any of the LSMU Sites would be required to implement BDSP EIR MM HYD-1a and MM HYD-1b to address stormwater impacts. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with water quality than those previously analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR Analysis

The BDSP EIR determined that impacts on groundwater would be less than significant. According to the BDSP EIR, buildout of the BDSP would not contribute to groundwater overdraft because the BDSP area would be served by potable water service provided by the City of American Canyon, and no groundwater wells would be drilled on-site. Additionally, the BDSP EIR determined that buildout of the BDSP would not impair groundwater recharge because soils that underlie the BDSP area are mostly clay, which have a very low infiltration rate—particularly when thoroughly wetted—and thus offer marginal groundwater recharge qualities. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Consistent with the discussion and analysis in the BDSP EIR, the proposed project would be served by the existing potable water service provided by the City of American Canyon. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with groundwater supplies or groundwater recharge than those previously analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

The BDSP EIR determined that the development consistent with the BDSP would not contribute runoff to downstream storm drainage facilities that would result in the potential for flooding, erosion or siltation, or create runoff water which would exceed the capacity of existing or planned stormwater drainage systems. According to the BDSP EIR, buildout of the BDSP would increase the impervious surface of the BDSP area, but compliance with the City's post-development stormwater requirements would ensure that that new development captures, detains, and regulates the release of the additional runoff generated by new impervious surfaces in a manner that avoids inundating downstream stormwater facilities such that flooding occurs.

Pursuant to the requirements of the applicable stormwater permits, the City of American Canyon requires new development to address post-development stormwater quality using treatment measures—Low Impact Development (LID) concepts. Common examples of LID

concepts include bioretention basins, landscaping, and designing pervious areas to drain into landscaped areas. LID serves two purposes: treating runoff and reducing the release of runoff during peak events.

When applications for new development are filed with the City of American Canyon, City staff will review project plans for compliance with the City's post-development stormwater requirements. This would ensure that new development captures, detains, and regulates the release of the additional runoff generated by new impervious surfaces in a manner that avoids inundating downstream stormwater facilities. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Development consistent with the LSMU Revision, including the Hampton Inn Hotel, would comply with the City's post-development stormwater requirements. Additionally, as previously discussed, the Hydrology/Hydraulic Study determined that the proposed project would implement bioretention areas and a new storm water system and that the peak discharge of the project site would be reduced under the proposed conditions. The proposed Hampton Inn Hotel would include five bioretention areas and would implement a Stormwater Control Plan and an operation and maintenance program. Therefore, the proposed project would not generate additional runoff. As such, the proposed project would not introduce new impacts or create more severe impacts associated with drainage, drainage systems, runoff, erosion, siltation, or flood flows than those previously analyzed in the BDSP EIR. No additional analysis is required.

d) Summary of BDSP EIR Analysis

According to the BDSP EIR, there are no inland water bodies that could be potentially susceptible to a seiche in the BDSP vicinity. This precludes the possibility of a seiche inundating the BDSP area.

The Association of Bay Area Government's interactive tsunami mapping feature indicates that only the coastal portions of Sonoma, Marin, San Francisco, and San Mateo Counties are susceptible to tsunamis. Areas located near the bay are not considered susceptible to tsunami inundation. This condition precludes the possibility of a tsunami inundating the BDSP area.

There are no steep slopes that would be susceptible to a mudflow in the BDSP vicinity, nor are there any volcanically active features that could produce a mudflow in the City of American Canyon. This precludes the possibility of a mudflow inundating the BDSP area. No impacts would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The LSMU sites are not located within the Southern Gateway sub area of the Specific Plan, and LSMU sites are not within a flood hazard area. Additionally, according to the Hydrology/Hydraulic Study prepared for the proposed Hampton Inn Hotel, the entire project

site is located within FEMA Flood Insurance Map, Community Panel No. 06055C0617F, dated August 3rd, 2016, and is located in Flood Zone X. These areas are determined to be in an area of minimal flood hazard.[36] Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with flood hazard areas than those previously analyzed in the BDSP EIR.

Furthermore, as stated in the BDSP EIR, only the coastal portions of Sonoma, Marin, San Francisco, and San Mateo Counties are susceptible to tsunamis, and areas located near the bay are not considered susceptible to tsunami inundation. Additionally, the LSMU sites are not near any steep slopes. Thus, the proposed project would not be at risk of inundation by seiche, tsunami, or flooding. Therefore, the proposed project would not introduce new impacts or create more severe impacts associated with seiche, tsunami, or flooding than those previously analyzed in the BDSP EIR. No additional analysis is required. No additional analysis is required.

e) Summary of BDSP EIR Analysis

This question was not included in the BDSP EIR. No conclusion was made regarding the significance level of impacts related to compliance with a water quality control plan or sustainable groundwater management plan.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The LSMU Revision, including development of the proposed Hampton Inn Hotel, would comply with the requirements of the San Francisco Bay Regional Water Quality Control Board and would satisfy the requirements of the National Pollutant Discharge Elimination System (NPDES) Program. The proposed project would not conflict with the guiding and implementing policies of the General Plan related to hydrology and water quality, including Goal 10, Objective 10.1, and Policies 10.1.1 through 10.1.13. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

BDSP EIR MM HYD-1a

Prior to issuance of grading permits for development projects that occur pursuant to the Specific Plan, the City of American Canyon shall verify that the applicant has prepared a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the statewide Construction General Permit. The SWPPP shall be designed to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled; (2) where not otherwise required to be under a Regional Water Quality Control Board permit, all non-stormwater discharges are identified and either eliminated,

[36] Iranitalab, Farhad. 2020. On-site Hydrology/Hydraulic Study. December 16.

controlled, or treated; (3) site best management practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity; and (4) stabilization BMPs are installed to reduce or eliminate pollutants after construction are completed. The SWPPP shall be prepared by a qualified SWPPP developer. The SWPPP shall include the minimum BMPs required for the identified Risk Level. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook—Construction or the Caltrans Stormwater Quality Handbook Construction Site BMPs Manual.

BDSP EIR MM HYD-1b

Prior to issuance of building permits for development projects that occur pursuant to the Specific Plan, the project applicant shall prepare a Stormwater Control Plan that includes post-construction stormwater controls in the site design to satisfy requirements of the Phase II Small MS4 Permit. This shall include a review of the final Stormwater Control Plan by the City of American Canyon to ensure that the required controls are in place.

Provision E.12.h of the MS4 Permit requires that an operation and maintenance program be implemented for post-construction stormwater management features. Responsible parties and funding for long-term maintenance of all BMPs must be specified. This plan shall specify a regular inspection schedule of stormwater treatment facilities in accordance with the requirements of the MS4 Permit. Reports documenting inspections and any remedial action conducted shall be submitted regularly to the City for review and approval.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to hydrology and water quality beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
11. Land Use *Would the project:*					
a) Physically divide an established community?	Less than significant impact	No	No	No	None
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than significant impact	No	No	No	None

Discussion

a) Summary of BDSP EIR

The BDSP EIR concluded that all development displaced by the BDSP building would occur on a voluntary basis and that occupants would be given advance notice of development plans. The BDSP includes mobility enhancements to improve both motorized and non-motorized circulation, which would improve Broadway District connectivity. Therefore, impacts were determined to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed LSMU Revision to allow hotel uses is consistent with nearby commercial uses and would therefore not divide an established community. Site 1 is zoned as LSMU and surrounding land uses are LSMU and community commercial (CC). Additionally, the proposed project does not include the addition of new roadways, which could divide an established community. While the proposed Hampton Inn Hotel may require a discretionary approval of a Minor Variation for building height, the height increase would only be incorporated into pitched roof elements and would not be dramatic enough to create a division in the community. Construction of a hotel on any of the LSMU Sites would result in similar conclusions. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR

The BDSP evaluated consistency of the BDSP with applicable policies and land use designations with the General Plan. The BDSP required a General Plan Amendment to ensure consistency between the BDSP and the American Canyon General Plan. When a Specific Plan entails amendments to the General Plan designations or zoning, inconsistency with the existing designations or zoning is an element of the project itself, which then necessitates a legislative policy decision by the agency and does not signify a potential environmental effect. As such, the proposed General Plan Amendment served as a self-mitigating aspect of the BDSP that served to correct the conflict. The BDSP EIR concluded that the BDSP was consistent with all applicable goals, objectives, and policies in the General Plan. Therefore, impacts were determined to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As described in Section 2.2.3, General Plan and Zoning, the proposed project includes a discretionary zone change to allow hotel uses as part of the LSMU zoning district. The proposed Hampton Inn Hotel may require a Minor Variation approval to exceed the maximum building height allowed in the LSMU zoning district. Once these discretionary requests are approved by the City, the proposed project would not conflict with any land use plan or policy. Construction of a hotel on any of the LSMU Sites would result in similar conclusions related to land use plan or policy. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to land use beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
12. Mineral Resources *Would the project:*					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No impact	No	No	No	None
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No impact	No	No	No	None

Discussion

a–b) Summary of BDSP EIR

The BDSP EIR concluded that the BDSP boundaries do not contain a known mineral deposit and the land does not support mineral extraction operations. This precludes the possibility of a loss of mineral resources of local, regional, or statewide importance. It was determined that no impact would occur.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As stated in the BDSP EIR, the BDSP boundaries do not contain a known mineral deposit and the LSMU sites do not currently support mineral extraction operations. The LSMU sites are not designated an area of significant mineral deposits and they are already developed, so future mineral deposit designations would not affect development within the BDSP area. Thus, the proposed project would not result in the loss of known mineral resources or deposit sites, nor is there high potential for mineral resources to be identified in the already undeveloped area. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to mineral resources beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
13. Noise *Would the project result in:*					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than significant impact with mitigation	No	No	No	MM NOI-1
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less than significant impact with mitigation	No	No	No	MM NOI-2a MM NOI-2b
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Less than significant impact	No	No	No	None

Discussion

a) Summary of the BDSP EIR

The noise analysis of the BDSP EIR concluded that potential exposure of persons to excessive noise could occur with buildout of the BDSP. However, MM NOI-1 would require a detailed acoustical analysis to be prepared for any noise sensitive land uses within the 65 A-weighted decibel (dBA) day/night average sound level (L_{dn}) roadway noise contours (i.e., within 350 feet of the centerline of Broadway Street). The detailed acoustical analysis would confirm the roadway noise levels impacting the sensitive receptors and identify any necessary mitigation

measures to reduce interior noise levels at the sensitive land uses to within City noise standards.

The noise analysis of the BDSP EIR concluded that any temporary ambient noise increase would not expose persons to noise levels in excess of standards established in the General Plan or Noise Ordinance. The American Canyon Municipal Code allows construction noise level impacts up to 75 dBA at residential receptors between the hours of 7:00 a.m. and 7:00 p.m. and up to 60 dBA between the hours of 7:00 p.m. and 7:00 a.m.

The noise analysis of the BDSP EIR concluded that buildout anticipated under the Specific Plan would not result in a substantial permanent increase in ambient noise levels in the BDSP vicinity.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Construction Impacts

The BDSP EIR anticipated development of the LSMU Sites. The change in land uses proposed by the LSMU Revision does not result in more intense or extensive construction or operational activity that has the potential to impact noise. Accordingly, it does not result in any change to the analysis or conclusions in the BDSP EIR. Based on Federal Highway Administration (FHWA)[37] the loudest pieces of construction equipment that would operate on Site 1 would produce maximum noise levels of 85 dBA maximum noise/sound level (L_{max}) as measured at 50 feet. The closest noise sensitive receptor is the single-family residence located north of the site, approximately 100 feet from the proposed building's construction footprint where the heaviest construction equipment would operate. At this distance, reasonable maximum noise levels from operation of the loudest pieces of construction equipment would attenuate to below 79 dBA L_{max}. Therefore, construction noise levels could exceed the City's daytime operational threshold of 75 dBA as measured at the nearest residential receptor.

However, construction activities within the City are required to adhere to the American Canyon Municipal Code's construction noise limits provided in Section 8.12.080 of the Municipal Code. Techniques to ensure compliance include, but are not limited to, the following: 1) the proposed 8-foot-high masonry sound wall along the northern and western property lines should be constructed prior to the foundation preparation activities for the proposed hotel structure; 2) no on-site operation of any heavy construction equipment shall be permitted between the hours of 7:00 p.m. and 7:00 a.m. Implementation of Condition of Approval NOI-1 would ensure the proposed Hampton Inn Hotel's compliance with Section 8.12.080 of the Municipal Code.

Therefore, construction noise impacts would be less than significant, and no additional mitigation is necessary. Therefore, the proposed Hampton Inn Hotel would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

[37] Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.

Operational Impacts

The proposed Hampton Inn Hotel would be set back a minimum of 100 feet from the centerline of Broadway Street. Based on the traffic noise modeling from the BDSP EIR, traffic noise levels on Broadway Street south of Donaldson Way would range up to 73.1 dBA L_{dn} as measured at 100 feet from the centerline of the roadway under buildout conditions anticipated under the BDSP.

Based on the EPA's Protective Noise Levels,[38] with a combination of walls, doors, and windows, standard construction in accordance with building code requirements would provide 25 dBA in exterior-to-interior noise reduction with windows closed and 15 dBA or more with windows open. The proposed Hampton Inn Hotel would not include operable windows but will include an alternate ventilation system such as mechanical air conditioning which would allow windows to remain closed for prolonged periods of time, sufficiently reducing traffic noise levels to meet the City's acceptable interior noise level standard of 50 dBA L_{dn} for residential type land uses (i.e., 73.1 dBA – 25 dBA = 48.1 dBA). Therefore, the proposed Hampton Inn Hotel would not result in a conflict with the City's land use-noise compatibility guidelines and project design features would reduce traffic noise impacts to the proposed Hampton Inn Hotel to be less than significant. Therefore, the proposed Hampton Inn Hotel would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

The proposed Hampton Inn Hotel would generate additional vehicular trips on roadways in the project vicinity. The City has established the exterior noise level standard in the General Plan to be 65 dBA L_{dn} for residential land uses but does not define what constitutes as a "substantial permanent increase." Therefore, the BDSP EIR utilized the guidelines from the Federal Transit Administration. A characteristic of noise is that a doubling of sound sources with equal strength is required to result in a perceptible increase (defined to be a 3 dBA or greater) in noise levels. According to the noise analysis of the BDSP EIR, existing daily traffic volumes are 1,437 on Broadway Street adjacent to the proposed Hampton Inn Hotel site. The proposed hotel project would generate[39] approximately 886 daily total trips,[40] which include approximately 56 AM peak-hour trips[41] and approximately 64 PM peak-hour trips.[42] As a result, the proposed Hampton Inn Hotel would not result in a doubling of traffic volumes on adjacent roadway segments and would result an increase of less than 3 dBA above existing traffic noise levels, which is a less than perceptible increase. Therefore, proposed Hampton Inn Hotel-related traffic noise levels would not result in a substantial permanent increase in traffic noise levels in excess of applicable standards and would represent a less than significant impact.

The BDSP EIR anticipated development of the LSMU Sites and the City requires compliance with building code requirements to meet noise standards. The change in land uses proposed by

[38] EPA 550/9-79-100, November 1978.
[39] W-Trans, 2021. Addendum to the EIR for the Broadway District Specific Plan. June 4.
[40] 106 hotel rooms*8.17 trip generation rate = approximately 866 trips
[41] 106 hotel rooms*0.53 AM peak-hours trip generation rate = approximately 56 AM peak-hour trips
[42] 106 hotel rooms*0.60 PM peak-hours trip generation rate = approximately 64 PM peak-hour trips

the LSMU Revision does not result in more intense or extensive construction or operational activity that has the potential to result in noise impacts. Based on the project-specific analysis provided above for the proposed Hampton Inn Hotel, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to substantial temporary or permanent increase in ambient noise levels. Therefore, the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR

The noise analysis of the BDSP EIR concluded that potential groundborne vibration impacts could occur with buildout of the BDSP. However, according to MM NOI-2a, any project that would utilize mobile construction equipment within 20 feet of any existing structure with sensitive receptors would have to provide site-specific vibration analysis. However, the analysis demonstrated that construction vibration impacts would be less than significant with implementation of MM NOI-2a.

The analysis also determined that potential operations vibration impacts could occur for vibration-sensitive land use development projects located within 30 feet of a truck route or within 80 feet of a railroad line. However, the analysis demonstrated that operational vibration impacts would be less than significant with implementation of MM NOI-2b.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The closest off-site structure to the LSMU Sites with existing sensitive receptors is the single-family residence located approximately 30-feet north of the proposed parking lot construction footprint. This is beyond the 20-foot threshold distance identified in the BDSP EIR, the distance within which potential vibration impacts could occur from mobile construction equipment. Therefore, the impact of groundborne vibration levels on off-site receptors would be less than significant, and the proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Furthermore, the proposed structures would not be located within 30-feet of any roadway or within 80-feet of any railroad. Therefore, operational vibration impacts on proposed on-site receptors would be less than significant. Construction of a hotel on any of the LSMU Sites would be required to implement BDSP EIR MM NOI-2a to address any vibration impacts. The proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR

The noise analysis of the BDSP EIR concluded that development consistent with the BDSP would not expose persons to excessive noise levels from aircraft.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The entire BDSP area is located outside the 55 dBA CNEL noise contour of Napa County Airport. Therefore, aviation noise exposure within the BDSP area is less than 55 dBA CNEL. All development and land use activities are considered acceptable within areas exposed to aviation noise levels of less than 55 dBA CNEL. The proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Conditions of Approval

Condition of Approval NOI-1–applicable to proposed Hampton Inn Hotel

The proposed Hampton Inn Hotel shall comply with the City's Municipal Code's construction noise limits provided in Section 8.12.080 of the Municipal Code. Techniques to ensure compliance include, but are not limited to, the following: 1) the proposed 8-foot-high masonry sound wall along the northern and western property lines should be constructed prior to the foundation preparation activities for the proposed hotel structure; 2) no on-site operation of any heavy construction equipment shall be permitted between the hours of 7:00 p.m. and 7:00 a.m.

Mitigation Measures

BDSP EIR MM NOI-1

Prior to issuance of building permits of noise-sensitive land uses within the 65 dBA L_{dn} roadway noise contours or within the 65 dBA L_{dn} roadway noise contours (within 350 feet of the centerline of Broadway Street or 127 feet of the centerline of American Canyon Road), the applicant shall retain an acoustical engineer to conduct a detailed acoustical analysis. The detailed acoustical analysis shall confirm the roadway noise levels impacting the sensitive receptors, and if necessary, shall identify mitigation measures to reduce interior noise levels at the sensitive land uses to within City noise standards.

BDSP EIR MM NOI-2a

Prior to issuance of grading permits, if construction activities will (1) pile drive within 150 feet or (2) utilize mobile construction equipment within 20 feet of any existing structure with sensitive receptors, the applicant shall retain an acoustical engineer to conduct a vibration analysis for potential impacts from construction-related vibration impacts to the existing structure(s) with sensitive receptors. The vibration analysis shall determine the vibration levels created by construction activities at the existing structure(s) with sensitive receptors and, if necessary, develop mitigation to reduce the vibration levels to within the Caltrans threshold of 0.25 inch per second PPV.

BDSP EIR MM NOI-2B

Prior to issuance of building permits, if new vibration-sensitive land uses are located within 30 feet of a truck route or 80 feet of a rail line, the applicant shall retain an acoustical engineer to conduct a vibration analysis for potential impacts from vibration generated by trucks or trains to the vibration-sensitive land uses. The vibration analysis shall determine the vibration levels impacting the proposed structure(s) with sensitive receptors, and if necessary, develop mitigation to reduce the vibration levels to within the Caltrans threshold of 0.04 inch per second PPV.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant noise impacts beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
14. Population and Housing *Would the project:*					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than significant impact	No	No	No	None
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less than significant impact	No	No	No	None

Discussion

a) Summary of BDSP EIR

It was concluded in the BDSP EIR that the BDSP would not include substantial direct or indirect population growth in an area. The potential population growth per year resulting from the BDSP would be within historical numeric population increase that have occurred within American Canyon and therefore, the BDSP would be planned residential growth. Therefore, the population growth was determined to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project does not include new residential uses; and therefore, it would not directly increase the population of the City. However, employees working at development constructed consistent with the LSMU Revision, including the Hampton Inn Hotel, could relocate from outside of the city. Even with the conservative assumption that all of project-generated employees would relocate from outside of the City, this number of new residents would not induce substantial unplanned population growth. The project site is designated LSMU, which currently allows for retail and apartments. It can be assumed that number of employees of the hotel would not significantly exceed the number of employees at a retail center. It can also be assumed that a hotel land use would generate substantially fewer new residents than an apartment use. Therefore, the proposed project would not introduce new

impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR

The BDSP EIR concluded that the BDSP would not displace substantial numbers of existing, necessitating the construction of replacement housing elsewhere. Under the BDSP, no persons would be involuntary displaced and new dwelling units would be built. Therefore, this impact was determined to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The LSMU Revision allows increased opportunities for development of underutilized and infill sites. Site 1 is currently occupied by a small commercial building, a garage/storage building, vacant land, a dirt parking area and driveway, and a windmill pump. Site 2 is currently undeveloped. Site 3 is comprised of a mix of vacant land and commercial and industrial development. Site 4 is comprised of vacant land, single family residences, and storage facilities. The project proposes to allow the development of an additional land use, hotels, on the LSMU Sites. It does not propose relocating the existing housing on Site 4.

The proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. The proposed project would not introduce new impacts or create more severe impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to population and housing beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
15. Public Services *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*					
a) Fire protection?	Less than significant impact	No	No	No	None
b) Police protection?	Less than significant impact	No	No	No	None
c) Schools?	Less than significant impact	No	No	No	None
d) Parks?	Less than significant impact	No	No	No	None
e) Other public facilities?	Less than significant impact	No	No	No	None

Discussion

a) Summary of BDSP EIR

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection. According to the BDSP EIR, payment of the development fees to fund capital improvements, as well as the Specific Plan's proximity to the American Canyon Fire Protection District Station, and compliance with the California Fire Code requirements for emergency access, fire detection and suppression systems, and minimum fire flow would minimize the demand for fire protection. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project would require a BDSP Amendment and zone change to allow lodging services as a permitted use or conditionally permitted use in the LSMU zoning district. The proposed zone change would not significantly alter the conclusions of the BDSP EIR because

development of hotel use would replace an equivalent amount of commercial square footage; this change would not be substantial enough to impact the ability of the fire department to maintain acceptable service ratios, response times, or other performance objectives.

According to correspondence with the American Canyon Fire Protection District (Appendix G), the proposed project would be served by Fire Station 2, located at 225 James Road, which is 0.3-mile northwest of the project site. Additionally, the fire department has automatic aid agreements with the Vallejo Fire Department and Napa County Fire Department. Existing staffing levels for the American Canyon Fire Protection District includes two Fire Captains, four Firefighters, two fire engines, and 24/7 staffing, as well as a ladder truck, a water tender, a reserve engine, and 2 brush fire style engines. The current average response time for the department is 2 minutes.[43]

Development consistent with the proposed LSMU revisions, including the proposed Hampton Inn Hotel would comply with the California Fire Code requirements for emergency access, fire detection and suppression systems, and minimum fire flow, and would pay the applicable development impact fees in accordance with Ordinance 2013-01.[44] Consistent with the BDSP EIR and the above project-specific analysis, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to fire protection responses. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to fire protection services than those previously analyzed in the BDSP EIR. The project site would not require new fire department facilities to serve the project. No additional analysis is required.

b) Summary of BDSP EIR

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection. According to the BDSP EIR, the payment of development fees to fund capital improvements, as well as the project's proximity to the police department, would ensure that the development of an additional police station would not be required. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Site 1 is located 0.3 mile west of American Canyon Police Department at 911 Donaldson Way East and would therefore not require new police facilities to serve the proposed project. Additionally, the proposed Hampton Inn Hotel would pay the required development fees.

[43] Comisky, James. Assistant Fire Chief, American Canyon Fire Protection District. Personal communication: e-mail. March 4, 2021.
[44] City of American Canyon. 2013. Ordinance 2013-01 An Ordinance of the American Canyon Fire Protection District Confirming and Amending the Ordinance Enacted by the Passage of Measure B, Erroneously Entitled "Resolution 2-80 and Resolution 6-80." https://www.cityofamericancanyon.org/home/showdocument?id=4192. Accessed March 12, 2021.

Consistent with the BDSP EIR and the above project-specific analysis, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to police protection responses. The proposed Hampton Inn Hotel and LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to police protection services than those previously analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. According to the BDSP EIR, buildout of the BDSP was anticipated to generate 614 students. The BDSP EIR determined that impacts would be less than significant with payment of development fees at the time that building permits are sought. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The nearest school is Donaldson Way Elementary School, located at 430 Donaldson Way, 1 mile west of the LSMU Sites. The LSMU Revision does not allow for new or increased residential uses and the proposed Hampton Inn Hotel does not include residential units. Furthermore, because the proposed amendment and zone change would not add or replace land contemplated for residential uses, the number of students generated by buildout of the BDSP would not change as a result of the proposed project. Because the proposed project would not generate a residential population and would not change the number of new students anticipated in the BDSP EIR, the impacts of the proposed project would not be more severe than those analyzed in the BDSP EIR. Additionally, the proposed project, including any development of hotels on any of the LSMU Sites, would pay the applicable development fees. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to schools than those previously analyzed in the BDSP EIR. No additional analysis is required.

d) Summary of BDSP EIR

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. According to the BDSP EIR, the BDSP was anticipated to increase the population of the Broadway District by approximately 4,300 residents, but impacts would be less than significant because the BDSP would require new

development that occurs within the BDSP either to provide trails, parks, and recreational facilities, or to provide fees to the City of American Canyon to develop such fees elsewhere. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project would not induce population growth in the City of American Canyon because it would not include any residential units or permanent housing; therefore, the impacts of the proposed project would not be more severe than those analyzed in the BDSP EIR. Additionally, the proposed Hampton Inn Hotel would not significantly increase the public use of recreational facilities because it would provide recreational facilities for occupants of the hotel, including a 600-square-foot outdoor swimming pool with a deck, patio, and fireplaces, as well as an indoor fitness room on the first level of the hotel. Additionally, the proposed Hampton Inn Hotel would pay the applicable fees to the City of American Canyon to develop public recreational facilities. Construction of a hotel on any of the LSMU Sites would result in similar conclusions related to public recreational facilities. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to parks than those previously analyzed in the BDSP EIR. No additional analysis is required.

e) Summary of BDSP EIR

The BDSP EIR determined that buildout of the BDSP would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities. According to the BDSP EIR, the BDSP's potential increase in population is a nominal increase compared with the existing population served by local libraries, and would not be expected to require new or substantially altered library facilities or other public facilities. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed Hampton Inn Hotel would not induce population growth in the City of American Canyon because it would not include any residential units or permanent housing; therefore, the impacts of the proposed project would not be more severe than those analyzed in the BDSP EIR. Construction of a hotel on any of the LSMU Sites would result in similar conclusions related library services. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to other public facilities, such as libraries, than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to public services beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
16. Recreation					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than significant impact	No	No	No	None
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	Less than significant impact	No	No	No	None

Discussion

a–b) Summary of BDSP EIR

The BDSP EIR concluded that the BDSP would result in a population increase. However, requirements for increased park acreage would be met by fees paid to the City of American Canyon and by proposed features of the BDSP, such as bike/pedestrian paths, parks, private recreational facilities. Therefore, impacts were determined to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As stated in Section 13, Population and Housing, the proposed project would not induce substantial population growth. Therefore, the proposed project, which includes amending existing permitted land uses to include hotels and a hotel development, would not substantially increase the use of existing parks and recreation facilities. In addition, the proposed Hampton Inn Hotel would include recreational amenities such as a fitness room, a pool, and an outdoor deck, which would alleviate any minimal increase of demand on parks and recreation facilities that may be caused by hotel guests and employees. The construction of these facilities would not result in impacts not previously address in the BDSP EIR. Consistent with the BDSP EIR and the above project-specific analysis, construction of a hotel on any of the LSMU Sites would result in similar conclusions related to recreational facilities. Therefore, the proposed project would not introduce new park and recreation impacts or

create more severe park and recreation impacts than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts related to recreation facilities beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
17. Transportation *Would the project:*					
a) Conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Significant and unavoidable impact	No	No	No	None
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	None	No	No	No	None
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than significant impact	No	No	No	None
d) Result in inadequate emergency access?	Less than significant impact	No	No	No	None

Discussion

A TIA Addendum was prepared for the proposed project on June 4, 2021, included as Appendix H of this report. The purpose of the TIA Addendum was to evaluate the potential for a change in the vehicle trip generation associated with the proposed zoning change to allow the development of hotels in the LSMU zone (including the proposed Hampton Inn Hotel) as compared to what was analyzed in the BDSP EIR. As a worst-case, conservative analysis, it is assumed in the TIA that all four LSMU sites would be developed as hotel use and the trip generations of these hotels are compared against what was analyzed in the BDSP EIR for the LSMU zone. Since the proposed Hampton Inn Hotel is the only specific use proposed at this time, its ratio of floor area to rooms was used to estimate the number of rooms for potential hotels on the other three LSMU sites. Using this method, it is assumed that a total of 229 hotel rooms would be constructed on the LSMU sites (106 for the proposed Hampton Inn Hotel and 123 rooms elsewhere on the three LSMU sites).

The TIA Addendum determined that there would be an overall net decrease in trip generation for the proposed project as compared to what was analyzed in the BDSP EIR. Using the rates from the *ITE Trip Generation Manual,* 9th Edition, which is the version that is consistent with the BDSP EIR, the proposed Hampton Inn Hotel and other potential hotel uses are expected to generate an average of

2,443 trips per day, including 165 trips during the AM peak-hour and 190 during the PM peak-hour. Compared to the land uses analyzed in the BDSP EIR, this represents a reduction of 2,778 daily trips, with an increase of 40 trips during the AM peak-hour and a decrease or 273 trips during the PM peak-hour. These changes are summarized in Table 17, below.

Table 17: Trip Generation Summary based on ITE Trip Generation Manual, 9th Edition

Land Use	Daily Trips	AM Peak-hour Trips	PM Peak-hour Trips
BDSP EIR: 86 dwelling units and 127,500 square feet of shopping center in the LSMU zone	5,220	126	464
Proposed Project + 86 dwelling units allowed in the LSMU zone	2,443	165	190
Net Change	-2,778	40	-273
Sources: W-Trans. 2021. Addendum to the EIR for the Broadway District Specific Plan; ITE Trip Generation Manual, 9th Edition.			

Additionally, the TIA analyzed the proposed project's anticipated trip generation rate using the *ITE Trip Generation Manual,* 10th Edition, which is the most current version. Using the rates from the *ITE Trip Generation Manual,* 10th Edition, the proposed Hampton Inn Hotel and other potential hotel uses are estimated to generate 2,554 daily trips. This includes 147 trips during the AM peak-hour and 186 trips during the PM peak-hour. In comparison with the land uses evaluated in the BDSP EIR, the proposed project is estimated to generate an average of 2,139 fewer trips per day, with the same number of trips during the AM peak-hour and a reduction of 276 trips during the PM peak-hour. The trip generation based on the 10th Edition is summarized in Table 18 below.

Table 18: Trip Generation Summary based on ITE Trip Generation Manual, 10th Edition

Land Use	Daily Trips	AM Peak-hour Trips	PM Peak-hour Trips
BDSP EIR: 86 dwelling units and 127,500 square feet of shopping center in the LSMU zone	4,683	147	462
Proposed Project + 86 dwelling units allowed in the LSMU zone	2,544	147	186
Net Change	-2,139	0	-276
Sources: W-Trans. 2021. Addendum to the EIR for the Broadway District Specific Plan; ITE Trip Generation Manual, 10th Edition.			

a) Summary of BDSP EIR

The BDSP EIR determined that the Existing Plus Background Plus Proposed Specific Plan Traffic condition associated with the proposed Specific Plan would not conflict with an applicable

plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The BDSP EIR concluded that impacts related to the Existing Plus Background Plus Proposed Specific Plan Traffic condition would be less than significant.

The BDSP EIR determined that the Cumulative Traffic condition associated with the proposed Specific Plan would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The BDSP EIR concluded that no feasible mitigation is available and that impacts related to the Cumulative Traffic condition would be significant and unavoidable.

The BDSP EIR determined that buildout of the BDSP may conflict with an applicable congestion management program. According to the BDSP EIR, buildout of the BDSP would generate new vehicle trips that would contribute to unacceptable operations on SR-29. The American Canyon Circulation Element contemplates mobility improvements that would promote the development of parallel routes and better vehicular, bicycle, and pedestrian connectivity within and adjacent to the Broadway District. However, widening SR-29 to eight lanes within American Canyon is not feasible. The BDSP EIR concluded that no feasible mitigation is available and that impacts related to an applicable congestion management program would be significant and unavoidable.

Additionally, the BDSP EIR determined that the BDSP would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. The BDSP EIR concluded that impacts related to policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

According to the TIA Addendum, given that the trip generation rate for hotel uses is lower than previously analyzed in the BDSP EIR, it is reasonably foreseeable that neither the proposed Hampton Inn Hotel nor similar hotel uses on the LSMU Sites would have a significant adverse impact on traffic operations in the area as compared to the land uses assumed in the BDSP EIR. Therefore, because the proposed LSMU Revision and the Hampton Inn Hotel would not result in any impacts more significant than those already analyzed in the BDSP EIR, the analysis and impact conclusions in the BDSP EIR adequately address the proposed project and no further environmental analysis is necessary or required. Subsequent applications for hotel development on any of the other LSMU Sites would result in a similar reduction in trips from what was assumed in the BDSP for Shopping Center uses. Accordingly, the LSMU Revisions, including development of hotel uses up to the remaining square footage assigned to the LSMU

Sites for Shopping Centers, are appropriately analyzed in the BDSP EIR and this Addendum. As this impact would be less than previously disclosed no additional analysis is required.

The proposed project would not introduce new impacts or create more severe impacts related to an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system than those previously analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR

This question was not included in the BDSP EIR. Thus, no VMT estimates were provided within the BDSP EIR. Additionally, the City of American Canyon had not yet adopted thresholds for VMT to determine impacts at the time the BDSP EIR was prepared.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in Section 15064.3(b)(2) regarding roadway capacity, a project's effect on automobile delay does not constitute a significant environmental impact under CEQA.

The City did not have adopted VMT thresholds at the time the BDSP EIR was certified, nor does it currently have adopted VMT thresholds. Under section 21166 of the Public Resources Code and Sections 15162 and 15164 of the State CEQA Guidelines, this issue is not required to be analyzed unless it constitutes new information of substantial importance that was not known and could not have been known at the time the previous EIR was certified as complete (PRC § 21166 and CEQA Guidelines §§ 15162 and 15163). Traffic impacts were analyzed using other relevant methods at the time of certification of the BDSP EIR. Under CEQA standards, it is not considered new information that requires analysis in a supplemental EIR or negative declaration. Therefore, no additional environmental analysis is warranted under CEQA. No additional analysis is required.

c) Summary of BDSP EIR

The BDSP EIR determined that buildout of the BDSP would not create hazards associated with design features or incompatible uses. Mobility enhancements such as roadway and circulation improvements, new connections, and speed limit reductions were contemplated by the BDSP EIR in order to improve roadway conditions. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project does not include changes that could potentially introduce new hazards associated with design features or incompatible uses. Consistent with the BDSP EIR, any development on the LSMU Sites in the BDSP planning area would comply with all regulations

related to site design, and the proposed project would not alter the mobility enhancements proposed in the BDSP EIR. Furthermore, the city traffic engineer would review and approve the site plan prior to approval. The proposed Hampton Inn Hotel and LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. Therefore, the proposed project would not introduce impacts or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

d) Summary of BDSP EIR

The BDSP EIR determined that buildout of the BDSP would not result in inadequate emergency access and would not impair roadway safety or emergency response or evacuation. Mobility enhancements such as roadway and circulation improvements, new connections, and speed limit reductions were contemplated by the BDSP EIR in order to improve emergency response and evacuation. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project does not include changes that could potentially interfere with emergency response, access, or evacuation. Consistent with the BDSP EIR, any development in the BDSP planning area would comply with all fire codes and regulations related to emergency access. Furthermore, the city traffic engineer would review and approve the site plan prior to approval. The proposed Hampton Inn Hotel and LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. Therefore, the proposed project would not introduce impacts or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to transportation beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum. Impacts that were not evaluated in the BDSP EIR would be less than significant.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
18. Utilities and Service Systems *Would the project:*					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than significant impact	No	No	No	None
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than significant impact	No	No	No	None
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than significant impact	No	No	No	None
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than significant impact	No	No	No	None

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	Less than significant impact	No	No	No	None

Discussion

a–b) Summary of BDSP EIR

Wastewater

The BDSP EIR determined that buildout of the BDSP would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. According to the BDSP EIR, future development in the BDSP planning area would result in a net increase sewer flow of 66,576 gallons per day (gpd). The BDSP EIR determined that several planned capital improvement projects would address deficiencies in the sewer collection system and that new development that occurs pursuant to the BDSP would be required to either contribute fees to the City of American Canyon to fund these improvements or install them in conjunction with project implementation (subject to reimbursement for costs outside of its equitable share). This would ensure that adequate wastewater collection and treatment is provided. Impacts would be less than significant.

Water

According to the BDSP EIR, a Water Supply Assessment prepared for the BDSP EIR showed that the City's water supply is sufficient to meet projected demand, including demand within the BDSP area, in all years to 2040 and under all normal-, dry-, and multiple-dry-year scenarios. The analysis showed that demand will exceed supply during some dry years, and additional demand as a result of BDSP implementation will increase those supply deficiencies. However, the City is still anticipated to be able to meet demand through the use of carryover State Water Project (SWP) water, or through some combination of carryover SWP water, Advanced Table A Program water, demand reductions, and/or additional purchases on the open market.

In addition, the BDSP EIR determined that recycled water supply in the City is available to meet existing and projected demand and is available in sufficient volume to support non-potable uses at the project site. Use of recycled water at the site was anticipated to increase the City's utilization of this supply.

Additionally, the BDSP EIR determined that individual developments would comply with the City's Zero Water Footprint policy, which would require new accounts to offset potable water use through off-site water conservation measures, conversion of off-site potable irrigation to recycled water, on-site demand reduction (relative to existing use), or by acquiring additional supply. Impacts would be less than significant.

Stormwater Drainage

The BDSP EIR determined that buildout of the BDSP would not create a need for new or expanded downstream storm drainage facilities. According to the BDSP EIR, buildout of the BDSP would increase impervious surfaces, but new development would address post-development stormwater quality using treatment measures—LID concepts that would treat runoff and reduce the release of runoff during peak events. Additionally, City staff will review new development plans for compliance with the City's post-development stormwater requirements, which would ensure that new development captures, detains, and regulates the release of the additional runoff generated by new impervious surfaces in a manner that avoids inundating downstream stormwater facilities such that flooding occurs. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Wastewater

The BDSP EIR anticipated development of the LSMU Sites. The change in land uses proposed by the LSMU Revision does not result in more intense activity. Development consistent with the LSMU Revision would be required to comply with all applicable development standards and specific plan guidelines. Because the proposed Hampton Inn Hotel would be developed in accordance with the BDSP's development standards and design guidelines, the proposed project would not result in an increase of wastewater demand beyond what was analyzed in the BDSP EIR and would not exceed wastewater treatment requirements of the RWQCB. The proposed project would require a BDSP Amendment and zone change to allow lodging services in the LSMU zoning district. Under the proposed zone change, 59,000 square feet of hotel use would replace an equivalent amount of commercial square footage; this change would not be substantial enough to create new significant impacts to wastewater treatment; thus, proposed BDSP amendment and zone change would not significantly alter the conclusions of the BDSP EIR.

Water

Development under the LSMU Revisions, including the proposed Hampton Inn Hotel would implement the City's requirements pursuant to the City's Zero Water Footprint policy, which would help to ensure that there is no net increase in potable water demand within the City, as noted in the BDSP EIR. According to the American Canyon 2015 UWMP, hospitality businesses such as hotels and resorts are included as a commercial and industrial land use when estimating potable water demand.[45] Therefore, the proposed lodging use would not change

[45] City of American Canyon. 2015 Urban Water Management Plan, Section 4.2.2.1 Commercial and Industrial Uses. Website: https://www.cityofamericancanyon.org/home/showdocument?id=17856. Accessed March 17, 2021.

the estimated potable water demand of the BDSP as a whole. The proposed project would not create demand for potable water beyond what was analyzed in the BDSP EIR and therefore would not require or result in the construction of new water facilities or the expansion of existing facilities.

Stormwater

Site 1 is designated LSMU, which currently allows for retail and apartments. The stormwater drainage of a hotel would not significantly exceed the stormwater drainage of the proposed hotel; therefore, the proposed project would not require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities beyond what was analyzed in the BDSP EIR. As discussed in Section 9, Hydrology and Water Quality, the proposed Hampton Inn Hotel would comply with the City's post-development stormwater requirements. Additionally, as discussed in Section 9, Hydrology and Water Quality, the Hydrology/Hydraulic Study prepared for the proposed Hampton Inn Hotel determined that bioretention areas and a storm water system would be implemented to reduce the peak discharge of Site 1 under the proposed conditions.

Construction of a hotel on any of the LSMU Sites would result in similar conclusions related to water, wastewater, and stormwater impacts. The proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to stormwater drainage facilities than those previously analyzed in the BDSP EIR. No additional analysis is required.

c) Summary of BDSP EIR Analysis

According to the BDSP EIR, the Sewer Master Plan analyzed the existing sewer collection system using two flow scenarios, Peak Dry Weather Flow and Peak Wet Weather Flow. In general, in a majority of the existing pipelines, velocities were below the recommended minimum for the Peak Dry Weather Flow scenario. Hydraulic deficiencies were identified in Broadway (Main Basin 3). In addition, based on modeling, peak flows exceeded the capacity of three of the five pump stations. However, the BDSP EIR determined that the City's planned capital improvement programs would address the deficiencies in the sewer collection system. Additionally, as previously discussed, the capital improvements would be funded by new development. Therefore, the BDSP EIR concluded that adequate wastewater collection and treatment would be provided and that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project would not result in a determination by a wastewater treatment provider that there is inadequate capacity to serve the project's projected demand in addition to existing commitments. The proposed BDSP Amendment and Zone Change would not significantly alter the conclusions of the BDSP EIR. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to wastewater capacity than those previously analyzed in the BDSP EIR. No additional analysis is required.

d-e) Summary of BDSP EIR Analysis

It was determined in the BDSP EIR that the BDSP area would be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs. According to the BDSP EIR, using an average of 3.89 pounds of debris per square foot for nonresidential construction and 4.38 pounds of debris per square foot of residential construction, buildout of the BDSP EIR would generate an estimated 10,299 cubic feet of waste. The BDSP EIR determined that the construction waste generated by buildout of the BDSP (10,299 cubic yards) would represent less than 0.01 percent of the remaining capacity at the Potrero Hills Landfill, and that the operational waste generated by buildout of the BDSP (7,304 cubic yards annually) would represent less than 0.01 percent of the remaining capacity at the Potrero Hills Landfill. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project would be served by a landfill with sufficient capacity to accommodate the proposed project's solid waste disposal needs and would not generate solid waste in excess of State or local standards or in excess of local infrastructure, nor would the project otherwise impair the attainment of solid waste reduction goals. The proposed zone change and BDSP amendment would not result in solid waste generations that would significantly alter the conclusions of the BDSP EIR. Based on the waste generation rates, the proposed hotel uses would generate a similar amount of waste as compared to the previously contemplated commercial uses. Therefore, the proposed project would not introduce new impacts or create more severe impacts related to landfill capacity than those previously analyzed in the BDSP EIR. No additional analysis is required.

The proposed project would also comply with all applicable federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, the proposed project would not introduce new impacts or create more severe impacts related compliance with federal, State, and local statutes and regulations than those previously analyzed in the BDSP EIR. No additional analysis is required.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to utilities and service systems beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
19. Wildfire *If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project: Would the project:*					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than significant impact	No	No	No	None
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	This checklist question was not analyzed in the BDSP EIR.	No	No	No	None
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	This checklist question was not analyzed in the BDSP EIR.	No	No	No	None
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	This checklist question was not analyzed in the BDSP EIR.	No	No	No	None

Discussion

a) Summary of BDSP EIR

The BDSP EIR concluded that all circulation changes proposed in the BDSP would either have no impact on the emergency response and evacuation or would improve mobility for emergency response vehicles. Therefore, the BDSP EIR would not impair implementation or physically interfere with any adopted emergency response plans or emergency evacuation plans. Impacts were determined to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

The proposed project does not include changes that could potentially interfere with emergency response, access, or evacuation. As discussed in Impact 8(h), the project sites are not within a wildfire zone according to CAL FIRE's Fire Hazard Severity Zone maps. The City of American Canyon adopted the Napa County Multi-Jurisdictional Hazard Mitigation Plan (NCMJHMP) in 2020. The plan does not identify the project sites as a wildfire zone, nor does it identify evacuation routes near or in the vicinity of the sites.[46] The proposed project would not obstruct implementation of the NCMJHMP. Consistent with the BDSP EIR, any development in the BDSP plan area would have to comply with all fire codes and regulations related to emergency access. Therefore, the proposed project would not introduce impacts or create more severe impacts than those analyzed in the BDSP EIR. No additional analysis is required.

b) Summary of BDSP EIR

This checklist question did not exist at the time that the BDSP EIR was certified. Additionally, impacts associated with pollutants from wildfire were not evaluated in other sections in the BDSP EIR. No conclusion was made about the significance level of environmental impacts regarding wildfire risks or risk of exposure to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As discussed in Impact 8(h), the LSMU sites are not located in a High Fire Hazard Severity Zone or a Very High Fire Hazard Severity Zone as mapped by CAL FIRE, and the LSMU sites are not located in a State Responsibility Area. The LSMU sites are developed and are not nearby wildland areas. The nearest air monitoring station that measures meteorological data is the Vallejo-304 Tuolumne Street Station, approximately 4.78 miles from the project site. This station recorded that the annual maximum wind speed for all 24-hour averages was 14.9 mph

[46] County of Napa. 2020. Multi-Jurisdictional Hazard Mitigation Plan 2020 Update. Website: https://mitigatehazards.com/napa-county-mjhmp/. Access July 11, 2021.

in the year 2020, 12.6 mph in the year 2019, and 13.8 mph in the year 2018.[47,48,49] While winds can reach speeds that could spread wildfires, Site 1 and surrounding area do not embody conditions that would exacerbate a wildfire. The proposed project would not introduce impacts or create more severe impacts than those analyzed in the BDSP EIR.

c) Summary of BDSP EIR

This checklist question did not exist at the time that the BDSP EIR was certified. Additionally, impacts associated with pollutants from wildfire were not evaluated in other sections in the BDSP EIR. No conclusion was made about the significance level of environmental impacts regarding the installation or maintenance of infrastructure such as roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

Infrastructure-related impacts were address in the BDSP EIR in Section 3.13, Utilities and Service Systems, which described the City of American Canyon's existing utility systems and assessed potential environmental effects related to utility services. Furthermore, the BDSP EIR discussed the effects the BDSP would have on the ability of the City of American Canyon and other service providers to deliver services to the BDSP and vicinity. Impacts were determined to be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

As discussed in Impact 8(h), the LSMU sites are not located in a High Fire Hazard Severity Zone or a Very High Fire Hazard Severity Zone as mapped by CAL FIRE, and the LSMU sites are not located in a State Responsibility Area. The LSMU sites are not nearby wildland areas.

The BDSP EIR contemplated infrastructure such as roads, fuel breaks, emergency water sources, power lines, and other utilities. The proposed project does not include the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk. While the proposed project would involve the alternation of the LSMU zone to include hotel uses, this change

[47] California Air Resources Board (ARB). 2021. AQZMIS. Solano County Annual Wind Summary Data 2020. Website: https://www.arb.ca.gov/aqmis2/display.php?year=2020&param=SWINSPD_mph&hours=all&county_name=48-Solano&basin=AIR+BASIN &latitude=PART+OF+STATE–&o3switch=new&units=012&ptype=met&mon=&day=&report=ASRPT&statistic=&order=&btnsubmit=Update+Display. Accessed March 16, 2021.

[48] California Air Resources Board (ARB). 2021. AQZMIS. Solano County Annual Wind Summary Data 2019. Website: https://www.arb.ca.gov/aqmis2/display.php?year=2019&param=SWINSPD_mph&hours=all&county_name=48-Solano&basin=AIR+BASIN &latitude=PART+OF+STATE–&o3switch=new&units=012&ptype=met&mon=&day=&report=ASRPT&statistic=&order=&btnsubmit=Update+Display. Accessed March 16, 2021.

[49] California Air Resources Board (ARB). 2021. AQZMIS. Solano County Annual Wind Summary Data 2018. Website: https://www.arb.ca.gov/aqmis2/display.php?year=2018&param=SWINSPD_mph&hours=all&county_name=48-Solano&basin=AIR+BASIN &latitude=PART+OF+STATE–&o3switch=new&units=012&ptype=met&mon=&day=&report=ASRPT&statistic=&order=&btnsubmit=Update+Display. Accessed March 16, 2021.

would not create a need for additional infrastructure to protect against wildfires Therefore, impacts would be less than significant.

d) Summary of BDSP EIR

This checklist question did not exist at the time the BDSP EIR was certified. However, impacts related to landslides and flooding were discussed in Section 3.5, Geology, Soils, and Seismicity.

The BDSP EIR determined that the BDSP area contains mostly flat land. Moreover, most, if not all, of the properties with the BDSP boundaries either support urban development or have been rough graded, which makes the likelihood of landslides very low. Impacts were determined to be less than significant.

The BDSP EIR determined that the Specific Plan would not place housing or structures within a 100-year flood hazard area. According to the BDSP EIR, the flood hazard areas within the Specific Plan coincide with the Southern Gateway subarea, where no new development is proposed by the BDSP. Therefore, development and land use activities contemplated by the Specific Plan would not expose persons or structures to new risks associated with 100-year or 500-year flood hazards. The BDSP EIR concluded that impacts would be less than significant.

LSMU Revisions and Hampton Inn Hotel Analysis and Conclusions

Site 1 is flat and is not located in a Landslide Zone as delineated by CGS.[50] The proposed Hampton Inn Hotel would implement BDSP EIR MM HYD-1a to address impacts related to flooding. The proposed LSMU Revisions would not result in potential impacts that would be more severe than were already analyzed in the BDSP EIR for uses permitted in the LSMU zone district. Therefore, the site is not at risk of landslides due to runoff, post-fire slop instability, or drainage changes. Impacts would be less than significant.

Mitigation Measures

None required.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant impacts to wildfire beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum. Impacts that were not evaluated in the BDSP EIR would be less than significant.

[50] California Geological Survey. Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ Accessed March 15, 2021.

Environmental Issues	Conclusion in Final EIR	Do the Proposed Changes Involve New or More Severe Impacts?	New Circumstances Involving New or More Severe Impacts?	New Information Requiring New Analysis or Verification?	Mitigation Measures
20. Mandatory Findings of Significance					
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	Less than significant with mitigation	No	No	No	MM BIO-1a, MM CUL-1, MM CUL-4
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Less than significant with mitigation	No	No	No	Applicable BDSP EIR MMs as discussed throughout this Addendum
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	Less than significant with mitigation	No	No	No	Applicable BDSP EIR MMs as discussed throughout this Addnedum

Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

As described in Section 4, Biological Resources, of the BDSP EIR, the proposed project would not have significant impacts beyond what was analyzed in the BDSP EIR. BDSP EIR MM BIO-1b would be applicable to the proposed Hampton Inn Hotel and would be implemented prior to tree removal activities that occur during the nesting season. Future construction of a hotel on other LSMU Sites would require the implementation BDSP EIR MM BIO-1a, MM BIO-1b, and MM BIO-2 to reduce impacts related to special-status plant species occurrences, riparian habitat, and wetlands, as applicable. The proposed project would have no significant impacts related to the potential for the degradation of the quality of the environment, a substantial reduction in the habitat of a fish or wildlife species, the drop of a fish or wildlife population below self-sustaining levels, a substantial reduction in the number or restriction on the range of a rare or endangered plant or animal.

Furthermore, as described in Section 5, Cultural Resources, the proposed project would not have significant impacts with respect to major periods of California history or prehistory beyond what was analyzed in the BDSP EIR. BDSP EIR MM CUL-1 and MM CUL-4 would be implemented in the event prehistoric or historic-period archaeological resources are encountered or in the event of discovery or recognition of any human remains during the project's ground disturbing activities. The proposed project would have no significant impacts related to the potential for elimination of important examples of major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The proposed project's impacts would be individually limited and not cumulatively considerable. Based on the analysis provided in Section 3, Air Quality; Section 13, Noise, and Section 17, Transportation, the proposed project would not substantially increase cumulative impacts related to these analysis areas. Additionally, as presented throughout this Addendum, the proposed project's cumulative impacts would be consistent with BDSP EIR.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

The proposed project has not been found to generate new or substantially more severe environmental effects than those previously analyzed in the BDSP EIR; therefore, there is no

likelihood of the proposed project causing substantial adverse effects on human beings, either directly or indirectly, beyond that which was previously analyzed in the BDSP EIR. Impacts would be consistent with what was analyzed in the BDSP EIR.

Mitigation Measures

Implement all BDSP mitigation measures discussed in this Addendum.

Conclusion

The proposed project would be consistent with the BDSP EIR and would not create new or more significant cumulative impacts beyond what was analyzed in the BDSP EIR. The conclusions from the BDSP EIR remain unchanged when considering the adoption of the Addendum. Impacts that were not evaluated in the BDSP EIR would be less than significant.

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Attachment 5

Appendix A:
Air Quality, Energy and Greenhouse Gas Emissions Analysis Supporting Information

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Appendix A: Air Quality, Greenhouse Gas Emissions, and Energy Supporting Information

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American Canyon Hampton Inn CalEEMod Notes

Note 1. CO_2 Intensity Factor adjusted to match Pacific Gas and Electric's (PG&E) 2019 emissions rates, the latest that are publicly available.[1] The intensity factor utilized in the model is 206 pounds of CO2 per megawatt-hour delivered. Other intensity factors (CH4 & N2O) were left on default values.

For the 2030 operational models, PG&E's 2030 CO_2 intensity factor is derived from an assumed 2030 power mix based on equal proportions of generation sources in 2019. The only factor that has been uniquely adjusted for 2030 is the change of eligible renewable energy sources total proportion from 33% to 60% to comply with Senate Bill 100's 2030 performance goals. Based on known factors for PG&E's 2019 CO_2 intensity factor, a proximate CO_2 intensity factor of 184 pounds per megawatt-hour delivered was identified for 2030. Please see PG&E Intensity Factors in this Appendix for more information.

Note 2. Land uses and sizes associated with development of the proposed project are drawn from Applicant-provided information dated March 23, 2021, as well as the following site plans:

- ams associates, inc. Civil Engineering Site Plans, dated March 11, 2021.
- Batha Design Group, Preliminary Landscape Plans, dated March 11, 2021.
- Architectural Dimensions, Architectural Site Plans, dated March 11, 2021.

Land uses utilized in the model represent the following:

Recreational > Hotel > 106 x Room = Proposed hotel. Lot acreage and square feet adjusted to match the above referenced site plans and Applicant-provided information.

Recreational > Recreational Swimming Pool > 0.6 x 1000sqft = Proposed outdoor pool. Building square footage includes the 717 square feet of trash enclosure and pool equipment space.

Recreational > City Park > 0.67 x acre = Proposed landscaped areas. Square feet adjusted to match the above referenced site plans and Applicant-provided information.

Parking > Parking Lot > 51.14 x 1000sqft = Proposed surface parking. Square feet adjusted to match Applicant-provided information.

Parking > Non-Asphalt Surfaces > 10.07 x 1000sqft = Proposed hardscape (e.g., pool patio, sidewalks, pathways). Square feet match Applicant-provided information.

Existing Land Uses

Based on aerial imagery review at the time of the preparation of this analysis, only existing structures which appeared to be operational were included in the existing emissions

[1] Pacific Gas & Electric. 2020. Corporate Responsibility and Sustainability Report 2020. Website: https://www.pgecorp.com/corp_responsibility/reports/2020/assets/PGE_CRSR_2020.pdf. Accessed April 7, 2021.

estimates. Existing land uses included in the existing emissions model consist of the following:

Residential > Single Family Housing > 1 x Dwelling Unit = the approximately 2,600-square foot single-family residence on-site.

Industrial > Unrefrigerated Warehouse-No Rail > 3 x 1000sqft = the approximately 3,000-square foot storage building on-site.

Commercial > General Office Building > 2.33 x 1000sqft = the approximately 2,330-square foot general commercial building on-site.

Note 3. According to Applicant-provided information, dated March 23, 2021, project construction is anticipated to begin August 1, 2021, and occur over a total of 375 workdays, 5 days per week. CalEEMod default construction activity dates and durations were adjusted to reflect this information. As architectural coatings are anticipated to be applied during the later portion of building construction activities, this activity was adjusted to occur concurrently with the last 100 days of building construction activity.

Note 4. According to Applicant-provided information dated March 23, 2021, approximately 11,000 cubic yards of cut material would be imported over 15 days during grading activities. Other construction equipment listed under the "Hauling" activity were reduced to zero as this activity only represents the 15 days of import hauling.

According to Applicant-provided information dated April 9, 2021, the Landscaping & Irrigation construction activity would not involve the operation of any heavy equipment. Therefore, this construction activity was omitted from the construction model.

Note 5. Square footage of existing building and hardscape were provided by the Applicant via email on April 9, 2021. The existing buildings and hardscape estimates include a total of 6,693 square feet of building space and 29,328 square feet of pavement. Therefore, an estimated 1,409 tons of building and pavement debris would be removed during demolition activities. Please see the demolition calculations contained in Appendix A for more information.

Note 6. During the proposed project construction model, all operational emission sources were reduced to zero to separate modeled construction emissions from operational emission results. During the proposed project and existing land uses operational models, all construction emission sources were reduced to zero to separate modeled construction and operational emission results.

Note 7. BAAQMD *Basic Construction Mitigation Measures Recommended For All Proposed Projects* were applied to the "Mitigated Construction T3" construction model, which would be required under BDPS EIR MM AIR-2 to ensure that the proposed project would result in a less-than-significant impact related to fugitive dust emissions during construction. This includes watering exposed areas at minimum twice per day and limiting construction vehicle speeds to 15 miles per hour on unpaved roads.

BDSP EIR MM AIR-3 was applied to the "Mitigated Construction T3" construction model, which would require the project to ensure that all construction equipment utilized for the proposed project meet EPA Tier III off-road emission standards.

MM AIR-4b was applied to the "Mitigated Construction T4 & Electric" construction model, which would require the use of Tier 4 Final engines for all construction equipment equal to or greater than 100 horsepower, the use of electric equivalents for all equipment less than 100 horsepower, and the prevention of fossil-fueled generators to power electric equipment with the exception of hand-held generators rated at 5 horsepower or less.

Note 8. W-Trans prepared a Trip Generation Memorandum (TGM) for the proposed project, dated March 12, 2021, that analyzes the trip generation rates for the proposed project. The TGM illustrates that the proposed hotel would generate an estimated 866 daily vehicle trips. Therefore, the hotel land use in the model was adjusted to reflect this. All other land uses' trip generate rates in the model were reduced to zero.

The TGM prepared for the proposed project does not specify the trip generation rates associated with the existing on-site residence and commercial building. Therefore, the trip generation rates in the existing emissions model were kept at model defaults.

Note 9. According to the Preliminary Landscape Plans prepared by Batha Design Group, dated March 11, 2021, the proposed project is estimated to generate a demand of 356,819 gallons of outdoor water consumption per year. Therefore, 356,819 gallons per year were applied to the City Park land use in the model. The outdoor water consumption for the hotel land use in the model was reduced to zero as that outdoor water use is captured in the estimation applied to the City Park land use.

Project Construction Emissions

Model File: American Canyon Hampton Inn - Mitigated Construction T3 - Napa County, Annual
Timestamp: Date: 4/29/2021 8:15 AM

Annual Construction Emissions (tons)

Year	Activity	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	CO_2e (Metric Tons)
	on site	0.00	0.06	0.00	0.01	0.00	0.00	10.6
	off site	0.00	0.02	0.00	0.00	0.00	0.00	5.7
2021	**Demolition**	**0.00**	**0.08**	**0.00**	**0.01**	**0.00**	**0.01**	**16.3**
	on site	0.01	0.12	0.00	0.01	0.00	0.01	21.7
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.5
2021	**Site Preparation**	**0.01**	**0.12**	**0.00**	**0.01**	**0.00**	**0.01**	**22.2**
	on site	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	off site	0.01	0.19	0.00	0.01	0.00	0.00	51.8
2021	**Hauling**	**0.01**	**0.19**	**0.00**	**0.01**	**0.00**	**0.00**	**51.8**
	on site	0.01	0.23	0.01	0.08	0.01	0.05	41.1
	off site	0.00	0.00	0.00	0.00	0.00	0.00	1.5
2021	**Grading**	**0.01**	**0.23**	**0.01**	**0.08**	**0.01**	**0.05**	**42.5**
	on site	0.01	0.24	0.01	0.01	0.01	0.01	36.5
	off site	0.01	0.05	0.00	0.01	0.00	0.00	18.0
2021	**Building Construction**	**0.02**	**0.29**	**0.01**	**0.03**	**0.01**	**0.02**	**54.5**
	on site	0.09	1.77	0.11	0.11	0.11	0.11	271.3
	off site	0.04	0.34	0.00	0.09	0.00	0.02	130.9
2022	**Building Construction**	**0.13**	**2.11**	**0.11**	**0.19**	**0.11**	**0.13**	**402.2**
	on site	0.00	0.03	0.00	0.00	0.00	0.00	5.2
	off site	0.00	0.01	0.00	0.00	0.00	0.00	2.4
2023	**Building Construction**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**7.7**
	on site	0.01	0.15	0.01	0.01	0.01	0.01	27.3
	off site	0.00	0.00	0.00	0.00	0.00	0.00	1.7
2021	**Paving**	**0.01**	**0.16**	**0.01**	**0.01**	**0.01**	**0.01**	**29.1**
	on site	0.01	0.22	0.01	0.01	0.01	0.01	39.1
	off site	0.00	0.00	0.00	0.00	0.00	0.00	2.4
2022	**Paving**	**0.01**	**0.22**	**0.01**	**0.02**	**0.01**	**0.01**	**41.5**
	on site	0.31	0.06	0.00	0.00	0.00	0.00	12.1
	off site	0.00	0.00	0.00	0.00	0.00	0.00	3.6
2022	**Architectural Coating**	**0.31**	**0.07**	**0.00**	**0.01**	**0.00**	**0.01**	**15.8**
	on site	0.02	0.00	0.00	0.00	0.00	0.00	0.6
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.2
2023	**Architectural Coating**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.8**
	Total On Site	**0.48**	**2.90**	**0.17**	**0.25**	**0.17**	**0.21**	**465.60**
	Total Off Site	**0.05**	**0.61**	**0.00**	**0.12**	**0.00**	**0.04**	**218.74**
						Total amortized over 30 years		**23**

Year	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	CO_2e (Metric Tons)
on site	0.04	0.80	0.04	0.12	0.04	0.08	137.23
off site	0.01	0.26	0.00	0.03	0.00	0.01	79.21
Year: 2021	**0.05**	**1.06**	**0.04**	**0.15**	**0.04**	**0.09**	**216.4**
on site	0.42	2.06	0.12	0.12	0.12	0.12	322.52
off site	0.04	0.34	0.00	0.09	0.00	0.03	136.91
Year: 2022	**0.46**	**2.40**	**0.13**	**0.22**	**0.13**	**0.15**	**459.4**
on site	0.02	0.04	0.00	0.00	0.00	0.00	5.86
off site	0.00	0.01	0.00	0.00	0.00	0.00	2.62
Year: 2023	**0.02**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**8.5**

Average Daily Construction Emissions (lbs/day)

	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Total Emissions (tons)	0.53	3.50	0.17	0.37	0.17	0.24
Total Emissions (lbs)	1,058.32	7,007.00	342.68	749.94	342.48	480.96
Average Daily Emissions (lbs/day)[1]	**2.82**	**18.69**	**0.91**	**2.00**	**0.91**	**1.28**

Notes:

1. Total emissions (lbs) are divided by the total nonoverlapping construction workdays (375 days).

Unmitigated Project Construction Emissions

Model File: American Canyon Hampton Inn - Mitigated Construction T4 & Electric - Napa County, Annual
Timestamp: Date: 4/29/2021 3:30 PM

Annual Construction Emissions (tons)

Year	Activity	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	CO_2e (Metric Tons)
	on site	0.00	0.00	0.00	0.01	0.00	0.00	3.8
	off site	0.00	0.02	0.00	0.00	0.00	0.00	5.7
2021	**Demolition**	**0.00**	**0.02**	**0.00**	**0.01**	**0.00**	**0.00**	**9.5**
	on site	0.00	0.01	0.00	0.01	0.00	0.00	19.3
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.5
2021	**Site Preparation**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**19.8**
	on site	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	off site	0.01	0.19	0.00	0.01	0.00	0.00	51.8
2021	**Hauling**	**0.01**	**0.19**	**0.00**	**0.01**	**0.00**	**0.00**	**51.8**
	on site	0.00	0.02	0.00	0.07	0.00	0.03	30.2
	off site	0.00	0.00	0.00	0.00	0.00	0.00	1.5
2021	**Grading**	**0.00**	**0.02**	**0.00**	**0.07**	**0.00**	**0.04**	**31.7**
	on site	0.00	0.01	0.00	0.00	0.00	0.00	8.9
	off site	0.01	0.05	0.00	0.01	0.00	0.00	18.0
2021	**Building Construction**	**0.01**	**0.05**	**0.00**	**0.01**	**0.00**	**0.00**	**26.9**
	on site	0.01	0.04	0.00	0.00	0.00	0.00	66.4
	off site	0.04	0.34	0.00	0.09	0.00	0.02	130.9
2022	**Building Construction**	**0.05**	**0.38**	**0.00**	**0.09**	**0.00**	**0.03**	**197.3**
	on site	0.00	0.00	0.00	0.00	0.00	0.00	1.3
	off site	0.00	0.01	0.00	0.00	0.00	0.00	2.4
2023	**Building Construction**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**3.7**
	on site	0.00	0.01	0.00	0.00	0.00	0.00	13.6
	off site	0.00	0.00	0.00	0.00	0.00	0.00	1.7
2021	**Paving**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**15.3**
	on site	0.00	0.01	0.00	0.00	0.00	0.00	19.4
	off site	0.00	0.00	0.00	0.00	0.00	0.00	2.4
2022	**Paving**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**21.8**
	on site	0.31	0.00	0.00	0.00	0.00	0.00	0.0
	off site	0.00	0.00	0.00	0.00	0.00	0.00	3.6
2022	**Architectural Coating**	**0.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.6**
	on site	0.02	0.00	0.00	0.00	0.00	0.00	0.0
	off site	0.00	0.00	0.00	0.00	0.00	0.00	0.2
2023	**Architectural Coating**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.2**
	Total On Site	**0.35**	**0.10**	**0.00**	**0.08**	**0.00**	**0.04**	**162.98**
	Total Off Site	**0.05**	**0.61**	**0.00**	**0.12**	**0.00**	**0.04**	**218.74**
							Total amortized over 30 years	**13**

Year	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	CO_2e (Metric Tons)
on site	0.01	0.05	0.00	0.08	0.00	0.04	75.84
off site	0.01	0.26	0.00	0.03	0.00	0.01	79.21
Year: 2021	**0.02**	**0.30**	**0.00**	**0.11**	**0.00**	**0.05**	**155.1**
on site	0.32	0.05	0.00	0.00	0.00	0.00	85.87
off site	0.04	0.34	0.00	0.09	0.00	0.03	136.91
Year: 2022	**0.36**	**0.39**	**0.00**	**0.09**	**0.00**	**0.03**	**222.8**
on site	0.02	0.00	0.00	0.00	0.00	0.00	1.28
off site	0.00	0.01	0.00	0.00	0.00	0.00	2.62
Year: 2023	**0.02**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**3.9**

Average Daily Construction Emissions (lbs/day)

	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Total Emissions (tons)	0.40	0.71	0.01	0.21	0.00	0.07
Total Emissions (lbs)	807.26	1,410.04	10.04	417.30	9.84	148.32

Average Daily Emissions (lbs/day)[1]	**2.15**	**3.76**	**0.03**	**1.11**	**0.03**	**0.40**

Notes:

1. Total emissions (lbs) are divided by the total nonoverlapping construction workdays (375 days).

Operational 2022 Emissions Summary (Existing)

Existing Operations - Summer and Winter Scenarios

American Canyon Hampton Inn - Existing Operation Only - Napa County, Summer

CalEEMod Run: Summer. Date: 4/7/2021 3:29 PM

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Area	1.23	0.02	0.19	0.19	0.19	0.19
Energy	0.00	0.02	0.00	0.00	0.00	0.00
Mobile	0.07	0.36	0.00	0.21	0.00	0.06
Total	**1.31**	**0.40**	**0.19**	**0.40**	**0.19**	**0.25**

American Canyon Hampton Inn - Existing Operation Only - Napa County, Winter

CalEEMod Run: Winter. Date: 4/7/2021 3:30 PM

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Area	1.23	0.02	0.19	0.19	0.19	0.19
Energy	0.00	0.02	0.00	0.00	0.00	0.00
Mobile	0.06	0.38	0.00	0.21	0.00	0.06
Total	**1.30**	**0.42**	**0.19**	**0.40**	**0.19**	**0.25**

Existing Operations - Maximum Daily Emissions

American Canyon Hampton Inn - Existing Operation Only - Napa County

Maximum between Summer and Winter Scenarios

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Total	**1.31**	**0.42**	**0.19**	**0.40**	**0.19**	**0.25**
CalEEMod Run	Summer	Winter	Winter	Winter	Winter	Winter

Operational 2023 Emissions Summary

Proposed Project Operations - Summer and Winter Scenarios

American Canyon Hampton Inn - Unmitigated Operation Only - Napa County, Summer

CalEEMod Run: Summer. Date: 4/29/2021 8:42 AM

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Area	1.49	0.00	0.00	0.00	0.00	0.00
Energy	0.08	0.70	0.05	0.05	0.05	0.05
Mobile	1.45	6.62	0.05	5.23	0.04	1.43
Total	**3.01**	**7.32**	**0.10**	**5.28**	**0.10**	**1.48**

American Canyon Hampton Inn - Unmitigated Operation Only - Napa County, Winter

CalEEMod Run: Winter. Date: 4/29/2021 8:43 AM

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Area	1.49	0.00	0.00	0.00	0.00	0.00
Energy	0.08	0.70	0.05	0.05	0.05	0.05
Mobile	1.25	6.99	0.05	5.23	0.04	1.43
Total	**2.82**	**7.69**	**0.10**	**5.28**	**0.10**	**1.48**

Proposed Project Operations - Maximum Daily Emissions

American Canyon Hampton Inn - Unmitigated Operation Only - Napa County

Maximum between Summer and Winter Scenarios

Emissions Source	Pounds per Day					
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
Existing Total	1.31	0.42	0.19	0.40	0.19	0.25
Proposed Project	3.01	7.69	0.10	5.28	0.10	1.48
CalEEMod Run	Summer	Winter	Winter	Winter	Winter	Winter
Net Proposed Project Emissions	**1.71**	**7.27**	**-0.09**	**4.87**	**-0.10**	**1.23**

Net Annual Operational 2023 Emissions Summary

Existing Operations - Annual Emissions

American Canyon Hampton Inn - Existing Operation Only - Napa County, Annual

CalEEMod Run: Annual. Date: 4/7/2021 3:26 PM

Emissions Source	Tons per Year						Metric Tons per Year		
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	Total CO_2e	Bio-CO_2	NBio-CO_2e
Area	0.04	0.00	0.00	0.00	0.00	0.00	0.2	0.1	0.1
Energy	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	10.0
Mobile	0.01	0.06	0.00	0.03	0.00	0.01	34.3	0.0	34.3
Waste	0.00	0.00	0.00	0.00	0.00	0.00	3.1	1.3	1.9
Water	0.00	0.00	0.00	0.00	0.00	0.00	2.3	0.4	1.9
Annual Total	**0.05**	**0.06**	**0.00**	**0.03**	**0.00**	**0.01**	**49.9**	**1.8**	**48.2**

Proposed Project Operations - Annual Emissions

American Canyon Hampton Inn - Unmitigated Operation Only - Napa County, Annual

CalEEMod Run: Annual. Date: 4/29/2021 8:40 AM

Emissions Source	Tons per Year						Metric Tons per Year		
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	Total CO_2e	Bio-CO_2	NBio-CO_2e
Area	0.27	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
Energy	0.01	0.13	0.01	0.01	0.01	0.01	183.4	0.0	183.4
Mobile	0.23	1.25	0.01	0.92	0.01	0.25	958.2	0.0	958.2
Waste	0.00	0.00	0.00	0.00	0.00	0.00	30.9	12.5	18.4
Water	0.00	0.00	0.00	0.00	0.00	0.00	5.2	0.9	4.4
Annual Total	**0.52**	**1.37**	**0.02**	**0.93**	**0.02**	**0.26**	**1177.7**	**13.4**	**1164.4**
							Amortized Construction Emissions (30 years)		*22.8*
							Total Operational GHG Emissions ($MTCO_2e$/year)		**1,187.2**

Note:

All operational emissions were taken from the Mitigated model results to account for BAAQMD and City requirements. For GHG emissions, only non-biogenic CO2e emissions are included in the project's operational GHG emissions, per BAAQMD's 2017 CEQA Air Quality Guidelines.

Net Operational Emissions between Existing and Proposed

Emissions Source	Tons per Year						Metric Tons per Year
	ROG	NO_x	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)	NBio-CO_2e
Annual Total	**0.47**	**1.31**	**0.02**	**0.89**	**0.02**	**0.25**	**1139.0**

American Canyon Hampton Inn Project Demolition Calculations

Building Demolition Debris Parameters[1]			
1	building gsf	10	cf building volume
1	cf building volume	0.25	cf waste volume
1	cf	0.037	cy
1	cy waste volume	0.5	ton waste weight
1	**gsf**	**0.04625**	**ton waste material**

Existing	Description	GSF[2]	Height/Depth (ft)[3]	Density (lbs/cf)[4]	Demolition Weight (pounds)	Demolition Weight (tons)
Buildings	Buildings	6,693	-	-	-	309.55
Pavement	Hardscape	29,328	0.5	150	2,199,600	1,099.80
					Total Hauling Cubic Yards	**1,409**

Terms:
cy = cubic yard
gsf = gross square feet
cf = cubic feet
ft = feet
lbs = pounds

Sources/Notes:

[1] California Air Pollution Control Officers Association (CAPCOA). 2017. Appendix A Calculation Details for CalEEMod. October.

[2] Square footage of existing building and hardscape are as provided via email by the Applicant, dated April 9, 2021.

[3] Pavement Source: DC Construction Services. 2017. How Thick Is Parking Lot Asphalt? Website: https://dccpaving.com/how-thick-is-parking-lot-asphalt/. Accessed November 30, 2020.

[4] Pavement Source: SFGate. 2019. How to Calculate Asphalt Weight Per Yard. Website: https://homeguides.sfgate.com/calculate-asphalt-weight-per-yard-81825.html. Accessed November 30, 2020.

American Canyon Hampton Inn - Mitigated Construction T3

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.82	1000sqft	0.18	7,822.00	0
Parking Lot	50.66	1000sqft	1.16	50,658.00	0
City Park	0.68	Acre	0.67	29,235.00	0
Hotel	106.00	Room	0.47	58,643.00	0
Recreational Swimming Pool	0.60	1000sqft	0.01	600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 4

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Demolition - CalEEMod Note 5

Grading - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 6

Consumer Products - CalEEMod Note 6

Area Coating - CalEEMod Note 6

Energy Use - CalEEMod Note 6

Water And Wastewater - CalEEMod Note 6

Solid Waste - CalEEMod Note 6

Construction Off-road Equipment Mitigation - CalEEMod Note 7

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	100.00
tblConstructionPhase	NumDays	220.00	300.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	6.00	15.00
tblConstructionPhase	NumDays	6.00	45.00
tblConstructionPhase	NumDays	10.00	85.00
tblConstructionPhase	NumDays	3.00	20.00
tblEnergyUse	LightingElect	2.35	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3.22	0.00
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24NG	39.56	0.00
tblGrading	MaterialImported	0.00	11,000.00
tblLandUse	LandUseSquareFeet	7,820.00	7,822.00
tblLandUse	LandUseSquareFeet	50,660.00	50,658.00

tblLandUse	LandUseSquareFeet	29,620.80	29,235.00
tblLandUse	LandUseSquareFeet	153,912.00	58,643.00
tblLandUse	LotAcreage	0.68	0.67
tblLandUse	LotAcreage	3.53	0.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblSolidWaste	SolidWasteGenerationRate	0.06	0.00
tblSolidWaste	SolidWasteGenerationRate	58.03	0.00
tblSolidWaste	SolidWasteGenerationRate	3.42	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWater	IndoorWaterUseRate	2,688,877.62	0.00
tblWater	IndoorWaterUseRate	35,485.89	0.00
tblWater	OutdoorWaterUseRate	810,207.32	0.00
tblWater	OutdoorWaterUseRate	298,764.18	0.00
tblWater	OutdoorWaterUseRate	21,749.41	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1351	1.4621	0.9600	2.4000e-003	0.2094	0.0582	0.2676	0.0880	0.0542	0.1422	0.0000	215.3885	215.3885	0.0423	0.0000	216.4451
2022	0.6243	2.5416	2.5418	5.3000e-003	0.0916	0.1085	0.2001	0.0248	0.1037	0.1285	0.0000	457.6586	457.6586	0.0706	0.0000	459.4229
2023	0.0218	0.0424	0.0455	1.0000e-004	1.8500e-003	1.7300e-003	3.5800e-003	5.0000e-004	1.6600e-003	2.1600e-003	0.0000	8.4486	8.4486	1.1100e-003	0.0000	8.4764
Maximum	**0.6243**	**2.5416**	**2.5418**	**5.3000e-003**	**0.2094**	**0.1085**	**0.2676**	**0.0880**	**0.1037**	**0.1422**	**0.0000**	**457.6586**	**457.6586**	**0.0706**	**0.0000**	**459.4229**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0542	1.0614	1.0830	2.4000e-003	0.1102	0.0439	0.1541	0.0439	0.0439	0.0878	0.0000	215.3883	215.3883	0.0423	0.0000	216.4449
2022	0.4560	2.3994	2.7118	5.3000e-003	0.0916	0.1252	0.2168	0.0248	0.1251	0.1500	0.0000	457.6582	457.6582	0.0706	0.0000	459.4225
2023	0.0189	0.0426	0.0485	1.0000e-004	1.8500e-003	2.3000e-003	4.1500e-003	5.0000e-004	2.3000e-003	2.8000e-003	0.0000	8.4486	8.4486	1.1100e-003	0.0000	8.4764
Maximum	**0.4560**	**2.3994**	**2.7118**	**5.3000e-003**	**0.1102**	**0.1252**	**0.2168**	**0.0439**	**0.1251**	**0.1500**	**0.0000**	**457.6582**	**457.6582**	**0.0706**	**0.0000**	**459.4225**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**32.27**	**13.41**	**-8.34**	**0.00**	**32.74**	**-1.78**	**20.40**	**38.85**	**-7.36**	**11.83**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**8-1-2021**	**10-31-2021**	0.9118	0.5900
2	**11-1-2021**	**1-31-2022**	1.0029	0.8117
3	**2-1-2022**	**4-30-2022**	0.7607	0.6792

4	**5-1-2022**	**7-31-2022**	0.6350	0.5652
5	**8-1-2022**	**10-31-2022**	0.8435	0.7687
6	**11-1-2022**	**1-31-2023**	0.6563	0.6034
		Highest	1.0029	0.8117

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2388	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2388**	**1.0000e-005**	**1.5200e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2388	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	**0.2388**	**1.0000e-005**	**1.5200e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2021	8/13/2021	5	10	
2	Site Preparation	Site Preparation	8/14/2021	9/10/2021	5	20	
3	Hauling	Grading	9/11/2021	10/1/2021	5	15	
4	Grading	Grading	9/11/2021	11/12/2021	5	45	
5	Building Construction	Building Construction	11/13/2021	1/6/2023	5	300	
6	Paving	Paving	11/13/2021	3/11/2022	5	85	
7	Architectural Coating	Architectural Coating	8/22/2022	1/6/2023	5	100	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 22.5

Acres of Paving: 1.34

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 90,116; Non-Residential Outdoor: 30,039; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Hauling	Graders	0	8.00	187	0.41
Hauling	Rubber Tired Dozers	0	8.00	247	0.40
Hauling	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	139.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Hauling	0	0.00	0.00	1,375.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	62.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0158	0.0000	0.0158	2.3900e-003	0.0000	2.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9700e-003	0.0985	0.0725	1.2000e-004		5.2000e-003	5.2000e-003		4.8600e-003	4.8600e-003	0.0000	10.5357	10.5357	2.6900e-003	0.0000	10.6030
Total	**9.9700e-003**	**0.0985**	**0.0725**	**1.2000e-004**	**0.0158**	**5.2000e-003**	**0.0210**	**2.3900e-003**	**4.8600e-003**	**7.2500e-003**	**0.0000**	**10.5357**	**10.5357**	**2.6900e-003**	**0.0000**	**10.6030**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0192	3.9000e-003	5.0000e-005	1.1700e-003	6.0000e-005	1.2300e-003	3.2000e-004	6.0000e-005	3.8000e-004	0.0000	5.2325	5.2325	2.6000e-004	0.0000	5.2390
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.6000e-004	1.7000e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4283	0.4283	1.0000e-005	0.0000	0.4286
Total	**7.7000e-004**	**0.0194**	**5.6000e-003**	**5.0000e-005**	**1.6800e-003**	**6.0000e-005**	**1.7500e-003**	**4.6000e-004**	**6.0000e-005**	**5.2000e-004**	**0.0000**	**5.6608**	**5.6608**	**2.7000e-004**	**0.0000**	**5.6676**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.1000e-003	0.0000	7.1000e-003	1.0700e-003	0.0000	1.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8100e-003	0.0605	0.0771	1.2000e-004		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003	0.0000	10.5357	10.5357	2.6900e-003	0.0000	10.6030
Total	**2.8100e-003**	**0.0605**	**0.0771**	**1.2000e-004**	**7.1000e-003**	**3.5900e-003**	**0.0107**	**1.0700e-003**	**3.5900e-003**	**4.6600e-003**	**0.0000**	**10.5357**	**10.5357**	**2.6900e-003**	**0.0000**	**10.6030**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0192	3.9000e-003	5.0000e-005	1.1700e-003	6.0000e-005	1.2300e-003	3.2000e-004	6.0000e-005	3.8000e-004	0.0000	5.2325	5.2325	2.6000e-004	0.0000	5.2390
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.6000e-004	1.7000e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4283	0.4283	1.0000e-005	0.0000	0.4286
Total	**7.7000e-004**	**0.0194**	**5.6000e-003**	**5.0000e-005**	**1.6800e-003**	**6.0000e-005**	**1.7500e-003**	**4.6000e-004**	**6.0000e-005**	**5.2000e-004**	**0.0000**	**5.6608**	**5.6608**	**2.7000e-004**	**0.0000**	**5.6676**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1829	0.1075	2.5000e-004		7.0200e-003	7.0200e-003		6.4600e-003	6.4600e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005
Total	**0.0155**	**0.1829**	**0.1075**	**2.5000e-004**	**0.0159**	**7.0200e-003**	**0.0229**	**1.7200e-003**	**6.4600e-003**	**8.1800e-003**	**0.0000**	**21.5264**	**21.5264**	**6.9600e-003**	**0.0000**	**21.7005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.0000e-004	2.1000e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5271	0.5271	1.0000e-005	0.0000	0.5275
Total	**2.9000e-004**	**2.0000e-004**	**2.1000e-003**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**6.4000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5271**	**0.5271**	**1.0000e-005**	**0.0000**	**0.5275**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.1600e-003	0.0000	7.1600e-003	7.7000e-004	0.0000	7.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0200e-003	0.1186	0.1364	2.5000e-004		4.9900e-003	4.9900e-003		4.9900e-003	4.9900e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005
Total	**6.0200e-003**	**0.1186**	**0.1364**	**2.5000e-004**	**7.1600e-003**	**4.9900e-003**	**0.0122**	**7.7000e-004**	**4.9900e-003**	**5.7600e-003**	**0.0000**	**21.5264**	**21.5264**	**6.9600e-003**	**0.0000**	**21.7005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.0000e-004	2.1000e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5271	0.5271	1.0000e-005	0.0000	0.5275
Total	**2.9000e-004**	**2.0000e-004**	**2.1000e-003**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**6.4000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5271**	**0.5271**	**1.0000e-005**	**0.0000**	**0.5275**

3.4 Hauling - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1800e-003	0.0000	1.1800e-003	1.8000e-004	0.0000	1.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.1800e-003**	**0.0000**	**1.1800e-003**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	5.3900e-003	0.1898	0.0386	5.3000e-004	0.0116	6.0000e-004	0.0122	3.1800e-003	5.8000e-004	3.7600e-003	0.0000	51.7604	51.7604	2.5800e-003	0.0000	51.8249
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.3900e-003**	**0.1898**	**0.0386**	**5.3000e-004**	**0.0116**	**6.0000e-004**	**0.0122**	**3.1800e-003**	**5.8000e-004**	**3.7600e-003**	**0.0000**	**51.7604**	**51.7604**	**2.5800e-003**	**0.0000**	**51.8249**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-004	0.0000	5.3000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.3000e-004**	**0.0000**	**5.3000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.3900e-003	0.1898	0.0386	5.3000e-004	0.0116	6.0000e-004	0.0122	3.1800e-003	5.8000e-004	3.7600e-003	0.0000	51.7604	51.7604	2.5800e-003	0.0000	51.8249
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**5.3900e-003**	**0.1898**	**0.0386**	**5.3000e-004**	**0.0116**	**6.0000e-004**	**0.0122**	**3.1800e-003**	**5.8000e-004**	**3.7600e-003**	**0.0000**	**51.7604**	**51.7604**	**2.5800e-003**	**0.0000**	**51.8249**

3.5 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0411	0.4548	0.2196	4.6000e-004		0.0206	0.0206		0.0190	0.0190	0.0000	40.7337	40.7337	0.0132	0.0000	41.0631
Total	**0.0411**	**0.4548**	**0.2196**	**4.6000e-004**	**0.1474**	**0.0206**	**0.1680**	**0.0758**	**0.0190**	**0.0947**	**0.0000**	**40.7337**	**40.7337**	**0.0132**	**0.0000**	**41.0631**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.6000e-004	5.9000e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.4826	1.4826	4.0000e-005	0.0000	1.4835
Total	**8.0000e-004**	**5.6000e-004**	**5.9000e-003**	**2.0000e-005**	**1.7800e-003**	**1.0000e-005**	**1.7900e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.4826**	**1.4826**	**4.0000e-005**	**0.0000**	**1.4835**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.2298	0.2733	4.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	40.7337	40.7337	0.0132	0.0000	41.0630
Total	**0.0114**	**0.2298**	**0.2733**	**4.6000e-004**	**0.0663**	**0.0109**	**0.0773**	**0.0341**	**0.0109**	**0.0450**	**0.0000**	**40.7337**	**40.7337**	**0.0132**	**0.0000**	**41.0630**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.6000e-004	5.9000e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.4826	1.4826	4.0000e-005	0.0000	1.4835
Total	**8.0000e-004**	**5.6000e-004**	**5.9000e-003**	**2.0000e-005**	**1.7800e-003**	**1.0000e-005**	**1.7900e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.4826**	**1.4826**	**4.0000e-005**	**0.0000**	**1.4835**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0358	0.2805	0.2549	4.4000e-004		0.0143	0.0143		0.0137	0.0137	0.0000	36.3385	36.3385	7.1500e-003	0.0000	36.5173
Total	**0.0358**	**0.2805**	**0.2549**	**4.4000e-004**		**0.0143**	**0.0143**		**0.0137**	**0.0137**	**0.0000**	**36.3385**	**36.3385**	**7.1500e-003**	**0.0000**	**36.5173**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4300e-003	0.0459	0.0120	1.1000e-004	2.7500e-003	1.0000e-004	2.8600e-003	8.0000e-004	1.0000e-004	9.0000e-004	0.0000	10.8110	10.8110	5.5000e-004	0.0000	10.8248
Worker	3.8800e-003	2.7100e-003	0.0285	8.0000e-005	8.5700e-003	6.0000e-005	8.6300e-003	2.2800e-003	5.0000e-005	2.3300e-003	0.0000	7.1492	7.1492	1.9000e-004	0.0000	7.1538
Total	**5.3100e-003**	**0.0486**	**0.0404**	**1.9000e-004**	**0.0113**	**1.6000e-004**	**0.0115**	**3.0800e-003**	**1.5000e-004**	**3.2300e-003**	**0.0000**	**17.9602**	**17.9602**	**7.4000e-004**	**0.0000**	**17.9786**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0125	0.2384	0.2696	4.4000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	36.3385	36.3385	7.1500e-003	0.0000	36.5172
Total	**0.0125**	**0.2384**	**0.2696**	**4.4000e-004**		**0.0143**	**0.0143**		**0.0143**	**0.0143**	**0.0000**	**36.3385**	**36.3385**	**7.1500e-003**	**0.0000**	**36.5172**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4300e-003	0.0459	0.0120	1.1000e-004	2.7500e-003	1.0000e-004	2.8600e-003	8.0000e-004	1.0000e-004	9.0000e-004	0.0000	10.8110	10.8110	5.5000e-004	0.0000	10.8248
Worker	3.8800e-003	2.7100e-003	0.0285	8.0000e-005	8.5700e-003	6.0000e-005	8.6300e-003	2.2800e-003	5.0000e-005	2.3300e-003	0.0000	7.1492	7.1492	1.9000e-004	0.0000	7.1538
Total	**5.3100e-003**	**0.0486**	**0.0404**	**1.9000e-004**	**0.0113**	**1.6000e-004**	**0.0115**	**3.0800e-003**	**1.5000e-004**	**3.2300e-003**	**0.0000**	**17.9602**	**17.9602**	**7.4000e-004**	**0.0000**	**17.9786**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2412	1.8985	1.8659	3.2500e-003		0.0913	0.0913		0.0875	0.0875	0.0000	269.9841	269.9841	0.0521	0.0000	271.2863
Total	**0.2412**	**1.8985**	**1.8659**	**3.2500e-003**		**0.0913**	**0.0913**		**0.0875**	**0.0875**	**0.0000**	**269.9841**	**269.9841**	**0.0521**	**0.0000**	**271.2863**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8500e-003	0.3227	0.0815	8.3000e-004	0.0204	6.7000e-004	0.0211	5.9100e-003	6.4000e-004	6.5500e-003	0.0000	79.6070	79.6070	4.0200e-003	0.0000	79.7076

Worker	0.0268	0.0180	0.1932	5.7000e-004	0.0637	4.2000e-004	0.0641	0.0169	3.8000e-004	0.0173	0.0000	51.1655	51.1655	1.2400e-003	0.0000	51.1964
Total	**0.0366**	**0.3407**	**0.2747**	**1.4000e-003**	**0.0841**	**1.0900e-003**	**0.0852**	**0.0229**	**1.0200e-003**	**0.0239**	**0.0000**	**130.7725**	**130.7725**	**5.2600e-003**	**0.0000**	**130.9040**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0928	1.7709	2.0031	3.2500e-003		0.1063	0.1063		0.1063	0.1063	0.0000	269.9838	269.9838	0.0521	0.0000	271.2860
Total	**0.0928**	**1.7709**	**2.0031**	**3.2500e-003**		**0.1063**	**0.1063**		**0.1063**	**0.1063**	**0.0000**	**269.9838**	**269.9838**	**0.0521**	**0.0000**	**271.2860**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8500e-003	0.3227	0.0815	8.3000e-004	0.0204	6.7000e-004	0.0211	5.9100e-003	6.4000e-004	6.5500e-003	0.0000	79.6070	79.6070	4.0200e-003	0.0000	79.7076
Worker	0.0268	0.0180	0.1932	5.7000e-004	0.0637	4.2000e-004	0.0641	0.0169	3.8000e-004	0.0173	0.0000	51.1655	51.1655	1.2400e-003	0.0000	51.1964
Total	**0.0366**	**0.3407**	**0.2747**	**1.4000e-003**	**0.0841**	**1.0900e-003**	**0.0852**	**0.0229**	**1.0200e-003**	**0.0239**	**0.0000**	**130.7725**	**130.7725**	**5.2600e-003**	**0.0000**	**130.9040**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2800e-003	0.0341	0.0355	6.0000e-005		1.5300e-003	1.5300e-003		1.4700e-003	1.4700e-003	0.0000	5.1926	5.1926	9.8000e-004	0.0000	5.2171
Total	**4.2800e-003**	**0.0341**	**0.0355**	**6.0000e-005**		**1.5300e-003**	**1.5300e-003**		**1.4700e-003**	**1.4700e-003**	**0.0000**	**5.1926**	**5.1926**	**9.8000e-004**	**0.0000**	**5.2171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.7400e-003	1.3600e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4885	1.4885	7.0000e-005	0.0000	1.4902
Worker	4.8000e-004	3.1000e-004	3.3900e-003	1.0000e-005	1.2200e-003	1.0000e-005	1.2300e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9461	0.9461	2.0000e-005	0.0000	0.9466
Total	**6.2000e-004**	**5.0500e-003**	**4.7500e-003**	**3.0000e-005**	**1.6100e-003**	**2.0000e-005**	**1.6300e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**2.4346**	**2.4346**	**9.0000e-005**	**0.0000**	**2.4368**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7800e-003	0.0341	0.0385	6.0000e-005		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003	0.0000	5.1926	5.1926	9.8000e-004	0.0000	5.2171

Total	**1.7800e-003**	**0.0341**	**0.0385**	**6.0000e-005**		**2.0400e-003**	**2.0400e-003**		**2.0400e-003**	**2.0400e-003**	**0.0000**	**5.1926**	**5.1926**	**9.8000e-004**	**0.0000**	**5.2171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.7400e-003	1.3600e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4885	1.4885	7.0000e-005	0.0000	1.4902
Worker	4.8000e-004	3.1000e-004	3.3900e-003	1.0000e-005	1.2200e-003	1.0000e-005	1.2300e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9461	0.9461	2.0000e-005	0.0000	0.9466
Total	**6.2000e-004**	**5.0500e-003**	**4.7500e-003**	**3.0000e-005**	**1.6100e-003**	**2.0000e-005**	**1.6300e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**2.4346**	**2.4346**	**9.0000e-005**	**0.0000**	**2.4368**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0186	0.1863	0.2061	3.1000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	27.1334	27.1334	8.6000e-003	0.0000	27.3484
Paving	6.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0192**	**0.1863**	**0.2061**	**3.1000e-004**		**0.0102**	**0.0102**		**9.4000e-003**	**9.4000e-003**	**0.0000**	**27.1334**	**27.1334**	**8.6000e-003**	**0.0000**	**27.3484**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.6000e-004	6.8900e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0900e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.7296	1.7296	5.0000e-005	0.0000	1.7308
Total	**9.4000e-004**	**6.6000e-004**	**6.8900e-003**	**2.0000e-005**	**2.0700e-003**	**1.0000e-005**	**2.0900e-003**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.7296**	**1.7296**	**5.0000e-005**	**0.0000**	**1.7308**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.3600e-003	0.1549	0.2270	3.1000e-004		9.2600e-003	9.2600e-003		9.2600e-003	9.2600e-003	0.0000	27.1334	27.1334	8.6000e-003	0.0000	27.3483
Paving	6.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.9900e-003**	**0.1549**	**0.2270**	**3.1000e-004**		**9.2600e-003**	**9.2600e-003**		**9.2600e-003**	**9.2600e-003**	**0.0000**	**27.1334**	**27.1334**	**8.6000e-003**	**0.0000**	**27.3483**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.6000e-004	6.8900e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0900e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.7296	1.7296	5.0000e-005	0.0000	1.7308
Total	**9.4000e-004**	**6.6000e-004**	**6.8900e-003**	**2.0000e-005**	**2.0700e-003**	**1.0000e-005**	**2.0900e-003**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.7296**	**1.7296**	**5.0000e-005**	**0.0000**	**1.7308**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0235	0.2333	0.2924	4.5000e-004		0.0122	0.0122		0.0113	0.0113	0.0000	38.7751	38.7751	0.0123	0.0000	39.0823
Paving	8.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0244**	**0.2333**	**0.2924**	**4.5000e-004**		**0.0122**	**0.0122**		**0.0113**	**0.0113**	**0.0000**	**38.7751**	**38.7751**	**0.0123**	**0.0000**	**39.0823**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	8.4000e-004	8.9900e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3805	2.3805	6.0000e-005	0.0000	2.3820
Total	**1.2500e-003**	**8.4000e-004**	**8.9900e-003**	**3.0000e-005**	**2.9600e-003**	**2.0000e-005**	**2.9800e-003**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**0.0000**	**2.3805**	**2.3805**	**6.0000e-005**	**0.0000**	**2.3820**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0105	0.2213	0.3243	4.5000e-004		0.0132	0.0132		0.0132	0.0132	0.0000	38.7751	38.7751	0.0123	0.0000	39.0823
Paving	8.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0114**	**0.2213**	**0.3243**	**4.5000e-004**		**0.0132**	**0.0132**		**0.0132**	**0.0132**	**0.0000**	**38.7751**	**38.7751**	**0.0123**	**0.0000**	**39.0823**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	8.4000e-004	8.9900e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3805	2.3805	6.0000e-005	0.0000	2.3820
Total	**1.2500e-003**	**8.4000e-004**	**8.9900e-003**	**3.0000e-005**	**2.9600e-003**	**2.0000e-005**	**2.9800e-003**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**0.0000**	**2.3805**	**2.3805**	**6.0000e-005**	**0.0000**	**2.3820**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Archit. Coating	0.3092					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.0669	0.0862	1.4000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	12.1280	12.1280	7.9000e-004	0.0000	12.1477
Total	**0.3189**	**0.0669**	**0.0862**	**1.4000e-004**		**3.8800e-003**	**3.8800e-003**		**3.8800e-003**	**3.8800e-003**	**0.0000**	**12.1280**	**12.1280**	**7.9000e-004**	**0.0000**	**12.1477**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.2700e-003	0.0137	4.0000e-005	4.5000e-003	3.0000e-005	4.5300e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.6184	3.6184	9.0000e-005	0.0000	3.6206
Total	**1.8900e-003**	**1.2700e-003**	**0.0137**	**4.0000e-005**	**4.5000e-003**	**3.0000e-005**	**4.5300e-003**	**1.2000e-003**	**3.0000e-005**	**1.2300e-003**	**0.0000**	**3.6184**	**3.6184**	**9.0000e-005**	**0.0000**	**3.6206**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3092					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8200e-003	0.0645	0.0870	1.4000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003	0.0000	12.1279	12.1279	7.9000e-004	0.0000	12.1477
Total	**0.3120**	**0.0645**	**0.0870**	**1.4000e-004**		**4.5200e-003**	**4.5200e-003**		**4.5200e-003**	**4.5200e-003**	**0.0000**	**12.1279**	**12.1279**	**7.9000e-004**	**0.0000**	**12.1477**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.2700e-003	0.0137	4.0000e-005	4.5000e-003	3.0000e-005	4.5300e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.6184	3.6184	9.0000e-005	0.0000	3.6206
Total	**1.8900e-003**	**1.2700e-003**	**0.0137**	**4.0000e-005**	**4.5000e-003**	**3.0000e-005**	**4.5300e-003**	**1.2000e-003**	**3.0000e-005**	**1.2300e-003**	**0.0000**	**3.6184**	**3.6184**	**9.0000e-005**	**0.0000**	**3.6206**

3.8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0168**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	6.6000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1831	0.1831	0.0000	0.0000	0.1832
Total	**9.0000e-005**	**6.0000e-005**	**6.6000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1831**	**0.1831**	**0.0000**	**0.0000**	**0.1832**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	3.3900e-003	4.5800e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0164**	**3.3900e-003**	**4.5800e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	6.6000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1831	0.1831	0.0000	0.0000	0.1832
Total	**9.0000e-005**	**6.0000e-005**	**6.6000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1831**	**0.1831**	**0.0000**	**0.0000**	**0.1832**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Hotel	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Other Non-Asphalt Surfaces	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Parking Lot	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Recreational Swimming Pool	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2388	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Unmitigated	0.2388	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2387					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Total	**0.2388**	**1.0000e-005**	**1.5200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2387					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Total	**0.2388**	**1.0000e-005**	**1.5200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000

Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

American Canyon Hampton Inn - Mitigated Construction T4 & Electric

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.82	1000sqft	0.18	7,822.00	0
Parking Lot	50.66	1000sqft	1.16	50,658.00	0
City Park	0.68	Acre	0.67	29,235.00	0
Hotel	106.00	Room	0.47	58,643.00	0
Recreational Swimming Pool	0.60	1000sqft	0.01	600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment -

Off-road Equipment - CalEEMod Note 7

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 4

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Demolition - CalEEMod Note 5

Grading - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 6

Consumer Products - CalEEMod Note 6

Area Coating - CalEEMod Note 6

Energy Use - CalEEMod Note 6

Water And Wastewater - CalEEMod Note 6

Solid Waste - CalEEMod Note 6

Construction Off-road Equipment Mitigation - CalEEMod Note 7

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	100.00
tblConstructionPhase	NumDays	220.00	300.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	6.00	15.00
tblConstructionPhase	NumDays	6.00	45.00
tblConstructionPhase	NumDays	10.00	85.00
tblConstructionPhase	NumDays	3.00	20.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-20
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-20
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-20
tblEnergyUse	LightingElect	2.35	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3.22	0.00
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24NG	39.56	0.00

tblGrading	MaterialImported	0.00	11,000.00
tblLandUse	LandUseSquareFeet	7,820.00	7,822.00
tblLandUse	LandUseSquareFeet	50,660.00	50,658.00
tblLandUse	LandUseSquareFeet	29,620.80	29,235.00
tblLandUse	LandUseSquareFeet	153,912.00	58,643.00
tblLandUse	LotAcreage	0.68	0.67
tblLandUse	LotAcreage	3.53	0.47
tblOffRoadEquipment	HorsePower	84.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblSolidWaste	SolidWasteGenerationRate	0.06	0.00
tblSolidWaste	SolidWasteGenerationRate	58.03	0.00
tblSolidWaste	SolidWasteGenerationRate	3.42	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWater	IndoorWaterUseRate	2,688,877.62	0.00
tblWater	IndoorWaterUseRate	35,485.89	0.00
tblWater	OutdoorWaterUseRate	810,207.32	0.00
tblWater	OutdoorWaterUseRate	298,764.18	0.00
tblWater	OutdoorWaterUseRate	21,749.41	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1288	1.4067	0.8955	2.2900e-003	0.2094	0.0553	0.2646	0.0880	0.0513	0.1392	0.0000	205.4974	205.4974	0.0418	0.0000	206.5413
2022	0.5814	2.1609	2.0639	4.4500e-003	0.0916	0.0894	0.1810	0.0248	0.0846	0.1095	0.0000	384.1816	384.1816	0.0671	0.0000	385.8587
2023	0.0210	0.0356	0.0363	8.0000e-005	1.8500e-003	1.4100e-003	3.2600e-003	5.0000e-004	1.3400e-003	1.8400e-003	0.0000	7.0355	7.0355	1.0500e-003	0.0000	7.0618
Maximum	**0.5814**	**2.1609**	**2.0639**	**4.4500e-003**	**0.2094**	**0.0894**	**0.2646**	**0.0880**	**0.0846**	**0.1392**	**0.0000**	**384.1816**	**384.1816**	**0.0671**	**0.0000**	**385.8587**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0246	0.3047	0.5321	2.2900e-003	0.1102	2.2600e-003	0.1125	0.0439	2.2200e-003	0.0462	0.0000	154.3539	154.3539	0.0280	0.0000	155.0543
2022	0.3618	0.3945	0.8018	4.4500e-003	0.0916	2.7300e-003	0.0943	0.0248	2.6600e-003	0.0275	0.0000	221.9479	221.9479	0.0330	0.0000	222.7717
2023	0.0172	5.8800e-003	0.0119	8.0000e-005	1.8500e-003	4.0000e-005	1.8900e-003	5.0000e-004	4.0000e-005	5.4000e-004	0.0000	3.8851	3.8851	5.0000e-004	0.0000	3.8976
Maximum	**0.3618**	**0.3945**	**0.8018**	**4.4500e-003**	**0.1102**	**2.7300e-003**	**0.1125**	**0.0439**	**2.6600e-003**	**0.0462**	**0.0000**	**221.9479**	**221.9479**	**0.0330**	**0.0000**	**222.7717**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**44.81**	**80.43**	**55.08**	**0.00**	**32.74**	**96.56**	**53.51**	**38.85**	**96.41**	**70.38**	**0.00**	**36.29**	**36.29**	**44.06**	**0.00**	**36.32**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

1	**8-1-2021**	**10-31-2021**	0.9118	0.2462
2	**11-1-2021**	**1-31-2022**	0.9052	0.1228
3	**2-1-2022**	**4-30-2022**	0.6571	0.1145
4	**5-1-2022**	**7-31-2022**	0.5279	0.1066
5	**8-1-2022**	**10-31-2022**	0.7364	0.2742
6	**11-1-2022**	**1-31-2023**	0.5788	0.2355
		Highest	0.9118	0.2742

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4000e-004**	**1.0000e-005**	**1.5200e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4000e-004**	**1.0000e-005**	**1.5200e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2021	8/13/2021	5	10	
2	Site Preparation	Site Preparation	8/14/2021	9/10/2021	5	20	
3	Hauling	Grading	9/11/2021	10/1/2021	5	15	
4	Grading	Grading	9/11/2021	11/12/2021	5	45	
5	Building Construction	Building Construction	11/13/2021	1/6/2023	5	300	
6	Paving	Paving	11/13/2021	3/11/2022	5	85	
7	Architectural Coating	Architectural Coating	8/22/2022	1/6/2023	5	100	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 22.5

Acres of Paving: 1.34

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 90,116; Non-Residential Outdoor: 30,039; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Hauling	Graders	0	8.00	187	0.41
Hauling	Rubber Tired Dozers	0	8.00	247	0.40
Hauling	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	5	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	139.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Hauling	0	0.00	0.00	1,375.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	62.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0158	0.0000	0.0158	2.3900e-003	0.0000	2.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9700e-003	0.0985	0.0725	1.2000e-004		5.2000e-003	5.2000e-003		4.8600e-003	4.8600e-003	0.0000	10.5357	10.5357	2.6900e-003	0.0000	10.6030
Total	**9.9700e-003**	**0.0985**	**0.0725**	**1.2000e-004**	**0.0158**	**5.2000e-003**	**0.0210**	**2.3900e-003**	**4.8600e-003**	**7.2500e-003**	**0.0000**	**10.5357**	**10.5357**	**2.6900e-003**	**0.0000**	**10.6030**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0192	3.9000e-003	5.0000e-005	1.1700e-003	6.0000e-005	1.2300e-003	3.2000e-004	6.0000e-005	3.8000e-004	0.0000	5.2325	5.2325	2.6000e-004	0.0000	5.2390

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.6000e-004	1.7000e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4283	0.4283	1.0000e-005	0.0000	0.4286
Total	**7.7000e-004**	**0.0194**	**5.6000e-003**	**5.0000e-005**	**1.6800e-003**	**6.0000e-005**	**1.7500e-003**	**4.6000e-004**	**6.0000e-005**	**5.2000e-004**	**0.0000**	**5.6608**	**5.6608**	**2.7000e-004**	**0.0000**	**5.6676**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.1000e-003	0.0000	7.1000e-003	1.0700e-003	0.0000	1.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	2.2700e-003	0.0192	1.2000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	3.7528	3.7528	1.2100e-003	0.0000	3.7832
Total	**5.2000e-004**	**2.2700e-003**	**0.0192**	**1.2000e-004**	**7.1000e-003**	**7.0000e-005**	**7.1700e-003**	**1.0700e-003**	**7.0000e-005**	**1.1400e-003**	**0.0000**	**3.7528**	**3.7528**	**1.2100e-003**	**0.0000**	**3.7832**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0192	3.9000e-003	5.0000e-005	1.1700e-003	6.0000e-005	1.2300e-003	3.2000e-004	6.0000e-005	3.8000e-004	0.0000	5.2325	5.2325	2.6000e-004	0.0000	5.2390
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.6000e-004	1.7000e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4283	0.4283	1.0000e-005	0.0000	0.4286
Total	**7.7000e-004**	**0.0194**	**5.6000e-003**	**5.0000e-005**	**1.6800e-003**	**6.0000e-005**	**1.7500e-003**	**4.6000e-004**	**6.0000e-005**	**5.2000e-004**	**0.0000**	**5.6608**	**5.6608**	**2.7000e-004**	**0.0000**	**5.6676**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1829	0.1075	2.5000e-004		7.0200e-003	7.0200e-003		6.4600e-003	6.4600e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005
Total	**0.0155**	**0.1829**	**0.1075**	**2.5000e-004**	**0.0159**	**7.0200e-003**	**0.0229**	**1.7200e-003**	**6.4600e-003**	**8.1800e-003**	**0.0000**	**21.5264**	**21.5264**	**6.9600e-003**	**0.0000**	**21.7005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.0000e-004	2.1000e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5271	0.5271	1.0000e-005	0.0000	0.5275
Total	**2.9000e-004**	**2.0000e-004**	**2.1000e-003**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**6.4000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5271**	**0.5271**	**1.0000e-005**	**0.0000**	**0.5275**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					7.1600e-003	0.0000	7.1600e-003	7.7000e-004	0.0000	7.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6800e-003	0.0116	0.0981	2.5000e-004		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	19.1379	19.1379	6.1900e-003	0.0000	19.2927
Total	**2.6800e-003**	**0.0116**	**0.0981**	**2.5000e-004**	**7.1600e-003**	**3.6000e-004**	**7.5200e-003**	**7.7000e-004**	**3.6000e-004**	**1.1300e-003**	**0.0000**	**19.1379**	**19.1379**	**6.1900e-003**	**0.0000**	**19.2927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.0000e-004	2.1000e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5271	0.5271	1.0000e-005	0.0000	0.5275
Total	**2.9000e-004**	**2.0000e-004**	**2.1000e-003**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**6.4000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5271**	**0.5271**	**1.0000e-005**	**0.0000**	**0.5275**

3.4 Hauling - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1800e-003	0.0000	1.1800e-003	1.8000e-004	0.0000	1.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.1800e-003**	**0.0000**	**1.1800e-003**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.3900e-003	0.1898	0.0386	5.3000e-004	0.0116	6.0000e-004	0.0122	3.1800e-003	5.8000e-004	3.7600e-003	0.0000	51.7604	51.7604	2.5800e-003	0.0000	51.8249
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.3900e-003**	**0.1898**	**0.0386**	**5.3000e-004**	**0.0116**	**6.0000e-004**	**0.0122**	**3.1800e-003**	**5.8000e-004**	**3.7600e-003**	**0.0000**	**51.7604**	**51.7604**	**2.5800e-003**	**0.0000**	**51.8249**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-004	0.0000	5.3000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.3000e-004**	**0.0000**	**5.3000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	5.3900e-003	0.1898	0.0386	5.3000e-004	0.0116	6.0000e-004	0.0122	3.1800e-003	5.8000e-004	3.7600e-003	0.0000	51.7604	51.7604	2.5800e-003	0.0000	51.8249
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.3900e-003**	**0.1898**	**0.0386**	**5.3000e-004**	**0.0116**	**6.0000e-004**	**0.0122**	**3.1800e-003**	**5.8000e-004**	**3.7600e-003**	**0.0000**	**51.7604**	**51.7604**	**2.5800e-003**	**0.0000**	**51.8249**

3.5 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1474	0.0000	0.1474	0.0758	0.0000	0.0758	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0411	0.4548	0.2196	4.6000e-004		0.0206	0.0206		0.0190	0.0190	0.0000	40.7337	40.7337	0.0132	0.0000	41.0631
Total	**0.0411**	**0.4548**	**0.2196**	**4.6000e-004**	**0.1474**	**0.0206**	**0.1680**	**0.0758**	**0.0190**	**0.0947**	**0.0000**	**40.7337**	**40.7337**	**0.0132**	**0.0000**	**41.0631**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.6000e-004	5.9000e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.4826	1.4826	4.0000e-005	0.0000	1.4835
Total	**8.0000e-004**	**5.6000e-004**	**5.9000e-003**	**2.0000e-005**	**1.7800e-003**	**1.0000e-005**	**1.7900e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.4826**	**1.4826**	**4.0000e-005**	**0.0000**	**1.4835**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0663	0.0000	0.0663	0.0341	0.0000	0.0341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0181	0.1532	4.6000e-004		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	29.9854	29.9854	9.7000e-003	0.0000	30.2279
Total	**4.1800e-003**	**0.0181**	**0.1532**	**4.6000e-004**	**0.0663**	**5.6000e-004**	**0.0669**	**0.0341**	**5.6000e-004**	**0.0347**	**0.0000**	**29.9854**	**29.9854**	**9.7000e-003**	**0.0000**	**30.2279**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.6000e-004	5.9000e-003	2.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.4826	1.4826	4.0000e-005	0.0000	1.4835
Total	**8.0000e-004**	**5.6000e-004**	**5.9000e-003**	**2.0000e-005**	**1.7800e-003**	**1.0000e-005**	**1.7900e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.4826**	**1.4826**	**4.0000e-005**	**0.0000**	**1.4835**

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Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	0.0295	0.2251	0.1904	3.2000e-004		0.0114	0.0114		0.0108	0.0108	0.0000	26.4474	26.4474	6.6400e-003	0.0000	26.6135
Total	**0.0295**	**0.2251**	**0.1904**	**3.2000e-004**		**0.0114**	**0.0114**		**0.0108**	**0.0108**	**0.0000**	**26.4474**	**26.4474**	**6.6400e-003**	**0.0000**	**26.6135**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4300e-003	0.0459	0.0120	1.1000e-004	2.7500e-003	1.0000e-004	2.8600e-003	8.0000e-004	1.0000e-004	9.0000e-004	0.0000	10.8110	10.8110	5.5000e-004	0.0000	10.8248
Worker	3.8800e-003	2.7100e-003	0.0285	8.0000e-005	8.5700e-003	6.0000e-005	8.6300e-003	2.2800e-003	5.0000e-005	2.3300e-003	0.0000	7.1492	7.1492	1.9000e-004	0.0000	7.1538
Total	**5.3100e-003**	**0.0486**	**0.0404**	**1.9000e-004**	**0.0113**	**1.6000e-004**	**0.0115**	**3.0800e-003**	**1.5000e-004**	**3.2300e-003**	**0.0000**	**17.9602**	**17.9602**	**7.4000e-004**	**0.0000**	**17.9786**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2400e-003	5.3800e-003	0.0455	3.2000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	8.8704	8.8704	2.8700e-003	0.0000	8.9421
Total	**1.2400e-003**	**5.3800e-003**	**0.0455**	**3.2000e-004**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**8.8704**	**8.8704**	**2.8700e-003**	**0.0000**	**8.9421**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4300e-003	0.0459	0.0120	1.1000e-004	2.7500e-003	1.0000e-004	2.8600e-003	8.0000e-004	1.0000e-004	9.0000e-004	0.0000	10.8110	10.8110	5.5000e-004	0.0000	10.8248
Worker	3.8800e-003	2.7100e-003	0.0285	8.0000e-005	8.5700e-003	6.0000e-005	8.6300e-003	2.2800e-003	5.0000e-005	2.3300e-003	0.0000	7.1492	7.1492	1.9000e-004	0.0000	7.1538
Total	**5.3100e-003**	**0.0486**	**0.0404**	**1.9000e-004**	**0.0113**	**1.6000e-004**	**0.0115**	**3.0800e-003**	**1.5000e-004**	**3.2300e-003**	**0.0000**	**17.9602**	**17.9602**	**7.4000e-004**	**0.0000**	**17.9786**

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Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1983	1.5179	1.3881	2.4000e-003		0.0722	0.0722		0.0684	0.0684	0.0000	196.5072	196.5072	0.0486	0.0000	197.7221
Total	**0.1983**	**1.5179**	**1.3881**	**2.4000e-003**		**0.0722**	**0.0722**		**0.0684**	**0.0684**	**0.0000**	**196.5072**	**196.5072**	**0.0486**	**0.0000**	**197.7221**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8500e-003	0.3227	0.0815	8.3000e-004	0.0204	6.7000e-004	0.0211	5.9100e-003	6.4000e-004	6.5500e-003	0.0000	79.6070	79.6070	4.0200e-003	0.0000	79.7076
Worker	0.0268	0.0180	0.1932	5.7000e-004	0.0637	4.2000e-004	0.0641	0.0169	3.8000e-004	0.0173	0.0000	51.1655	51.1655	1.2400e-003	0.0000	51.1964
Total	**0.0366**	**0.3407**	**0.2747**	**1.4000e-003**	**0.0841**	**1.0900e-003**	**0.0852**	**0.0229**	**1.0200e-003**	**0.0239**	**0.0000**	**130.7725**	**130.7725**	**5.2600e-003**	**0.0000**	**130.9040**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.2200e-003	0.0399	0.3379	2.4000e-003		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	65.9050	65.9050	0.0213	0.0000	66.4379
Total	**9.2200e-003**	**0.0399**	**0.3379**	**2.4000e-003**		**1.2300e-003**	**1.2300e-003**		**1.2300e-003**	**1.2300e-003**	**0.0000**	**65.9050**	**65.9050**	**0.0213**	**0.0000**	**66.4379**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8500e-003	0.3227	0.0815	8.3000e-004	0.0204	6.7000e-004	0.0211	5.9100e-003	6.4000e-004	6.5500e-003	0.0000	79.6070	79.6070	4.0200e-003	0.0000	79.7076
Worker	0.0268	0.0180	0.1932	5.7000e-004	0.0637	4.2000e-004	0.0641	0.0169	3.8000e-004	0.0173	0.0000	51.1655	51.1655	1.2400e-003	0.0000	51.1964

Total	**0.0366**	**0.3407**	**0.2747**	**1.4000e-003**	**0.0841**	**1.0900e-003**	**0.0852**	**0.0229**	**1.0200e-003**	**0.0239**	**0.0000**	**130.7725**	**130.7725**	**5.2600e-003**	**0.0000**	**130.9040**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.5200e-003	0.0273	0.0264	5.0000e-005		1.2100e-003	1.2100e-003		1.1500e-003	1.1500e-003	0.0000	3.7795	3.7795	9.2000e-004	0.0000	3.8025
Total	**3.5200e-003**	**0.0273**	**0.0264**	**5.0000e-005**		**1.2100e-003**	**1.2100e-003**		**1.1500e-003**	**1.1500e-003**	**0.0000**	**3.7795**	**3.7795**	**9.2000e-004**	**0.0000**	**3.8025**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.7400e-003	1.3600e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4885	1.4885	7.0000e-005	0.0000	1.4902
Worker	4.8000e-004	3.1000e-004	3.3900e-003	1.0000e-005	1.2200e-003	1.0000e-005	1.2300e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9461	0.9461	2.0000e-005	0.0000	0.9466
Total	**6.2000e-004**	**5.0500e-003**	**4.7500e-003**	**3.0000e-005**	**1.6100e-003**	**2.0000e-005**	**1.6300e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**2.4346**	**2.4346**	**9.0000e-005**	**0.0000**	**2.4368**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-004	7.7000e-004	6.5000e-003	5.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2674	1.2674	4.1000e-004	0.0000	1.2776
Total	**1.8000e-004**	**7.7000e-004**	**6.5000e-003**	**5.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**1.2674**	**1.2674**	**4.1000e-004**	**0.0000**	**1.2776**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.7400e-003	1.3600e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4885	1.4885	7.0000e-005	0.0000	1.4902
Worker	4.8000e-004	3.1000e-004	3.3900e-003	1.0000e-005	1.2200e-003	1.0000e-005	1.2300e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9461	0.9461	2.0000e-005	0.0000	0.9466
Total	**6.2000e-004**	**5.0500e-003**	**4.7500e-003**	**3.0000e-005**	**1.6100e-003**	**2.0000e-005**	**1.6300e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**2.4346**	**2.4346**	**9.0000e-005**	**0.0000**	**2.4368**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0186	0.1863	0.2061	3.1000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	27.1334	27.1334	8.6000e-003	0.0000	27.3484
Paving	6.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0192**	**0.1863**	**0.2061**	**3.1000e-004**		**0.0102**	**0.0102**		**9.4000e-003**	**9.4000e-003**	**0.0000**	**27.1334**	**27.1334**	**8.6000e-003**	**0.0000**	**27.3484**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.6000e-004	6.8900e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0900e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.7296	1.7296	5.0000e-005	0.0000	1.7308
Total	**9.4000e-004**	**6.6000e-004**	**6.8900e-003**	**2.0000e-005**	**2.0700e-003**	**1.0000e-005**	**2.0900e-003**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.7296**	**1.7296**	**5.0000e-005**	**0.0000**	**1.7308**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8900e-003	8.1900e-003	0.1166	3.1000e-004		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	13.4867	13.4867	4.3600e-003	0.0000	13.5957
Paving	6.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.5200e-003**	**8.1900e-003**	**0.1166**	**3.1000e-004**		**2.5000e-004**	**2.5000e-004**		**2.5000e-004**	**2.5000e-004**	**0.0000**	**13.4867**	**13.4867**	**4.3600e-003**	**0.0000**	**13.5957**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	6.6000e-004	6.8900e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0900e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.7296	1.7296	5.0000e-005	0.0000	1.7308
Total	**9.4000e-004**	**6.6000e-004**	**6.8900e-003**	**2.0000e-005**	**2.0700e-003**	**1.0000e-005**	**2.0900e-003**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.7296**	**1.7296**	**5.0000e-005**	**0.0000**	**1.7308**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0235	0.2333	0.2924	4.5000e-004		0.0122	0.0122		0.0113	0.0113	0.0000	38.7751	38.7751	0.0123	0.0000	39.0823
Paving	8.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0244**	**0.2333**	**0.2924**	**4.5000e-004**		**0.0122**	**0.0122**		**0.0113**	**0.0113**	**0.0000**	**38.7751**	**38.7751**	**0.0123**	**0.0000**	**39.0823**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	1.2500e-003	8.4000e-004	8.9900e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3805	2.3805	6.0000e-005	0.0000	2.3820
Total	**1.2500e-003**	**8.4000e-004**	**8.9900e-003**	**3.0000e-005**	**2.9600e-003**	**2.0000e-005**	**2.9800e-003**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**0.0000**	**2.3805**	**2.3805**	**6.0000e-005**	**0.0000**	**2.3820**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7000e-003	0.0117	0.1666	4.5000e-004		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	19.2715	19.2715	6.2300e-003	0.0000	19.4273
Paving	8.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.5900e-003**	**0.0117**	**0.1666**	**4.5000e-004**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**	**0.0000**	**19.2715**	**19.2715**	**6.2300e-003**	**0.0000**	**19.4273**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	8.4000e-004	8.9900e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3805	2.3805	6.0000e-005	0.0000	2.3820
Total	**1.2500e-003**	**8.4000e-004**	**8.9900e-003**	**3.0000e-005**	**2.9600e-003**	**2.0000e-005**	**2.9800e-003**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**0.0000**	**2.3805**	**2.3805**	**6.0000e-005**	**0.0000**	**2.3820**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3092					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.0669	0.0862	1.4000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	12.1280	12.1280	7.9000e-004	0.0000	12.1477
Total	**0.3189**	**0.0669**	**0.0862**	**1.4000e-004**		**3.8800e-003**	**3.8800e-003**		**3.8800e-003**	**3.8800e-003**	**0.0000**	**12.1280**	**12.1280**	**7.9000e-004**	**0.0000**	**12.1477**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.2700e-003	0.0137	4.0000e-005	4.5000e-003	3.0000e-005	4.5300e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.6184	3.6184	9.0000e-005	0.0000	3.6206
Total	**1.8900e-003**	**1.2700e-003**	**0.0137**	**4.0000e-005**	**4.5000e-003**	**3.0000e-005**	**4.5300e-003**	**1.2000e-003**	**3.0000e-005**	**1.2300e-003**	**0.0000**	**3.6184**	**3.6184**	**9.0000e-005**	**0.0000**	**3.6206**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3092					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0000	0.0000	0.0000	1.4000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3092**	**0.0000**	**0.0000**	**1.4000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.2700e-003	0.0137	4.0000e-005	4.5000e-003	3.0000e-005	4.5300e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.6184	3.6184	9.0000e-005	0.0000	3.6206
Total	**1.8900e-003**	**1.2700e-003**	**0.0137**	**4.0000e-005**	**4.5000e-003**	**3.0000e-005**	**4.5300e-003**	**1.2000e-003**	**3.0000e-005**	**1.2300e-003**	**0.0000**	**3.6184**	**3.6184**	**9.0000e-005**	**0.0000**	**3.6206**

3.8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0168**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	6.6000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1831	0.1831	0.0000	0.0000	0.1832
Total	**9.0000e-005**	**6.0000e-005**	**6.6000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1831**	**0.1831**	**0.0000**	**0.0000**	**0.1832**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	1.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0163**	**0.0000**	**0.0000**	**1.0000e-005**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	6.6000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1831	0.1831	0.0000	0.0000	0.1832
Total	**9.0000e-005**	**6.0000e-005**	**6.6000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1831**	**0.1831**	**0.0000**	**0.0000**	**0.1832**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Hotel	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Other Non-Asphalt Surfaces	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Parking Lot	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Recreational Swimming Pool	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Unmitigated	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Total	**1.4000e-004**	**1.0000e-005**	**1.5200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Total	**1.4000e-004**	**1.0000e-005**	**1.5200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

American Canyon Hampton Inn - Unmitigated Operation
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.82	1000sqft	0.18	7,822.00	0
Parking Lot	50.66	1000sqft	1.16	50,658.00	0
City Park	0.68	Acre	0.67	29,235.00	0
Hotel	106.00	Room	0.47	58,643.00	0
Recreational Swimming Pool	0.60	1000sqft	0.01	600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 6

Off-road Equipment -

Off-road Equipment - CalEEMod Note 6

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 8

Consumer Products -

Area Coating -

Energy Use -

Water And Wastewater - CalEEMod Note 9

Solid Waste -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	8/27/2021	7/30/2021
tblLandUse	LandUseSquareFeet	7,820.00	7,822.00
tblLandUse	LandUseSquareFeet	50,660.00	50,658.00
tblLandUse	LandUseSquareFeet	29,620.80	29,235.00
tblLandUse	LandUseSquareFeet	153,912.00	58,643.00
tblLandUse	LotAcreage	0.68	0.67
tblLandUse	LotAcreage	3.53	0.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	WorkerTripNumber	0.00	13.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00

tblVehicleTrips	SU_TR	5.95	8.17
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWater	OutdoorWaterUseRate	810,207.32	356,819.00
tblWater	OutdoorWaterUseRate	298,764.18	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2714	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Energy	0.0140	0.1274	0.1070	7.6000e-004		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003	0.0000	182.0756	182.0756	8.7700e-003	3.8100e-003	183.4292
Mobile	0.2320	1.2452	2.8335	0.0104	0.9074	8.3900e-003	0.9158	0.2435	7.8500e-003	0.2514	0.0000	957.2700	957.2700	0.0353	0.0000	958.1520
Waste						0.0000	0.0000		0.0000	0.0000	12.4860	0.0000	12.4860	0.7379	0.0000	30.9335
Water						0.0000	0.0000		0.0000	0.0000	0.8643	1.5013	2.3656	0.0890	2.1400e-003	5.2279
Total	**0.5174**	**1.3726**	**2.9420**	**0.0112**	**0.9074**	**0.0181**	**0.9255**	**0.2435**	**0.0175**	**0.2611**	**13.3503**	**1,140.8498**	**1,154.2001**	**0.8709**	**5.9500e-003**	**1,177.7458**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area	0.2714	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Energy	0.0140	0.1274	0.1070	7.6000e-004		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003	0.0000	182.0756	182.0756	8.7700e-003	3.8100e-003	183.4292
Mobile	0.2320	1.2452	2.8335	0.0104	0.9074	8.3900e-003	0.9158	0.2435	7.8500e-003	0.2514	0.0000	957.2700	957.2700	0.0353	0.0000	958.1520
Waste						0.0000	0.0000		0.0000	0.0000	12.4860	0.0000	12.4860	0.7379	0.0000	30.9335
Water						0.0000	0.0000		0.0000	0.0000	0.8643	1.5013	2.3656	0.0890	2.1400e-003	5.2279
Total	**0.5174**	**1.3726**	**2.9420**	**0.0112**	**0.9074**	**0.0181**	**0.9255**	**0.2435**	**0.0175**	**0.2611**	**13.3503**	**1,140.8498**	**1,154.2001**	**0.8709**	**5.9500e-003**	**1,177.7458**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2021	7/30/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.34

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2320	1.2452	2.8335	0.0104	0.9074	8.3900e-003	0.9158	0.2435	7.8500e-003	0.2514	0.0000	957.2700	957.2700	0.0353	0.0000	958.1520
Unmitigated	0.2320	1.2452	2.8335	0.0104	0.9074	8.3900e-003	0.9158	0.2435	7.8500e-003	0.2514	0.0000	957.2700	957.2700	0.0353	0.0000	958.1520

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Hotel	866.02	866.02	866.02	2,435,729	2,435,729
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	866.02	866.02	866.02	2,435,729	2,435,729

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Hotel	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929

Other Non-Asphalt Surfaces	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Parking Lot	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Recreational Swimming Pool	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	43.4113	43.4113	6.1100e-003	1.2600e-003	43.9409
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	43.4113	43.4113	6.1100e-003	1.2600e-003	43.9409
NaturalGas Mitigated	0.0140	0.1274	0.1070	7.6000e-004		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003	0.0000	138.6643	138.6643	2.6600e-003	2.5400e-003	139.4883
NaturalGas Unmitigated	0.0140	0.1274	0.1070	7.6000e-004		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003	0.0000	138.6643	138.6643	2.6600e-003	2.5400e-003	139.4883

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.59847e+006	0.0140	0.1274	0.1070	7.6000e-004		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003	0.0000	138.6643	138.6643	2.6600e-003	2.5400e-003	139.4883

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0140**	**0.1274**	**0.1070**	**7.6000e-004**		**9.6800e-003**	**9.6800e-003**		**9.6800e-003**	**9.6800e-003**	**0.0000**	**138.6643**	**138.6643**	**2.6600e-003**	**2.5400e-003**	**139.4883**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.59847e+006	0.0140	0.1274	0.1070	7.6000e-004		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003	0.0000	138.6643	138.6643	2.6600e-003	2.5400e-003	139.4883
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0140**	**0.1274**	**0.1070**	**7.6000e-004**		**9.6800e-003**	**9.6800e-003**		**9.6800e-003**	**9.6800e-003**	**0.0000**	**138.6643**	**138.6643**	**2.6600e-003**	**2.5400e-003**	**139.4883**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	446860	41.7546	5.8800e-003	1.2200e-003	42.2639

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	17730.3	1.6567	2.3000e-004	5.0000e-005	1.6769
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**43.4113**	**6.1100e-003**	**1.2700e-003**	**43.9409**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	446860	41.7546	5.8800e-003	1.2200e-003	42.2639
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	17730.3	1.6567	2.3000e-004	5.0000e-005	1.6769
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**43.4113**	**6.1100e-003**	**1.2700e-003**	**43.9409**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Mitigated	0.2714	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Unmitigated	0.2714	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0326					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2387					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003
Total	**0.2714**	**1.0000e-005**	**1.5200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0326					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2387					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9600e-003	2.9600e-003	1.0000e-005	0.0000	3.1600e-003

Total	**0.2714**	**1.0000e-005**	**1.5200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.9600e-003**	**2.9600e-003**	**1.0000e-005**	**0.0000**	**3.1600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.3656	0.0890	2.1400e-003	5.2279
Unmitigated	2.3656	0.0890	2.1400e-003	5.2279

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.356819	0.1167	2.0000e-005	0.0000	0.1181
Hotel	2.68888 / 0	2.2126	0.0878	2.1100e-003	5.0361
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0354859 / 0.021740	0.0363	1.1600e-003	3.0000e-005	0.0737

Total		**2.3656**	**0.0890**	**2.1400e-003**	**5.2279**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.356819	0.1167	2.0000e-005	0.0000	0.1181
Hotel	2.68888 / 0	2.2126	0.0878	2.1100e-003	5.0361
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0354859 /	0.0363	1.1600e-003	3.0000e-005	0.0737
Total		**2.3656**	**0.0890**	**2.1400e-003**	**5.2279**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.4860	0.7379	0.0000	30.9335
Unmitigated	12.4860	0.7379	0.0000	30.9335

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0302
Hotel	58.03	11.7796	0.6962	0.0000	29.1834
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	3.42	0.6942	0.0410	0.0000	1.7199
Total		**12.4860**	**0.7379**	**0.0000**	**30.9335**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0302
Hotel	58.03	11.7796	0.6962	0.0000	29.1834
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	3.42	0.6942	0.0410	0.0000	1.7199

Total		**12.4860**	**0.7379**	**0.0000**	**30.9335**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

American Canyon Hampton Inn - Unmitigated Operation
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.82	1000sqft	0.18	7,822.00	0
Parking Lot	50.66	1000sqft	1.16	50,658.00	0
City Park	0.68	Acre	0.67	29,235.00	0
Hotel	106.00	Room	0.47	58,643.00	0
Recreational Swimming Pool	0.60	1000sqft	0.01	600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 6

Off-road Equipment -

Off-road Equipment - CalEEMod Note 6

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 8

Consumer Products -

Area Coating -

Energy Use -

Water And Wastewater - CalEEMod Note 9

Solid Waste -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	8/27/2021	7/30/2021
tblLandUse	LandUseSquareFeet	7,820.00	7,822.00
tblLandUse	LandUseSquareFeet	50,660.00	50,658.00
tblLandUse	LandUseSquareFeet	29,620.80	29,235.00
tblLandUse	LandUseSquareFeet	153,912.00	58,643.00
tblLandUse	LotAcreage	0.68	0.67
tblLandUse	LotAcreage	3.53	0.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	WorkerTripNumber	0.00	13.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00

tblVehicleTrips	SU_TR	5.95	8.17
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWater	OutdoorWaterUseRate	810,207.32	356,819.00
tblWater	OutdoorWaterUseRate	298,764.18	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	6.9000e-004	0.0000	0.0000	6.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.9000e-004**	**0.0000**	**0.0000**	**6.4000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	6.9000e-004	0.0000	0.0000	6.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.9000e-004**	**0.0000**	**0.0000**	**6.4000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4877	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Energy	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
Mobile	1.4488	6.6208	16.1773	0.0600	5.1796	0.0460	5.2256	1.3857	0.0430	1.4287		6,090.0091	6,090.0091	0.2144		6,095.3683
Total	**3.0133**	**7.3189**	**16.7805**	**0.0642**	**5.1796**	**0.0991**	**5.2787**	**1.3857**	**0.0961**	**1.4818**		**6,927.5865**	**6,927.5865**	**0.2305**	**0.0154**	**6,937.9252**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4877	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Energy	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
Mobile	1.4488	6.6208	16.1773	0.0600	5.1796	0.0460	5.2256	1.3857	0.0430	1.4287		6,090.0091	6,090.0091	0.2144		6,095.3683

Total	3.0133	7.3189	16.7805	0.0642	5.1796	0.0991	5.2787	1.3857	0.0961	1.4818		6,927.5865	6,927.5865	0.2305	0.0154	6,937.9252

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2021	7/30/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.34

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4488	6.6208	16.1773	0.0600	5.1796	0.0460	5.2256	1.3857	0.0430	1.4287		6,090.0091	6,090.0091	0.2144		6,095.3683

Unmitigated	1.4488	6.6208	16.1773	0.0600	5.1796	0.0460	5.2256	1.3857	0.0430	1.4287		6,090.0091	6,090.0091	0.2144		6,095.3683

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Hotel	866.02	866.02	866.02	2,435,729	2,435,729
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	866.02	866.02	866.02	2,435,729	2,435,729

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Hotel	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Other Non-Asphalt Surfaces	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Parking Lot	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Recreational Swimming Pool	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
NaturalGas Unmitigated	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	7119.1	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0768**	**0.6980**	**0.5863**	**4.1900e-003**		**0.0530**	**0.0530**		**0.0530**	**0.0530**		**837.5411**	**837.5411**	**0.0161**	**0.0154**	**842.5182**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	7.1191	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0768**	**0.6980**	**0.5863**	**4.1900e-003**		**0.0530**	**0.0530**		**0.0530**	**0.0530**		**837.5411**	**837.5411**	**0.0161**	**0.0154**	**842.5182**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4877	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Unmitigated	1.4877	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1783					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5700e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Total	**1.4877**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0363**	**0.0363**	**1.0000e-004**		**0.0387**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1783					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5700e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Total	**1.4877**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0363**	**0.0363**	**1.0000e-004**		**0.0387**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

American Canyon Hampton Inn - Unmitigated Operation
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.82	1000sqft	0.18	7,822.00	0
Parking Lot	50.66	1000sqft	1.16	50,658.00	0
City Park	0.68	Acre	0.67	29,235.00	0
Hotel	106.00	Room	0.47	58,643.00	0
Recreational Swimming Pool	0.60	1000sqft	0.01	600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 6

Off-road Equipment -

Off-road Equipment - CalEEMod Note 6

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 8

Consumer Products -

Area Coating -

Energy Use -

Water And Wastewater - CalEEMod Note 9

Solid Waste -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	8/27/2021	7/30/2021
tblLandUse	LandUseSquareFeet	7,820.00	7,822.00
tblLandUse	LandUseSquareFeet	50,660.00	50,658.00
tblLandUse	LandUseSquareFeet	29,620.80	29,235.00
tblLandUse	LandUseSquareFeet	153,912.00	58,643.00
tblLandUse	LotAcreage	0.68	0.67
tblLandUse	LotAcreage	3.53	0.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	WorkerTripNumber	0.00	13.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00

tblVehicleTrips	SU_TR	5.95	8.17
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblWater	OutdoorWaterUseRate	810,207.32	356,819.00
tblWater	OutdoorWaterUseRate	298,764.18	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	6.9000e-004	0.0000	0.0000	6.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.9000e-004**	**0.0000**	**0.0000**	**6.4000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	6.9000e-004	0.0000	0.0000	6.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.9000e-004**	**0.0000**	**0.0000**	**6.4000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4877	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Energy	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
Mobile	1.2521	6.9936	16.4144	0.0565	5.1796	0.0463	5.2259	1.3857	0.0433	1.4290		5,738.0481	5,738.0481	0.2199		5,743.5459
Total	**2.8166**	**7.6917**	**17.0176**	**0.0607**	**5.1796**	**0.0994**	**5.2790**	**1.3857**	**0.0964**	**1.4821**		**6,575.6255**	**6,575.6255**	**0.2361**	**0.0154**	**6,586.1028**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4877	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Energy	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
Mobile	1.2521	6.9936	16.4144	0.0565	5.1796	0.0463	5.2259	1.3857	0.0433	1.4290		5,738.0481	5,738.0481	0.2199		5,743.5459

Total	2.8166	7.6917	17.0176	0.0607	5.1796	0.0994	5.2790	1.3857	0.0964	1.4821		6,575.6255	6,575.6255	0.2361	0.0154	6,586.1028

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2021	7/30/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.34

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2521	6.9936	16.4144	0.0565	5.1796	0.0463	5.2259	1.3857	0.0433	1.4290		5,738.0481	5,738.0481	0.2199		5,743.5459

Unmitigated	1.2521	6.9936	16.4144	0.0565	5.1796	0.0463	5.2259	1.3857	0.0433	1.4290		5,738.0481	5,738.0481	0.2199		5,743.5459

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Hotel	866.02	866.02	866.02	2,435,729	2,435,729
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	866.02	866.02	866.02	2,435,729	2,435,729

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	100	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Hotel	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Other Non-Asphalt Surfaces	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Parking Lot	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929
Recreational Swimming Pool	0.593730	0.035302	0.167493	0.109091	0.021115	0.005747	0.017044	0.037455	0.003901	0.001761	0.005404	0.001027	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
NaturalGas Unmitigated	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	7119.1	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0768**	**0.6980**	**0.5863**	**4.1900e-003**		**0.0530**	**0.0530**		**0.0530**	**0.0530**		**837.5411**	**837.5411**	**0.0161**	**0.0154**	**842.5182**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	7.1191	0.0768	0.6980	0.5863	4.1900e-003		0.0530	0.0530		0.0530	0.0530		837.5411	837.5411	0.0161	0.0154	842.5182
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0768**	**0.6980**	**0.5863**	**4.1900e-003**		**0.0530**	**0.0530**		**0.0530**	**0.0530**		**837.5411**	**837.5411**	**0.0161**	**0.0154**	**842.5182**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4877	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Unmitigated	1.4877	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1783					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5700e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Total	**1.4877**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0363**	**0.0363**	**1.0000e-004**		**0.0387**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1783					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5700e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0363	0.0363	1.0000e-004		0.0387
Total	**1.4877**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0363**	**0.0363**	**1.0000e-004**		**0.0387**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

American Canyon Hampton Inn - Existing Operation Only
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	2,600.00	3
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.07	3,000.00	0
General Office Building	2.33	1000sqft	0.05	2,330.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 10

Consumer Products -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Off-road Equipment - CalEEMod Note 7

Sequestration -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	1,800.00	2,600.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblTripsAndVMT	WorkerTripNumber	0.00	10.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.8000e-004	1.2000e-004	1.3100e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3295	0.3295	1.0000e-005	0.0000	0.3297
Maximum	**1.8000e-004**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3295**	**0.3295**	**1.0000e-005**	**0.0000**	**0.3297**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.8000e-004	1.2000e-004	1.3100e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3295	0.3295	1.0000e-005	0.0000	0.3297
Maximum	**1.8000e-004**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3295**	**0.3295**	**1.0000e-005**	**0.0000**	**0.3297**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-12-2021**	**6-11-2021**	0.0003	0.0003
		Highest	0.0003	0.0003

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0417	2.2000e-004	0.0161	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0434	0.1705	2.5000e-004	1.0000e-005	0.1790
Energy	4.2000e-004	3.7200e-003	2.5700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	9.8786	9.8786	8.7000e-004	2.4000e-004	9.9719
Mobile	9.5900e-003	0.0568	0.1095	3.7000e-004	0.0310	3.5000e-004	0.0314	8.3200e-003	3.3000e-004	8.6500e-003	0.0000	34.3024	34.3024	1.3900e-003	0.0000	34.3372
Waste						0.0000	0.0000		0.0000	0.0000	1.2687	0.0000	1.2687	0.0750	0.0000	3.1431
Water						0.0000	0.0000		0.0000	0.0000	0.3722	0.7029	1.0751	0.0383	9.2000e-004	2.3080

Total	**0.0517**	**0.0607**	**0.1281**	**4.1000e-004**	**0.0310**	**1.9200e-003**	**0.0329**	**8.3200e-003**	**1.9000e-003**	**0.0102**	**1.7680**	**44.9274**	**46.6953**	**0.1158**	**1.1700e-003**	**49.9392**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0417	2.2000e-004	0.0161	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0434	0.1705	2.5000e-004	1.0000e-005	0.1790
Energy	4.2000e-004	3.7200e-003	2.5700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	9.8786	9.8786	8.7000e-004	2.4000e-004	9.9719
Mobile	9.5900e-003	0.0568	0.1095	3.7000e-004	0.0310	3.5000e-004	0.0314	8.3200e-003	3.3000e-004	8.6500e-003	0.0000	34.3024	34.3024	1.3900e-003	0.0000	34.3372
Waste						0.0000	0.0000		0.0000	0.0000	1.2687	0.0000	1.2687	0.0750	0.0000	3.1431
Water						0.0000	0.0000		0.0000	0.0000	0.3722	0.7029	1.0751	0.0383	9.2000e-004	2.3080
Total	**0.0517**	**0.0607**	**0.1281**	**4.1000e-004**	**0.0310**	**1.9200e-003**	**0.0329**	**8.3200e-003**	**1.9000e-003**	**0.0102**	**1.7680**	**44.9274**	**46.6953**	**0.1158**	**1.1700e-003**	**49.9392**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	0.0000
Total	**0.0000**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/12/2021	3/25/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.2000e-004	1.3100e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3295	0.3295	1.0000e-005	0.0000	0.3297
Total	**1.8000e-004**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3295**	**0.3295**	**1.0000e-005**	**0.0000**	**0.3297**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.2000e-004	1.3100e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3295	0.3295	1.0000e-005	0.0000	0.3297
Total	**1.8000e-004**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3295**	**0.3295**	**1.0000e-005**	**0.0000**	**0.3297**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.5900e-003	0.0568	0.1095	3.7000e-004	0.0310	3.5000e-004	0.0314	8.3200e-003	3.3000e-004	8.6500e-003	0.0000	34.3024	34.3024	1.3900e-003	0.0000	34.3372
Unmitigated	9.5900e-003	0.0568	0.1095	3.7000e-004	0.0310	3.5000e-004	0.0314	8.3200e-003	3.3000e-004	8.6500e-003	0.0000	34.3024	34.3024	1.3900e-003	0.0000	34.3372

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	25.70	5.73	2.45	46,661	46,661
Single Family Housing	9.52	9.91	8.62	21,819	21,819
Unrefrigerated Warehouse-No Rail	5.04	5.04	5.04	14,714	14,714
Total	40.26	20.68	16.11	83,194	83,194

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988
Single Family Housing	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988
Unrefrigerated Warehouse-No Rail	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.7367	5.7367	7.9000e-004	1.6000e-004	5.8053
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.7367	5.7367	7.9000e-004	1.6000e-004	5.8053
NaturalGas Mitigated	4.2000e-004	3.7200e-003	2.5700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1420	4.1420	8.0000e-005	8.0000e-005	4.1666
NaturalGas Unmitigated	4.2000e-004	3.7200e-003	2.5700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1420	4.1420	8.0000e-005	8.0000e-005	4.1666

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	38142.1	2.1000e-004	1.8700e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0354	2.0354	4.0000e-005	4.0000e-005	2.0475
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Unrefrigerated Warehouse-No	10410	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5555	0.5555	1.0000e-005	1.0000e-005	0.5588
Total		**4.3000e-004**	**3.7200e-003**	**2.5700e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.1420**	**4.1420**	**8.0000e-005**	**8.0000e-005**	**4.1666**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	38142.1	2.1000e-004	1.8700e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0354	2.0354	4.0000e-005	4.0000e-005	2.0475
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Unrefrigerated Warehouse-No	10410	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5555	0.5555	1.0000e-005	1.0000e-005	0.5588
Total		**4.3000e-004**	**3.7200e-003**	**2.5700e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.1420**	**4.1420**	**8.0000e-005**	**8.0000e-005**	**4.1666**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	41543.9	3.9572	5.5000e-004	1.1000e-004	4.0046
Single Family Housing	8090.57	0.7707	1.1000e-004	2.0000e-005	0.7799
Unrefrigerated Warehouse-No	10590	1.0087	1.4000e-004	3.0000e-005	1.0208
Total		**5.7366**	**8.0000e-004**	**1.6000e-004**	**5.8053**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	41543.9	3.9572	5.5000e-004	1.1000e-004	4.0046
Single Family Housing	8090.57	0.7707	1.1000e-004	2.0000e-005	0.7799
Unrefrigerated Warehouse-No	10590	1.0087	1.4000e-004	3.0000e-005	1.0208
Total		**5.7366**	**8.0000e-004**	**1.6000e-004**	**5.8053**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0417	2.2000e-004	0.0161	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0434	0.1705	2.5000e-004	1.0000e-005	0.1790
Unmitigated	0.0417	2.2000e-004	0.0161	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0434	0.1705	2.5000e-004	1.0000e-005	0.1790

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.8900e-003	1.3000e-004	8.5700e-003	2.0000e-005		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.1271	0.0312	0.1583	2.4000e-004	1.0000e-005	0.1665
Landscaping	2.3000e-004	9.0000e-005	7.4800e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0122	0.0122	1.0000e-005	0.0000	0.0125
Total	**0.0417**	**2.2000e-004**	**0.0161**	**2.0000e-005**		**1.2800e-003**	**1.2800e-003**		**1.2800e-003**	**1.2800e-003**	**0.1271**	**0.0434**	**0.1705**	**2.5000e-004**	**1.0000e-005**	**0.1790**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.8900e-003	1.3000e-004	8.5700e-003	2.0000e-005		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.1271	0.0312	0.1583	2.4000e-004	1.0000e-005	0.1665
Landscaping	2.3000e-004	9.0000e-005	7.4800e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0122	0.0122	1.0000e-005	0.0000	0.0125
Total	**0.0417**	**2.2000e-004**	**0.0161**	**2.0000e-005**		**1.2800e-003**	**1.2800e-003**		**1.2800e-003**	**1.2800e-003**	**0.1271**	**0.0434**	**0.1705**	**2.5000e-004**	**1.0000e-005**	**0.1790**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0751	0.0383	9.2000e-004	2.3080
Unmitigated	1.0751	0.0383	9.2000e-004	2.3080

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
General Office Building	0.41412 / 0.253815	0.4295	0.0135	3.3000e-004	0.8653
Single Family Housing	0.065154 / 0.0410754	0.0680	2.1300e-003	5.0000e-005	0.1365
Unrefrigerated Warehouse-No Rail	0.69375 / 0	0.5777	0.0227	5.4000e-004	1.3062
Total		**1.0751**	**0.0383**	**9.2000e-004**	**2.3080**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.41412 / 0.253815	0.4295	0.0135	3.3000e-004	0.8653
Single Family Housing	0.065154 / 0.0410754	0.0680	2.1300e-003	5.0000e-005	0.1365
Unrefrigerated Warehouse-No Rail	0.69375 / 0	0.5777	0.0227	5.4000e-004	1.3062
Total		**1.0751**	**0.0383**	**9.2000e-004**	**2.3080**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			

Mitigated	1.2687	0.0750	0.0000	3.1431
Unmitigated	1.2687	0.0750	0.0000	3.1431

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	2.17	0.4405	0.0260	0.0000	1.0913
Single Family Housing	1.26	0.2558	0.0151	0.0000	0.6337
Unrefrigerated Warehouse-No Rail	2.82	0.5724	0.0338	0.0000	1.4182
Total		**1.2687**	**0.0750**	**0.0000**	**3.1431**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	2.17	0.4405	0.0260	0.0000	1.0913
Single Family Housing	1.26	0.2558	0.0151	0.0000	0.6337
Unrefrigerated Warehouse-No Rail	2.82	0.5724	0.0338	0.0000	1.4182
Total		**1.2687**	**0.0750**	**0.0000**	**3.1431**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	0.0000	0.0000	0.0000	0.0000

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e

		MT			
Soft Maple	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

American Canyon Hampton Inn - Existing Operation Only
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	2,600.00	3
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.07	3,000.00	0
General Office Building	2.33	1000sqft	0.05	2,330.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 10

Consumer Products -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Off-road Equipment - CalEEMod Note 7

Sequestration -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	1,800.00	2,600.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblTripsAndVMT	WorkerTripNumber	0.00	10.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0376	0.0219	0.2821	7.8000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	0.0000	77.6743	77.6743	2.0100e-003	0.0000	77.7245
Maximum	**0.0376**	**0.0219**	**0.2821**	**7.8000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**	**0.0000**	**77.6743**	**77.6743**	**2.0100e-003**	**0.0000**	**77.7245**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0376	0.0219	0.2821	7.8000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	0.0000	77.6743	77.6743	2.0100e-003	0.0000	77.7245
Maximum	**0.0376**	**0.0219**	**0.2821**	**7.8000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**	**0.0000**	**77.6743**	**77.6743**	**2.0100e-003**	**0.0000**	**77.7245**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2338	0.0209	1.4234	2.5300e-003		0.1900	0.1900		0.1900	0.1900	20.3783	6.3262	26.7045	0.0253	1.4400e-003	27.7666
Energy	2.2900e-003	0.0204	0.0141	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003		25.0176	25.0176	4.8000e-004	4.6000e-004	25.1663
Mobile	0.0715	0.3610	0.7368	2.5600e-003	0.2106	2.2800e-003	0.2129	0.0564	2.1400e-003	0.0585		259.8364	259.8364	0.0100		260.0869
Total	**1.3076**	**0.4023**	**2.1743**	**5.2200e-003**	**0.2106**	**0.1938**	**0.4045**	**0.0564**	**0.1937**	**0.2501**	**20.3783**	**291.1803**	**311.5586**	**0.0358**	**1.9000e-003**	**313.0198**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2338	0.0209	1.4234	2.5300e-003		0.1900	0.1900		0.1900	0.1900	20.3783	6.3262	26.7045	0.0253	1.4400e-003	27.7666
Energy	2.2900e-003	0.0204	0.0141	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003		25.0176	25.0176	4.8000e-004	4.6000e-004	25.1663
Mobile	0.0715	0.3610	0.7368	2.5600e-003	0.2106	2.2800e-003	0.2129	0.0564	2.1400e-003	0.0585		259.8364	259.8364	0.0100		260.0869
Total	**1.3076**	**0.4023**	**2.1743**	**5.2200e-003**	**0.2106**	**0.1938**	**0.4045**	**0.0564**	**0.1937**	**0.2501**	**20.3783**	**291.1803**	**311.5586**	**0.0358**	**1.9000e-003**	**313.0198**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/12/2021	3/25/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0376	0.0219	0.2821	7.8000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		77.6743	77.6743	2.0100e-003		77.7245

Total	**0.0376**	**0.0219**	**0.2821**	**7.8000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**		**77.6743**	**77.6743**	**2.0100e-003**		**77.7245**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0376	0.0219	0.2821	7.8000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		77.6743	77.6743	2.0100e-003		77.7245
Total	**0.0376**	**0.0219**	**0.2821**	**7.8000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**		**77.6743**	**77.6743**	**2.0100e-003**		**77.7245**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0715	0.3610	0.7368	2.5600e-003	0.2106	2.2800e-003	0.2129	0.0564	2.1400e-003	0.0585		259.8364	259.8364	0.0100		260.0869
Unmitigated	0.0715	0.3610	0.7368	2.5600e-003	0.2106	2.2800e-003	0.2129	0.0564	2.1400e-003	0.0585		259.8364	259.8364	0.0100		260.0869

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	25.70	5.73	2.45	46,661	46,661
Single Family Housing	9.52	9.91	8.62	21,819	21,819
Unrefrigerated Warehouse-No Rail	5.04	5.04	5.04	14,714	14,714
Total	40.26	20.68	16.11	83,194	83,194

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988
Single Family Housing	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988
Unrefrigerated Warehouse-No Rail	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.2900e-003	0.0204	0.0141	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003		25.0176	25.0176	4.8000e-004	4.6000e-004	25.1663
NaturalGas Unmitigated	2.2900e-003	0.0204	0.0141	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003		25.0176	25.0176	4.8000e-004	4.6000e-004	25.1663

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	104.499	1.1300e-003	0.0102	8.6100e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.2940	12.2940	2.4000e-004	2.3000e-004	12.3671
Single Family Housing	79.6304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Unrefrigerated Warehouse-No	28.5205	3.1000e-004	2.8000e-003	2.3500e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.3554	3.3554	6.0000e-005	6.0000e-005	3.3753
Total		**2.3000e-003**	**0.0204**	**0.0141**	**1.3000e-004**		**1.5800e-003**	**1.5800e-003**		**1.5800e-003**	**1.5800e-003**		**25.0176**	**25.0176**	**4.8000e-004**	**4.6000e-004**	**25.1663**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.104499	1.1300e-003	0.0102	8.6100e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.2940	12.2940	2.4000e-004	2.3000e-004	12.3671
Single Family Housing	0.0796304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Unrefrigerated Warehouse-No	0.0285205	3.1000e-004	2.8000e-003	2.3500e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.3554	3.3554	6.0000e-005	6.0000e-005	3.3753
Total		**2.3000e-003**	**0.0204**	**0.0141**	**1.3000e-004**		**1.5800e-003**	**1.5800e-003**		**1.5800e-003**	**1.5800e-003**		**25.0176**	**25.0176**	**4.8000e-004**	**4.6000e-004**	**25.1663**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2338	0.0209	1.4234	2.5300e-003		0.1900	0.1900		0.1900	0.1900	20.3783	6.3262	26.7045	0.0253	1.4400e-003	27.7666
Unmitigated	1.2338	0.0209	1.4234	2.5300e-003		0.1900	0.1900		0.1900	0.1900	20.3783	6.3262	26.7045	0.0253	1.4400e-003	27.7666

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0363	0.0200	1.3403	2.5200e-003		0.1895	0.1895		0.1895	0.1895	20.3783	6.1765	26.5548	0.0252	1.4400e-003	27.6133
Landscaping	2.5500e-003	9.6000e-004	0.0831	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		0.1497	0.1497	1.5000e-004		0.1534
Total	**1.2338**	**0.0209**	**1.4234**	**2.5200e-003**		**0.1900**	**0.1900**		**0.1900**	**0.1900**	**20.3783**	**6.3262**	**26.7045**	**0.0254**	**1.4400e-003**	**27.7666**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0363	0.0200	1.3403	2.5200e-003		0.1895	0.1895		0.1895	0.1895	20.3783	6.1765	26.5548	0.0252	1.4400e-003	27.6133
Landscaping	2.5500e-003	9.6000e-004	0.0831	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		0.1497	0.1497	1.5000e-004		0.1534
Total	**1.2338**	**0.0209**	**1.4234**	**2.5200e-003**		**0.1900**	**0.1900**		**0.1900**	**0.1900**	**20.3783**	**6.3262**	**26.7045**	**0.0254**	**1.4400e-003**	**27.7666**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

American Canyon Hampton Inn - Existing Operation Only
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	2,600.00	3
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.07	3,000.00	0
General Office Building	2.33	1000sqft	0.05	2,330.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 10

Consumer Products -

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Off-road Equipment - CalEEMod Note 7

Sequestration -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	1,800.00	2,600.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblTripsAndVMT	WorkerTripNumber	0.00	10.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0395	0.0279	0.2724	7.2000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	0.0000	71.8451	71.8451	1.9100e-003	0.0000	71.8928
Maximum	**0.0395**	**0.0279**	**0.2724**	**7.2000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**	**0.0000**	**71.8451**	**71.8451**	**1.9100e-003**	**0.0000**	**71.8928**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0395	0.0279	0.2724	7.2000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	0.0000	71.8451	71.8451	1.9100e-003	0.0000	71.8928
Maximum	**0.0395**	**0.0279**	**0.2724**	**7.2000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**	**0.0000**	**71.8451**	**71.8451**	**1.9100e-003**	**0.0000**	**71.8928**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2338	0.0209	1.4234	2.5300e-003		0.1900	0.1900		0.1900	0.1900	20.3783	6.3262	26.7045	0.0253	1.4400e-003	27.7666
Energy	2.2900e-003	0.0204	0.0141	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003		25.0176	25.0176	4.8000e-004	4.6000e-004	25.1663
Mobile	0.0619	0.3789	0.7614	2.4100e-003	0.2106	2.3000e-003	0.2129	0.0564	2.1600e-003	0.0585		244.6976	244.6976	0.0104		244.9571
Total	**1.2980**	**0.4202**	**2.1989**	**5.0700e-003**	**0.2106**	**0.1939**	**0.4045**	**0.0564**	**0.1937**	**0.2501**	**20.3783**	**276.0414**	**296.4197**	**0.0362**	**1.9000e-003**	**297.8900**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2338	0.0209	1.4234	2.5300e-003		0.1900	0.1900		0.1900	0.1900	20.3783	6.3262	26.7045	0.0253	1.4400e-003	27.7666
Energy	2.2900e-003	0.0204	0.0141	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003		25.0176	25.0176	4.8000e-004	4.6000e-004	25.1663
Mobile	0.0619	0.3789	0.7614	2.4100e-003	0.2106	2.3000e-003	0.2129	0.0564	2.1600e-003	0.0585		244.6976	244.6976	0.0104		244.9571
Total	**1.2980**	**0.4202**	**2.1989**	**5.0700e-003**	**0.2106**	**0.1939**	**0.4045**	**0.0564**	**0.1937**	**0.2501**	**20.3783**	**276.0414**	**296.4197**	**0.0362**	**1.9000e-003**	**297.8900**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/12/2021	3/25/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0279	0.2724	7.2000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		71.8451	71.8451	1.9100e-003		71.8928

Total	**0.0395**	**0.0279**	**0.2724**	**7.2000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**		**71.8451**	**71.8451**	**1.9100e-003**		**71.8928**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0279	0.2724	7.2000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		71.8451	71.8451	1.9100e-003		71.8928
Total	**0.0395**	**0.0279**	**0.2724**	**7.2000e-004**	**0.0822**	**5.3000e-004**	**0.0827**	**0.0218**	**4.9000e-004**	**0.0223**		**71.8451**	**71.8451**	**1.9100e-003**		**71.8928**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0619	0.3789	0.7614	2.4100e-003	0.2106	2.3000e-003	0.2129	0.0564	2.1600e-003	0.0585		244.6976	244.6976	0.0104		244.9571
Unmitigated	0.0619	0.3789	0.7614	2.4100e-003	0.2106	2.3000e-003	0.2129	0.0564	2.1600e-003	0.0585		244.6976	244.6976	0.0104		244.9571

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	25.70	5.73	2.45	46,661	46,661
Single Family Housing	9.52	9.91	8.62	21,819	21,819
Unrefrigerated Warehouse-No Rail	5.04	5.04	5.04	14,714	14,714
Total	40.26	20.68	16.11	83,194	83,194

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988
Single Family Housing	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988
Unrefrigerated Warehouse-No Rail	0.586522	0.036345	0.168625	0.112459	0.022729	0.006000	0.017299	0.036828	0.003880	0.001801	0.005497	0.001027	0.000988

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.2900e-003	0.0204	0.0141	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003		25.0176	25.0176	4.8000e-004	4.6000e-004	25.1663
NaturalGas Unmitigated	2.2900e-003	0.0204	0.0141	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003		25.0176	25.0176	4.8000e-004	4.6000e-004	25.1663

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	104.499	1.1300e-003	0.0102	8.6100e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.2940	12.2940	2.4000e-004	2.3000e-004	12.3671
Single Family Housing	79.6304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Unrefrigerated Warehouse-No	28.5205	3.1000e-004	2.8000e-003	2.3500e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.3554	3.3554	6.0000e-005	6.0000e-005	3.3753
Total		**2.3000e-003**	**0.0204**	**0.0141**	**1.3000e-004**		**1.5800e-003**	**1.5800e-003**		**1.5800e-003**	**1.5800e-003**		**25.0176**	**25.0176**	**4.8000e-004**	**4.6000e-004**	**25.1663**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.104499	1.1300e-003	0.0102	8.6100e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.2940	12.2940	2.4000e-004	2.3000e-004	12.3671
Single Family Housing	0.0796304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Unrefrigerated Warehouse-No	0.0285205	3.1000e-004	2.8000e-003	2.3500e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.3554	3.3554	6.0000e-005	6.0000e-005	3.3753
Total		**2.3000e-003**	**0.0204**	**0.0141**	**1.3000e-004**		**1.5800e-003**	**1.5800e-003**		**1.5800e-003**	**1.5800e-003**		**25.0176**	**25.0176**	**4.8000e-004**	**4.6000e-004**	**25.1663**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2338	0.0209	1.4234	2.5300e-003		0.1900	0.1900		0.1900	0.1900	20.3783	6.3262	26.7045	0.0253	1.4400e-003	27.7666
Unmitigated	1.2338	0.0209	1.4234	2.5300e-003		0.1900	0.1900		0.1900	0.1900	20.3783	6.3262	26.7045	0.0253	1.4400e-003	27.7666

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0363	0.0200	1.3403	2.5200e-003		0.1895	0.1895		0.1895	0.1895	20.3783	6.1765	26.5548	0.0252	1.4400e-003	27.6133
Landscaping	2.5500e-003	9.6000e-004	0.0831	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		0.1497	0.1497	1.5000e-004		0.1534
Total	**1.2338**	**0.0209**	**1.4234**	**2.5200e-003**		**0.1900**	**0.1900**		**0.1900**	**0.1900**	**20.3783**	**6.3262**	**26.7045**	**0.0254**	**1.4400e-003**	**27.7666**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0363	0.0200	1.3403	2.5200e-003		0.1895	0.1895		0.1895	0.1895	20.3783	6.1765	26.5548	0.0252	1.4400e-003	27.6133
Landscaping	2.5500e-003	9.6000e-004	0.0831	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		0.1497	0.1497	1.5000e-004		0.1534
Total	**1.2338**	**0.0209**	**1.4234**	**2.5200e-003**		**0.1900**	**0.1900**		**0.1900**	**0.1900**	**20.3783**	**6.3262**	**26.7045**	**0.0254**	**1.4400e-003**	**27.7666**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Construction Trailer Energy Consumption - Napa County, Annual

Construction Trailer Energy Consumption

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.75	1000sqft	0.02	750.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CO2IntensityFactor	641.35	206

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3200e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	7.0000e-005	6.0000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	1.9047	1.9047	1.9000e-004	5.0000e-005	1.9238
Mobile	1.9100e-003	0.0111	0.0218	7.0000e-005	5.6000e-003	7.0000e-005	5.6700e-003	1.5000e-003	6.0000e-005	1.5700e-003	0.0000	6.3944	6.3944	2.7000e-004	0.0000	6.4011
Waste						0.0000	0.0000		0.0000	0.0000	0.1421	0.0000	0.1421	8.4000e-003	0.0000	0.3520
Water						0.0000	0.0000		0.0000	0.0000	0.0423	0.0941	0.1364	4.3600e-003	1.1000e-004	0.2767
Total	**5.3000e-003**	**0.0117**	**0.0223**	**7.0000e-005**	**5.6000e-003**	**1.2000e-004**	**5.7200e-003**	**1.5000e-003**	**1.1000e-004**	**1.6200e-003**	**0.1844**	**8.3933**	**8.5776**	**0.0132**	**1.6000e-004**	**8.9537**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3200e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	7.0000e-005	6.0000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	1.9047	1.9047	1.9000e-004	5.0000e-005	1.9238
Mobile	1.9100e-003	0.0111	0.0218	7.0000e-005	5.6000e-003	7.0000e-005	5.6700e-003	1.5000e-003	6.0000e-005	1.5700e-003	0.0000	6.3944	6.3944	2.7000e-004	0.0000	6.4011
Waste						0.0000	0.0000		0.0000	0.0000	0.1421	0.0000	0.1421	8.4000e-003	0.0000	0.3520
Water						0.0000	0.0000		0.0000	0.0000	0.0423	0.0941	0.1364	4.3600e-003	1.1000e-004	0.2767
Total	**5.3000e-003**	**0.0117**	**0.0223**	**7.0000e-005**	**5.6000e-003**	**1.2000e-004**	**5.7200e-003**	**1.5000e-003**	**1.1000e-004**	**1.6200e-003**	**0.1844**	**8.3933**	**8.5776**	**0.0132**	**1.6000e-004**	**8.9537**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/3/2021	5/2/2021	5	10	
2	Site Preparation	Site Preparation	5/3/2021	5/2/2021	5	1	
3	Grading	Grading	5/3/2021	5/2/2021	5	2	
4	Building Construction	Building Construction	5/3/2021	5/2/2021	5	100	
5	Paving	Paving	5/3/2021	5/2/2021	5	5	
6	Architectural Coating	Architectural Coating	5/3/2021	5/2/2021	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,125; Non-Residential Outdoor: 375; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9100e-003	0.0111	0.0218	7.0000e-005	5.6000e-003	7.0000e-005	5.6700e-003	1.5000e-003	6.0000e-005	1.5700e-003	0.0000	6.3944	6.3944	2.7000e-004	0.0000	6.4011
Unmitigated	1.9100e-003	0.0111	0.0218	7.0000e-005	5.6000e-003	7.0000e-005	5.6700e-003	1.5000e-003	6.0000e-005	1.5700e-003	0.0000	6.3944	6.3944	2.7000e-004	0.0000	6.4011

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	8.27	1.85	0.79	15,020	15,020
Total	8.27	1.85	0.79	15,020	15,020

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.578403	0.037565	0.170055	0.116185	0.024443	0.006261	0.017557	0.036177	0.003853	0.001839	0.005587	0.001024	0.001053

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.2495	1.2495	1.8000e-004	4.0000e-005	1.2648
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.2495	1.2495	1.8000e-004	4.0000e-005	1.2648
NaturalGas Mitigated	7.0000e-005	6.0000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6552	0.6552	1.0000e-005	1.0000e-005	0.6591
NaturalGas Unmitigated	7.0000e-005	6.0000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6552	0.6552	1.0000e-005	1.0000e-005	0.6591

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

General Office Building	12277.5	7.0000e-005	6.0000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6552	0.6552	1.0000e-005	1.0000e-005	0.6591
Total		**7.0000e-005**	**6.0000e-004**	**5.1000e-004**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.6552**	**0.6552**	**1.0000e-005**	**1.0000e-005**	**0.6591**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	12277.5	7.0000e-005	6.0000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6552	0.6552	1.0000e-005	1.0000e-005	0.6591
Total		**7.0000e-005**	**6.0000e-004**	**5.1000e-004**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.6552**	**0.6552**	**1.0000e-005**	**1.0000e-005**	**0.6591**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	13372.5	1.2495	1.8000e-004	4.0000e-005	1.2648
Total		**1.2495**	**1.8000e-004**	**4.0000e-005**	**1.2648**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	13372.5	1.2495	1.8000e-004	4.0000e-005	1.2648
Total		**1.2495**	**1.8000e-004**	**4.0000e-005**	**1.2648**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3200e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	3.3200e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

SubCategory	tons/yr										MT/yr					
Architectural Coating	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**3.3200e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**3.3200e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			

Mitigated	0.1364	4.3600e-003	1.1000e-004	0.2767
Unmitigated	0.1364	4.3600e-003	1.1000e-004	0.2767

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.1333 / 0.0817002	0.1364	4.3600e-003	1.1000e-004	0.2767
Total		**0.1364**	**4.3600e-003**	**1.1000e-004**	**0.2767**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.1333 / 0.0817002	0.1364	4.3600e-003	1.1000e-004	0.2767
Total		**0.1364**	**4.3600e-003**	**1.1000e-004**	**0.2767**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1421	8.4000e-003	0.0000	0.3520
Unmitigated	0.1421	8.4000e-003	0.0000	0.3520

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0.7	0.1421	8.4000e-003	0.0000	0.3520
Total		**0.1421**	**8.4000e-003**	**0.0000**	**0.3520**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

General Office Building	0.7	0.1421	8.4000e-003	0.0000	0.3520
Total		**0.1421**	**8.4000e-003**	**0.0000**	**0.3520**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Control Pathway

Dispersion Options

Titles

C:\Lakes\AERMOD View\American Canyon Hampton Inn_DPM\American Canyon

Dispersion Options

☐ Regulatory Default ☑ Non-Default Options

☑ Elevated Terrain
☐ No Stack-Tip Downwash (NOSTD)
☐ Run in Screening Mode
☐ Conversion of NOx to NO2 (OLM or PVMRM)
☐ No Checks for Non-Sequential Met Data
☑ Fast All Sources (FASTALL)
☐ Fast Area Sources (FASTAREA)
☐ Optimized Area Source Plume Depletion
☐ Gas Deposition

BETA Options:

☐ Capped and Horizontal Stack Releases
☐ Adjusted Friction Velocity (u*) in AERMET (ADJ_U*)
☐ Low Wind Options

☐ SCIM (Sampled Chronological Input Model)
☐ Ignore Urban Night / Daytime Transition (NOURBTRAN)

Dispersion Coefficient

Urban
Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM2.5

Averaging Time Options

Hours ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☑ Period ☐ Annual

Exponential Decay

☐ Yes ☑ No

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: American Canyon Hampton Inn_DPM.err

Source Pathway - Source Inputs

Polygon Area Sources

Source Type: AREA POLY

Source: ONSITE (Project Site)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
16.52	3.33	4.24E-7		5	565216.51	4225015.13
		4.24E-7			565225.29	4224951.35
		4.24E-7			565395.83	4224975.61
		4.24E-7			565384.04	4225039.86
		4.24E-7			565216.28	4225016.29

Line Area Sources

Source Type: LINE AREA

Source: HWY29 (Highway 29)

Length of Side [m]	Emission Rate [g/ s]	Initial Vertical Dimension [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
26.00	1.27E-10	2.63	565358.81	4225343.39	19.74	2.83
			565439.51	4224768.73	16.27	2.83
			565445.18	4224712.21	16.15	2.83
			565448.95	4224673.07	16.03	2.83

Area Sources Generated from Line Sources

Line Source ID	Area Source ID	X Coordinate [m]	Y Coordinate [m]	Release Height [m]	Length of Side [m]	Angle [deg]	Base Elevation [m]	Initial Sigma Z [m]
HWY29	A0000001	565345.94	4225341.59	2.83	193.43	82.01	19.61	2.63
	A0000002	565372.84	4225150.03	2.83	193.43	82.01	19.24	2.63
	A0000003	565399.73	4224958.48	2.83	193.43	82.01	17.46	2.63
	A0000004	565426.57	4224767.43	2.83	56.80	84.26	16.24	2.63
	A0000005	565432.24	4224710.97	2.83	39.32	84.51	15.98	2.63

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	565339.41	4225044.87		18.04	
2	565312.10	4225039.76		17.72	
3	565282.23	4225035.24		17.37	
4	565256.88	4225032.49		17.09	
5	565310.86	4224855.95		16.06	
6	565203.03	4225025.48		16.48	
7	565176.97	4225022.31		16.19	
8	565154.08	4225018.80		15.92	
9	565151.91	4224997.75		15.79	
10	565154.41	4224978.20		15.70	
11	565159.59	4224949.30		15.56	
12	565176.08	4224977.95		15.85	
13	565165.23	4224933.18		15.49	
14	565166.80	4224912.35		15.39	
15	565176.81	4224886.20		15.32	
16	565175.78	4224859.21		15.14	
17	565223.99	4225063.24		17.07	
18	565201.70	4225061.96		16.82	
19	565181.95	4225060.25		16.56	
20	565162.64	4225059.40		16.31	
21	565145.03	4225056.42		16.11	
22	565577.09	4225004.34		19.72	
23	565557.23	4224959.71		19.03	
24	565576.89	4225021.64		19.90	
25	565578.07	4225034.82		20.04	
26	565579.06	4225050.74		20.19	
27	565571.59	4224961.28		19.09	
28	565580.99	4225066.02		20.40	
29	565581.77	4225080.77		20.60	
30	565584.09	4225133.73		21.00	

31	565584.56	4225147.85		21.06	
32	565159.99	4225078.11		16.48	
33	565141.51	4225067.00		16.18	
34	565173.64	4225086.08		16.70	
35	565195.25	4225074.36		16.80	

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	565216.08	4225016.52	FENCEPRI	16.52	
2	565384.11	4225039.96	FENCEPRI	18.38	
3	565395.92	4224975.54	FENCEPRI	17.61	
4	565225.23	4224951.25	FENCEPRI	16.06	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: C:\Users\lpark\Desktop\5476.0001 American Canyon Inn\HRA\724955\724955.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: C:\Users\lpark\Desktop\5476.0001 American Canyon Inn\HRA\724955\724955.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 9.40 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2009			Napa County Airport
Upper Air		2009			OAKLAND/WSO AP

Data Period

Data Period to Process

Start Date: 1/1/2009 Start Hour: 1 End Date: 1/2/2014 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Sensitive Receptor Summary

C:\Lakes\AERMOD View\American Canyon Hampton Inn_DPM\American Canyon

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.61264	ug/m^3	R1	565339.41	4225044.87	18.04	0.00	18.04	
PERIOD		0.62422	ug/m^3	R2	565312.10	4225039.76	17.72	0.00	17.72	
PERIOD		0.59084	ug/m^3	R3	565282.23	4225035.24	17.37	0.00	17.37	
PERIOD		0.49033	ug/m^3	R4	565256.88	4225032.49	17.09	0.00	17.09	
PERIOD		0.02228	ug/m^3	S1	565310.86	4224855.95	16.06	0.00	16.06	
PERIOD		0.10769	ug/m^3	R5	565203.03	4225025.48	16.48	0.00	16.48	
PERIOD		0.08501	ug/m^3	R6	565176.97	4225022.31	16.19	0.00	16.19	
PERIOD		0.06651	ug/m^3	R7	565154.08	4225018.80	15.92	0.00	15.92	
PERIOD		0.06758	ug/m^3	R8	565151.91	4224997.75	15.79	0.00	15.79	
PERIOD		0.05771	ug/m^3	R9	565154.41	4224978.20	15.70	0.00	15.70	
PERIOD		0.03003	ug/m^3	R10	565159.59	4224949.30	15.56	0.00	15.56	
PERIOD		0.07706	ug/m^3	R11	565176.08	4224977.95	15.85	0.00	15.85	
PERIOD		0.01834	ug/m^3	R12	565165.23	4224933.18	15.49	0.00	15.49	
PERIOD		0.01037	ug/m^3	R13	565166.80	4224912.35	15.39	0.00	15.39	
PERIOD		0.00771	ug/m^3	R14	565176.81	4224886.20	15.32	0.00	15.32	
PERIOD		0.00614	ug/m^3	R15	565175.78	4224859.21	15.14	0.00	15.14	
PERIOD		0.07874	ug/m^3	R16	565223.99	4225063.24	17.07	0.00	17.07	
PERIOD		0.04495	ug/m^3	R17	565201.70	4225061.96	16.82	0.00	16.82	
PERIOD		0.03863	ug/m^3	R18	565181.95	4225060.25	16.56	0.00	16.56	
PERIOD		0.03582	ug/m^3	R19	565162.64	4225059.40	16.31	0.00	16.31	

Sensitive Receptor Summary

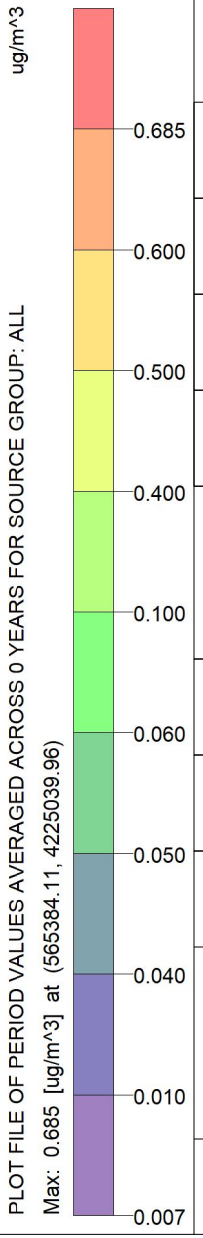
C:\Lakes\AERMOD View\American Canyon Hampton Inn_DPM\American Canyon

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.03494	ug/m^3	R20	565145.03	4225056.42	16.11	0.00	16.11	
PERIOD		0.02163	ug/m^3	R21	565577.09	4225004.34	19.72	0.00	19.72	
PERIOD		0.01832	ug/m^3	R22	565557.23	4224959.71	19.03	0.00	19.03	
PERIOD		0.02282	ug/m^3	R23	565576.89	4225021.64	19.90	0.00	19.90	
PERIOD		0.02305	ug/m^3	R24	565578.07	4225034.82	20.04	0.00	20.04	
PERIOD		0.02305	ug/m^3	R25	565579.06	4225050.74	20.19	0.00	20.19	
PERIOD		0.01687	ug/m^3	R26	565571.59	4224961.28	19.09	0.00	19.09	
PERIOD		0.02263	ug/m^3	R27	565580.99	4225066.02	20.40	0.00	20.40	
PERIOD		0.02237	ug/m^3	R28	565581.77	4225080.77	20.60	0.00	20.60	
PERIOD		0.02187	ug/m^3	R29	565584.09	4225133.73	21.00	0.00	21.00	
PERIOD		0.02180	ug/m^3	R30	565584.56	4225147.85	21.06	0.00	21.06	
PERIOD		0.02467	ug/m^3	R31	565159.99	4225078.11	16.48	0.00	16.48	
PERIOD		0.02838	ug/m^3	R32	565141.51	4225067.00	16.18	0.00	16.18	
PERIOD		0.02253	ug/m^3	R33	565173.64	4225086.08	16.70	0.00	16.70	
PERIOD		0.03247	ug/m^3	R34	565195.25	4225074.36	16.80	0.00	16.80	

PROJECT TITLE:

C:\Lakes\AERMOD View\American Canyon Hampton Inn_DPM\American Canyon



COMMENTS:

SOURCES:

2

RECEPTORS:

1517

OUTPUT TYPE:

Concentration

MAX:

0.685 ug/m^3

COMPANY NAME:

MODELER:

DATE:

4/29/2021

SCALE: 1:14,739

0 0.4 km

PROJECT NO.:

Control Pathway

Dispersion Options

Titles

C:\Lakes\AERMOD View\American Canyon Hampton Inn_DPM\American Canyon

Dispersion Options

☐ Regulatory Default ☑ Non-Default Options

☑ Elevated Terrain
☐ No Stack-Tip Downwash (NOSTD)
☐ Run in Screening Mode
☐ Conversion of NOx to NO2 (OLM or PVMRM)
☐ No Checks for Non-Sequential Met Data
☑ Fast All Sources (FASTALL)
☐ Fast Area Sources (FASTAREA)
☐ Optimized Area Source Plume Depletion
☐ Gas Deposition

BETA Options:

☐ Capped and Horizontal Stack Releases
☐ Adjusted Friction Velocity (u*) in AERMET (ADJ_U*)
☐ Low Wind Options

☐ SCIM (Sampled Chronological Input Model)
☐ Ignore Urban Night / Daytime Transition (NOURBTRAN)

Dispersion Coefficient

Urban
Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM2.5

Averaging Time Options

Hours ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☑ Period ☐ Annual

Exponential Decay

☐ Yes ☑ No

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: American Canyon Hampton Inn_Mitigated.err

Source Pathway - Source Inputs

Polygon Area Sources

Source Type: AREA POLY

Source: ONSITE (Project Site)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
16.52	3.33	7.57E-9		5	565216.51	4225015.13
		7.57E-9			565225.29	4224951.35
		7.57E-9			565395.83	4224975.61
		7.57E-9			565384.04	4225039.86
		7.57E-9			565216.28	4225016.29

Line Area Sources

Source Type: LINE AREA

Source: HWY29 (Highway 29)

Length of Side [m]	Emission Rate [g/ s]	Initial Vertical Dimension [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
26.00	1.27E-10	2.63	565358.81	4225343.39	19.74	2.83
			565439.51	4224768.73	16.27	2.83
			565445.18	4224712.21	16.15	2.83
			565448.95	4224673.07	16.03	2.83

Area Sources Generated from Line Sources

Line Source ID	Area Source ID	X Coordinate [m]	Y Coordinate [m]	Release Height [m]	Length of Side [m]	Angle [deg]	Base Elevation [m]	Initial Sigma Z [m]
HWY29	A0000001	565345.94	4225341.59	2.83	193.43	82.01	19.61	2.63
	A0000002	565372.84	4225150.03	2.83	193.43	82.01	19.24	2.63
	A0000003	565399.73	4224958.48	2.83	193.43	82.01	17.46	2.63
	A0000004	565426.57	4224767.43	2.83	56.80	84.26	16.24	2.63
	A0000005	565432.24	4224710.97	2.83	39.32	84.51	15.98	2.63

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	565339.41	4225044.87		18.04	
2	565312.10	4225039.76		17.72	
3	565282.23	4225035.24		17.37	
4	565256.88	4225032.49		17.09	
5	565310.86	4224855.95		16.06	
6	565203.03	4225025.48		16.48	
7	565176.97	4225022.31		16.19	
8	565154.08	4225018.80		15.92	
9	565151.91	4224997.75		15.79	
10	565154.41	4224978.20		15.70	
11	565159.59	4224949.30		15.56	
12	565176.08	4224977.95		15.85	
13	565165.23	4224933.18		15.49	
14	565166.80	4224912.35		15.39	
15	565176.81	4224886.20		15.32	
16	565175.78	4224859.21		15.14	
17	565223.99	4225063.24		17.07	
18	565201.70	4225061.96		16.82	
19	565181.95	4225060.25		16.56	
20	565162.64	4225059.40		16.31	
21	565145.03	4225056.42		16.11	
22	565577.09	4225004.34		19.72	
23	565557.23	4224959.71		19.03	
24	565576.89	4225021.64		19.90	
25	565578.07	4225034.82		20.04	
26	565579.06	4225050.74		20.19	
27	565571.59	4224961.28		19.09	
28	565580.99	4225066.02		20.40	
29	565581.77	4225080.77		20.60	
30	565584.09	4225133.73		21.00	

31	565584.56	4225147.85		21.06	
32	565159.99	4225078.11		16.48	
33	565141.51	4225067.00		16.18	
34	565173.64	4225086.08		16.70	
35	565195.25	4225074.36		16.80	

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	565216.08	4225016.52	FENCEPRI	16.52	
2	565384.11	4225039.96	FENCEPRI	18.38	
3	565395.92	4224975.54	FENCEPRI	17.61	
4	565225.23	4224951.25	FENCEPRI	16.06	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: C:\Users\lpark\Desktop\5476.0001 American Canyon Inn\HRA\724955\724955.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: C:\Users\lpark\Desktop\5476.0001 American Canyon Inn\HRA\724955\724955.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 9.40 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2009			Napa County Airport
Upper Air		2009			OAKLAND/WSO AP

Data Period

Data Period to Process

Start Date: 1/1/2009 Start Hour: 1 End Date: 1/2/2014 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Sensitive Receptor Summary

C:\Lakes\AERMOD View\American Canyon Hampton Inn_DPM\American Canyon

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.01094	ug/m^3	R1	565339.41	4225044.87	18.04	0.00	18.04	
PERIOD		0.01114	ug/m^3	R2	565312.10	4225039.76	17.72	0.00	17.72	
PERIOD		0.01055	ug/m^3	R3	565282.23	4225035.24	17.37	0.00	17.37	
PERIOD		0.00875	ug/m^3	R4	565256.88	4225032.49	17.09	0.00	17.09	
PERIOD		0.00041	ug/m^3	S1	565310.86	4224855.95	16.06	0.00	16.06	
PERIOD		0.00193	ug/m^3	R5	565203.03	4225025.48	16.48	0.00	16.48	
PERIOD		0.00152	ug/m^3	R6	565176.97	4225022.31	16.19	0.00	16.19	
PERIOD		0.00119	ug/m^3	R7	565154.08	4225018.80	15.92	0.00	15.92	
PERIOD		0.00121	ug/m^3	R8	565151.91	4224997.75	15.79	0.00	15.79	
PERIOD		0.00103	ug/m^3	R9	565154.41	4224978.20	15.70	0.00	15.70	
PERIOD		0.00054	ug/m^3	R10	565159.59	4224949.30	15.56	0.00	15.56	
PERIOD		0.00138	ug/m^3	R11	565176.08	4224977.95	15.85	0.00	15.85	
PERIOD		0.00033	ug/m^3	R12	565165.23	4224933.18	15.49	0.00	15.49	
PERIOD		0.00019	ug/m^3	R13	565166.80	4224912.35	15.39	0.00	15.39	
PERIOD		0.00014	ug/m^3	R14	565176.81	4224886.20	15.32	0.00	15.32	
PERIOD		0.00011	ug/m^3	R15	565175.78	4224859.21	15.14	0.00	15.14	
PERIOD		0.00141	ug/m^3	R16	565223.99	4225063.24	17.07	0.00	17.07	
PERIOD		0.00081	ug/m^3	R17	565201.70	4225061.96	16.82	0.00	16.82	
PERIOD		0.00069	ug/m^3	R18	565181.95	4225060.25	16.56	0.00	16.56	
PERIOD		0.00064	ug/m^3	R19	565162.64	4225059.40	16.31	0.00	16.31	

Sensitive Receptor Summary

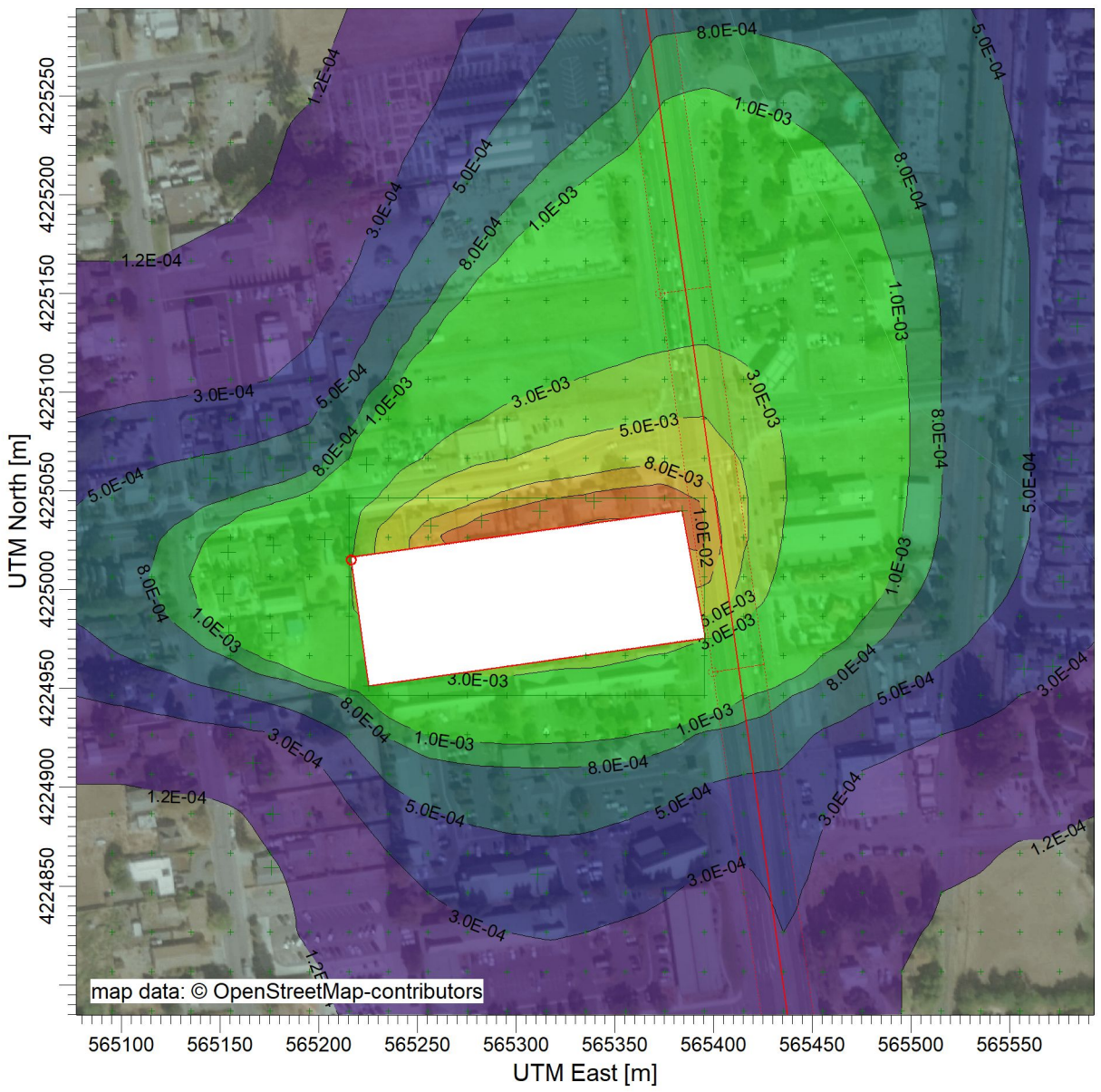
C:\Lakes\AERMOD View\American Canyon Hampton Inn_DPM\American Canyon

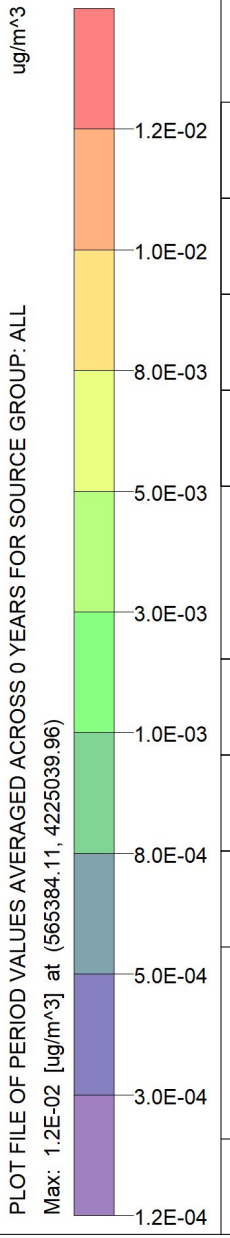
PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.00063	ug/m^3	R20	565145.03	4225056.42	16.11	0.00	16.11	
PERIOD		0.00040	ug/m^3	R21	565577.09	4225004.34	19.72	0.00	19.72	
PERIOD		0.00035	ug/m^3	R22	565557.23	4224959.71	19.03	0.00	19.03	
PERIOD		0.00042	ug/m^3	R23	565576.89	4225021.64	19.90	0.00	19.90	
PERIOD		0.00043	ug/m^3	R24	565578.07	4225034.82	20.04	0.00	20.04	
PERIOD		0.00043	ug/m^3	R25	565579.06	4225050.74	20.19	0.00	20.19	
PERIOD		0.00032	ug/m^3	R26	565571.59	4224961.28	19.09	0.00	19.09	
PERIOD		0.00042	ug/m^3	R27	565580.99	4225066.02	20.40	0.00	20.40	
PERIOD		0.00041	ug/m^3	R28	565581.77	4225080.77	20.60	0.00	20.60	
PERIOD		0.00040	ug/m^3	R29	565584.09	4225133.73	21.00	0.00	21.00	
PERIOD		0.00040	ug/m^3	R30	565584.56	4225147.85	21.06	0.00	21.06	
PERIOD		0.00044	ug/m^3	R31	565159.99	4225078.11	16.48	0.00	16.48	
PERIOD		0.00051	ug/m^3	R32	565141.51	4225067.00	16.18	0.00	16.18	
PERIOD		0.00041	ug/m^3	R33	565173.64	4225086.08	16.70	0.00	16.70	
PERIOD		0.00058	ug/m^3	R34	565195.25	4225074.36	16.80	0.00	16.80	

PROJECT TITLE:

C:\Lakes\AERMOD View\American Canyon Hampton Inn_DPM\American Canyon





COMMENTS:

SOURCES:

2

RECEPTORS:

1517

OUTPUT TYPE:

Concentration

MAX:

1.2E-02 ug/m^3

COMPANY NAME:

MODELER:

DATE:

4/30/2021

SCALE: 1:3,471

0 0.1 km

PROJECT NO.:

HARP2 - HRACalc (dated 19044) 4/30/2021 8:58:06 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 3

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|DBRs changed|FAH changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\lpark\Desktop\5476.0001 American Canyon Inn\HRA\HARP2\American Canyon Hampton Inn_Unmit Residential_CancerRisk.csv
HRA ran successfully

HARP2 - HRACalc (dated 19044) 4/30/2021 9:17:11 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2
Total Exposure Duration: 3

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 3
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|EF changed|DBRs changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\lpark\Desktop\5476.0001 American Canyon Inn\HRA\HARP2\American Canyon Hampton Inn_Unmit School_CancerRisk.csv
HRA ran successfully

HARP2 - HRACalc (dated 19044) 4/30/2021 9:21:16 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 3

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|DBRs changed|FAH changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\lpark\Desktop\5476.0001 American Canyon Inn\HRA\HARP2\American Canyon Hampton Inn_Mit Residential_CancerRisk.csv
HRA ran successfully

HARP2 - HRACalc (dated 19044) 4/30/2021 9:23:03 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2
Total Exposure Duration: 3

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 3
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|DBRs changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\lpark\Desktop\5476.0001 American Canyon Inn\HRA\HARP2\American Canyon Hampton Inn_Mit School_CancerRisk.csv
HRA ran successfully

Model Assumptions and Methodology

The BAAQMD has developed a set of guidelines[1] that recommends using the American Meteorological Society and Environmental Protection Agency Regulatory Model (AERMOD) air dispersion model to estimate emission concentrations for use in identifying the cancer risk and hazard index associated with sensitive receptor exposure to project construction emissions. The following modeling parameters were employed using AERMOD, Version 19191, to estimate DPM and $PM_{2.5}$ emission concentrations that were used in the associated cancer risk and hazard calculations.

AERMOD Modeling Parameters

1. Sensitive receptors (e.g., schools, daycare facilities, hospitals, care facilities, residences) in the immediate project vicinity are represented in the model with discrete cartesian receptors. The closest sensitive receptors to the project site are single-family residences approximately 20 feet north of the project site and the American Canyon Family Resources Daycare approximately 325 feet south of the project site. A nested cartesian grid was also placed in AERMOD with the following spacing parameters:
   - 20 meters spacing from the project site boundaries to 200 meters from the project site;
   - 50 meters spacing between 200 and 500 meters from the project site; and
   - 250 meters spacing to between 500 and 2,000 meters from the project site.
2. AERMOD's non-default regulatory dispersion option was selected. Among the dispersion control options available, the Fast All Sources option was selected.
3. The Urban dispersion coefficient was used as greater than 50 percent of the surrounding three kilometers is developed.
4. The UTM coordinates used to initially locate the project site are 10 S, 565,353 meters easting and 4,225,001 meters northing.
5. Construction emissions were represented in the model using two separate area sources. For the emissions occurring from on-site construction activities, one polygon area source was placed across the entire project site. For off-site heavy-duty vehicle operation, one line area source was placed on Highway 29 within 1,000 feet northeast of the project site. Off-site emissions were adjusted to only account for off-site emissions that would occur within 1,000 feet of the project site (see Off-Site $PM_{2.5}$ Exhaust Adjustment Sheet of this Appendix). As shown therein, each line area source was assigned an emission rate equal to its proportion of the off-site emissions based on the length of the respective line area source divided by the combined length of all line area source(s).
6. Meteorological data from the Napa County Airport Air Monitoring Station, Station ID 93227. This station was selected as it is the closest monitoring station to the project site, and it resembles physical site characteristics and elevation generally representative of the project site. The Napa

[1] Bay Area Air Quality Management District (BAAQMD). 2020. BAAQMD Health Risk Assessment Modeling Protocol. December. Website: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol_august_2020-pdf.pdf?la=en. Accessed April 13, 2021.

County Airport Air Monitoring Station provides preprocessed meteorological data covering the years 2009-2014. The model used all years of available meteorological data.

Cancer Risk Calculations

The BAAQMD has developed a set of guidelines for estimating cancer risks resulting from exposure to toxic air contaminants (TAC).[2,3] These guidelines require the use of Hotspots Analysis and Reporting Program (HARP2) software to identify the cancer risk associated with DPM generated during construction activities. The HARP2 risk scenario inputs used to calculate cancer risk during project construction are as follows:

1. The analysis type used in HARP2 was "Cancer Risk."
2. The receptor type used in HARP2 was "Individual Resident."
3. For the residential receptors, the Exposure Duration used in HARP2 was "User Defined (Tier 2)." A 3-year horizon with a start age of 3rd Trimester was selected for this input.
4. For the school receptors, the Exposure Duration used in HARP2 was "User Defined (Tier 2)." A 3-year horizon with a start age of 2 was selected for this input.
5. For the residential receptors, the Intake Rate Percentile used in HARP2 was "Risk Management Policy (RPM) – *Inhalation Only*."
6. For the school receptors, the Intake Rate Percentile used in HARP2 was "95th (High End)."
7. The "Apply Molecular Weight Adjustment Factor" factor was selected.
8. Inhalation only was the pathway selected for evaluation in HARP2.
9. For the residential receptors, the fraction of time at residence factor was selected for age bins greater than or equal to 16 years on the Inhalation scenario tab in HARP2.
10. The Tier 2 breathing rates and the Tier 2 fraction of time at residence factors were selected on the Inhalation scenario tab in HARP2.

$PM_{2.5}$ exhaust emissions were used in AERMOD as a surrogate pollutant to estimate concentrations of diesel particulate matter (DPM) emissions during project construction. Table 1 and Table 2 summarize the cancer risk and hazard index results for project construction at the maximally impacted receptors (MIR), a single-family residence approximately 20 feet north of the project site and a community school approximately 325 feet south of the project site with and without implementation of MM AIR-4b, which would require the use of Tier 4 Final engines for all construction equipment equal to or greater than 100 horsepower, the use of electric equivalents for all equipment less than 100 horsepower, and the prevention of fossil-fueled generators to power electric equipment with the exception of hand-held generators rated at 5 horsepower or less.

[2] Bay Area Air Quality Management District (BAAQMD). 2016. BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines. December. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en. Accessed April 13, 2021.

[3] Bay Area Air Quality Management District (BAAQMD). 2020. BAAQMD Health Risk Assessment Modeling Protocol. August. Website: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol_august_2020-pdf.pdf?la=en. Accessed April 13, 2021.

Table 1: Estimated Cancer Risks and Chronic Non-Cancer Hazards (Proposed Project)

HARP2 Scenario	TAC Concentration (from AERMOD)[1]	Risk Sum (from HARP2)	Cancer Risk (risk per million)[2]	Chronic Non-Cancer Hazard Index[3]
Residential Receptor Scenario: 3YrCancerRMP_Inh_FAH3to70	6.2422e-01	1.9433e-04	193.33	0.12
School Receptor Scenario: 3YrCancerHighEnd_Inh	2.2280e-02	2.6015e-06	2.60	<0.01
Thresholds of Significance			**10**	**1**
Exceeds Individual Source Threshold?			**Yes**	**No**

Notes:
[1] TAC concentration taken from AERMOD is always at the MIR identified during the original construction air dispersion model (a single-family residence approximately 20 feet north of the project site and a community school approximately 325 feet south of the project site).
[2] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[3] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the reference exposure level of 5 µg/m^3.
REL = reference exposure level
MIR = maximally impacted receptor
Emissions Source: Appendix A.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 15, 2021.

Table 2: Estimated Cancer Risks and Chronic Non-Cancer Hazards (Mitigated)

HARP2 Scenario	TAC Concentration (from AERMOD)[1]	Risk Sum (from HARP2)	Cancer Risk (risk per million)[2]	Chronic Non-Cancer Hazard Index[3]
Residential Receptor Scenario: 3YrCancerRMP_Inh_FAH3to70	1.1140e-02	3.4681e-06	3.47	<0.01
School Receptor Scenario: 3YrCancerHighEnd_Inh	4.1000e-04	4.7874e-08	0.05	<0.01
Thresholds of Significance			**10**	**1**
Exceeds Individual Source Threshold?			**No**	**No**

Notes:
[1] TAC concentration taken from AERMOD is always at the MIRs identified during the original construction air dispersion model (a single-family residence approximately 20 feet north of the project site and a community school approximately 325 feet south of the project site).
[2] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[3] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the reference exposure level of 5 µg/m^3.
REL = reference exposure level
MIR = maximally impacted receptor
Emissions Source: Appendix A.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed April 15, 2021.

Project Construction Emissions

Annual Construction Emissions (tons/year)
(as taken from CalEEMod)

	$PM_{2.5}$ (Exhaust)
Onsite	0.00359
Offsite	0.00006
Demolition (2021)	**0.00365**
Onsite	0.00499
Offsite	0.00000
Site Preparation (2021)	**0.00499**
Onsite	0.00000
Offsite	0.00058
Hauling (2021)	**0.00058**
Onsite	0.01090
Offsite	0.00001
Grading (2021)	**0.01091**
Onsite	0.01430
Offsite	0.00015
Building Construction (2021)	**0.01445**
Onsite	0.10630
Offsite	0.00102
Building Construction (2022)	**0.10732**
Onsite	0.00204
Offsite	0.00002
Building Construction (2023)	**0.00206**
Onsite	0.00926
Offsite	0.00001
Paving (2021)	**0.00927**
Onsite	0.01320
Offsite	0.00002
Paving (2022)	**0.01322**
Onsite	0.00452
Offsite	0.00003
Architectural Coating (2022)	**0.00455**
Onsite	0.00024
Offsite	0.00000
Architectural Coating (2023)	**0.00024**
Total Onsite	**1.69E-01**
Total Offsite	**1.90E-03**

Exhaust $PM_{2.5}$ AERMOD Inputs

Construction Hours	**3,000.00**	**(8 hours/day, 375 workdays)**
Elapsed Hours	**9,000.00**	
Variable Factor	**3.00**	
On-Site Emissions	**338.68**	**pounds**
	153,622.54	**grams**
	1.707E+01	**grams/hours**
	4.741E-03	**grams/sec**
Off-Site Emissions	**3.80**	**pounds**
	1,723.65	**grams**
	1.915E-01	**grams/hour**
	5.320E-05	**grams/sec**

Off-Site AERMOD Input Adjustments

Roadway Segment	Length (Miles)	Proportion of Total	$PM_{2.5}$ (Exhaust) Emission Rate (g/sec)
Highway 29	0.4	100.00%	**2.238E-06**
Totals	*0.4*	*100.00%*	*2.238E-06*

Notes:
[1] Conversion factor of 453.592 grams/pound was used to convert daily emissions expressed in pounds to daily emissions expressed in grams.
[2] Off-site emissions used in the AERMOD air dispersion model were reduced to account for the proportion of emissions occurring within 1,000 feet of the project site.

Off-Site Emission Adjustment for 1,000-foot Radius of Project Site

Phase Name	Days	Vendor Trip Number (Daily)	Hauling Trip Number (Total)	Vendor Trip Length	Hauling Trip Length
Demolition	10	0	139	7.3	20
Site Preparation	20	0	0	7.3	20
Hauling	15	0	1375	7.3	20
Grading	45	0	0	7.3	20
Building Construction	300	24	0	7.3	20
Paving	85	0	0	7.3	20
Architectural Coating	100	0	0	7.3	20
	Totals	**7200**	**1514**		

Diesel-Fueled Vehicle Results

	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	7,200.00	52,560.00
Hauling Trucks	1,514	30,280
Total VMT		**82,840**

AERMOD 1,000-ft Radius Adjustment

	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	7,200.00	2,880.00
Hauling Trucks	1,514	606
Total VMT		**3,485.60**

Proportion of off-site emissions occuring within 1,000 of project site:	**4.2076%**

Project Energy Use Summary

Summary of Energy Use During Construction		(Annually)
Construction vehicle fuel	14,144	gallons (gasoline, diesel)
Construction equipment fuel	45,597	gallons (diesel)
Total construction fuel	59,742	gallons (gasoline, diesel)
Construction office electricity	19,161	kilowatt hours

Summary of Energy Use During Operations		(Annually)
Operation vehicle fuel	88,714	gallons (gasoline, diesel)
Operation natural gas	2,598,470	kilo-British Thermal Units
Operation electricity	464,590	kilowatt hours

Construction Vehicle Fuel Calculations

California Air Resource Board (ARB). 2020. EMFAC2014 Web Database. Website: https://www.arb.ca.gov/emfac/2014/. Accessed May 3, 2021.

VMT = Vehicle Miles Traveled
FE = Fuel Economy

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: County
Region: Napa
Calendar Year: 2021
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

										Calculations	
Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT (mi/day)	Trips	Fuel_Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
Napa		2021 HHDT	Aggregated	Aggregated	GAS	7.7027347	956.5071724	154.1163	0.210252	4.549331076	4351.467803
Napa		2021 HHDT	Aggregated	Aggregated	DSL	909.07755	114791.9274	0	19.89517	5.76983848	662330.8801
Napa		2021 LDA	Aggregated	Aggregated	GAS	43624.495	1763696.71	274381.7	57.05079	30.91450329	54523807.73
Napa		2021 LDA	Aggregated	Aggregated	DSL	535.73819	21528.23555	3286.006	0.555621	38.74626913	834138.8085
Napa		2021 LDT1	Aggregated	Aggregated	GAS	3422.7824	120036.4188	20481.51	4.697905	25.55105301	3067056.901
Napa		2021 LDT1	Aggregated	Aggregated	DSL	3.8366537	89.69880464	18.5912	0.003052	29.38840891	2636.10515
Napa		2021 LDT2	Aggregated	Aggregated	GAS	13248.047	542917.4876	82972.85	23.65986	22.94677934	12458207.79
Napa		2021 LDT2	Aggregated	Aggregated	DSL	26.233828	1171.73422	167.0498	0.039073	29.98836281	35138.3909
Napa		2021 LHDT1	Aggregated	Aggregated	GAS	1180.3716	34702.57844	17585.78	3.620989	9.583729572	332580.1272
Napa		2021 LHDT1	Aggregated	Aggregated	DSL	1329.6346	43502.60774	16725.13	2.530404	17.19195811	747895.01
Napa		2021 LHDT2	Aggregated	Aggregated	GAS	168.04387	6041.72007	2503.603	0.689911	8.757248084	52908.8415
Napa		2021 LHDT2	Aggregated	Aggregated	DSL	367.19324	13991.36145	4618.829	0.897268	15.59328907	218171.3436
Napa		2021 MHDT	Aggregated	Aggregated	GAS	107.0301	5611.052005	2141.458	0.877896	6.391477806	35862.91435
Napa		2021 MHDT	Aggregated	Aggregated	DSL	1105.3441	50561.74925	0	6.118658	8.263535337	417818.8016

Worker
Sum of VMT*FE (Column BI) 70920985.72
Total VMT 2449440.285
Weighted Average FE 28.95395579

Vendor
Sum of VMT*FE (Column BI) 2471919.386
Total VMT 270159.5036
Weighted Average FE 9.149851675

Haul
Sum of VMT*FE (Column BI) 666682.3479
Total VMT 115748.4346
Weighted Average FE 5.759752607

Project Construction Assumptions

On-site Construction
Source: AQ/GHG Appendix, CalEEMod Output
American Canyon Hampton Inn - Mitigated Construction T3 - Napa County, Annual
Date: 4/29/2021 8:15 AM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Demolition	Demolition	8/1/2021	8/13/2021	5	10
	Site Preparation	Site Preparation	8/14/2021	9/10/2021	5	20
	Hauling	Grading	9/11/2021	10/1/2021	5	15
	Grading	Grading	9/11/2021	11/12/2021	5	45
	Building Construction	Building Construction	11/13/2021	1/6/2023	5	300
	Paving	Paving	11/13/2021	3/11/2022	5	85
	Architectural Coating	Architectural Coating	8/22/2022	1/6/2023	5	100

Trips and VMT	Phase Name	Trips per Day			Total Trips						Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Vendor Vel	Num Days	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Demolition	13	0	139	10.8	7.3	20	LD_Mix	10	130	0	139	1,404	0	2,780	48.49	0.00	24.13
	Site Preparation	8	0	0	10.8	7.3	20	LD_Mix	20	160	0	0	1,728	0	0	59.68	0.00	0.00
	Hauling	0	0	1375	10.8	7.3	20	LD_Mix	15	0	0	1,375	0	0	27,500	0.00	0.00	238.73
	Grading	10	0	0	10.8	7.3	20	LD_Mix	45	450	0	0	4,860	0	0	167.85	0.00	0.00
	Building Construction	62	24	0	10.8	7.3	20	LD_Mix	300	18,600	7,200	0	200,880	52,560	0	6,937.91	5,744.36	0.00
	Paving	15	0	0	10.8	7.3	20	LD_Mix	85	1,275	0	0	13,770	0	0	475.58	0.00	0.00
	Architectural Coating	12	0	0	10.8	7.3	20	LD_Mix	100	1,200	0	0	12,960	0	0	447.61	0.00	0.00

On-site Total Construction VMT (miles)
318,442

On-Site Total Fuel Consumption (gallons)
14,144

Construction Equipment Fuel Calculation

On-site

Source: AQ/GHG Appendix, CalEEMod Output
Adelanto Quick n Clean - Construction Only
Date: 10/29/2020 11:50 AM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Demolition	Demolition	8/1/2021	8/13/2021	5	10
	Site Preparation	Site Preparation	8/14/2021	9/10/2021	5	20
	Hauling	Grading	9/11/2021	10/1/2021	5	15
	Grading	Grading	9/11/2021	11/12/2021	5	45
	Building Construction	Building Construction	11/13/2021	1/6/2023	5	300
	Paving	Paving	11/13/2021	3/11/2022	5	85
	Architectural Coating	Architectural Coating	8/22/2022	1/6/2023	5	100

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage
	Demolition	Concrete/Industrial Saws	1	8	81	0.73	10	4,730.40	236.52
	Demolition	Rubber Tired Dozers	1	8	247	0.4	10	7,904.00	395.20
	Demolition	Tractors/Loaders/Backhoes	3	8	97	0.37	10	8,613.60	430.68
	Site Preparation	Graders	1	8	187	0.41	20	12,267.20	613.36
	Site Preparation	Scrapers	1	8	367	0.48	20	28,185.60	1,409.28
	Site Preparation	Tractors/Loaders/Backhoes	1	7	97	0.37	20	5,024.60	251.23
	Grading	Graders	1	8	187	0.41	45	27,601.20	1,380.06
	Grading	Rubber Tired Dozers	1	8	247	0.4	45	35,568.00	1,778.40
	Grading	Tractors/Loaders/Backhoes	2	7	97	0.37	45	22,610.70	1,130.54
	Building Construction	Cranes	1	8	231	0.29	300	160,776.00	8,038.80
	Building Construction	Forklifts	2	7	89	0.2	300	74,760.00	3,738.00
	Building Construction	Generator Sets	1	8	84	0.74	300	149,184.00	7,459.20
	Building Construction	Tractors/Loaders/Backhoes	1	6	97	0.37	300	64,602.00	3,230.10
	Building Construction	Welders	3	8	46	0.45	300	149,040.00	7,452.00
	Paving	Cement and Mortar Mixers	1	8	9	0.56	85	3,427.20	171.36
	Paving	Pavers	1	8	130	0.42	85	37,128.00	1,856.40
	Paving	Paving Equipment	1	8	132	0.36	85	32,313.60	1,615.68
	Paving	Rollers	2	8	80	0.38	85	41,344.00	2,067.20
	Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	85	24,405.20	1,220.26
	Architectural Coating	Air Compressors	1	6	78	0.48	100	22,464.00	1,123.20
							Construction Equipment Fuel Consumption		**45,597.47 gallons**

Notes:

Equipment assumptions are provided in the CalEEMod output files.

Fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

South Coast Air Quality Management District. 1993. Air Quality Handbook, Table A9-3E.
Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed May 3, 2021.

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer

Construction Trailer Energy Consumption - Napa County, Annual

Date: 5/3/2021 8:19 PM

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	13372.5	1.2495	1.8000e-004	4.0000e-005	1.2648
Total		**1.2495**	**1.8000e-004**	**4.0000e-005**	**1.2648**

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity

Annual	13,373	kWh/yr
Total Over Construction	**19,161**	**kWh**

Total Construction Schedule	
Start	8/1/2021
End	1/6/2023
Total Calendar Days	523
Years	1.43

Proposed Operation Fuel Calculation

California Air Resource Board (ARB). 2020. EMFAC2014 Web Database. Website: https://www.arb.ca.gov/emfac/2014/. Accessed May 3, 2021.

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: County
Region: Napa
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Given									*Calculations*	
Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
Napa	2023	HHDT	Aggregated	Aggregated	GAS	7.04044164	890.52075	0.191116214	4.659577	4149.450164
Napa	2023	HHDT	Aggregated	Aggregated	DSL	924.892084	120812.856	19.78310399	6.106871	737788.4763
Napa	2023	LDA	Aggregated	Aggregated	GAS	44968.1448	1799192.34	54.77263619	32.84838	59100552.59
Napa	2023	LDA	Aggregated	Aggregated	DSL	576.510612	22793.5374	0.554793865	41.0847	936465.5632
Napa	2023	LDT1	Aggregated	Aggregated	GAS	3205.76558	114566.873	4.176438638	27.43171	3142765.774
Napa	2023	LDT1	Aggregated	Aggregated	DSL	3.48943585	83.1965207	0.002669448	31.16618	2592.918005
Napa	2023	LDT2	Aggregated	Aggregated	GAS	13199.0707	543027.963	21.93336881	24.75807	13444326.36
Napa	2023	LDT2	Aggregated	Aggregated	DSL	28.053602	1209.76282	0.038035624	31.80605	38477.77293
Napa	2023	LHDT1	Aggregated	Aggregated	GAS	1032.46264	29506.2018	3.063727642	9.630818	284168.8446
Napa	2023	LHDT1	Aggregated	Aggregated	DSL	1224.57885	39104.4038	2.249736744	17.38177	679703.7047
Napa	2023	LHDT2	Aggregated	Aggregated	GAS	151.97189	5508.64682	0.621496745	8.863517	48825.9834
Napa	2023	LHDT2	Aggregated	Aggregated	DSL	347.604178	13165.1147	0.829851393	15.86442	208856.967
Napa	2023	MCY	Aggregated	Aggregated	GAS	2154.37524	17560.7532	0.463620515	37.87743	665156.186
Napa	2023	MDV	Aggregated	Aggregated	GAS	10150.788	346816.537	19.50471076	17.78117	6166803.082
Napa	2023	MDV	Aggregated	Aggregated	DSL	184.206759	7653.67537	0.316367035	24.19239	185160.7156
Napa	2023	MH	Aggregated	Aggregated	GAS	281.323819	2383.34395	0.359746303	6.625069	15789.81719
Napa	2023	MH	Aggregated	Aggregated	DSL	71.9218259	636.881887	0.066014887	9.647549	6144.349497
Napa	2023	MHDT	Aggregated	Aggregated	GAS	101.502039	5569.35618	0.857473865	6.495074	36173.38036
Napa	2023	MHDT	Aggregated	Aggregated	DSL	1118.87783	49811.2078	5.942345099	8.382416	417538.2586
Napa	2023	OBUS	Aggregated	Aggregated	GAS	55.8890251	3458.29124	0.522653101	6.6168	22882.82282
Napa	2023	OBUS	Aggregated	Aggregated	DSL	114.516744	9218.33554	1.247498147	7.389458	68118.50605
Napa	2023	SBUS	Aggregated	Aggregated	GAS	14.362584	822.239983	0.069452477	11.83889	9734.40568
Napa	2023	SBUS	Aggregated	Aggregated	DSL	66.3443173	2515.5048	0.345774984	7.274976	18300.2377
Napa	2023	UBUS	Aggregated	Aggregated	GAS	19.4880494	3311.03585	0.665390425	4.97608	16475.97855
Napa	2023	UBUS	Aggregated	Aggregated	DSL	14.1849878	2410.04125	0.542029568	4.446328	10715.83388

	Vehicles	
Sum of VMT*FE	**86267667.98**	
Total VMT	**3142028.618**	
Weighted Average FE	**27.45604145**	**miles/gallon**

Total VMT

Source: AQ/GHG Appendix, CalEEMod Output
American Canyon Hampton Inn - Unmitigated Operation - Napa County, Annual
Date: 4/29/2021 8:40 AM

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Hotel	866.02	866.02	866.02	2,435,729	2,435,729
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	866.02	866.02	866.02	2,435,729	2,435,729

	Annual VMT (miles)	Fuel Consumption	
Total VMT	2,435,729	**88,714**	**gallons per year**

Operation Natural Gas Use

Source: AQ/GHG Appendix, CalEEMod Output

American Canyon Hampton Inn - Unmitigated Operation - Napa County, Annual

Date: 4/29/2021 8:40 AM

kBTU/yr = kilo-British Thermal Units/year

	Natural Gas Use
Hotel	2,598,470

Total **2,598,470 kBTU/yr**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Land Use	kBTU/yr	tons/yr									
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000
Hotel	2.59847e+006	0.0140	0.1274	0.1070	7.6000e-004		9.6800e-003	9.6800e-003		9.6800e-003	9.6800e-003
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000
Total		**0.0140**	**0.1274**	**0.1070**	**7.6000e-004**		**9.6800e-003**	**9.6800e-003**		**9.6800e-003**	**9.6800e-003**

Operation Electricity Use

Source: AQ/GHG Appendix, CalEEMod Output

American Canyon Hampton Inn - Unmitigated Operation - Napa County, Annual

Date: 4/29/2021 8:40 AM

Project Electricity Use

kWh/yr = kilowatt hours per year

Land Use	Electricity Use (kWh/yr)
Hotel	446,860
Parking Lot	17,730
Total	**464,590 kWh/yr**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Hotel	446860	41.7546	5.8800e-003	1.2200e-003	42.2639
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	17730.3	1.6567	2.3000e-004	5.0000e-005	1.6769
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**43.4113**	**6.1100e-003**	**1.2700e-003**	**43.9409**

Appendix B:
Biological Resources Evaluation Memorandum

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Memorandum

Date: May 12, 2021

To: Jay Patel, Anjani Management, LLC

From: Alec Villanueva, Associate Biologist

Subject: Biological Resources Evaluation Memorandum for the 3443 Broadway Hilton Hampton Inn Project in American Canyon, California

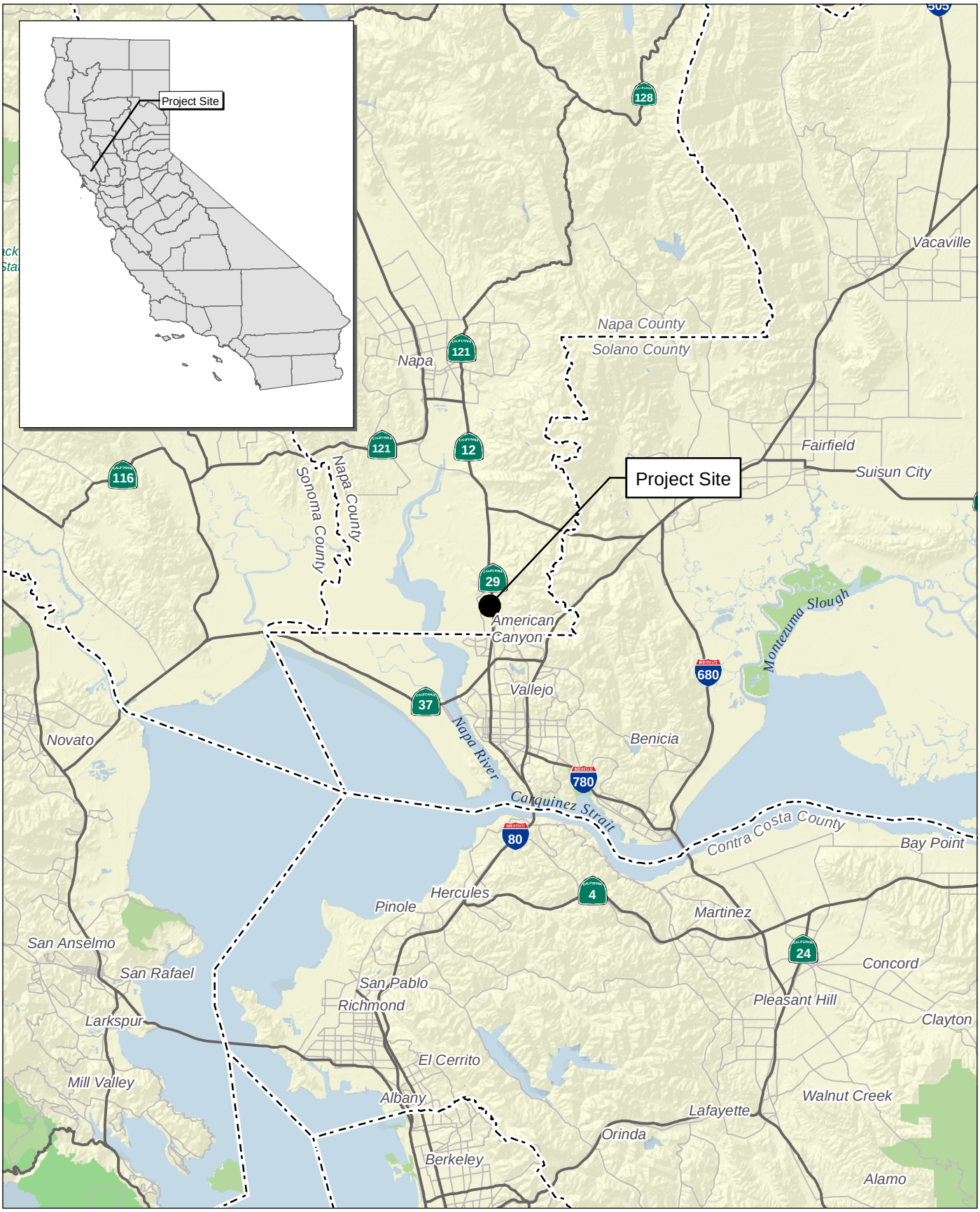
This memorandum summarizes the findings of a Biological Resources Evaluation for the property located at 3443 Broadway, in American Canyon, California, which FirstCarbon Solutions (FCS) conducted on April 16, 2021. Recommended measures to avoid or minimize potential project-related impacts to sensitive and protected biological resources on-site are included as appropriate.

PROJECT LOCATION AND PROJECT DESCRIPTION

The project site is located in the City of American Canyon, in Napa County, California (Exhibit 1).The Project Applicant, Anjani Management, LLC (Applicant) proposes to develop a 2.51-acre property located at 3443 Broadway, just south of the intersection of Broadway and Donaldson Way West near the center of the City (Exhibit 2). The property is formally identified as Assessor's Parcel Number (APN) 058-312-010. The project site is located within the *Cuttings Wharf, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map.

The Applicant is proposing to demolish the existing buildings on-site and develop a 3-story, 106-room Hilton Hampton Inn. The building footprint would be approximately 19,691 square feet with a total building area of approximately 59,000 square feet.

The project site lies within the boundaries of the Broadway District Specific Plan (BDSP). The Specific Plan area encompasses more than 300 acres along both sides of the Broadway corridor (State Route 29 [SR-29]) from the American Canyon/Vallejo city limit (Napa/Solano County line) to the northern city limit.

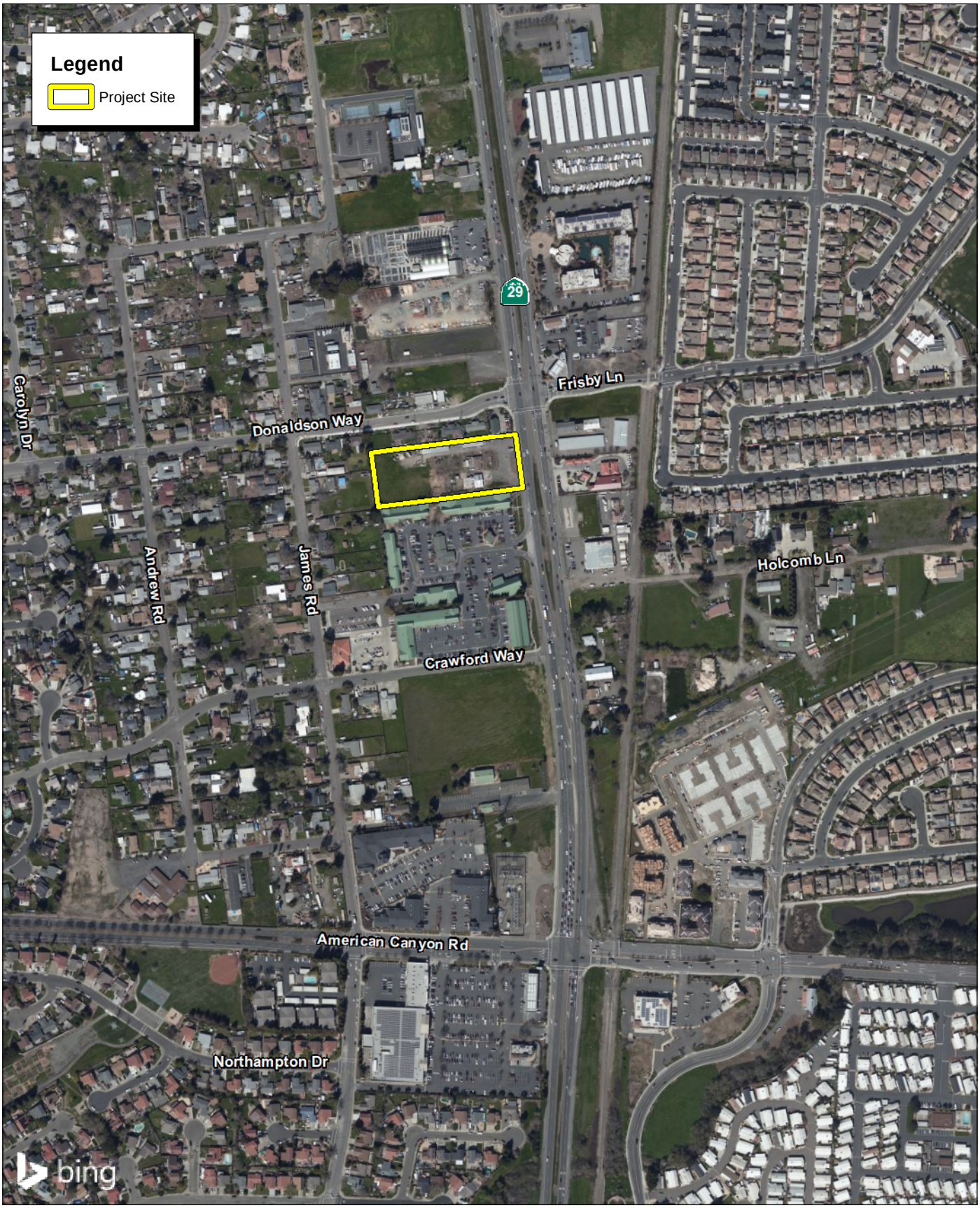


Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

5 2.5 0 5 Miles

Exhibit 1
Regional Location Map



Source: Bing Aerial Imagery. County of Napa.

FIRSTCARBON SOLUTIONS™

500 250 0 500
Feet

Exhibit 2
Local Vicinity Map

54760001 • 05/2021 | 2_local_vicinity.mxd

REGULATORY SETTING

This section provides an overview of the laws and regulations that are applicable to the proposed project.

Federal Regulations

Endangered Species Act

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the Federal Endangered Species Act (FESA). Section 9 of FESA protects listed species from "take," which is broadly defined as actions taken to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." FESA protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the Fish and Game Code. All raptors and their nests are protected from take or disturbance under the MBTA (16 United States Code [USC] § 703, *et seq*.) and California statute (Fish and Game Code [FGC] § 3503.5). The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq*.) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

State Regulations

CEQA Guidelines

The following California Environmental Quality Act (CEQA) Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan.

California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (FGC § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California's rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA. Fish and Game Code Section 2081 established an incidental take permit program for state-listed species. The CDFW maintains a list of "candidate species," which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq*.) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from "take"

prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way.”

Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under FESA and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a “Species of Special Concern.” The CDFW maintains lists of “Species of Special Concern” that serve as species “watch lists.” Species with this status may have limited distributions or limited populations, and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

California Native Plant Society

The CNPS maintains a rank of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed Extinct in California
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere
- **Rank 2:** Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- **Rank 3:** Plants about which we need more information—A Review List
- **Rank 4:** Plants of limited distribution—A Watch List

All plants appearing as CNPS Rank 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

METHODOLOGY

Analysis of the biological resources associated with the project site entailed a thorough review of relevant literature followed by a reconnaissance-level field survey to document existing site conditions and identify biological resource constraints, including the potential for special-status species to occur on-site. The survey area included the entire project site as well as the immediate vicinity where access was possible.

Literature Review

A literature review was conducted to provide a baseline from which to evaluate the biological resources potentially occurring on the site and in the surrounding area.

Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current topographic maps and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity. Information obtained from the review of the topographic maps included elevation range, general watershed information, and potential drainage feature locations.[1] Aerial photographs provide a perspective of the most current site conditions relative to on-site and off-site land uses, preliminary plant community locations, and potential locations of wildlife movement corridors.

Soil Surveys

An FCS Biologist reviewed the Natural Resources Conservation Service (NRCS) Web Soil Survey to determine soil series (i.e., group of soils with similar profiles) and soil mapping units occurring at the project site.[2] The FCS Biologist reviewed habitat requirements pertaining to soils and substrates for special-status species to establish whether on-site conditions provide suitable habitat for special-status plant and wildlife species.

Special-status Species Database Search

An FCS Biologist reviewed the CDFW CNDDB, a special-status species and plant community account database, the USFWS Information for Planning and Consultation (IPaC) system, and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California database for the *Cuttings Wharf, California,* USGS 7.5-minute Topographic Quadrangle Map and the eight surrounding quadrangles.[3,4,5]

Jurisdictional Waters and Wetlands

An FCS Biologist reviewed EPA WATERS and aerial photography to identify potential natural drainage features and water bodies.[6] In general, all surface drainage features identified as blue-line streams on USGS maps and linear water or wetland features that exhibit evidence of concentrated flow are considered potentially subject to state and federal regulatory authority as waters of the United States and/or State. A preliminary assessment on the ground was conducted to determine the location of any existing drainages and the limits of project-related grading activities, to aid in determining whether a formal delineation of waters of the United States or State is necessary.

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1 United States Environmental Protection Agency (EPA). 2020. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed April 21, 2021.

2 Natural Resources Conservation Service (NRCS). 2020. United States Department of Agriculture (USDA). Soil Survey Official Soil Series Descriptions. Website: http://www.nrcs.usda.gov/. Accessed April 21, 2021.

3 California Department of Fish and Wildlife (CDFW). 2020. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view /RareFind.aspx. Accessed April 21, 2021.

4 United States Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed April 21, 2021.

5 California Native Plant Society (CNPS). 2020. California Native Plant Society Rare and Endangered Plant Inventory (CNPSEI). Website: http://www.rareplants.cnps.org/. Accessed April 21, 2021.

6 United States Environmental Protection Agency (EPA). 2020. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed April 21, 2021.

Protected Trees

Prior to conducting the reconnaissance-level survey, FCS's Biologist reviewed applicable City and County ordinances pertaining to tree preservation and protective measures and their tree replacement conditions or permits required.

Habitat Conservation Plan

As part of the literature review, FCS also took into consideration whether the proposed project lies within the boundaries of any adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan and whether any such plan would be applicable to the proposed project.

Reconnaissance-Level Field Survey

An FCS Biologist conducted a reconnaissance-level field survey of the project site and its immediate vicinity, where accessible. The object of the survey was to assess and characterize the biological conditions on and adjacent to the site, including an identification of special-status plant and wildlife species and their habitats. During the survey, the Biologist searched for evidence of and habitat for special-status species and other sensitive biological resources that were identified in the literature review.

RESULTS

Existing Conditions

FCS Biologist, Alec Villanueva, conducted the reconnaissance-level field survey on April 16, 2021. Weather conditions during the field survey were sunny and clear, with an approximate temperature of 54°F (degrees Fahrenheit). Wind speeds were an average of 9 miles per hour. Photos of the site are provided in Attachment A.

Soils

According to the NRCS Web Soil Survey, the entire 2.51-acre project site consists of Clear Lake clay soils (Exhibit 3) [7]. The western half of the project has not been developed and contains some exposed soil dominated by nonnative grasses. The rest of the project site has been developed and the native soil has been covered by hardscape and imported fill (e.g., gravel).

Vegetation Communities or Land Cover

Urban/Developed with Ornamental Trees–0.78 Acres

Developed land is characterized by permanent or semi-permanent structures, pavement, or hardscape and landscaped areas that often require irrigation. The urban/developed vegetation community includes

[7] Natural Resources Conservation Service (NRCS). 2021. United States Department of Agriculture (USDA). Soil Survey Official Soil Series Descriptions. Website: http://www.nrcs.usda.gov/. Accessed April 21, 2021.

land that has been developed or otherwise covered with a permanent man-made surface. Areas where no natural land is evident, or because large amounts of debris or other materials have been placed upon it, may also be included. Vegetation within the urban/developed land on the project site consists of ornamental landscaped vegetation; little to no native species were observed.

Much of the eastern half of the project site has been developed and contains several structures including a residence, several storage sheds, and a furniture business. (Exhibit 4). Half a dozen palms trees can be found along the northeast boundary of the project site.

Ruderal–0.81 Acre

Ruderal habitat is classified as areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, if any vegetation is present, it is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or that exhibit signs of past or present animal usage that precludes them from providing viable natural habitat for uses other than dispersal. Examples of disturbed land include areas that have been graded, land that is repeatedly cleared for fuel management purposes and/or that has undergone repeated use that prevents natural revegetation (i.e., dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old home-sites.

Ruderal habitat can be found in within the front and back yard of the on-site residence. Plant species observed included cheeseweed (*Malva parviflora*), redstem filaree (*Erodium cicutarium*) and pineappleweed (*Matricaria discoidea*), and dandelion (*Taraxacum* ssp.).

The back yard of the residence contains several ornamental trees including, one lemon tree (Citrus × limon), six cherry trees (*Prunus avium*), and two fig trees (*Ficus carica*). A stand of giant reed (*Arundo donax*) is present along the southern boundary of the project site. Approximately thirty cottonwood saplings (*Populus fremo*ntii), Himalayan blackberry (*Rubus armeniacus*), an oak sapling (*Quercus ssp.),* an acacia sapling (*Acacia spp*.) and a maple sapling (*Acer ssp*.) are also present in this stand of vegetation.

Non-native Annual Grassland–0.92 Acre

The western half of the project site is covered by annual grasses that are predominantly non-native, including red brome (*Bromus madritensis*), ripgut brome (*Bromus diandrus*) foxtail barley (*Hordeum jubatum*), Italian ryegrass (*Festuca perennis*) and wild oat (*Avena* sp.). Other herbaceous species present included shortpod mustard (*Hirschfeldia incana*), prickly lettuce (*Lactuca serriola*) and pigweed (*Amaranthus* spp.).

Wildlife

The site may provide habitat for generalist and opportunistic wildlife species that are able to tolerate high levels of habitat disturbance. Several bird species were observed including rock dove (*Columba livia*), American crow (*Corvus brachyrhynchos*), and European starling (*Sturnus vulgaris*). A pair of California ground squirrels (*Otospermophilus beecheyi*) were observed scurrying underneath a shed.

Several domestic species were observed on-site including several chickens (*Gallus domesticus*), a cat (*Felis catus*) and a horse (*Equus caballus*).

The several trees that are present on the project site could provide suitable habitat for migratory or resident nesting birds. However, no active bird nests were observed during the field survey.

Special-status Species

A review of the CNDDB, CNPS, and IPaC Inventories determined that 69 special-status plant species and 39 special-status animal species have been recorded within the regional vicinity of the project site (Attachment B). The parameters of these search queries included an area consisting of the *Cutting Wharf, California*, USGS 7.5-minute topography quadrangle map, and the eight surrounding quadrangles (regional vicinity). The likelihood and rationale for these species to occur are discussed in the paragraphs below. No special-status plants or animal species were observed during the field survey.

Special-status Plants

The database results included 15 special-status plant species have been recorded within a 5-mile radius of the project site. These include:

1. alkali milk-vetch (*Astragalus tener* var. *tener*)
2. big-scale balsamroot (*Balsamorhiza macrolepis*)
3. Tiburon paintbrush (*Castilleja affinis* var. *neglecta*)
4. Lyngbye's sedge (*Carex lyngbyei*)
5. soft salty bird's-beak (*Chloropyron molle* ssp. *mole*)
6. fragrant fritillary (*Fritillaria liliacea*)
7. dwarf downingia (*Downingia pusilla*)
8. San Joaquin spearscale (*Extriplex joaquinana*)
9. Carquinez goldenbush (*Isocoma arguta*)
10. Delta tule pea (Lathyrus jepsonii var. jepsonii)
11. Mason's lilaeopsis (*Lilaeopsis masonii*)
12. Marin knotweed (Polygonum marinense)
13. Suisun Marsh aster (*Symphyotrichum lentum*)
14. two-fork clover (*Trifolium amoenum*)
15. saline clover (Trifolium hydrophilum)

The recorded species require specific habitats or conditions, including valley grasslands, cismontane woodlands, chaparral or swamps, and marshes. None of these habitat types are present on-site. Therefore, no special-status plants are expected to occur on the project site. The developed state of the project site does not provide suitable habitat for any special-status plant species recorded in the CNDDB or CNPS Inventory due to the lack of natural vegetation and the lack of suitable substrate.

Special-status Wildlife

The database results included 25 species-status wildlife species that are known to occur within a 5-mile radius of the project site (Attachment B). Most of these species are not expected to occur on the project site due to the developed conditions of the project site and the surrounding areas, the lack of suitable habitat on the project site, and/or the fact that the project site is situated outside of the species' known geographic range.

Many of the special-status species that were recorded in the CNDDB are unlikely to occur on-site given the urban setting and lack of suitable habitat.

The lack of salt marsh and estuarine habitat on-site precludes the following species:

- tricolored blackbird (*Agelaius tricolor*)
- Western snowy plover (*Charadrius nivosus nivosus*)
- saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*)
- California black rail (*Laterallus jamaicensis coturniculus*)
- San Pablo song sparrow (*Melospiza melodia samuelis*)
- osprey (*Pandion haliaetus*)
- California Ridgway's rail (*Rallus obsoletus obsoletus*)
- salt marsh harvest mouse (*Reithrodontomys raviventris*)
- salt marsh wandering shrew (*Sorex vagrans halicoetes*)

No special-status fish and species and no special-status amphibian species including foothill yellow-legged frog (*Rana boylii*) and California red-legged frog (*Rana draytonii*), nor aquatic reptiles such as are expected to occur on-site due to the lack of suitable aquatic habitat on-site. The lack of vernal pools on-site precludes vernal pool fairy shrimp (*Branchinecta lynchi*). Callippe silverspot butterfly (*Speyeria callippe callippe*) is unlikely to occur due to the lack of its preferred host plant (*Viola pedunculata*) on-site. No special-status bat species have been recorded in the vicinity of the project site. The lack of suitable roosting and foraging habitat also reduces the likelihood of bat roosting on-site.

The BDSP Environmental Impact Report (EIR) determined that development within the Specific Plan area has the potential to impact nesting bird species. The project site contains over a half a dozen mature trees, which could provide suitable nesting habitat for resident and migratory bird species that are protected under federal and State regulations.

Several special-status birds of prey were recorded within the vicinity of the project site including American peregrine falcon (*Falco peregrinus anatum*), burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), and Swainson's hawk (*Buteo swainsoni*) and white-tailed kite (*Elanus leucurus*); however, all are unlikely to occur on-site due to the lack of suitable nesting habitat. There is limited potential however, that some of these birds of prey (except for Swainson's hawk) may forage on-site. However, the likelihood for these species to forage on-site is low as more optimal foraging habitat in the form of grassland and saltmarsh habitats are both present within a 1 mile vicinity of the project site.

Jurisdictional Waters and Wetlands

The BDSP EIR identified two riparian corridors within the Specific Plan area that could potentially be affected by development and land use activities. These are American Canyon Creek and North Slough. The project site lies approximately 0.5 mile north and 1.5 miles south of these riparian corridors, respectively. Therefore, the development of the proposed project would not impact either of these riparian habitats.

No wetlands or other aquatic features that meet criteria as waters of the United States or State were observed within the project site during the reconnaissance-level survey.

Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated "islands" of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of wildlife movement corridors during the field survey. The project site is entirely developed and is surrounded in all directions by extensive urban development, roadways and other man-made structures that serve as barriers to wildlife movement. The project site does not contain or is adjacent to any riparian corridors either. Therefore, the project site does not include a wildlife movement corridor.

Protected Trees

The American Canyon Municipal Code does not contain an ordinance regulating the removal of trees that would be applicable to the proposed project. The Municipal Code concerns exclusively the removal of street trees, none of which are present on-site.[8]

Applicable Habitat Conservation Plans

The proposed project does not lie within the boundaries of any adopted HCP/NCCP, or other approved local, regional, or State habitat conservation plan.[9]

[8] City of American Canyon. 2021. American Canyon Municipal Code. Webs site: https://qcode.us/codes/americancanyon/. Accessed April 21, 2021.

[9] California Department of Fish and Wildlife (CDFW). 2021. NCCP Plan Summaries. Website: https://wildlife.ca.gov/conservation/planning/nccp/plans. Accessed April 21, 2021

Source: Google Earth Aerial Imagery. County of Napa. USDA Soils Data Mart, Napa

FIRSTCARBON SOLUTIONS™

150 75 0 150
Feet

Exhibit 3
Soils Map

Source: Google Earth Aerial Imagery. County of Napa.

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Exhibit 4
Land Cover and Vegetation

BIOLOGICAL CONSTRAINTS AND RECOMMENDED MITIGATION MEASURES

The biological constraints analysis determined that:

- The project site does not contain suitable habitat for any special-status plants.
- The project site does not contain suitable habitat for any special-status wildlife species, aside from nesting birds.
- The project site does not contain potentially jurisdictional wetlands or waters of the United States or waters of the State.
- The proposed project will not significantly impact any known wildlife corridors, as none are locally present.
- The proposed project will not conflict with any ordinances regarding the protection/preservation of biological resources described in the American Canyon Municipal Code.

The following section recommends mitigation measures, project design features, conditions of approval, and Best Management Practices (BMPs) that would result in avoidance or minimization of potential project-related impacts to regulated biological resources on-site.

Pre-construction Surveys for Nesting Birds

Several native migratory or resident birds that are protected under the MBTA and/or Fish and Game Code may nest in the trees and shrubs that are found on and adjacent to the project site. During nesting season, the development of the proposed project has the potential to impact protected bird nests due to the removal of this vegetation or indirectly harm birds though the generation of noise, light, and other disturbances that could result in the abandonment of eggs or young. Therefore, if work takes place during nesting season, it is recommended that the proposed project implement Mitigation Measure (MM) BIO-1b as described in the BDSP EIR in order to avoid potential impacts to nesting birds. MM BIO-1b is listed below.

MM BIO-1b Prior to tree removal activities that occur during the nesting season (February 1 and August 31), the applicant shall retain a qualified Biologist to conduct a pre-construction nesting bird survey no more than 14 days prior to vegetation removal. If the Biologist observes nesting birds to be present, a minimum 250-foot protective buffer shall be established around the nest until the young have fledged. This mitigation measure shall not apply to tree removal activities that occur outside the nesting season (September 1 to January 31).

Attachment A:
Site Photographs

Photograph 1: Project site looking west from Highway 29.

Photograph 2: Looking south from NE corner of the project site.

Photograph 3: Looking north from SE corner of the project site.

Photograph 4: Looking south from central northern boundary of the project site.

Photograph 5: Looking north from central southern boundary of the project site.

Photograph 6: Looking east from the western boundary of project site.

Photograph 7: Looking north from SW corner of the project site.

Photograph 8: Looking south from NW corner of the project site.

Attachment B:
Literature Search Results

CNPS California Native Plant Society

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

69 matches found. *Click on scientific name for details*

Search Criteria
Found in Quads 3812234, 3812233, 3812232, 3812224, 3812223, 3812222, 3812214 3812213 and 3812212;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Federal Listing Status	State Listing Status	CA Rare Plant Rank	Habitats	Lowest Elevation	Highest Elevation	Blooming Period
Agrostis hendersonii	Henderson's bent grass	Poaceae	annual herb			3.2	• Valley and foothill grassland (mesic) • Vernal pools	70 m	305 m	Apr-Jun
Allium peninsulare var. franciscanum	Franciscan onion	Alliaceae	perennial bulbiferous herb			1B.2	• Cismontane woodland • Valley and foothill grassland	52 m	305 m	(Apr)May-Jun
Amorpha californica var. napensis	Napa false indigo	Fabaceae	perennial deciduous shrub			1B.2	• Broadleafed upland forest (openings) • Chaparral • Cismontane woodland	120 m	2000 m	Apr-Jul
Antirrhinum virga	twig-like snapdragon	Plantaginaceae	perennial herb			4.3	• Chaparral • Lower montane coniferous forest	100 m	2015 m	Jun-Jul
Arabis modesta	modest rockcress	Brassicaceae	perennial herb			4.3	• Chaparral • Lower montane coniferous forest	120 m	800 m	Mar-Jul
Arctostaphylos bakeri ssp. bakeri	Baker's manzanita	Ericaceae	perennial evergreen shrub		CR	1B.1	• Broadleafed upland forest • Chaparral	75 m	300 m	Feb-Apr
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb			1B.2	• Playas • Valley and	1 m	60 m	Mar-Jun

							foothill grassland (adobe clay) • Vernal pools			
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb			1B.2	• Chaparral • Cismontane woodland • Valley and foothill grassland	45 m	1555 m	Mar-Jun
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	FE	CE	1B.1	• Valley and foothill grassland (mesic) • Vernal pools	10 m	110 m	Mar-May
Blepharizonia plumosa	big tarplant	Asteraceae	annual herb			1B.1	• Valley and foothill grassland	30 m	505 m	Jul-Oct
Brodiaea leptandra	narrow-anthered brodiaea	Themidaceae	perennial bulbiferous herb			1B.2	• Broadleafed upland forest • Chaparral • Cismontane woodland • Lower montane coniferous forest • Valley and foothill grassland	110 m	915 m	May-Jul
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb			4.2	• Chaparral • Coastal scrub	10 m	1220 m	(Jan)Mar-Jun
Calochortus pulchellus	Mt. Diablo fairy-lantern	Liliaceae	perennial bulbiferous herb			1B.2	• Chaparral • Cismontane woodland • Riparian woodland • Valley and foothill grassland	30 m	840 m	Apr-Jun
Carex lyngbyei	Lyngbye's sedge	Cyperaceae	perennial rhizomatous herb			2B.2	• Marshes and swamps (brackish or freshwater)	0 m	10 m	Apr-Aug
Castilleja affinis var. neglecta	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	FE	CT	1B.2	• Valley and foothill grassland (serpentinite)	60 m	400 m	Apr-Jun
Castilleja ambigua var. ambigua	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)			4.2	• Coastal bluff scrub • Coastal prairie • Coastal scrub • Marshes and swamps • Valley and foothill	0 m	435 m	Mar-Aug

							grassland • Vernal pools margins			
Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub			1B.1	• Closed-cone coniferous forest • Chaparral • Cismontane woodland	75 m	1065 m	Feb-Jun
Ceanothus purpureus	holly-leaved ceanothus	Rhamnaceae	perennial evergreen shrub			1B.2	• Chaparral • Cismontane woodland	120 m	640 m	Feb-Jun
Ceanothus sonomensis	Sonoma ceanothus	Rhamnaceae	perennial evergreen shrub			1B.2	• Chaparral (sandy, serpentinite or volcanic)	215 m	800 m	Feb-Apr
Centromadia parryi ssp. congdonii	Congdon's tarplant	Asteraceae	annual herb			1B.1	• Valley and foothill grassland (alkaline)	0 m	230 m	May-Oct(Nov)
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb			1B.2	• Chaparral • Coastal prairie • Meadows and seeps • Marshes and swamps (coastal salt) • Valley and foothill grassland (vernally mesic)	0 m	420 m	May-Nov
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb			4.2	• Valley and foothill grassland • Vernal pools	0 m	100 m	May-Oct
Chloropyron molle ssp. molle	soft bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	FE	CR	1B.2	• Marshes and swamps (coastal salt)	0 m	3 m	Jun-Nov
Chorizanthe valida	Sonoma spineflower	Polygonaceae	annual herb	FE	CE	1B.1	• Coastal prairie (sandy)	10 m	305 m	Jun-Aug
Cicuta maculata var. bolanderi	Bolander's water-hemlock	Apiaceae	perennial herb			2B.1	• Marshes and swamps Coastal, fresh or brackish water	0 m	200 m	Jul-Sep
Clarkia gracilis ssp. tracyi	Tracy's clarkia	Onagraceae	annual herb			4.2	• Chaparral (openings, usually serpentinite)	65 m	650 m	Apr-Jul
Dirca occidentalis	western leatherwood	Thymelaeaceae	perennial deciduous shrub			1B.2	• Broadleafed upland forest • Closed-cone coniferous	25 m	425 m	Jan-Mar(Apr)

					forest • Chaparral • Cismontane woodland • North Coast coniferous forest • Riparian forest • Riparian woodland			
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	2B.2	• Valley and foothill grassland (mesic) • Vernal pools	1 m	445 m	Mar-May
Eleocharis parvula	small spikerush	Cyperaceae	perennial herb	4.3	• Marshes and swamps	1 m	3020 m	(Apr)Jun-Aug(Sep)
Erigeron biolettii	streamside daisy	Asteraceae	perennial herb	3	• Broadleafed upland forest • Cismontane woodland • North Coast coniferous forest	30 m	1100 m	Jun-Oct
Erigeron greenei	Greene's narrow-leaved daisy	Asteraceae	perennial herb	1B.2	• Chaparral (serpentinite or volcanic)	80 m	1005 m	May-Sep
Eriogonum luteolum var. caninum	Tiburon buckwheat	Polygonaceae	annual herb	1B.2	• Chaparral • Cismontane woodland • Coastal prairie • Valley and foothill grassland	0 m	700 m	May-Sep
Eryngium jepsonii	Jepson's coyote thistle	Apiaceae	perennial herb	1B.2	• Valley and foothill grassland • Vernal pools	3 m	300 m	Apr-Aug
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	1B.2	• Chenopod scrub • Meadows and seeps • Playas • Valley and foothill grassland	1 m	835 m	Apr-Oct
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	1B.2	• Cismontane woodland • Coastal prairie • Coastal scrub • Valley and	3 m	410 m	Feb-Apr

							foothill grassland			
Harmonia nutans	nodding harmonia	Asteraceae	annual herb			4.3	• Chaparral • Cismontane woodland	75 m	975 m	Mar-May
Helianthella castanea	Diablo helianthella	Asteraceae	perennial herb			1B.2	• Broadleafed upland forest • Chaparral • Cismontane woodland • Coastal scrub • Riparian woodland • Valley and foothill grassland	60 m	1300 m	Mar-Jun
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Asteraceae	annual herb			1B.2	• Valley and foothill grassland	20 m	560 m	Apr-Nov
Hesperolinon breweri	Brewer's western flax	Linaceae	annual herb			1B.2	• Chaparral • Cismontane woodland • Valley and foothill grassland	30 m	945 m	May-Jul
Holocarpha macradenia	Santa Cruz tarplant	Asteraceae	annual herb	FT	CE	1B.1	• Coastal prairie • Coastal scrub • Valley and foothill grassland	10 m	220 m	Jun-Oct
Horkelia tenuiloba	thin-lobed horkelia	Rosaceae	perennial herb			1B.2	• Broadleafed upland forest • Chaparral • Valley and foothill grassland	50 m	500 m	May-Jul(Aug)
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb			4.2	• Coastal prairie • Lower montane coniferous forest • Meadows and seeps	0 m	600 m	Mar-May
Isocoma arguta	Carquinez goldenbush	Asteraceae	perennial shrub			1B.1	• Valley and foothill grassland (alkaline)	1 m	20 m	Aug-Dec
Juglans hindsii	Northern California black walnut	Juglandaceae	perennial deciduous tree			1B.1	• Riparian forest • Riparian woodland	0 m	440 m	Apr-May
Lasthenia conjugens	Contra Costa goldfields	Asteraceae	annual herb	FE		1B.1	• Cismontane woodland	0 m	470 m	Mar-Jun

						• Playas (alkaline) • Valley and foothill grassland • Vernal pools			
Lathyrus jepsonii var. jepsonii	Delta tule pea	Fabaceae	perennial herb		1B.2	• Marshes and swamps (freshwater and brackish)	0 m	5 m	May-Jul(Aug-Sep)
Legenere limosa	legenere	Campanulaceae	annual herb		1B.1	• Vernal pools	1 m	880 m	Apr-Jun
Leptosiphon acicularis	bristly leptosiphon	Polemoniaceae	annual herb		4.2	• Chaparral • Cismontane woodland • Coastal prairie • Valley and foothill grassland	55 m	1500 m	Apr-Jul
Leptosiphon jepsonii	Jepson's leptosiphon	Polemoniaceae	annual herb		1B.2	• Chaparral • Cismontane woodland • Valley and foothill grassland	100 m	500 m	Mar-May
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	annual herb		3	• Broadleafed upland forest • Coastal scrub • Lower montane coniferous forest • Valley and foothill grassland	15 m	305 m	Jun-Oct
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	CR	1B.1	• Marshes and swamps (brackish or freshwater) • Riparian scrub	0 m	10 m	Apr-Nov
Lilium rubescens	redwood lily	Liliaceae	perennial bulbiferous herb		4.2	• Broadleafed upland forest • Chaparral • Lower montane coniferous forest • North Coast coniferous forest • Upper montane coniferous forest	30 m	1910 m	Apr-Aug(Sep)
	Napa lomatium	Apiaceae	perennial herb		4.3	• Chaparral •	90 m	830 m	Mar-Jun

Lomatium repostum					Cismontane woodland			
Lupinus sericatus	Cobb Mountain lupine	Fabaceae	perennial herb	1B.2	• Broadleafed upland forest • Chaparral • Cismontane woodland • Lower montane coniferous forest	275 m	1525 m	Mar-Jun
Micropus amphibolus	Mt. Diablo cottonweed	Asteraceae	annual herb	3.2	• Broadleafed upland forest • Chaparral • Cismontane woodland • Valley and foothill grassland	45 m	825 m	Mar-May
Monardella viridis	green monardella	Lamiaceae	perennial rhizomatous herb	4.3	• Broadleafed upland forest • Chaparral • Cismontane woodland	100 m	1010 m	Jun-Sep
Polygonum marinense	Marin knotweed	Polygonaceae	annual herb	3.1	• Marshes and swamps (coastal salt or brackish)	0 m	10 m	(Apr)May-Aug(Oct)
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	4.2	• Cismontane woodland • North Coast coniferous forest • Valley and foothill grassland • Vernal pools	15 m	470 m	Feb-May
Rhynchospora californica	California beaked-rush	Cyperaceae	perennial rhizomatous herb	1B.1	• Bogs and fens • Lower montane coniferous forest • Meadows and seeps (seeps) • Marshes and swamps (freshwater)	45 m	1010 m	May-Jul
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	2B.2	• Chaparral • Cismontane woodland • Coastal scrub	15 m	800 m	Jan-Apr(May)
	Napa checkerbloom	Malvaceae	perennial herb	1B.1	• Chaparral	415 m	610 m	Apr-Jun

Sidalcea hickmanii ssp. napensis									
Sidalcea hickmanii ssp. viridis	Marin checkerbloom	Malvaceae	perennial herb		1B.1	• Chaparral (serpentinite)	50 m	430 m	May-Jun
Spergularia macrotheca var. longistyla	long-styled sand-spurrey	Caryophyllaceae	perennial herb		1B.2	• Meadows and seeps • Marshes and swamps	0 m	255 m	Feb-May(Jun)
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb		1B.2	• Marshes and swamps (brackish and freshwater)	0 m	3 m	(Apr)May-Nov
Trichostema ruygtii	Napa bluecurls	Lamiaceae	annual herb		1B.2	• Chaparral • Cismontane woodland • Lower montane coniferous forest • Valley and foothill grassland • Vernal pools	30 m	680 m	Jun-Oct
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	FE	1B.1	• Coastal bluff scrub • Valley and foothill grassland (sometimes serpentinite)	5 m	415 m	Apr-Jun
Trifolium hydrophilum	saline clover	Fabaceae	annual herb		1B.2	• Marshes and swamps • Valley and foothill grassland (mesic, alkaline) • Vernal pools	0 m	300 m	Apr-Jun
Triteleia lugens	dark-mouthed triteleia	Themidaceae	perennial bulbiferous herb		4.3	• Broadleafed upland forest • Chaparral • Coastal scrub • Lower montane coniferous forest	100 m	1000 m	Apr-Jun
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub		2B.3	• Chaparral • Cismontane woodland • Lower montane coniferous forest	215 m	1400 m	May-Jun

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Sonoma (3812234) OR Napa (3812233) OR Mt. George (3812232) OR Sears Point (3812224) OR Cuttings Wharf (3812223) OR Cordelia (3812222) OR Petaluma Point (3812214) OR Mare Island (3812213) OR Benicia (3812212))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Adela oplerella Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Agrostis hendersonii Henderson's bent grass	PMPOA040K0	None	None	G2Q	S2	3.2
Allium peninsulare var. franciscanum Franciscan onion	PMLIL021R1	None	None	G5T2	S2	1B.2
Amorpha californica var. napensis Napa false indigo	PDFAB08012	None	None	G4T2	S2	1B.2
Andrena blennospermatis Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S2	
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Balsamorhiza macrolepis big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
Blennosperma bakeri Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
Blepharizonia plumosa big tarplant	PDAST1C011	None	None	G1G2	S1S2	1B.1
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Brodiaea leptandra narrow-anthered brodiaea	PMLIL0C022	None	None	G3?	S3?	1B.2
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Calasellus californicus An isopod	ICMAL34010	None	None	G2	S2	
Calochortus pulchellus Mt. Diablo fairy-lantern	PMLIL0D160	None	None	G2	S2	1B.2
Carex lyngbyei Lyngbye's sedge	PMCYP037Y0	None	None	G5	S3	2B.2
Castilleja affinis var. neglecta Tiburon paintbrush	PDSCR0D013	Endangered	Threatened	G4G5T1T2	S1S2	1B.2
Ceanothus confusus Rincon Ridge ceanothus	PDRHA04220	None	None	G1	S1	1B.1
Ceanothus purpureus holly-leaved ceanothus	PDRHA04160	None	None	G2	S2	1B.2
Ceanothus sonomensis Sonoma ceanothus	PDRHA04420	None	None	G2	S2	1B.2
Centromadia parryi ssp. congdonii Congdon's tarplant	PDAST4R0P1	None	None	G3T1T2	S1S2	1B.1
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S2	SSC
Chloropyron molle ssp. molle soft salty bird's-beak	PDSCR0J0D2	Endangered	Rare	G2T1	S1	1B.2
Cicuta maculata var. bolanderi Bolander's water-hemlock	PDAPI0M051	None	None	G5T4T5	S2?	2B.1
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC
Coastal Brackish Marsh Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Cypseloides niger black swift	ABNUA01010	None	None	G4	S2	SSC
Danaus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T2T3	S2S3	
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dicamptodon ensatus California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
Dirca occidentalis western leatherwood	PDTHY03010	None	None	G2	S2	1B.2
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erigeron greenei Greene's narrow-leaved daisy	PDAST3M5G0	None	None	G3	S3	1B.2
Eryngium jepsonii Jepson's coyote-thistle	PDAPI0Z130	None	None	G2	S2	1B.2
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Geothlypis trichas sinuosa saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S1S2	
Helianthella castanea Diablo helianthella	PDAST4M020	None	None	G2	S2	1B.2
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	PDAST4R065	None	None	G5T2	S2	1B.2
Hesperolinon breweri Brewer's western flax	PDLIN01030	None	None	G2	S2	1B.2
Horkelia tenuiloba thin-lobed horkelia	PDROS0W0E0	None	None	G2	S2	1B.2
Hydroprogne caspia Caspian tern	ABNNM08020	None	None	G5	S4	
Hypomesus transpacificus Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
Isocoma arguta Carquinez goldenbush	PDAST57050	None	None	G1	S1	1B.1
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Lathyrus jepsonii var. jepsonii Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Leptosiphon jepsonii Jepson's leptosiphon	PDPLM09140	None	None	G2G3	S2S3	1B.2
Lilaeopsis masonii Mason's lilaeopsis	PDAPI19030	None	Rare	G2	S2	1B.1
Lupinus sericatus Cobb Mountain lupine	PDFAB2B3J0	None	None	G2?	S2?	1B.2
Masticophis lateralis euryxanthus Alameda whipsnake	ARADB21031	Threatened	Threatened	G4T2	S2	
Melospiza melodia maxillaris Suisun song sparrow	ABPBXA301K	None	None	G5T3	S3	SSC
Melospiza melodia samuelis San Pablo song sparrow	ABPBXA301W	None	None	G5T2	S2	SSC
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Northern Vernal Pool Northern Vernal Pool	CTT44100CA	None	None	G2	S2.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
Polygonum marinense Marin knotweed	PDPGN0L1C0	None	None	G2Q	S2	3.1
Rallus obsoletus obsoletus California Ridgway's rail	ABNME05011	Endangered	Endangered	G3T1	S1	FP
Rana boylii foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Reithrodontomys raviventris salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S1S2	FP
Rhynchospora californica California beaked-rush	PMCYP0N060	None	None	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Serpentine Bunchgrass Serpentine Bunchgrass	CTT42130CA	None	None	G2	S2.2	
Sidalcea hickmanii ssp. napensis Napa checkerbloom	PDMAL110A6	None	None	G3T1	S1	1B.1
Sorex ornatus sinuosus Suisun shrew	AMABA01103	None	None	G5T1T2Q	S1S2	SSC
Spergularia macrotheca var. longistyla long-styled sand-spurrey	PDCAR0W062	None	None	G5T2	S2	1B.2
Speyeria callippe callippe callippe silverspot butterfly	IILEPJ6091	Endangered	None	G5T1	S1	
Speyeria zerene sonomensis Sonoma zerene fritillary	IILEPJ6083	None	None	G5T1	S1	
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Syncaris pacifica California freshwater shrimp	ICMAL27010	Endangered	Endangered	G2	S2	
Taricha rivularis red-bellied newt	AAAAF02020	None	None	G2	S2	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Trichostema ruygtii Napa bluecurls	PDLAM220H0	None	None	G1G2	S1S2	1B.2
Trifolium amoenum two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Viburnum ellipticum oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
Xanthocephalus xanthocephalus yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 99

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

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Location

Napa County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Salt Marsh Harvest Mouse Reithrodontomys raviventris — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/613

Birds

NAME	STATUS

California Clapper Rail Rallus longirostris obsoletus — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4240

California Least Tern Sterna antillarum browni — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8104

Northern Spotted Owl Strix occidentalis caurina — Threatened
Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/1123

Western Snowy Plover Charadrius nivosus nivosus — Threatened
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/8035

Reptiles

NAME	STATUS

Green Sea Turtle Chelonia mydas — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6199

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened
Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/2891

Fishes

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NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/321	Threatened
Tidewater Goby Eucyclogobius newberryi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Callippe Silverspot Butterfly Speyeria callippe callippe Wherever found There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3779	Endangered
San Bruno Elfin Butterfly Callophrys mossii bayensis Wherever found There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3394	Endangered

Crustaceans

NAME	STATUS
California Freshwater Shrimp Syncaris pacifica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7903	Endangered
Conservancy Fairy Shrimp Branchinecta conservatio Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/498	Threatened

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Flowering Plants

NAME	STATUS
Contra Costa Goldfields Lasthenia conjugens Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7058	Endangered
Showy Indian Clover Trifolium amoenum Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6459	Endangered
Soft Bird's-beak Cordylanthus mollis ssp. mollis Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8541	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

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Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php

- Nationwide conservation measures for birds
  http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

Black Rail Laterallus jamaicensis — Breeds Mar 1 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/7717

Black Turnstone Arenaria melanocephala — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jan 1 to Dec 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

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Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ

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"Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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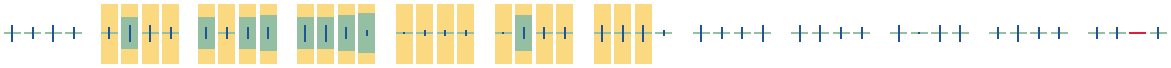
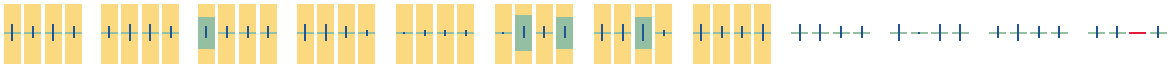
■ probability of presence ■ breeding season | survey effort – no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

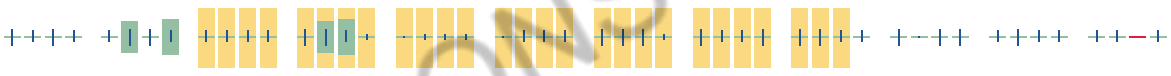
Allen's Hummingbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Bald Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Black Rail BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

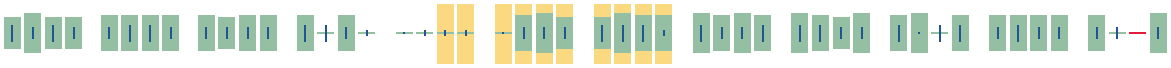


Black Turnstone BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

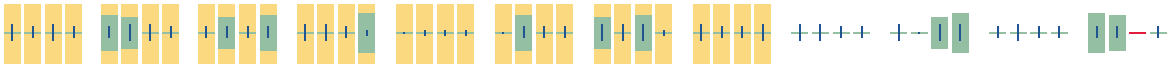
Clark's Grebe BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

NOT FOR CONSULTATION

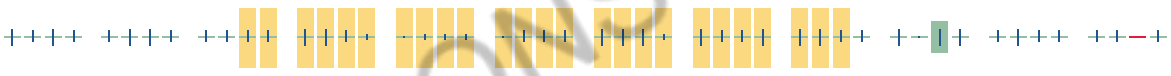
Common Yellowthroat BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Golden Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

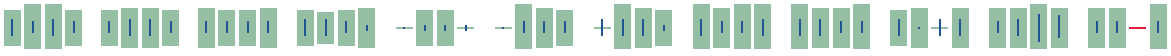


Lawrence's Goldfinch BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

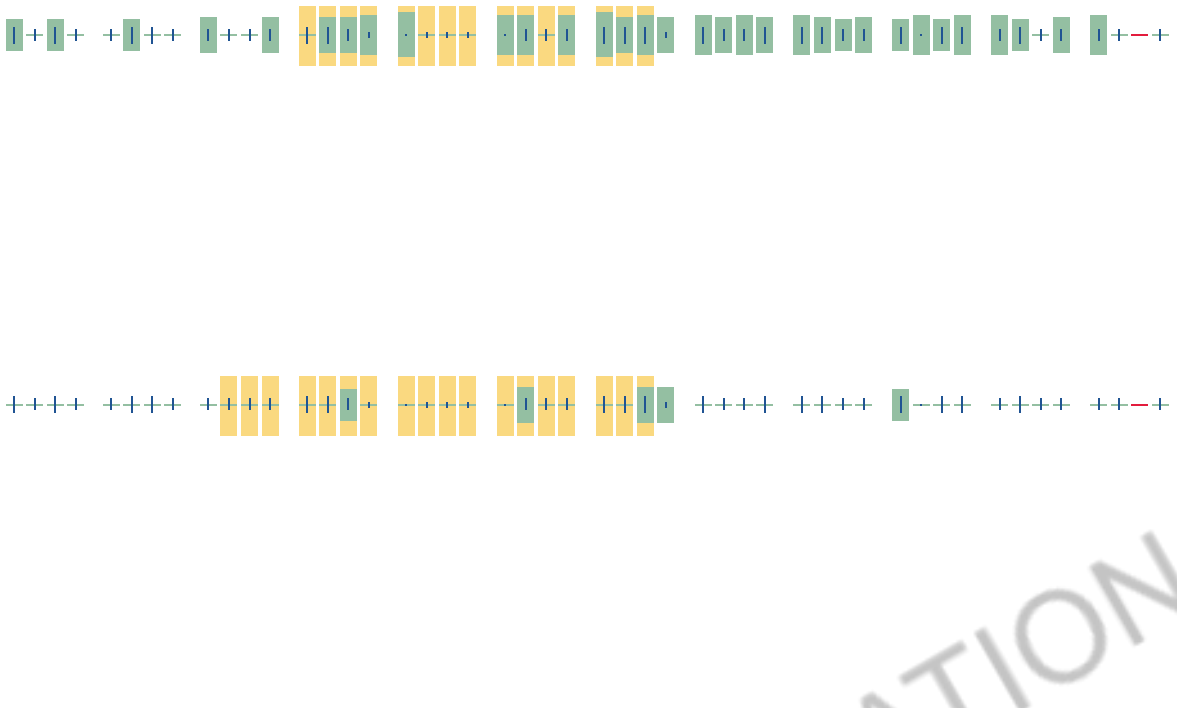


Long-billed Curlew BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Marbled Godwit BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



NOT FOR CONSULTATION



Nuttall's Woodpecker BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Oak Titmouse BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

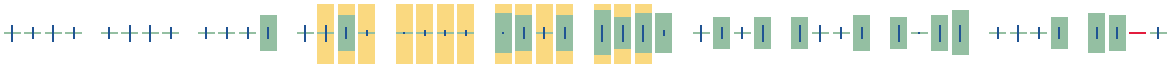
Rufous Hummingbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Short-billed Dowitcher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

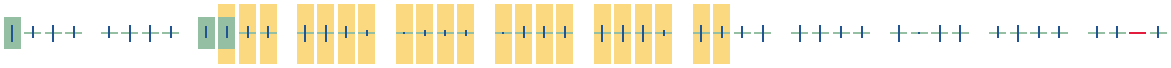
Song Sparrow BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

NOT FOR CONSULTATION

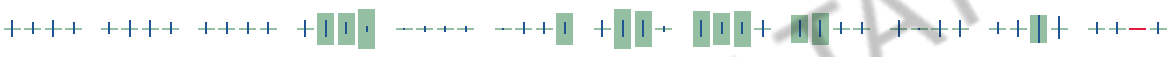
Spotted Towhee BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Tricolored Blackbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

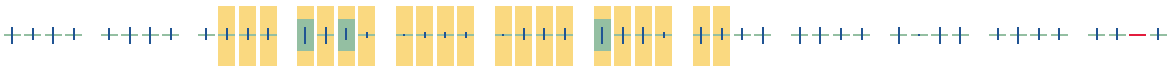


Whimbrel BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Willet BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Wrentit BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



NOT FOR CONSULTATION

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to

occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

NOT FOR CONSULTATION

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Appendix C: Cultural Resources Record Search Results and Historic Resource Evaluation

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C.1 - Native American Heritage Commission

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Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

■ **CEQA Tribal Consultation List (AB 52)** – *Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2*

☐ **General Plan (SB 18)** - *Per Government Code § 65352.3.*

Local Action Type:

☐ **General Plan** ☐ **General Plan Element** ☐ **General Plan Amendment**

☐ **Specific Plan** ☐ **Specific Plan Amendment** ☐ **Pre-planning Outreach Activity**

Required Information

Project Title: Hampton Inn Project

Local Government/Lead Agency: City of American Canyon

Contact Person: Dana DePietro, Spencer Pignotti

Street Address: 1350 Treat Boulevard, Suite 380

City: Walnut Creek **Zip:** 94597

Phone: .925.357.2562 **Fax:**

Email: spignotti@fcs-intl.com

Specific Area Subject to Proposed Action

County: Napa **City/Community:** American Canyon

Project Description:

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010).The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet

Additional Request

■ **Sacred Lands File Search** - *Required Information:*

USGS Quadrangle Name(s): Cuttings Wharf & Cordelia

Township: 4N **Range:** 4W **Section(s):** 23,24,25,26

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

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Chumash

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

January 21, 2021

Dana DePietro, PhD
FirstCarbon Solutions

Via Email to: ddepietro@fcs-intl.com
Cc: spignotti@fcs-intl.com
scottg@mishewalwappoindians.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Hampton Inn Project, Napa County

Dear Dr. DePietro:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

  All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was positive. Please contact the Mishewal-Wappo Tribe of Alexander Valley on the attached list for more information.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Sarah.Fonseca@nahc.ac.gov.

Sincerely,

Sarah Fonseca
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Tribal Consultation List
Napa County
1/21/2021

Cachil Dehe Band of Wintun Indians of the Colusa Indian Community
Daniel Gomez, Chairman
3730 Highway 45 — Wintun
Colusa, CA, 95932
Phone: (530) 458 - 8231
dgomez@colusa-nsn.gov

Cortina Rancheria - Kletsel Dehe Band of Wintun Indians
Charlie Wright, Chairperson
P.O. Box 1630 — Wintun
Williams, CA, 95987
Phone: (530) 473 - 3274
Fax: (530) 473-3301

Guidiville Indian Rancheria
Donald Duncan, Chairperson
P.O. Box 339 — Pomo
Talmage, CA, 95481
Phone: (707) 462 - 3682
Fax: (707) 462-9183
admin@guidiville.net

Middletown Rancheria of Pomo Indians
Jose Simon, Chairperson
P.O. Box 1035 — Lake Miwok, Pomo
Middletown, CA, 95461
Phone: (707) 987 - 3670
Fax: (707) 987-9091
sshope@middletownrancheria.com

Mishewal-Wappo Tribe of Alexander Valley
Scott Gabaldon, Chairperson
2275 Silk Road — Wappo
Windsor, CA, 95492
Phone: (707) 494 - 9159
scottg@mishewalwappotribe.com

Pinoleville Pomo Nation
Leona Willams, Chairperson
500 B Pinoleville Drive — Pomo
Ukiah, CA, 95482
Phone: (707) 463 - 1454
Fax: (707) 463-6601

Yocha Dehe Wintun Nation
Isaac Bojorquez, Director of Cultural Resources
PO Box 18 Brooks, CA 95606 — Patwin
Phone: (530) 796 - 0103
ibojorquez@yochadehe-nsn.gov

Yocha Dehe Wintun Nation
Anthony Roberts, Chairperson
P.O. Box 18 — Patwin
Brooks, CA, 95606
Phone: (530) 796 - 3400
aroberts@yochadehe-nsn.gov

Yocha Dehe Wintun Nation
Laverne Bill, Site Protection Manager
P.O. Box 18 — Patwin
Brooks, CA, 95606
Phone: (530) 796 - 3400
lbill@yochadehe-nsn.gov

Yocha Dehe Wintun Nation
Leland Kinter, THPO
P.O. Box 18 — Patwin
Brooks, CA, 95606
Phone: (530) 796 - 3400
thpo@yochadehe-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Hampton Inn Project, Napa County.

January 22, 2020.

Cachil Dehe Band of Wintun Indians of the
Colusa Indian Community
Daniel Gomez, Chairman
2730 Highway 45
Colusa, CA, 95932

Subject: Proposed Hampton Inn Project

Dear Chairman Daniel Gomez:

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment for the proposed Hampton Inn Project on behalf of the City of American Canyon. As part of the environmental review process, we are conducting a cultural analysis.

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010). The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet.

Enclosed is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

Irvine
250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
Pasadena, CA 91101

Bay Area
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Central Valley
7265 N First Street, Suite 101
Fresno, CA 93720

Inland Empire
650 E. Hospitality Lane, Suite 125
San Bernardino, CA 92408

Sacramento Valley
2204 Plaza Drive, Suite 210
Rocklin, CA 95765

Connecticut
2 Corporate Drive, Suite 450
Shelton, CT 06484

Utah
2901 Bluegrass Blvd, Suite 200-37
Lehi, UT 84043

EUROPE

United Kingdom
Tel: +44 (0) 845.165.6245
Fax: +44 (0) 20.3070.0890
Jubilee House
Third Avenue
Marlow
United Kingdom SL7 1EY

AUSTRALIA

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Tel: +61 (02) 9418.7822
Unit 1, 1 Skyline Place
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Tel: +254-737-433-621
ADEC Kenya Services EPZ Ltd.
Nairobi, Kenya

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Philippines
Tel: +63 (2) 775.0632
Fax: +63 (2) 775.0632 local 8050
26th Floor, Philippine AXA Life Centre,
Sen. Gil Puyat Avenue,
Makati City, Metro Manila

Malaysia
Tel: +603 74902112
Fax: +603 79606977
15-7, Block A, Jaya ONE
72A Jalan Universiti
46200 Petaling Jaya
Selangor, Malaysia

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Designated lead agencies under CEQA and NEPA are handling project notification and consultation requirements. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map

January 22, 2020.

Cortina Rancheria – Kletsel Dehe Band of Wintun Indians
Charlie Wright, Chairperson
P.O. Box 1630
Williams, CA, 95987

Subject: Proposed Hampton Inn Project

Dear Chairperson Wright:

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment for the proposed Hampton Inn project on behalf of the City of American Canyon. As part of the environmental review process, we are conducting a cultural analysis.

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010). The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet.he site is heavily wooded, and an approximately 1.25-acre retention pond is located in the southwest of the site.

Enclosed is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

UNITED STATES

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250 Commerce, Suite 250
Irvine, CA 92602

Pasadena
16 N. Marengo Avenue, Suite 303
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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map

January 22, 2020.

Guidiville Indian Rancheria
Donald Duncan, Chairperson
P.O. Box 339
Talmage, CA, 95481

Subject: Proposed Hampton Inn Project

Dear Chairperson Duncan:

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment for the proposed Hampton Inn project on behalf of the City of American Canyon. As part of the environmental review process, we are conducting a cultural analysis.

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010). The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet.

Enclosed is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map

January 22, 2020.

Middletown Rancheria of Pomo Indians
Jose Simon, Chairperson
P.O. Box 1035
Middletown, CA, 95461

Subject: Proposed Hampton Inn Project

Dear Chairperson Simon:

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment for the proposed Hampton Inn project on behalf of the City of American Canyon. As part of the environmental review process, we are conducting a cultural analysis.

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010). The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet.

Enclosed is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map

January 22, 2020.

Mishewal-Wappo Tribe of Alexander Valley
Scott Gabaldon, Chairperson
2275 Silk Road
Windsor, CA, 95492

Subject: Proposed Suisun Hampton Inn Project

Dear Chairperson Wright:

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment for the proposed Hampton Inn project on behalf of the City of American Canyon. As part of the environmental review process, we are conducting a cultural analysis.

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010). The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet.

Enclosed is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map

January 22, 2020.

Pinoleville Pomo Nation
Leona Willams, Chairperson
500 B Pinoleville Drive
Ukiah, CA, 95482

Subject: Proposed Hilton Inn Project

Dear Chairperson Willams:

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment for the proposed Hilton Inn Project on behalf of the City of American Canyon. As part of the environmental review process, we are conducting a cultural analysis.

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010). The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet.

Enclosed is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map

January 22, 2020.

Yocha Dehe Wintun Nation
Isaac Bojorquez, Director of Cultural Resources
PO Box 18 Brooks, CA 95606

Subject: Proposed Hampton Inn Project

Dear Isaac Bojorquez:

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment for the proposed Hampton Inn project on behalf of the City of American Canyon. As part of the environmental review process, we are conducting a cultural analysis.

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010). The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet.

Enclosed is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map

January 22, 2020.

Yocha Dehe Wintun Nation
Anthony Roberts, Chairperson
P.O. Box 18
Brooks, CA 95606

Subject: Proposed Hampton Inn Project

Dear Chairperson Roberts:

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment for the proposed Hampton Inn project on behalf of the City of American Canyon. As part of the environmental review process, we are conducting a cultural analysis.

The 2.52-acre project site located at 3443 Broadway in the City of American Canyon (Assessor's Parcel Number [APN] 058-312-010). The Applicant proposes to demolish the existing buildings on the site and develop a 3-story, 106-room Hampton Inn hotel. The building footprint will be approximately 19,264 square feet, for a total building area of approximately 57,454 square feet.

Enclosed is a Records Search map with a 0.5-mile buffer around the site for your reference.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project location map

C.2 - Northwest Information Center Search Results

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CHRIS Data Request Form

ACCESS AND USE AGREEMENT NO.: 37 **IC FILE NO.:** _____

To: Northwest Information Center

Print Name: Dana DePietro Date: 1.7.2021

Affiliation: FirstCarbon Solutions

Address: 1350 Treat Blvd Suite 380

City: Walnut Creek State: CA Zip: 94597

Phone: .925.357.2562 Fax: _____ Email: spignotti@fcs-intl.com

Billing Address (if different than above): 220 Commerce, Suite 200 Irvine, CA 94597

Billing Email: ap@fcs-intl.com Billing Phone: _____

Project Name / Reference: American Canyon Hampton Inn

Project Street Address: 3443 Broadway, American Canyon, CA

County or Counties: Napa

Township/Range/UTMs: T: 4N; R: 4W; Sections 23, 24, 25, 26

USGS 7.5' Quad(s): USGS Cuttings Wharf and Cordelia 7.5' Quadrangle

PRIORITY RESPONSE (Additional Fee): yes ☐ / no ■

TOTAL FEE NOT TO EXCEED: $ 800
(If blank, the Information Center will contact you if the fee is expected to exceed $1,000.00)

Special Instructions:

If costs will exceed $800, please omit the mapping of any Records/Surveys that were not conducted within the Direct APE/Project Area and/or the sources listed under section 2B. Please do continue to map all Resources located both within the Direct APE and 1/2 mile search radius. We would like detail and list view .pdfs of Resources and Reports as well.

Information Center Use Only

Date of CHRIS Data Provided for this Request: _____

Confidential Data Included in Response: yes ☐ / no ☐

Notes: _____

CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the $150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the OHP website.

1. Map Format Choice:

Select One: Custom GIS Maps ☒ GIS Data ☐ Custom GIS Maps **and** GIS Data ☐ No Maps ☐

Any selection below left unmarked will be considered a "no. "

Location Information:

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Locations	yes ☒ / no ☐	yes ☒ / no ☐
Report Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
"Other" Report Locations[2]	yes ☐ / no ☒	yes ☐ / no ☒

3. Database Information:
(contact the IC for product examples, or visit the SSJVIC website for examples)

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Excel Spreadsheet	yes ☐ / no ☒	yes ☐ / no ☒
NON-ARCHAEOLOGICAL Resource Database		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Excel Spreadsheet	yes ☐ / no ☒	yes ☐ / no ☒
Report Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
Include "Other" Reports [2]	yes ☐ / no ☒	yes ☐ / no ☒

4. Document PDFs (paper copy only upon request)**:**

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Records[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Records	yes ☒ / no ☐	yes ☐ / no ☒
Reports[1]	yes ☒ / no ☐	yes ☒ / no ☐
"Other" Reports[2]	yes ☒ / no ☐	yes ☐ / no ☒

CHRIS Data Request Form

5. Eligibility Listings and Documentation:

	Within project area	Within 0.5 mi. radius
OHP Built Environment Resources Directory[3]:		
Directory listing only (Excel format)	yes ☐ / no ☒	yes ☐ / no ☒
Associated documentation[4]	yes ☐ / no ☒	yes ☐ / no ☒
OHP Archaeological Resources Directory[1,5]:		
Directory listing only (Excel format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☐ / no ☒	yes ☐ / no ☒
***California Inventory of Historic Resources* (1976):**		
Directory listing only (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☐ / no ☒	yes ☐ / no ☒

6. Additional Information:

The following sources of information may be available through the Information Center. However, several of these sources are now available on the OHP website and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

Caltrans Bridge Survey	yes ☐ / no ☒
Ethnographic Information	yes ☐ / no ☒
Historical Literature	yes ☐ / no ☒
Historical Maps	yes ☒ / no ☐
Local Inventories	yes ☒ / no ☐
GLO and/or Rancho Plat Maps	yes ☒ / no ☐
Shipwreck Inventory	yes ☐ / no ☒
Soil Survey Maps	yes ☐ / no ☒

---

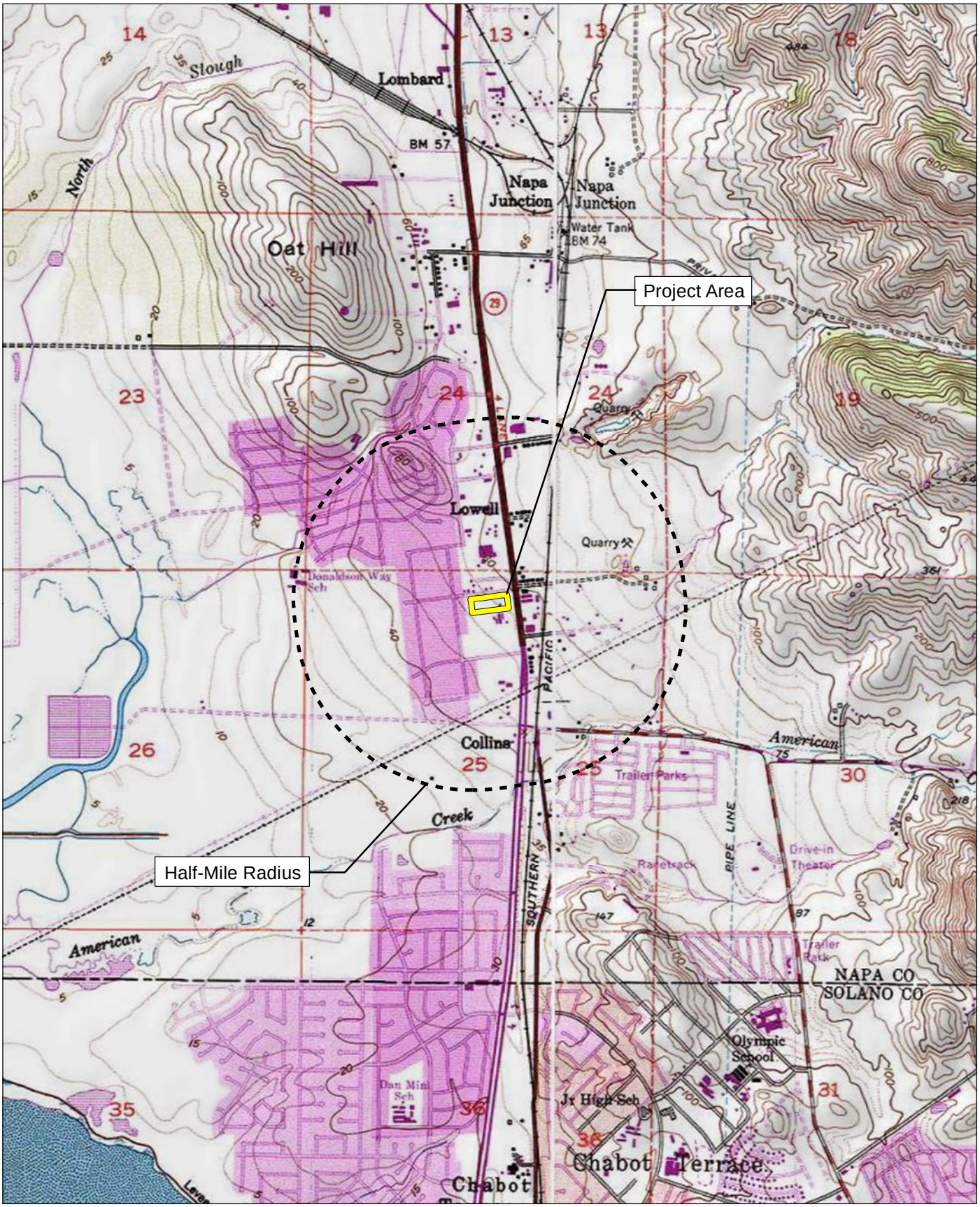
[1] In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

[2] "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

[3] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

[4] Associated documentation will vary by resource. Contact the IC for further details.

[5] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.



Source: USGS Cuttings Wharf & Cordelia 7.5' Quadrangles / T04N,R04W,sections: 23, 24, 25, 26

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

54760001 • 01/2021 | 54760001_record_search.mxd

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA, COLUSA, CONTRA COSTA, DEL NORTE, HUMBOLDT, LAKE, MARIN, MENDOCINO, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLATA, SANTA CRUZ, SOLANO, SONOMA, YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

2/12/2021 NWIC File No.: 20-1299

Dana DePietro
FirstCarbon Solutions
1350 Treat Blvd, St 380
Walnut Creek, CA 94597

Re: American Canyon Hampton Inn

The Northwest Information Center received your record search request for the project area referenced above, located on the Cuttings Wharf, Cordelia USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a 0.5 mi. radius:

Resources within project area:	None listed
Resources within 0.5 mi. radius:	P-28-000777, P-28-000778, P-28-001819, P-28-001827, P-28-001829, P-28-001830, P-28-001831, P-28-001832, P-28-001833, P-28-001834, P-28-002611
Reports within project area:	[16] Please see attached list, page 3
Reports within 0.5 mi. radius:	S-1022, 1144, 1145, 6250, 18016, 22817, 24344, 34418, 47306, 52530, 53147

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☒ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☒ enclosed	☐ not requested	☐ nothing listed
Historical Maps:	☒ enclosed	☐ not requested	☐ nothing listed
Local Inventories:	☒ enclosed	☐ not requested	☐ nothing listed

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

*Notes:
** Current versions of these resources are available on-line:
Caltrans Bridge Survey: http://www.dot.ca.gov/hq/structur/strmaint/historic.htm
Soil Survey: http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=CA
Shipwreck Inventory: http://www.slc.ca.gov/Info/Shipwrecks.html

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,
Annette Neal
Researcher

Reports Within Project Area

DocCo	DocNo
S-	000848
S-	002458
S-	002515
S-	002663
S-	007888
S-	008226
S-	009462
S-	009795
S-	012492
S-	015529
S-	018217
S-	030204
S-	032596
S-	033600
S-	046321
S-	049780

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-28-000777	CA-NAP-000898H	Other - American Canyon Survey Site-02; Resource Name - Frisbie Homestead	Site	Historic	AH02; AH03; AH04; AH05; AH09; AH10; AH15	1996 (John Sharp, Michael Jablonowski, Robert Douglas, Cultural Resources Facility, Sonoma State University); 2003 (V.R. Beard, Tom Origer & Associates)	S-018016
P-28-000778		Resource Name - 652 American Canyon	Building, Structure	Historic	HP33	1996 (J. Sharp, Cultural Resources Facility, Sonoma State University); 2003 (V.R. Beard, Tom Origer & Associates)	S-018016
P-28-001819		Resource Name - Standard Portland Cement Company; Voided - C-1191; Other - Standing Structures from the Standard Portland Cement Corporation	Building, Structure	Historic	HP08	1994 (Chuck Whatford, [none]); 2015 (Brad Brewster, ESA, Inc.)	S-046321
P-28-001827		Resource Name - 150 S. Napa Junction Road; Other - Adobe Lumber	Building	Historic	HP06	2015 (Brad Brewster, ESA)	S-046321
P-28-001828		Resource Name - 151 S. Napa Junction Road	Building	Historic	HP02	2015 (Brad Brewster, ESA)	S-046321
P-28-001829		Resource Name - 155 S. Napa Junction Road	Building	Historic	HP02	2015 (Brad Brewster, ESA)	S-046321
P-28-001830		Resource Name - 159 S. Napa Junction Road	Building	Historic	HP02	2015 (Brad Brewster, ESA)	S-046321
P-28-001831		Resource Name - 163 S. Napa Junction Road	Building	Historic	HP02	2015 (Brad Brewster, ESA)	S-046321
P-28-001832		Resource Name - 167-171 S. Napa Junction Road	Building	Historic	HP02	2015 (Brad Brewster, ESA)	S-046321
P-28-001833		Resource Name - 175 S. Napa Junction Road	Building	Historic	HP02	2015 (Brad Brewster, ESA)	S-046321
P-28-001834		Resource Name - 3860 Highway 29; Other - Palby's Junction	Building	Historic	HP06	2015 (Brad Brewster, ESA)	S-046321
P-28-002611		Resource Name - T-Mobile West, LLC Candidate BA10854Z (Hwy 29 PG&E Tower); Other - PG&E Utility Lattice Tower	Structure	Historic	HP11	2018 (K.A. Crawford, Crawford Historic Services)	S-052530

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-046321	Voided - S-46796	2015	Brad Brewster, Heidi Koenig, and Paul Zimmer	Watson Ranch Specific Plan, City of American Canyon, Napa County, Cultural Resources Survey Report	ESA Associates	28-001819, 28-001820, 28-001821, 28-001822, 28-001823, 28-001824, 28-001825, 28-001826, 28-001827, 28-001828, 28-001829, 28-001830, 28-001831, 28-001832, 28-001833, 28-001834, 28-002456
S-046321a		2015	Brad Brewster	Addendum to the Watson Ranch Cultural Resources Survey Report Off-site Improvements (letter report)	ESA Cultural Resources Group	

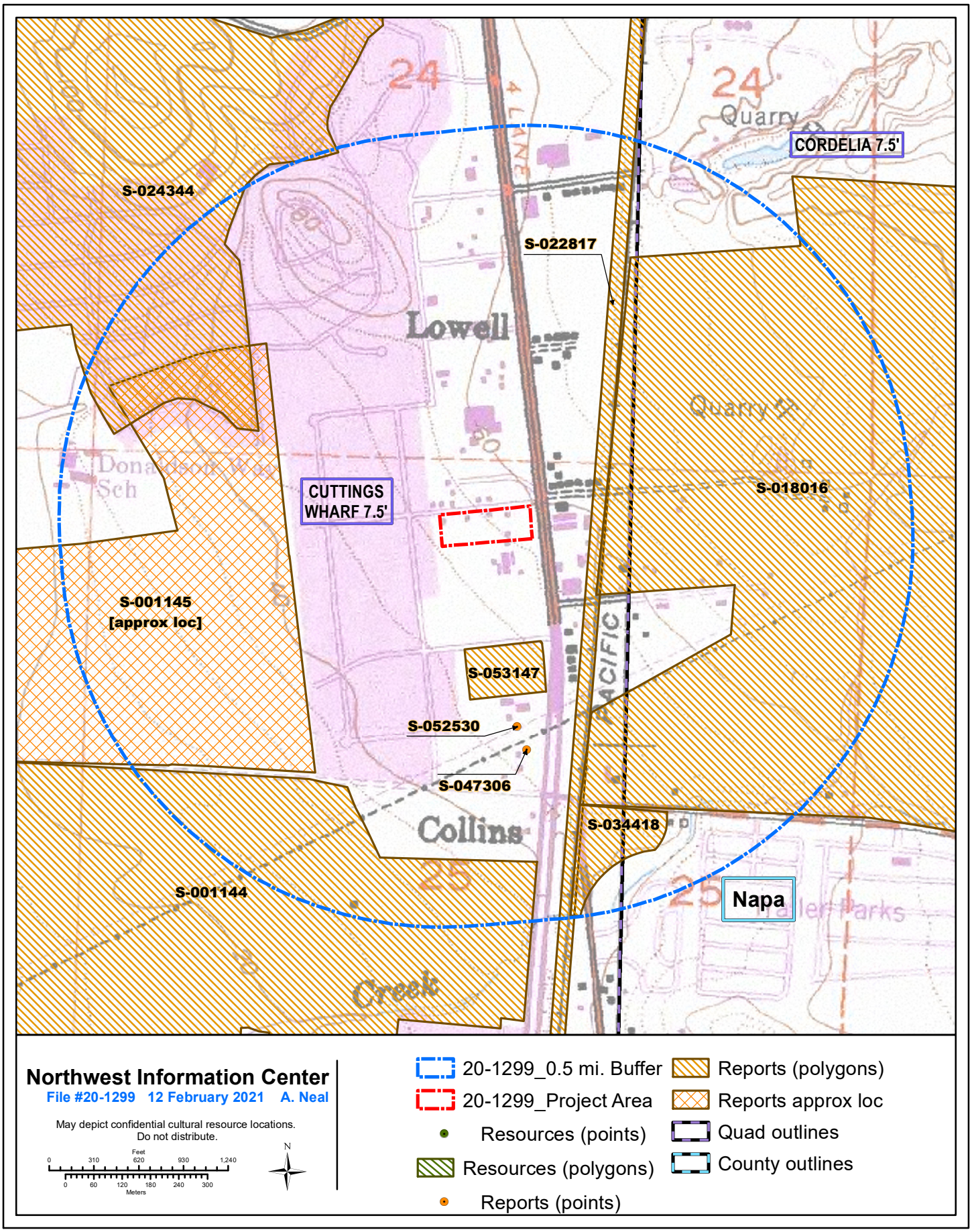
Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-001022		1976	Thomas L. Jackson	Preliminary archaeological reconnaissance of the proposed 'Canyon Creek Center Restaurant' development, Highway 29, Vallejo, California (letter report)	Archaeological Consulting and Research Services	
S-001144		1977	Thomas L. Jackson	A preliminary archaeological reconnaissance of the proposed Napa Meadows subdivision, located in American Canyon, Napa County (letter report).	Archaeological Consulting and Research Services, Inc.	
S-001145		1977	Thomas L. Jackson	A preliminary archaeological reconnaissance of the proposed Napa Glen subdivision, located in American Canyon, Napa County (letter report).	Archaeological Consulting and Research Services, Inc.	
S-006250		1983	C. Kristina Roper and David A. Fredrickson	A Cultural Resource Study of Previously Unsurveyed Portions of the P.G.& E. Lakeville-Sobrante 230 kV Transmission Line	Cultural Resources Facility, Sonoma State University	48-000110, 49-000180
S-018016	Submitter - 50001-19/96	1996	Michael Jablonowski and John Sharp	An Archaeological Study of 405 Acres of Land for the Southeast Area Specific Plan, City of American Canyon, Napa County, California.	Anthropological Studies Center, Sonoma State University	28-000776, 28-000777, 28-000778, 28-002456
S-022817	Submitter - Project Number 27101	2000	Wendy J. Nelson, Maureen Carpenter, and Julia G. Costello	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS01: Sacramento to Oakland	Far Western Anthropological Research Group, Inc.; Foothill Resources, Ltd.	01-000084, 01-000120, 07-000137, 07-000138, 07-000149, 07-000184, 48-000072, 48-000081, 48-000211, 48-000441, 48-000549, 57-000198
S-024344	Submitter - ARS 88-40	1988	Katherine Flynn	Archaeological Survey of the Cookie Hill Housing Development, Napa County (APN 58-04-21) (letter report)	Archaeological Resource Service	
S-034418	Submitter - Project RY176-88/07	2007	Sandra Massey	A Cultural Resources Study for the American Canyon Road/Broadway Commercial Center Project, American Canyon, Napa County, California	Anthropological Studies Center, Sonoma State University	
S-046321a		2015	Brad Brewster	Addendum to the Watson Ranch Cultural Resources Survey Report Off-site Improvements (letter report)	ESA Cultural Resources Group	
S-047306	OTIS Report Number - FCC_2016_0202_003 ; Submitter - AT&T CCL00250	2016	Carolyn Losee	Cultural Resources Investigation for AT&T CCL00250 “PG&E” 3331 Highway 29, American Canyon, Napa County, California 94503 (letter report)	Archaeological Resources Technology	

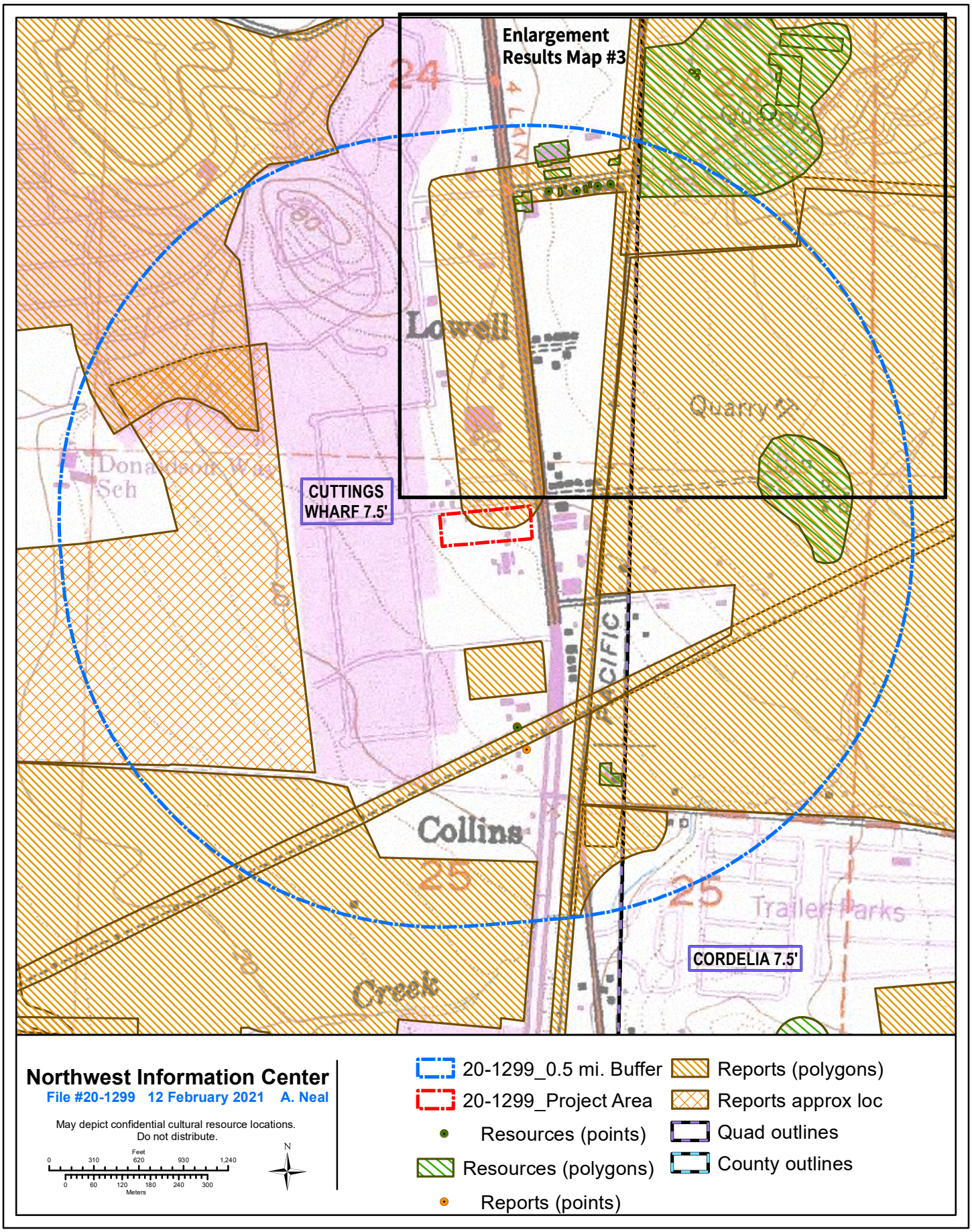
Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-047306a		2016	Julianne Polanco	FCC_2016_0202_003; CCL00250 "PG&E" 3331 Highway 29, American Canyon, Collocation	Office of Historic Preservation	
S-047306b		2016	Carolyn Losee	FCC Wireless Telecommunication Bureau Collocation (“CO”) Submission Packet, FCC Form 621, AT&T CCL00250 "PG&E", 3331 Highway 29, American Canyon, CA 94503	Diablo Green Consulting, Inc.	
S-052530	OTIS Report Number - FCC_2018_0705_003	2018	Katherine D. Thomas, Carrie D. Wills, and Kathleen A. Crawford	Cultural Resources Record Search Results for T-Mobile West, LLC Candidate BA10854Z (hwy 29 PG&E Tower), 3331 Highway 29, American Canyon, Napa County, California	Environmental Assessment Specialists, Inc.	28-002611
S-052530a		2018	Carrie D. Wills and Kathleen A. Crawford	Direct APE Historic Architectural Assessment for T-Mobile West, LLC Candidate BA10854Z (Hwy 29 PG&E Tower), 3331 Highway 29, American Canyon, Napa County, California	Environmental Assessment Specialists, Inc.	
S-052530b		2018	Carrie D. Wills, Kathleen Crawford, and Katherine Thomas	FCC Form 621 for BA10854Z (Hwy 29 PG&E Tower), 3331 Highway 29, American Canyon, CA 94503	Environmental Assessment Specialists, Inc.	
S-052530c		2018	Julianne Polanco	[FCC_2018_0705_003] BA10854Z (Hwy 29 PG&E Tower) 3331 Highway 29, American Canyon, Collocation	Office of Historic Preservation	
S-053147		2018	Eileen Barrow	Historical Resources Study for the Crawford Way Senior Housing Project, American Canyon, Napa County, California	Tom Origer & Associates	

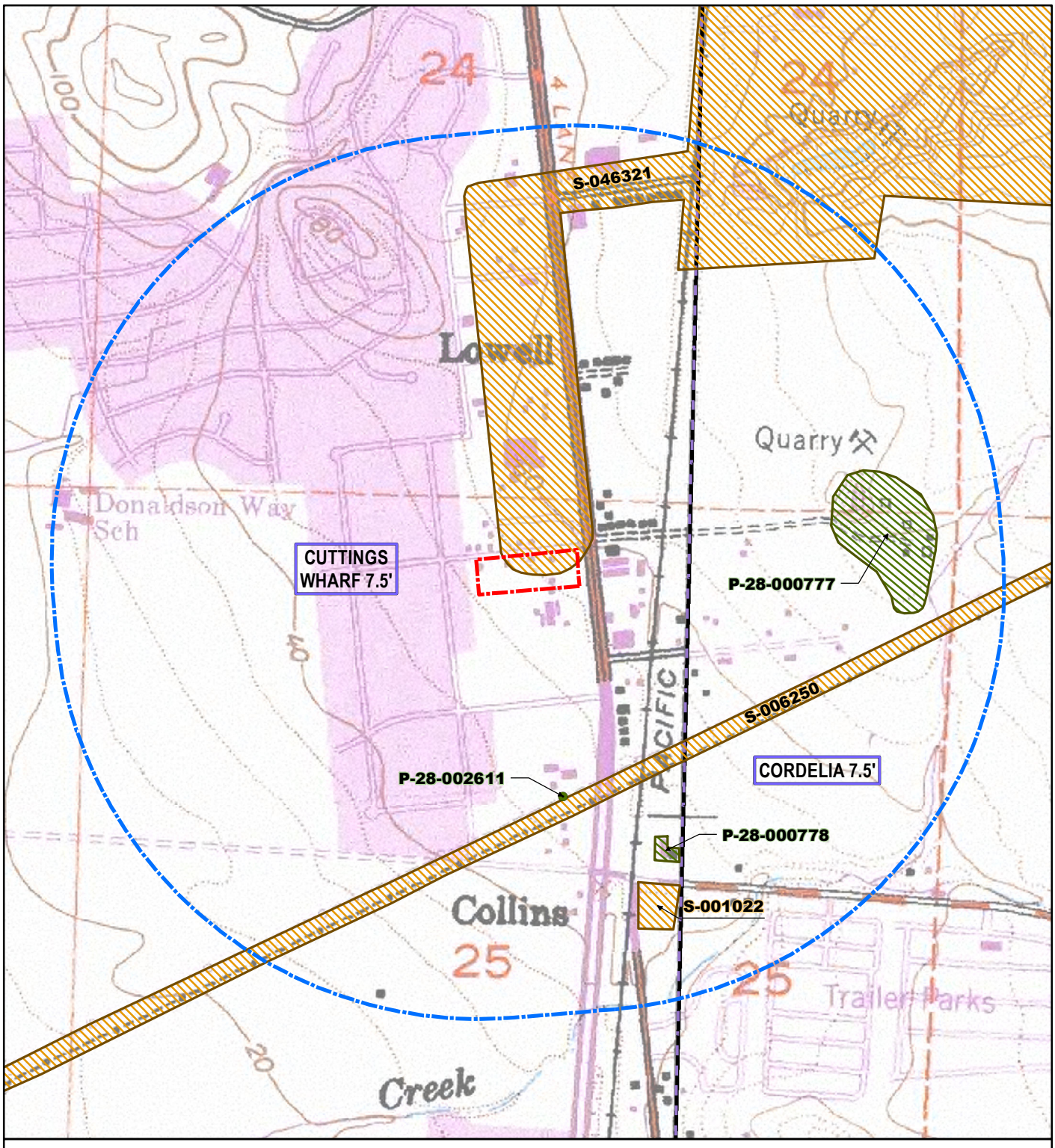
American Canyon Hampton Inn
Results Map #1



American Canyon Hampton Inn
Overview Map



American Canyon Hampton Inn
Results Map #2



Northwest Information Center
File #20-1299 12 February 2021 A. Neal

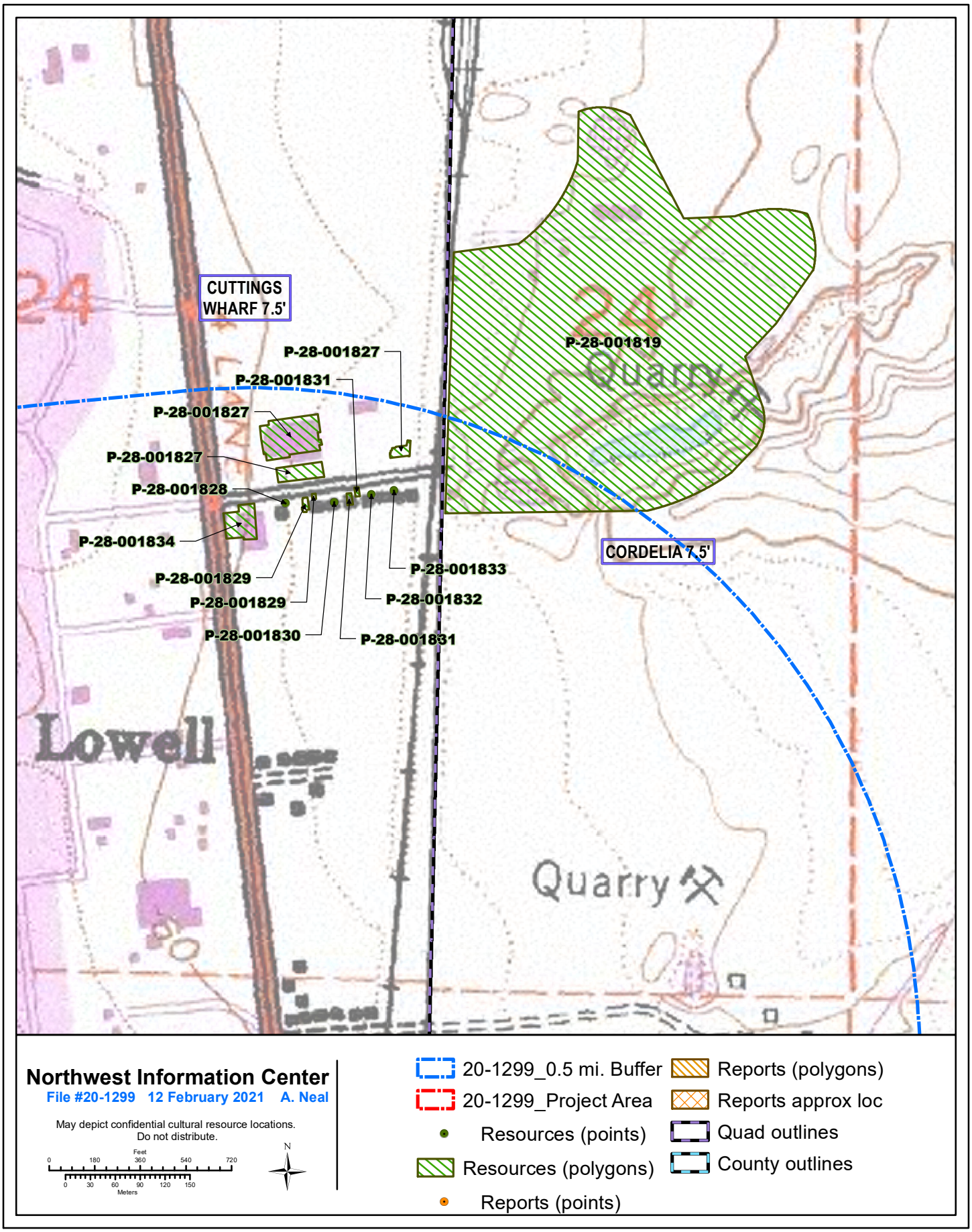
May depict confidential cultural resource locations.
Do not distribute.

Feet 0 310 620 930 1,240
Meters 0 60 120 180 240 300

N

20-1299_0.5 mi. Buffer
20-1299_Project Area
Resources (points)
Resources (polygons)
Reports (points)
Reports (polygons)
Reports approx loc
Quad outlines
County outlines

American Canyon Hampton Inn
Results Map #3



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C.3 - Paleontological Records Search

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Kenneth L. Finger, Ph.D.
Consulting Paleontologist

18208 Judy St., Castro Valley, CA 94546-2306 510.305.1080 klfpaleo@comcast.net

January 8, 2021

Dana DePietro
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

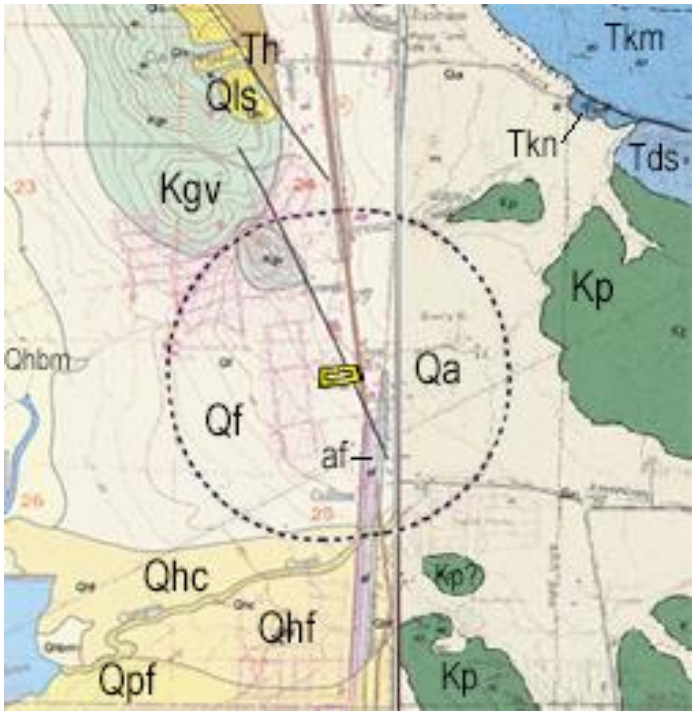
Re: Paleontological Records Search: American Canyon Hampton Inn Project (5476.0001), Napa County

Dear Dr. DePietro:

As per the request of Spencer Pignotti, I have performed a records search on the University of California Museum of Paleontology (UCMP) database for the Hampton Inn project in the City of American Canyon. The project site is on 2.52 flat acres at 3443 Broadway. Its PRS location is NW¼, NE¼, Sec. 25, T4N, R4W, Cuttings Wharf quadrangle (USGS 7.5'-series topographic map). The surface is heavily disturbed and currently has several buildings slated for demolition.

Geologic Mapping

As shown here on the conjoined parts of the geologic maps by Bezore et al. (2002) and Dibblee and Minch (2006), the surface of the entire project site (yellow outline at center) consists solely of Holocene–Pleistocene fan deposits (Qf) according to Bezore et al. but the unit was subsequently referred to as Holocene alluvium by Dibblee and Minch. The surrounding half-mile search area (dashed outline) also includes modern artificial fill and stream channel deposits and Cretaceous rocks of the Great Valley Sequence (Kgv).



Key to Mapped Units

af	Artificial fill (Modern)
Qhc	Stream channel deposits (Modern)
Qa	Alluvium (Holocene)
Qhf	Landslide deposits (Holocene)
Qhbm	Bay mud (Holocene)
Qls	Landslide deposits (Holocene–Pleist.)
Qf	Fan deposits (Holocene–Pleistocene)
Qpf	Fan deposits (late Pleistocene)
Th	Huichica Formation (Pliocene)
Tk	Kreyenhagen Formation (late Eocene)
Tkm	Markley Sandstone Member
Tkn	Nortonville Shale Member
Tds	Domengine Formation (middle Eocene)
Kp	Panoche Formation (Late Cretaceous)
Kgv	Great Valley Sequence (Cretaceous)

Paleontological Records Search

The paleontological records search of the UCMP database focused on the Pleistocene alluvium and Cretaceous Great Valley Sequence. No vertebrate or plant localities are recorded for Napa County. The results for the Great Valley Sequence are one vertebrate and 36 plant localities. The vertebrate locality is in the Chico Formation, which the database includes in the Great Valley Group, and is in Butte County. The plant localities are in the Panoche Formation, which the database also includes in the Great Valley Group, and all are from construction of SR41 in Kern and San Luis Obispo Counties. There are no significant paleontological resources recorded from the Great Valley Sequence (or Group) in Napa County.

Paleontological Assessment and Mitigation Recommendations

A preconstruction paleontological walkover survey of the proposed American Canyon Hampton Inn project site is not recommended because its natural surface has been heavily disturbed. I also do not recommend paleontological monitoring of earth-disturbing construction activities because 1) the most recent mapping in the area indicates that the surficial alluvium is Holocene, which is too young to be fossiliferous, and 2) the UCMP database search revealed that there are no significant Pleistocene or Cretaceous localities in Napa County.

Although highly unlikely, should any significant paleontological resources (e.g., bones, teeth, well-preserved plant elements) be unearthed by the construction crew, their activities should be diverted at least 15 feet from the find until a professional paleontologist has assessed it and, if deemed significant, salvaged it in a timely manner. Salvaged fossils should be deposited in an appropriate repository, such as the UCMP, where they will be properly curated and made available for future research.

Sincerely,

Ken Finger

References Cited

Bezore, S., Randolph-Loar, C.E., and Witter, R.C., 2002, Geologic map of the Cuttings Wharf quadrangle, Napa and Solano Counties, California: a digital database, version 1.

Dibblee, T.W., and Minch, J.A., 2006, Geologic map of the Cordelia and Fairfield South quadrangles, Napa and Solano Counties, California. Dibblee Geological Foundation Dibblee Foundation Map DF-190, scale 1:24,000.

C.4 - Historic Resource Evaluation

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EVANS & DE SHAZO
ARCHAEOLOGY HISTORIC PRESERVATION

A HISTORIC RESOURCE EVALUATION OF THE PROPERTY LOCATED AT 3439 BROADWAY, AMERICAN CANYON, NAPA COUNTY, CALIFORNIA

SUBMITTED TO:
Tsui Li, Project Manager
tli@fcs-intl.com
First Carbon Solutions

SUBMITTED BY:
Stacey De Shazo, M.A.
Principal Architectural Historian
stacey@evans-deshazo.com

July 8, 2021

Evans & De Shazo, Inc
1141 Gravenstein Highway South,
Sebastopol, CA 95472
707-823-7400
www.evans-deshazo.com

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ATTACHMENTS: Department of Parks and Recreation (DPR) 523 forms (Appendix A)

INTRODUCTION

Evans & De Shazo, Inc. (EDS) completed a Historic Resource Evaluation (HRE) of the property located at 3439 Broadway, American Canyon, Napa County, within the 2.51-acre Assessor Parcel Number (APN) 058-312-010 (Property). The Property includes a ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, ca. 1985 industrial building, two windmills (ca. 1950 and undated), ca. 1955 wood storage shed (shed 1), ca. 1950 wood storage shed (shed 2), ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape. The proposed project includes the demolition of the existing built envrionment resources within the Property and the development of a three-story, 106-room Hampton Inn hotel. The new building footprint would be approximately 19,691 square feet (sf), and the total building area is approximately 59,000 sf. The Property is not currently listed on the Office of Historic Preservation's (OHP) Built Environment Resources Directory (BERD) and is not listed on any local, state, or federal list of historical resources. In addition, the Property does not appear to have been previously evaluated for listing on the California Register of Historical Resources (CRHR). As such, the City of American Canyon in accordance with the California Environmental Quality Act (CEQA) requested an HRE of the built environment resource to determine if there are any historical resources within the Property that will be impacted by the proposed Project and provide recommendations, as needed.

The HRE is based on specific guidelines and evaluation criteria of the CRHR (14 CCR §15064.5 and PRC§ 21084.1). The following HRE was completed by EDS Principal Architectural Historian Stacey De Shazo, M.A., who exceeds the Secretary of the Interior's qualification standards in Architectural History and History, and Nicole LaRochelle, B.A. (M.S. in Historic Preservation and Conservation in progress). The results of the HRE are presented herein.

PROPERTY LOCATION

The 2.51-acre Property (APN 058-312-010) is located on the west side of Broadway Street (Napa Vallejo Highway). The Property is situated 262 feet south of Donaldson Way W. and 673 feet north of Crawford Way (Figure 1).

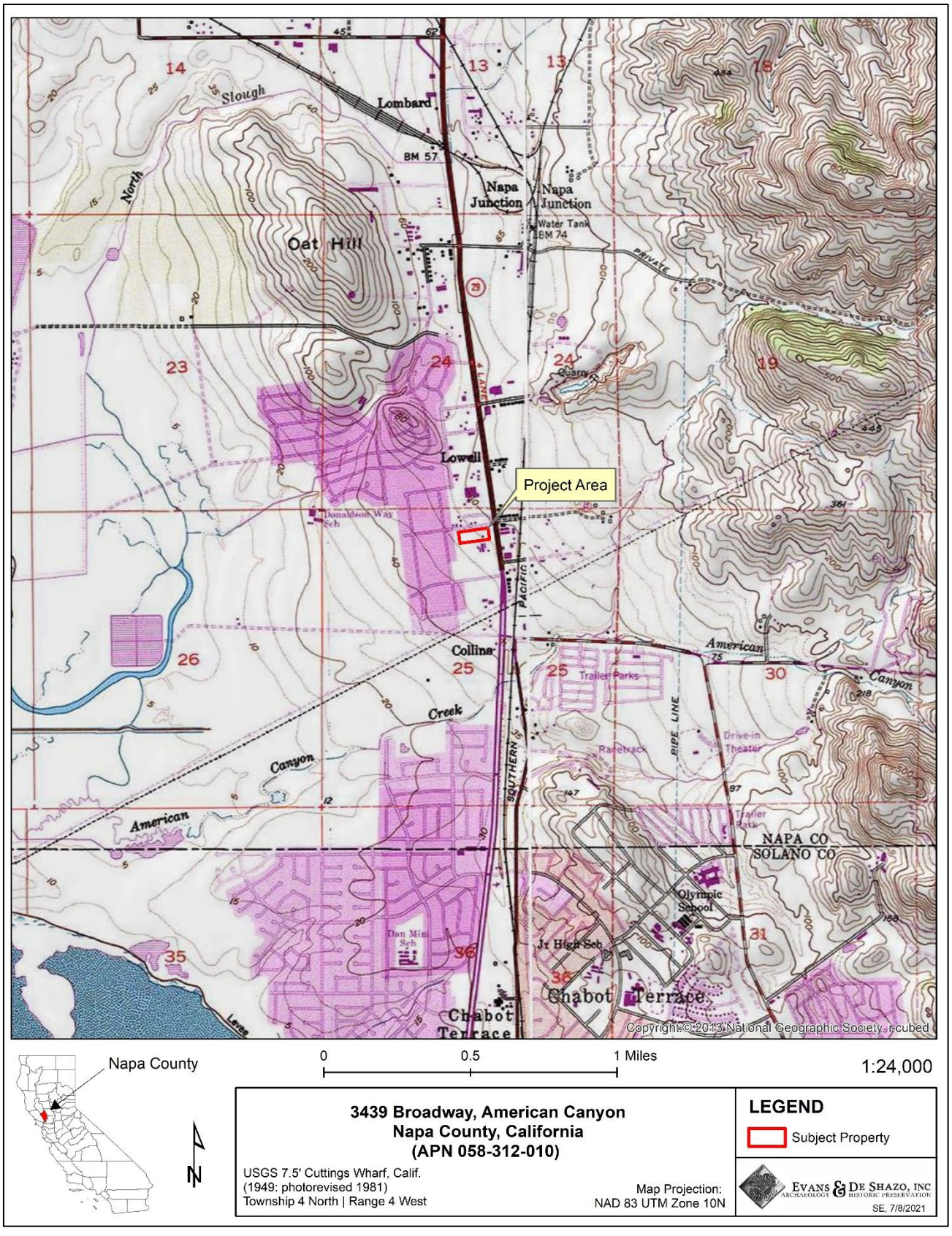


Figure 1. Property location map.

REGULATORY SETTING

The CEQA regulations, as they pertain to "cultural resources", are outlined below.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA and the Guidelines for Implementing CEQA (State CEQA Guidelines § 15064.5) give direction and guidance for evaluating properties, and the preparation of Initial Studies, Categorical Exemptions, Negative Declarations, and Environmental Impact Reports. Pursuant to California State law, the City of American Canyon is legally responsible and accountable for determining the environmental impact of any land use proposal it approves. Cultural resources are aspects of the environment that require identification and assessment for potential significance under CEQA (14 CCR § 15064.5 and PRC § 21084.1).

There are five classes of cultural resources defined by the State OHP. These are:

- **Building**: A structure created principally to shelter or assist in carrying out any form of human activity. A "building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
- **Structure**: A construction made for a functional purpose rather than creating human shelter. Examples include mines, bridges, and tunnels.
- **Object**: Construction primarily artistic in nature or relatively small in scale and simply constructed. It may be movable by nature or design or made for a specific setting or environment. Objects should be in a setting appropriate to their significant historic use or character. Examples include fountains, monuments, maritime resources, sculptures, and boundary markers.
- **Site**: The location of a significant event. A prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event and if no buildings, structures, or objects marked it at that time. Examples include trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.
- **Historic District**: Unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.

According to CCR § 15064.5, cultural resources are historically significant if they are:

(1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (PRC §5024.1, 14 CCR § 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in PRC § 5020.1(k) or identified as significant in a historical resource survey meeting the requirements PRC § 5024.1(g), shall be presumed to be historically or culturally significant. Public agencies must treat any such

resource as significant unless the preponderance of the evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC § 5024.1, 14 CCR § 4852), including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources pursuant to PRC § 5020.1(k) or identified in a historical resources survey meeting the criteria in PRC § 5024.1(g) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC § 5020.1(j) or § 5024.1.

METHODS

The methods used to complete the HRE included a review of documents provided by the client, such as the Property Title Report and deed records obtain from the Napa County Assessor/Recorder Office, and various other documents. EDS also reviewed the various cultural resource inventories listed below, and conducted extensive online research, including at the Napa County Historical Society (NCHS). EDS also reviewed digital documents on file with EDS, such as historical maps, Sanborn Fire Insurance maps, historical aerial photographs, and other primary source documents. The purpose of the research was to understand the Property history and the history of the surrounding area to assist in the development a historical context in which to evaluate the historic significance of the built environment within the Property. EDS Principal Architectural Historian Stacey De Shazo, M.A. and Nicole LaRochelle, B.A. (M.S. in Historic Preservation and Conservation in progress) completed an architectural survey to identify the age, any known architectural style or form, character-defining features, materials, and alterations of built environment resources, at least 45 years in age, within the Property. Department of Parks and Recreation (DPR) 523 forms were also completed for the Property (Appendix A).

Cultural Resource Inventories

As part of the record search, the following inventories were reviewed:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CRHR)
- California Historical Landmarks (CHL)
- California Points of Historical Interest (CPHI)
- California OHP BERD for Napa County (2020)

Online Research

Online research utilized the following sources:

- www.newspapers.com
- www.ancestry.com
- www.calisphere.com (University of California)
- http://www.library.ca.gov/ (California State Library)
- https://cdnc.ucr.edu/ California Digital Newspaper Collection
- Digital Reel (https://dr652e.bmiimaging.com/)

HISTORICAL SETTING

The following section provides a brief history of the area where the Property is located and a specific history of the built environment resources, at least 45 years in age, within the Property. The purpose of this section is to provide an understanding of the development of the area and the specific context within which the built environment resources were evaluated for historical significance.

MEXICAN ERA (1821 – 1846)

In 1821, Mexico declared its independence from Spain and took possession of "Alta California"[1] marking the end of the Spanish period (1769 – 1821) and the beginning of the Mexican period, also referred to as the "rancho" period in Alta California. Although California was now under Mexican rule, in 1824, the present-day City of Sonoma was where the last and most northerly of the 21 missions, the Mission San Francisco Solano (i.e., Mission Sonoma), was constructed; and it was the only mission established under an independent Mexican government with the Mexican era. In 1833, the missions in California were secularized by the Mexican government, and mission-owned land was dissolved. During this time, extraordinary changes occurred throughout Alta California, as the Mexican government lacked the strong oversight and military rule previously imposed by the Spanish, and as such, there were new opportunities for trade when foreign ships that had previously been held off by Spanish guarded military ports could dock and provide a variety of provisions to local settlers throughout California. These new provisions, including tea, coffee, sugars, spices, and spirits, as well as a variety of manufactured goods, soon made their way into the region; and the taxes

[1] Alta California was a polity of New Spain founded in 1769 and became a territory of Mexico after the Mexican War of Independence in 1821.

on these imported goods became the main source of revenue for the Mexican government in Alta California. Likewise, products produced in Alta California were exported, which bolstered the hide and tallow trade that became the primary business activity in Alta California during this time. During this time, the Mexican colonial authorities encouraged the settlement of Alta California by providing large land grants called ranchos to politically prominent persons that were loyal to the Mexican government and permitting foreigners to settle land. As a result, the 20 or so ranchos in Alta California during the Spanish period increased to roughly 800 ranchos that varied from 10,000 to 20,000 acres during the Mexican era.

In 1843, the Property was located within an 84,000-acre rancho, known as *Rancho Suscol*, granted by the Mexican governor Micheltorena to General Mariano Guadalupe Vallejo.

EARLY AMERICAN PERIOD (1848 – 1851)

The beginning of the American Period in California is marked by the end of the Mexican American War (1846-1848) when the United States (U.S.) took possession of Mexican territories, including California, New Mexico, Texas, and Arizona in the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848. The Treaty of Guadalupe Hidalgo provided resident Mexicans their American citizenship and guaranteed title to ranchos obtained during the Mexican period. However, less than two weeks before the signing of the treaty, on January 24, 1848, James Marshall discovered gold at Sutter's Mill, which marked the start of California's Gold Rush (1848 to 1855). Soon, the excitement of the Gold Rush and the promise of fertile and abundant land brought between 150,000 and 200,000 new settlers to California from all over the U.S., as well as Scotland, Ireland, England, Germany, and France.[2] During this time, many new settlers squatted on land, including Mexican rancho land and unclaimed land. To quickly resolve Mexican rancho land disputes, the U.S. Congress passed the California Land Act of 1851 that established a three-member Public Land Commission (Commission) to determine the validity of prior Spanish and Mexican land grants.[3] The act required landowners who claimed title under the former Mexican government to file a claim with the Commission within two years. Although the Commission eventually confirmed most of the original Mexican land grants, the burden was on landowners to prove their title. The cost of litigation forced many rancho owners to sell off their land to newly arriving settlers, including some who had illegally squatted on their land, as well as land speculators and the lawyers who were hired to defend their land claims in court.[4]

HISTORY OF AMERICAN CANYON (1850s – 1992)

In the early 1850's, European American emigrants began arriving in the Napa Valley, including the area where the Property is located. One of the earliest known European-American settlers in the area was Simpson Thompson, who arrived in 1852 and settled on land he acquired from General Vallejo and J.B. Frisbie near present-day Soscol Ferry Road, approximately 4.5 miles northwest of the Property. Thompson, along with his

[2] Karen Clay, *Property Rights and Institutions: Congress and the California Land Act 1851*, The Journal of Economic History, Cambridge University Press, 59(01):122-142, March 1999.

[3] The Spanish government-controlled California land from approximately 1770 to 1821 and the Mexican government-controlled California land from 1821 to 1846.

[4] Nancy Olmsted. *Vanished Waters: A History of San Francisco's Mission Bay*, Mission Creek Conservancy, San Francisco, 1986.

two sons, James M. and Thomas H., established orchards and developed a nursery within the 225-acre property that was known as the "Thompson Ranch". During this time, the first improved county road between Vallejo and Napa City (present-day Highway 29) was built near Thompson's property, and in an effort to support the settlement of newly acquired land in the western U.S., the U.S. government subsidized stagecoach operators who would carry U.S. mail to settlers in the developing towns.[5] This resulted in the expansion of a number of stagecoach lines, many of which used the newly improved county road such as the "Vallejo to Napa City" road (aka as the county road), making a stop in the "Suscol" area where the Thompson Ranch was located.[6] During the 1850s, Simpson Thompson capitalized on the ease of access to transportation by planting thousands of fruit and nut trees, a vineyard, and a number of garden ornamental plants and shrubs within his property as part of his growing nursery operation.

In 1855, Elijah True arrived in Napa Valley and constructed the "Suscol House" (extant; National Register #79000506) approximately five miles northwest of the Property. The Suscol House provided accommodations to travelers and newly arriving settlers in the area who arrived via stagecoach or the Suscol ferry.[7] In 1861, assistant State Geologist Mr. Brewer noted in his diary while camping by the Suscol House that "there was so much travel on the roads that the teams of horses could only be seen by the dust clouds they raised, which were almost beyond endurance."[8] The small community known as "Suscol" become the main transfer point for steamer traffic and east-west road transportation. By 1867, the small community consisted of a saloon, blacksmith, general store, and hotel; however, it did not grow much larger, and the small community never established a church or a school.

By the 1860s, the nearby city of Napa was growing, and as the traffic on the county road and Napa River increased, the agricultural development of the land in present-day American Canyon grew. In late 1868, a final section of the Napa Valley Railroad (NVR) was constructed from Suscol to "Adelante" (later known as Napa Junction), which connected the Napa Valley with the California Pacific Railroad (CPR) (Figure 2). At the time it was constructed, the NVR ran from Calistoga to Vallejo, and soon thereafter, the CPR line, which terminated in Vallejo, was completed to Sacramento. In the late 1860s, the NVR intended to extend its route north into the Russian River Valley in Sonoma County; however, the plans never materialized. During this time, the Property, which was adjacent and west of the NVR line, was part of a 609-acre property owned by A.A. Cohen. Cohen, who was the secretary of the NVR, established the San Francisco & Oakland Railroad, and served as its President. This was the first railroad system in Alameda County in 1863. More significantly, he was the chief attorney for the CPR. In 1869, the NVR was sold to the CRP Railroad Extension Company, which had been formed for the specific purpose of taking over the NVR between Napa Junction and Calistoga.[9] The

[5] ESA, "Draft Environmental Impact Report Watson Ranch Specific Plan Project" City of American Canyon, Jul 2018.

[6] Jerry Bowen, "City straddled Solano-Napa border", accessed July 6, 2021, http://www.solanoarticles.com/history/index.php/weblog/more/city_straddled_solanonapa_border/.

[7] M. B. Hoover, H. E. Rensch, E. G. Rensch, W. N. Abeloe. *Historic Spots in California.* Revised by Douglas E. Kyle. Stanford University Press, Palo Alto, 2002.

[8] Jerry Bowen, "The rise and decline of Soscol [sic] City", accessed July 6, 2021, http://www.solanoarticles.com/history/index.php/weblog/more/the_rise_and_decline_of_soscol_city/.

[9] Ibid.

CPR Extension Company was then consolidated with its parent company, the CPR, in December 1869. The rail line through the Napa Valley was now connected with the California Pacific's line to Sacramento.[10] The California Pacific's Napa Valley line opened the Napa Valley region and the area where the Property is located to markets throughout the U.S. and beyond.

In 1900, Napa Junction (within present-day American Canyon) became the site of the Standard Portland Cement Company, later the Basalt Rock Company (Figure 3), which was a cement plant and limestone and clay quarry business owned by Augustus Andrew Watson. Augustus was an attorney who lived in the small community of Suscol and appears to have inherited the approximate 100-acre property from his father George Watson in the late 1890s. After the cement plant was constructed and operations began, a rail spur was constructed from the adjacent Southern Pacific Railroad line, and soon on-site employee housing was constructed. The following account are excerpts from the "Standard Portland Cement Company" article by Rebecca Yerger, published in the *Napa Valley Register* on June 6, 1999, which provides a brief history of the cement plant and quarry business.

> *"Beginning in 1900, the Napa Daily Journal regularly printed detailed reports of the quarry operation at the Napa Junction property. On June 8, 1900, the newspaper noted, 'the product from our new lime quarry will be shipped by rail to Oakland for treatment.' The volume of limestone extracted from the Napa Junction land quickly warranted direct access to the Southern Pacific Railroad shipping lines...."*
>
> *"The limestone quarry operation continued under the direction of its owner, local attorney Augustus Watson, until 1902. That year, he sold the Napa Junction property to an intermediary for the Standard Portland Cement Company...."* and *"Once in full operation, February 1903, the Standard Portland Cement Company employed 150 local men...."*
>
> *"The Standard Portland Cement Company continued its Napa Junction operation until about 1935 when the on-site supply of limestone and clay ran out...Between 1940 and 1950...the land was owned intermittently by the Santa Cruz Portland Cement Company, a sister plant to the original Napa Junction company..."*

In 1946, the Basalt Rock Company leased the plant from the Santa Cruz Portland Cement Company and began production of "lightweight aggregate, a ball-shaped material which floated like pumice...(and) a siliceous based cement additive trade named Pozzelan at the Napa Junction plant".[11] In 1950, the Basalt Rock Company purchased the property from the Santa Cruz Portland Cement Company. The plant operated on the site from 1946 to 1978, when it permanently closed.

During World War II (WWII) (1939-1945), Mare Island Naval Shipyard in Vallejo employed 46,000 at its peak; however, most of the workers lived in areas such as Napa and Vallejo where housing was available. After WWII ended in 1945, the area of present-day American Canyon saw the development of subdivision housing, first with the McKnight Acres subdivision in the late 1940s, followed by the Rancho Del Mar subdivision in

[10] Matt C. Bischoff, et al., HAER No. CA-322 – The Napa Valley Railroad Bridge, 2003.

[11] Rebecca Yerger, "Standard Portland Cement Company," *Napa Valley Register,* June 6, 1999.

1952. In 1955, a formal request was made to form the City of American Canyon but it was refused by the Napa County commission, and in 1962, a second request was made, this time the name of the city was "Lombard City", but it was rejected by the residents living in the unincorporated area. The first post office was established in present-day American Canyon in 1956, in the "Mid City Nursery" building. The post office was moved in 1957 to the "Millers store" and the first volunteer fire station was constructed in back of the store (Figure 4). Throughout the 1960s and 1970s, the area of American Canyon developed slowly. In 1992, the residents and the Napa County Board of Supervisors, voted in favor of incorporating the City of American Canyon, which included the area of the (now ruins) Basalt Rock Company.

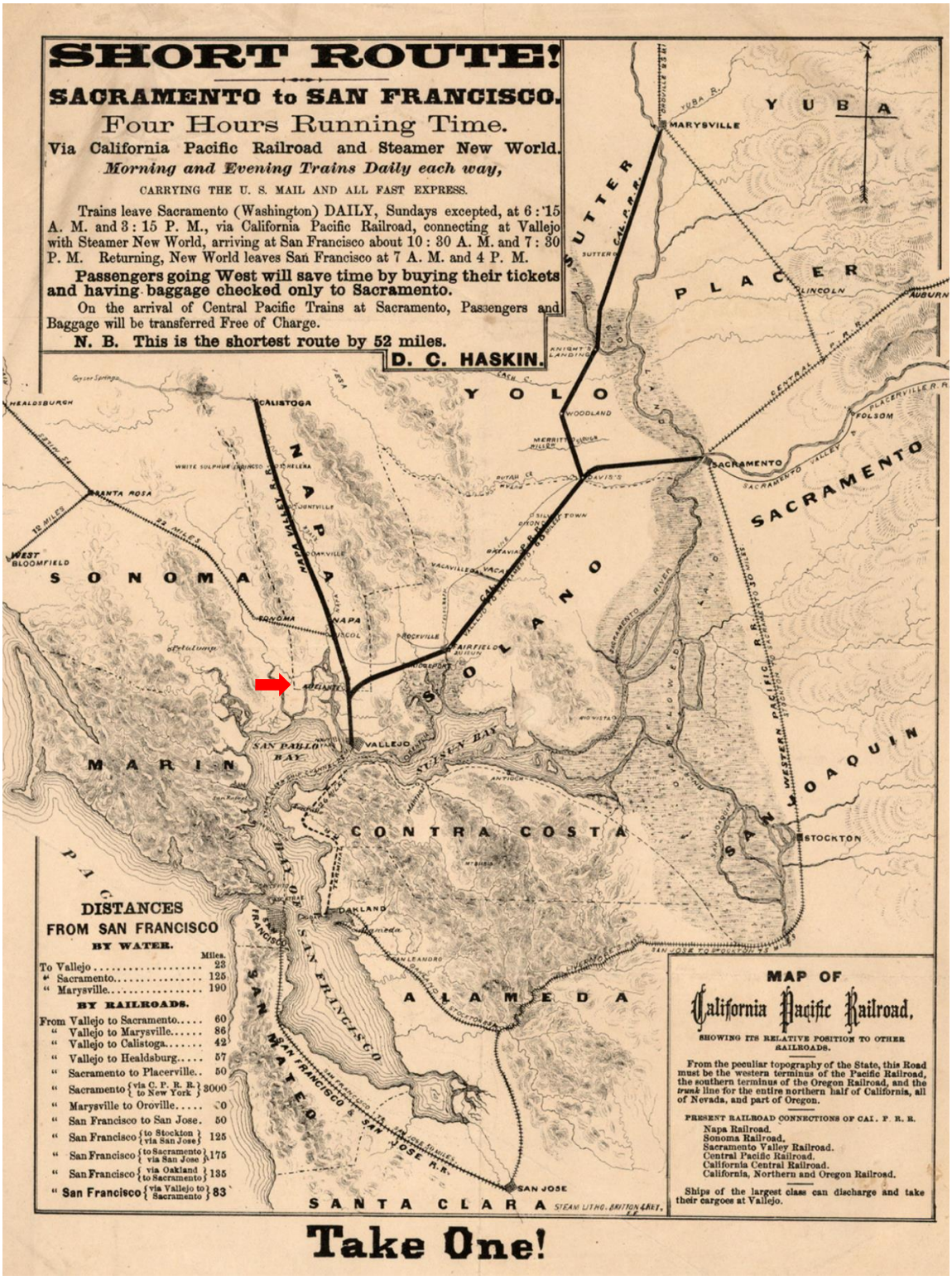


Figure 2. 1869 map of California Pacific Railroad showing the NVR line and the rail stop at "Adelante" (courtesy of University of California Bancroft Library).

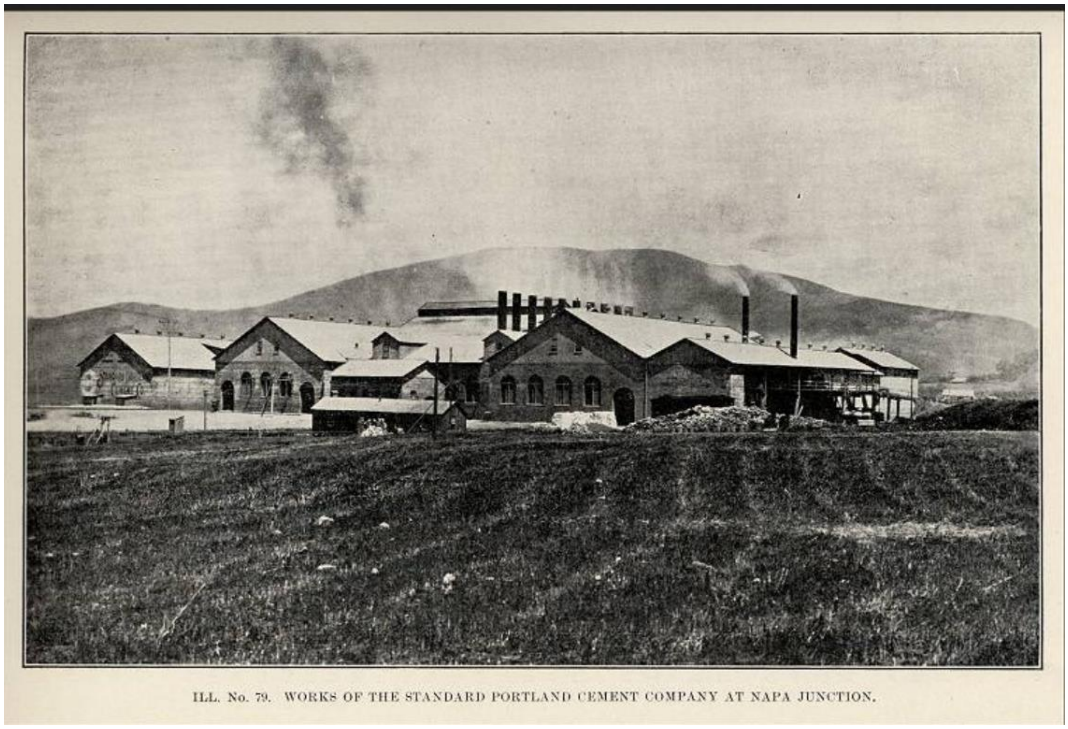


Figure 3. ca. 1906 photograph of the Standard Portland Cement Company in present-day American Canyon (courtesy of Peggy B. and George Perazzo).

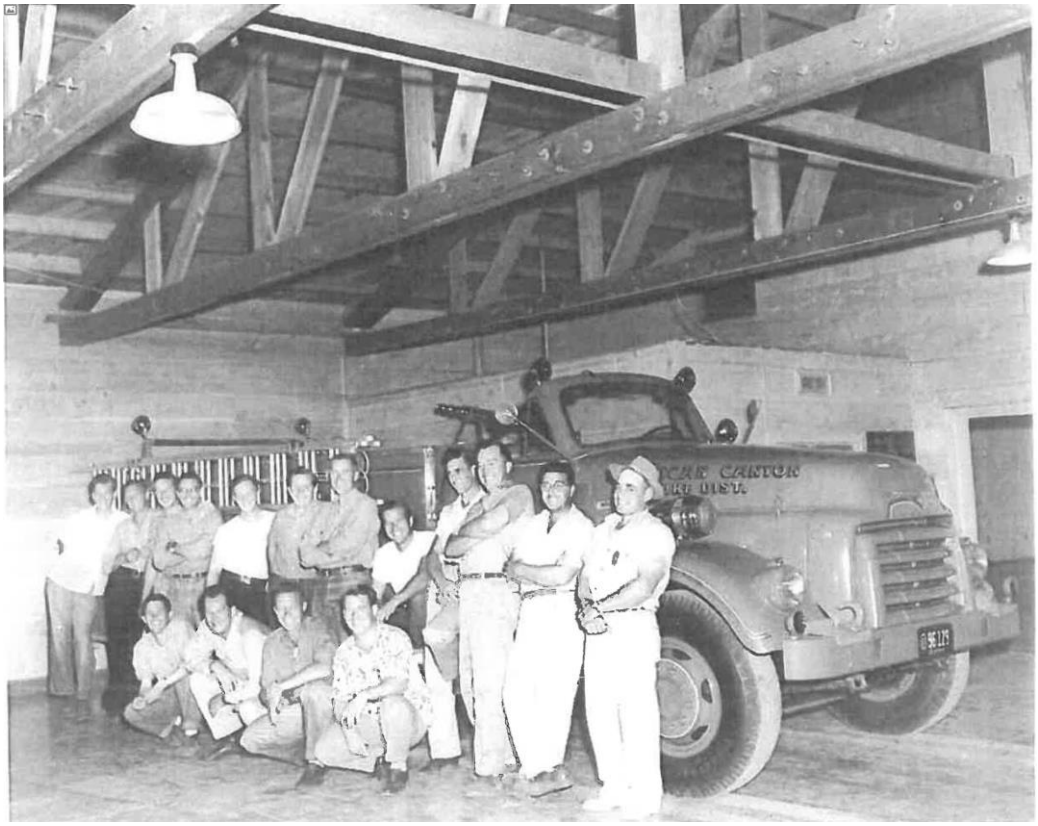


Figure 4. 1957 photograph of American Canyon's first volunteer fire department (courtesy of American Canyon Historical Society).

PROPERTY HISTORY

In 1876, prior to the construction of the current built environment resources, the Property was located within a 609-acre property owned by A.A. Cohen. During this time, the Property appears to have consisted of grass and marshlands areas of unincorporated Napa County. In the late 1800s, the property was owned by the McKnight family, including 14 members, who owned the land including the subject Property from the late nineteenth century to the early twentieth century. In the late 1940s, the McKnight family began subdividing the land as the "McKnight Acres".[12] Robert and Gwen[dolyn] Gish purchased lot number seven – a 2.51-acre lot - from the McKnight family on April 4, 1949.[13] At the time of purchase, the Property was undeveloped. During this time, Robert was a shipfitter employed at the Mare Island Naval Shipyard in Vallejo. Robert built the seven buildings currently within the Property, which includes the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, ca. 1985 industrial building, two ca. 1955 wooden sheds, and ca. 1960 metal building. Both the ca. 1950 house and industrial building were built shortly after the Gish family purchased the property and provided the Gish family with both a house and a location for Robert's side business, "Novelty Manufacturing" company. During the Gish's fifty-nine years of ownership of the Property, Robert built two other industrial buildings, one in ca. 1973 and the other in ca. 1985 as his business expanded, both buildings are located along the north Property boundary.[14] Once Robert retired, the business continued as "The Sign Factory" with his business partner who rented the buildings from the Gish family.[15] As American Canyon was not incorporated until 1992, there are no Sanborn Maps of the area; however, aerial photographs of the Property were found, which shows that in 1965 the Gish family kept an orchard (Figure 5). Furthermore, by 1957, the Aermotor windmill was installed, providing the Property with water (Figure 6). A 1987 newspaper article titled, "Windmill Pioneer Sees Three Decades of Change", describes the Property as having a steel fence made from repurposed Pacific Gas & Electric (PG&E) towers and a swimming pool, both of which are no longer present within the Property (Figure 7).

[12] Newspapers.com, "Supervisors Proceedings," *Napa Journal*, May 21, 1950.

[13] Napa County, California, Deed Book 303, Page 158, April 4, 1949.

[14] Newspapers.com, "County Planning Commission Approve Raymond Expansion," *The Napa Valley Register,* May 3, 1984.

[15] Newspapers.com, "Custom Sign Shop Keeps Up with the Times," *The Napa Valley Register,* February 28, 2004.

The following table includes the ownership and occupancy history associated with the built environment resources with the Property, including the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, ca. 1985 industrial building, two windmills (ca. 1950 and undated), ca. 1955 wood storage shed (shed 1), ca. 1955 wood storage shed (shed 2), ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape.

Table 1. Property Ownership and Occupants.

Year	Owners/Occupants	Additional Details
ca. 1949-2008	Owners: Robert W. Gish and Gwendolyn L. Vogt Gish	• Robert and Gwendolyn Gish purchased the Property on April 4, 1949 from the McKnight family. • Robert was born in 1920 and was raised in Napa. He entered the U.S. Navy in 1940 (Figure 8).[16] Gwendolyn was born in Oakdale in ca. 1926.[17] They were married in Piedmont in 1947 and moved to Napa.[18] • In 1950, the Gish's moved to the unincorporated American Canyon area in the "McKnight Acres" between Vallejo and Napa, where Robert built their house and an industrial building for his side business "Novelty Manufacturing Co.". Over the course of five decades, Robert developed the property to further expand his business. During the Gish's interim on the Property, the surrounding area developed and became incorporated as American Canyon in 1992.[19] • Robert worked on Mare Island in the Naval Shipyard as a shipfitter until he retired in 1977.[20] • Although the Gish's lived outside Napa, they belonged to the Napa Valley Gem and Rock Club and often acted as officers of the club.[21] • Robert and Gwendolyn's two children, Walt and Lisa also resided within the Property during their childhood. • Robert died in May of 2008, leaving the property to Gwendolyn.[22]
ca. 2008-2015	Owner: The Robert W. Gish and Gwen L. Gish Family Disclaimer Trust	• After Robert died in 2008, the Property's title was transferred to the Robert W. Gish and Gwen L. Gish Family Disclaimer Trust, with Gwen and Walt Gish as the Trustees.

[16] Newspapers.com, "112 Napa County Men Begin Training in Armed Forces; 58 in Navy, 54 in Army," *Napa Journal,* May 19, 1944.

[17] Ancestry.com. *1930 Stanislaus County Census,* Oakdale, California.

[18] Newspapers.com, "The Robert Gish' to Reside Here after Honeymoon," *Napa Journal,* March 7, 1947.

[19] Newspaper.com, "Windmill Pioneer Sees Three Decades of Changes," *The Napa Valley Register,* April 25, 1997.

[20] Newspapers.com, "Gish," *The Napa Valley Register,* March 12, 1997.

[21] Newspapers.com, "Ivy Loeber to Address Rock and Gem Club Here," *The Napa Valley Register,* January 20, 1960.

[22] "Robert Gish," *The Napa Valley Register,* May 13, 2008.

ca. 2015 - 2021	Owner: Gateway Crossing, Inc, A California Corporation	• No additional information available.

Figure 5. Aerial photograph of American Canyon taken May 1, 1965, with the Property outlined in red.

Figure 6. The Aermotor Windmill ("Buy Before the Advance," *The Napa Journal*, July 15, 1900).

Part IV, April 1987, VINTAGE—3

USING WINDMILL power, Bob Gish is able to water his lawn and garden at a minimal cost. His windmill is a landmark along the Napa-Vallejo Highway. Gish and his wife, Gwen, bought their homesite in 1949 when American Canyon was mostly unbroken grassland. (Register photo by Bob McKenzie)

Windmill pioneer sees three decades of change

By KEVIN COURTNEY
Register Staff Writer

AMERICAN CANYON — The year was 1949 and American Canyon was still practically prairie.

So says Bob Gish, who homesteaded here at the end of World War II with his wife, Gwen.

Yes, the Napa-Vallejo Highway existed, but most everything else was shimmering grassland, he recalled.

"General Vallejo sold to McKnight who sold to me," said Gish, explaining his ties to pioneer times.

The Gishes have seen plenty of changes over the past three decades. Housing tracts, mobilehome parks, a mile or two of strip commercial and industrial projects have been built.

All of which pleases them.

Their own two-and-a-half-acre parcel is nearly chock-a-block full, containing their basalite-block home and industrial buildings for their sign business, Novelty Manufacturing Co.

Ideally, the Gishes would like to build even more manufacturing space, but Napa County keeps putting up roadblocks.

"They put so many things in your way you give up," said Gwen Gish.

Bob Gish thinks he knows why the politicians and bureaucrats in Napa have tried to curb American Canyon's growth.

"They're afraid we'll grow and out-vote Napa," he said. "They want to hold the population down."

The Gish property is a strange blend of the industrial and the bucolic.

Facing the Napa-Vallejo Highway, the front yard is awash with the roar of traffic.

Using steel rods from an old Pacific Gas & Electric tower, Gish has fashioned his own distinctive front yard fence, which at night is lit by his own private street light.

But the crowning touch is his windmill.

This touch of country works like a charm, pumping water for Gish's lawn and swimming pool.

It also stops passersby dead in their tracks.

"A lot of people want to know how much electricity does it make," said Bob Gish.

Gish's windmill has been around for years, long before wind farms began appearing to produce electricity.

"I'll never forget one guy who lived in San Francisco," Bob Gish recalled. "He was surprised by the age of the windmill. He said, 'They didn't have ecology back then, did they?'

"I didn't understand what he was saying. He said, 'Isn't that why you put it up?' I said, 'No. I put it up to pump water.'"

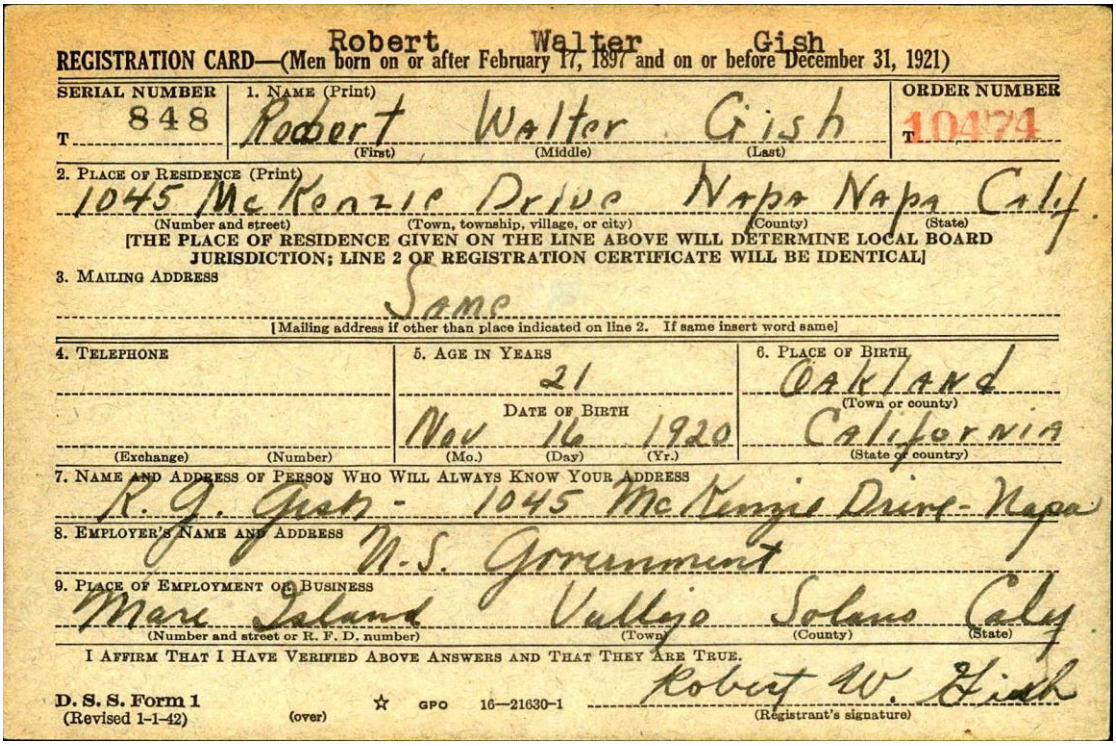
The Gishes said they are quite happy in American Canyon, even if the rest of Napa County "has always tried to cut the area down."

"You have access to Fairfield, to Napa, to Santa Rosa, to Vallejo. You can go anywhere you want," said Bob, a retired Mare Island Naval Shipyard employee who started his sign business while still working full time.

He said he is more than happy to have his mail addressed "Vallejo" instead of "American Canyon."

"We've always called this Vallejo," he said. "We still do. We don't want our mail to go to Canyon City."

Figure 7. "Windmill Pioneer Sees Three Decades of Change" (*The Napa Valley Register,* April 25, 1987).



Robert Walter Gish

REGISTRATION CARD—(Men born on or after February 17, 1897 and on or before December 31, 1921)

SERIAL NUMBER T 848 | 1. NAME (Print) Robert (First) Walter (Middle) Gish (Last) | ORDER NUMBER T 10474

2. PLACE OF RESIDENCE (Print) 1045 McKenzie Drive (Number and street) Napa (Town, township, village, or city) Napa (County) Calif. (State)

[THE PLACE OF RESIDENCE GIVEN ON THE LINE ABOVE WILL DETERMINE LOCAL BOARD JURISDICTION; LINE 2 OF REGISTRATION CERTIFICATE WILL BE IDENTICAL]

3. MAILING ADDRESS Same

[Mailing address if other than place indicated on line 2. If same insert word same]

4. TELEPHONE (Exchange) (Number)

5. AGE IN YEARS 21

DATE OF BIRTH Nov (Mo.) 16 (Day) 1920 (Yr.)

6. PLACE OF BIRTH Oakland (Town or county) California (State or country)

7. NAME AND ADDRESS OF PERSON WHO WILL ALWAYS KNOW YOUR ADDRESS R. J. Gish - 1045 McKenzie Drive - Napa

8. EMPLOYER'S NAME AND ADDRESS U.S. Government

9. PLACE OF EMPLOYMENT OR BUSINESS Mare Island (Number and street or R. F. D. number) Vallejo (Town) Solano (County) Calif. (State)

I AFFIRM THAT I HAVE VERIFIED ABOVE ANSWERS AND THAT THEY ARE TRUE.

Robert W. Gish (Registrant's signature)

D. S. S. Form 1 (Revised 1-1-42) (over) ☆ GPO 16—21630-1

Figure 8. 1942 WWII Draft Card for Robert W. Gish (Ancestry.com).

ARCHITECTURAL STYLE

The ca. 1950 house is a cross-hipped roof with elements from the WWII Era Cottage architectural style, briefly described in the section below.

WWII ERA COTTAGE (1935 TO 1950)

The WWII Era Cottage is often thought of as the "workingman's house". The type serves as a transitional form bridging the gap between the Bungalow and Cottages of the 1920s to sprawling Ranch of the 1950s and 1960s. It was a frugal style during the depression and prior to the WWII, and after WWII, with the economy just beginning to start up, materials were still in short supply, and so this small cottage was ideal to curb demand for housing, which was exacerbated by soldiers returning and their new families. As a response to the situation, new homes like the WWII Era Cottage were built in large quantities. Featuring little ornamentation, WWII Era Cottages are generally small (some less than 1,000 square feet), and correspond to the small size of young families. Most were built by speculative builders and purchased by families who took advantage of a variety of government incentive programs which were offered through the Federal Housing Administration (FHA).[23]

HISTORIC ARCHITECTURAL SURVEY

On June 8, 2021, EDS Principal Architectural Historian Stacey De Shazo, M.A., and Nicole LaRochelle, B.S.

[23] https://dahp.wa.gov/historic-preservation/historic-buildings/architectural-style-guide/wwii-era-cottage

completed a historic architectural survey of the Property including the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), ca. 1955 wood storage shed (shed 1), 1955 wood storage shed (shed 2), ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape. The following section documents the results of the survey. The ca. 1985 industrial building was not documented as it is less than 45 years of age and did not warrant recordation.

Figure 9. Map showing the built environment resources within the Property.

CA. 1950 HOUSE

The ca. 1950 house is associated with elements of the WWII Era Cottage architectural style. The house is a one-story building with a low-pitched, cross-hipped roof with a raised brick foundation. The house is constructed using concrete blocks, with bullnosed blocks at each corner. These blocks are painted, and a brick water table runs along the perimeter. The roof is clad with composite shingles and has wide eaves, which are closed. Decorative gutters run along the perimeter of the house. The exterior chimney is located on the south elevation and is made with painted concrete blocks with the bullnose edges.

East Elevation (Primary Façade)

The east elevation (primary façade) consists of a central door and two windows (Figure 10). The wood paneled door is recessed from the main façade and accessed by poured concrete steps. A four-light casement window is situated to the north of the door in the front-facing wing. To the south of the door is a picture window, which has three lights on either side of a fixed single-light; the lower two lights on each side opens (Figure 11). The raised brick foundation has metal vents and extends into built-in planters on either side of the concrete steps.

Figure 10. Photo showing the south and east elevations, facing northwest.

Figure 11. Picture window on south elevation, facing north.

North Elevation

The north elevation consists of the concrete block façade with two windows. The windows are two, horizontal high placed casement windows, with three lights. The outside panes on each window open (Figure 12). Vents are located on the corners of the raised brick foundation (Figure 13).

Figure 12. North elevation, facing south.

Figure 13. East and north elevations, facing southwest.

West Elevation

The west elevation consists of four windows and a trellis connected to the façade. While the concrete blocks continue throughout the west façade, the brick water table does not. The two southern windows are picture windows with metal casements (Figure 14). The southernmost window is high-placed and has single-lights, flanked by with operable outer lights. The window to the north has opening two-lights surrounding the single light. The two windows on the north section of the west elevation are four-light casement windows, the southern of the two is a high-placed window (Figure 15).

Figure 14. West elevation, facing east.

Figure 15. West elevation, facing east.

South Elevation

The south elevation consists of a side entry and the exterior eave chimney (Figure 16). A brick water table runs along the perimeter of this elevation and has one vent. The western corner of the elevation has a ten-light, wood door, accessed by a short brick stair (Figure 17). The steps have an iron banister, of which a section is missing. To the east of the door is the concrete block chimney, which incorporates bullnosed blocks at each corner. Two access panels are located on the chimney (Figure 18). Additionally, a four-light casement window is set on the south elevation of the recessed entry. Like the other four-light casement windows, the eastern two-lights are on hinges.

Figure 16. South elevation, facing north.

Figure 17. Photo of the red door on the south elevation, facing north.

Figure 18. South and west elevations, facing northeast.

ANCILLARY BUILDINGS

ca. 1950 Industrial Building

The ca. 1950 industrial building consists of concrete brick and corrugated metal materials. The east (primary) elevation has a metal door with a corrugated metal awning located in the center of the building (Figure 19). To the north of the door is two metal casement windows. The main section of the building has a low-pitched, front-facing gable roof, with a corrugated metal stepped parapet wall on the east elevation, while the back section has a parapet roof. The roof is clad with corrugated metal in the front section. The north elevation has a single door at the corner of the concrete brick façade (Figure 20). The back section of the building is clad with corrugated metal (Figure 21).

Figure 19. East elevation, facing west.

Figure 20. North elevation, facing southeast.

Figure 21. West elevation, facing east.

ca. 1973 Industrial Building

The ca. 1973 industrial building is a concrete block building with stucco cladding on the east (primary) façade. The roof is a parapet with decorative cornices on the east and west facades. The east elevation has a central door with a fixed window on either side of the door. The window openings are square, with a concrete block in the top half of the opening. Prior to 2016, when the stucco finish and decorative cornice were added, the entire building was simply painted concrete block. The south façade has four metal doors with a stoop at each door. Eight square, fixed clerestory windows are spaced along the top perimeter of the south façade. The west elevation has a loading dock with a full floor-to-ceiling metal barn door set on a metal bar (Figure 22).

Figure 22. South and west elevations, facing northeast.

CA. 1955 WOOD STORAGE SHEDS (SHED #1 AND SHED #2)

The two ca. 1955 wood storage sheds are currently connected by two two-by-four inch boards and are identical (Figure 23). They are on raised foundations and have board and batten cladding and a single door on the east elevation. The sheds have front-facing gables, with metal facia and composite shingles (Figure 24).

Figure 23. East elevations, facing west.

Figure 24. South and east elevations, facing northwest.

ca. 1960 Metal Building

The ca. 1960 metal building is a one-and-a-half story storage building with corrugated metal cladding. It has a low-pitched shed roof. The east elevation has a corrugated metal door in the center, without any fenestration on the other elevations (Figure 25). While the first story has horizontal cladding, the above half story has horizontally placed corrugated metal. A metal belt runs along where the first and half story meet, as well as where the roof meets the façade.

Figure 25. East elevation, facing west.

ca. 1970 "Paint Locker" Building

The ca. 1970 "Paint Locker" building is a metal building with a locking door at the center of the north elevation. The words "Paint Locker" are painted on the door (Figure 26). The roof is flat parapet design.

Figure 26. North elevation of "Paint Locker," facing south.

Windmills (Front And Rear)

There are two windmills located on the Property, one at the front of the ca. 1950 house and one at the rear of the house. The ca. 1950 windmill (front) located east of the house is an Aermotor Chicago Windmill (Figure 27). While the ca. 1950 front windmill still has its pump and mechanics, it is no longer connected to the ground. A second, undated, windmill (rear) at the rear and west of the house is attached to a wooden trellis. It does not have its mechanics and is not operational (Figure 28).

Figure 27. The Aermotor Chicago windmill (front), facing south.

Figure 28. The two windmills, facing southeast (Left: Aermotor Chicago windmill. Right: rear windmill).

ASSOCIATED LANDSCAPE

The associated landscape includes a circular, gravel driveway and a parking lot. The east border of the Property has a painted picket fence and sign (Figure 29). Between the ca. 1950 house and ca. 1973 industrial building are metal posts of a fence made from a decommissioned PG&E tower (Figure 30). A wooden trellis is built directly from the west elevation of the ca. 1950 house and extends over a back garden, and beside the trellis is a carport with wooden post supports and corrugated metal roofing (Figure 31). The front yard does not have any trees; however, there are seven unidentified fruit and nut trees located behind the ca. 1950 house and ca. 1950 industrial building (Figure 30). A pallet fence is located in the back of the Property and serves as the perimeter of a garden (Figure 33). A wooden corral is located at the northwest corner of the Property and is constructed with pallets and plywood (Figure 34).

Figure 29. Fence and sign at East border, facing southwest.

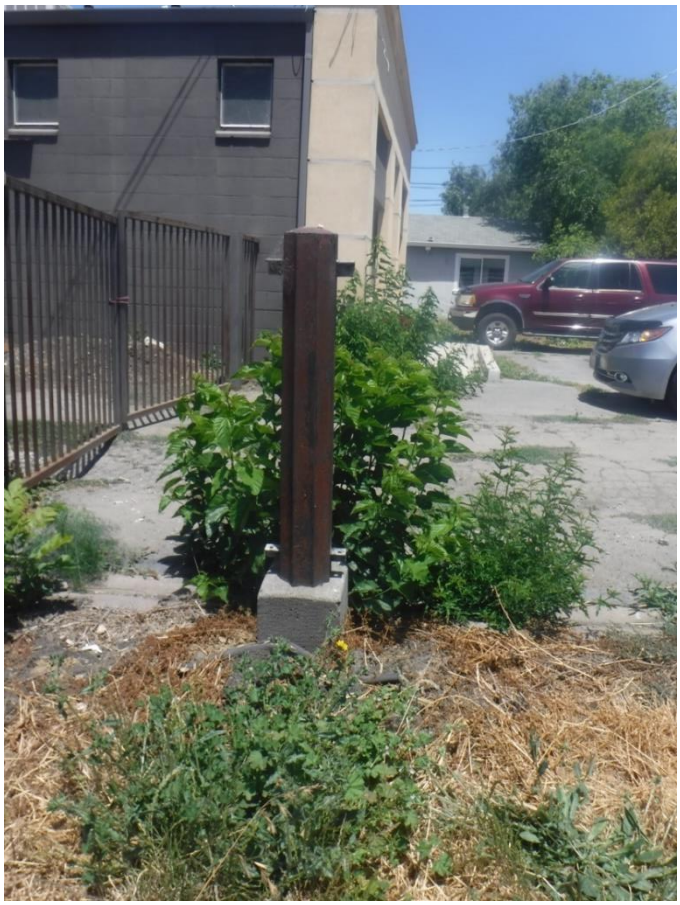


Figure 30. Fence post from decommissioned PG&E tower, facing north.

Figure 31. Wooden trellis and carport, facing north.

Figure 32. Trees located behind the house, facing northwest.

Figure 33. Palate fence and gate, facing southwest.

Figure 34. Corral, facing west.

EVALUATION FOR HISTORICAL SIGNIFICANCE

The Property that includes the ca. 1950 house, ca. 1950 industrial building, two ca. 1955 wood sheds, ca. 1960 metal building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), ca. 1970 "Paint Locker" building, and associated landscape was evaluated to determine individual eligibility for listing on the CRHR. The ca. 1950 building was evaluated for its association with WWII Era Cottage architecture with a period of significance of ca. 1950, which is the estimated date the building was constructed. The ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape are not associated with any known architectural style, form, or architectural landscape design or landscape planning.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The CRHR is an inventory of significant architectural, archaeological, and historical resources in the State of California. Resources can be listed in the CRHR through several methods. State Historical Landmarks and NRHP listed properties are automatically listed in the CRHR. Properties can also be nominated to the CRHR by local governments, private organizations, or citizens. The CRHR follows *similar* guidelines to those used for the NRHP. One difference is that the CRHR identifies the Criteria for Evaluation numerically instead of alphabetically. Another difference, according to the OHP is that "It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the NRHP, but they may still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or

historical information or specific data".[24]

To qualify for listing in the CRHR a property must possess significance under one of the four criteria and have historical integrity. The process of determining integrity consists of evaluating seven variables or aspects that include location, design, setting, materials, workmanship, feeling and association. According to the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*, these seven characteristics are defined as follows:

- **Location** is the place where the historic property was constructed.
- **Design** is the combination of elements that create the form, plans, space, structure, and style of the property.
- **Setting** addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the building(s).
- **Materials** refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.
- **Workmanship** is the physical evidence of the crafts of a particular culture or people during any given period in history.
- **Feeling** is the property's expression of the aesthetic or historic sense of a particular period of time.
- **Association** is the direct link between an important historic event or person and a historic property.

The following section examines the individual eligibility of the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape for listing on the CRHR.

CRHR EVALUATION

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

   The Property containing the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape is associated with the post-WWII development of the unincorporated area of American Canyon. While Vallejo and Napa were established cities, the grass and marshlands between the cities saw little development by the end of WWII. Due to its proximity to the Naval Shipyard at Mare Island, neighborhoods were developed in the 1950's and subsequent years. While the Property was one of the first residential properties to be developed, it predates the period in which the neighborhood was developed. Furthermore, there is no evidence that development of the neighborhood was an "event" that made a significant contribution to California heritage or history. For these reasons, the ca. 1950 house, ca. 1950

[24] California Office of Historic Preservation Technical Assistance Series #6 California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register).

industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape are not found to be eligible for individual listing on the CRHR under this criterion.

Therefore, the Property containing the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape is not individually eligible for listing in the CRHR under Criterion 1.

2. **(Person): Is associated with the lives of persons important in our past.**

The ownership and occupancy history of the Property and the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape was thoroughly researched, and it does not appear to be associated with a person important in our past.

Therefore, the Property containing the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape does not appear individually eligible for listing in the CRHR under Criterion 2.

3. **(Construction/Architecture): Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.**

The ca. 1950 house is not associated with a known architectural style but has elements of the WWII Era Cottage style. However, since the building only utilizes some aspects of this style, it does not embody any distinctive characteristics of a time, period, region or method of construction. It was designed and constructed by the owner, who is not associated with any architectural movements or styles. Furthermore, the house does not represent the work of an important creative individual and does not possess high artistic values.

The ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, are not associated with any architectural style and the associated landscape is not a planned, designed landscape.

Therefore, the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape within the Property are not eligible for listing in the CRHR under Criterion 3.

4. **(Information potential): Has yielded, or may be likely to yield, information important in prehistory or history.**

Criterion 4 most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion 4 can also apply to buildings that contain important information. For a building to be eligible under Criterion 4, it must be a principal source of important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1950 house, ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, and ca. 1970 "Paint Locker" building do not have the ability to convey information related to architecture, construction, or design; therefore, none of the built environment resources are eligible for listing in the CRHR under Criterion 4.

INTEGRITY

A property must possess significance under one or more of the above listed criteria and have historic integrity to qualify for listing in the CRHR. There are seven variables, or aspects, used to judge historic integrity, including location, design, setting, materials, workmanship, feeling, and association.[25] A resource must possess the aspects of integrity that relate to the historical theme(s) and period of significance identified for the built-environment resources. National Register Bulletin 15 explains, "only after significance is fully established can you proceed to the issue of integrity."

The Property containing the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape was not found to be eligible under any of the CRHR criteria; therefore, an integrity analysis was not completed.

CONCLUSIONS

EDS completed an HRE of the Property containing the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape at 3439 Broadway Street (APN 058-312-010), in the City of American Canyon, Napa County, California, to determine if the Property is a historical resource in according with CCR § 15064.5, and if the Project would have an adverse impact on historical resources. The methods used to complete the HRE included research and an intensive level historic architectural survey conducted by EDS Principal Architectural Historian Stacey De Shazo, M.A., who exceeds the Secretary of the Interior's qualification standards in Architectural History and History, and Nicole LaRochelle, Architectural Historian Intern (M.S. in progress).

The HRE determined that the Property containing ca. 1950 house, ca. 1950 industrial building, ca. 1973

[25] National Park Service, *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: United States Department of the Interior, 1997).

industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 “Paint Locker” building, and associated landscape is not a historical resource because it does not meet the eligibility requirements for listing on the CRHR and is not currently listed on any national, state, or local register of historic resources. As such, EDS has determined that any future proposed Project will not impact built-environment historical resources within the Property.

BIBLIOGRAPHY

Ancestry.com

1942 WWII Draft Card, Robert W. Gish.

1930 Stanislaus County Census. Oakdale, California.

Matt C. Bischoff, et al., HAER No. CA-322 – The Napa Valley Railroad Bridge, 2003.

Jerry Bowen. "City straddled Solano-Napa border", accessed July 6, 2021, http://www.solanoarticles.com/history/index.php/weblog/more/city_straddled_solanonapa_border

California Historical Society accessed June 23, 2021, U.C. Digital Library. http://digitallibrary.usc.edu.

Clay, Karen. *Property Rights and Institutions: Congress and the California Land Act 1851*, The Journal of Economic History, Cambridge University Press, 59(01):122-142, March 1999

ESA. "Draft Environmental Impact Report Watson Ranch Specific Plan Project" City of American Canyon, Jul 2018.

Hoover, M. B., H. E. Rensch, E. G. Rensch, W. N. Abeloe. *Historic Spots in California.* Revised by Douglas E. Kyle. Stanford University Press, Palo Alto, 2002.

Ward McAfee. California's Railroad Era, 1850-1911. Golden West Books, San Marino, California, 1973

McAlester, Virginia and Lee McAlester. A Field Guild to American Houses. New York, Alfred A. Knopf. Munro-Fraser, J.P. 2013.

Napa County Assessors' Office

Deed Book 303, Page 158, April 4, 1949.

Newspapers.com

"112 Napa County Men Begin Training in Armed Forces; 58 in Navy, 54 in Army." *Napa Journal*, May 19, 1944.

"Buy Before the Advance." *The Napa Journal*, July 15, 1900.

"County Planning Commission Approve Raymond Expansion." *The Napa Valley Register,* May 3, 1984.

"Custom Sign Shop Keeps Up with the Times." *The Napa Valley Register*, February 28, 2004.

"Gish," *The Napa Valley Register*. March 12, 1997.

"Ivy Loeber to Address Rock and Gem Club Here." *The Napa Valley Register*, January 20, 1960.

Rebecca Yerger. "Standard Portland Cement Company." *Napa Valley Register,* June 6, 1999.

"Robert Gish." *The Napa Valley Register.* May 13, 2008.

"Supervisors Proceedings." *Napa Journal*. May 21, 1950.

"Windmill Pioneer Sees Three Decades of Change." *The Napa Valley Register.* April 25, 1987.

Olmsted, Nancy. *Vanished Waters: A History of San Francisco's Mission Bay*. Mission Creek Conservancy, San Francisco, 1986

Tyler, Norman, Ted Ligibel, and Ilene R. Tyler. Historic Preservation: An Introduction to Its History, Principles, and Practice. New York: W.W. Norton & Co., 2009.

U.C. Santa Barbara Library

May 21, 1957 Aerial photograph of unincorporated American Canyon.

May 1, 1965 Aerial photograph of unincorporated American Canyon.

Appendix A:

DPR Forms

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listing
Review Code | Reviewer | Date

Page 1 **of** 18 ***Resource Name or #:** 3439 Broadway Street
P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Napa **and**

***b. USGS 7.5' Quad** Cuttings Wharf **Date** 1981 **T** 4N ; **R** 4W ; ☐ **of** ☐ **of Sec** un ; MD **B.M.**

c. Address 3439 Broadway Street City American Canyon Zip 94503

d. UTM: Zone 10S , 565339 mE/ 4224981 mN

e. Other Locational Data: The resource is located within the 2.51-acre property (APN 058-312-010) on the west side of Broadway Street (Napa Vallejo Highway) and south of Donaldson Way W. The Property is situated 262 feet south of Donaldson Way W and 673 feet north of Crawford Way.

***P3a. Description:** The resource includes a ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape. The 1950 is not associated with a style, however, it utilizes elements of the "WWII Era Cottage" architectural style prevalent after the second World War. The house has a low-pitched, cross-gabled roof with an exterior eave chimney. It is one-story with a brick foundation. (Continued on Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP2. Single-family property (ca. 1950 house); HP4. Ancillary building (ca. 1950 industrial building, ca. 1973 industrial building, two ca. 1955 wooden sheds, ca. 1960 metal shed); HP39. Other (ca. 1955 windmill and undated windmill, and associated landscape)

***P4. Resources Present:** ☒ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: 1950 house, facing west.

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both Various construction dates; various sources

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway S, Sebastopol, CA 95472

***P9. Date Recorded:** 06/8/2021

***P11. Report Citation:** Stacey De Shazo and Nicole LaRochelle (2021), Historic Resource Evaluation of the Property located at 3439 Broadway, American Canyon, Napa County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary Sheet, page 1)

The house is constructed using concrete blocks, with bullnosed blocks at each corner. These blocks are painted, and a brick water table runs along the perimeter. The roof is clad with composite shingles and has wide eaves, which are closed. Decorative gutters run along the perimeter of the house. The exterior chimney is located on the south elevation and is made with painted concrete blocks with the bullnose edges.

East Elevation (Primary Façade)

The east elevation (primary façade) consists of a central door and two windows (Figure 1). The wood paneled door is recessed from the main façade and accessed by poured concrete steps. A four-light casement window is situated to the north of the door in the front-facing wing. To the south of the door is a picture window, which has three lights on either side of a fixed single-light; the lower two lights on each side opens (Figure 2). The raised brick foundation has metal vents and extends into built-in planters on either side of the concrete steps.

Figure 1. Photo showing the south and east elevations, facing northwest.

Figure 2. Picture window on south elevation, facing north.

North Elevation

The north elevation consists of the concrete block façade with two windows. The windows are two, horizontal high placed casement windows, with three lights. The outside panes on each window open (Figure 3). Vents are located on the corners of the raised brick foundation (Figure 4).

Figure 3. North elevation, facing south.

Figure 4. East and north elevations, facing southwest.

West Elevation

The west elevation consists of four windows and a trellis connected to the façade. While the concrete blocks continue throughout the west façade, the brick water table does not. The two southern windows are picture windows with metal casements (Figure 5). The southernmost window is high-placed and has single-lights, flanked by with operable outer lights. The window to the north has opening two-lights surrounding the single light. The two windows on the north section of the west elevation are four-light casement windows, the southern of the two is a high-placed window (Figure 6).

Figure 5. West elevation, facing east.

Figure 6. West elevation, facing east.

South Elevation

The south elevation consists of a side entry and the exterior eave chimney (Figure 7). A brick water table runs along the perimeter of this elevation and has one vent. The western corner of the elevation has a ten-light, wood door, accessed by a short brick stair (Figure 8). The steps have an iron banister, of which a section is missing. To the east of the door is the concrete block chimney, which incorporates bullnosed blocks at each corner. Two access panels are located on the chimney (Figure 9). Additionally, a four-light casement window is set on the south elevation of the recessed entry. Like the other four-light casement windows, the eastern two-lights are on hinges.

Figure 7. South elevation, facing north.

Figure 8. Photo of the red door on the south elevation, facing north.

Figure 9. South and west elevations, facing northeast.

ANCILLARY BUILDINGS

ca. 1950 Industrial Building

The ca. 1950 industrial building consists of concrete brick and corrugated metal materials. The east (primary) elevation has a metal door with a corrugated metal awning located in the center of the building (Figure 10). To the north of the door is two metal casement windows. The main section of the building has a low-pitched, front-facing gable roof, with a corrugated metal stepped parapet wall on the east elevation, while the back section has a parapet roof. The roof is clad with corrugated metal in the front section. The north elevation

has a single door at the corner of the concrete brick façade (Figure 11). The back section of the building is clad with corrugated metal (Figure 12).

Figure 10. East elevation, facing west.

Figure 11. North elevation, facing southeast.

Figure 12. West elevation, facing east.

ca. 1973 Industrial Building

The ca. 1973 industrial building is a concrete block building with stucco cladding on the east (primary) façade. The roof is a parapet with decorative cornices on the east and west facades. The east elevation has a central door with a fixed window on either side of the door. The window openings are square, with a concrete block in the top half of the opening. Prior to 2016, when the stucco finish and decorative cornice were added, the entire building was simply painted concrete block. The south façade has four metal doors with a stoop at each door. Eight square, fixed clerestory windows are spaced along the top perimeter of the south façade. The west elevation has a loading dock with a full floor-to-ceiling metal barn door set on a metal bar (Figure 13).

Figure 13. South and west elevations, facing northeast.

ca. 1955 Wood Storage Sheds (Shed #1 and Shed #2)

The two ca. 1955 wood storage sheds are currently connected by two two-by-four inch boards and are identical (Figure 14). They are on raised foundations and have board and batten cladding and a single door on the east elevation. The sheds have front-facing gables, with metal facia and composite shingles (Figure 15).

Figure 14. East elevations, facing west.

Figure 15. South and east elevations, facing northwest.

ca. 1960 Metal Building

The ca. 1960 metal building is a one-and-a-half story storage building with corrugated metal cladding. It has a low-pitched shed roof. The east elevation has a corrugated metal door in the center, without any fenestration on the other elevations (Figure 16). While the first story has horizontal cladding, the above half story has horizontally placed corrugated metal. A metal belt runs along where the first and half story meet, as well as where the roof meets the façade.

Figure 16. East elevation, facing west.

ca. 1970 "Paint Locker" Building

The ca. 1970 "Paint Locker" building is a metal building with a locking door at the center of the north elevation. The words "Paint Locker" are painted on the door (Figure 17). The roof is flat parapet design.

Figure 17. North elevation of "Paint Locker," facing south.

Windmills (Front and Rear)

There are two windmills located on the property, one at the front of the ca. 1950 house and one at the rear of the house. The ca. 1950 windmill (front) located east of the house is an Aermotor Chicago Windmill (Figure 18). While the ca. 1950 front windmill still has its pump and mechanics, it is no longer connected to the ground. A second, undated, windmill (rear) at the rear and west of the house is attached to a wooden trellis. It does not have its mechanics and is not operational (Figure 19).

Figure 18. The Aermotor Chicago windmill (front), facing south.

Figure 19. The two windmills, facing southeast (Left: Aermotor Chicago windmill. Right: rear windmill).

Associated Landscape

The associated landscape includes a circular, gravel driveway and a parking lot. The east border of the property has a painted picket fence and sign (Figure 20). Between the ca. 1950 house and ca. 1973 industrial building are metal posts of a fence made from a decommissioned PG&E tower (Figure 21). A wooden trellis is built directly from the west elevation of the ca. 1950 house and extends over a back garden, and beside the trellis is a carport with wooden post supports and corrugated metal roofing (Figure 22). The front yard does not have any trees; however, there are seven unidentified fruit and nut trees located behind the ca. 1950 house and ca. 1950 industrial building (Figure 21). A pallet fence is located in the back of the property and serves as the perimeter of a garden (Figure 24). A wooden corral is located at the northwest corner of the property and is constructed with pallets and plywood (Figure 25).

Figure 20. Fence and sign at East border, facing southwest.

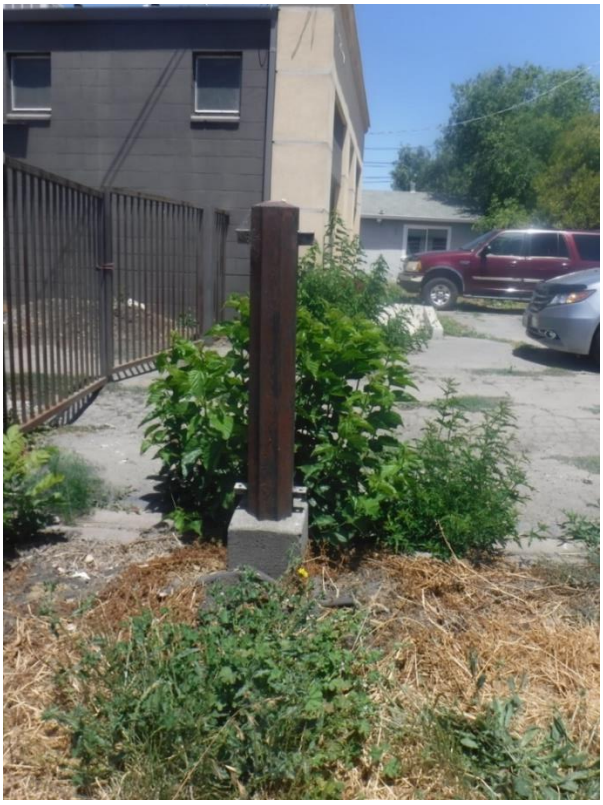


Figure 21. Fence post from decommissioned PG&E tower, facing north.

Figure 22. Wooden trellis and carport, facing north

Figure 23. Trees located behind the house, facing northwest.

Figure 24. Palate fence and gate, facing southwest.

Figure 25. Corral, facing west.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES (CRHR) EVALUATION

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

   The property containing the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal

building, ca. 1970 "Paint Locker" building, and associated landscape is associated with the post-World War II (WWII) development of the unincorporated area of American Canyon. While Vallejo and Napa were established cities, the grass and marshlands between the cities saw little development by the end of WWII. Due to its proximity to the Naval Shipyard at Mare Island, neighborhoods were developed in the 1950's and subsequent years. While the property was one of the first residential properties to be developed, it predates the period in which the neighborhood was developed. Furthermore, there is no evidence that development of the neighborhood was an "event" that made a significant contribution to California heritage or history. For these reasons, the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape are not found to be eligible for individual listing on the CRHR under this criterion.

Therefore, the property containing the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape is not individually eligible for listing in the CRHR under Criterion 1.

2. (Person): Is associated with the lives of persons important in our past.

The ownership and occupancy history of the property and the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape was thoroughly researched, and it does not appear to be associated with a person important in our past.

Therefore, the property containing the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape does not appear individually eligible for listing in the CRHR under Criterion 2.

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

The ca. 1950 house is not associated with a known architectural style but has elements of the WWII Era Cottage style. However, since the building only utilizes some aspects of this style, it does not embody any distinctive characteristics of a time, period, region or method of construction. It was designed and constructed by the owner, who is not associated with any architectural movements or styles. Furthermore, the house does not represent the work of an important creative individual and does not possess high artistic values.

The ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, are not associated with any architectural style and the associated landscape is not a planned, designed landscape.

Therefore, the ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, ca. 1970 "Paint Locker" building, and associated landscape within the property are not eligible for listing in the CRHR under Criterion 3.

4. (Information potential): Has yielded, or may be likely to yield, information important in prehistory or history.

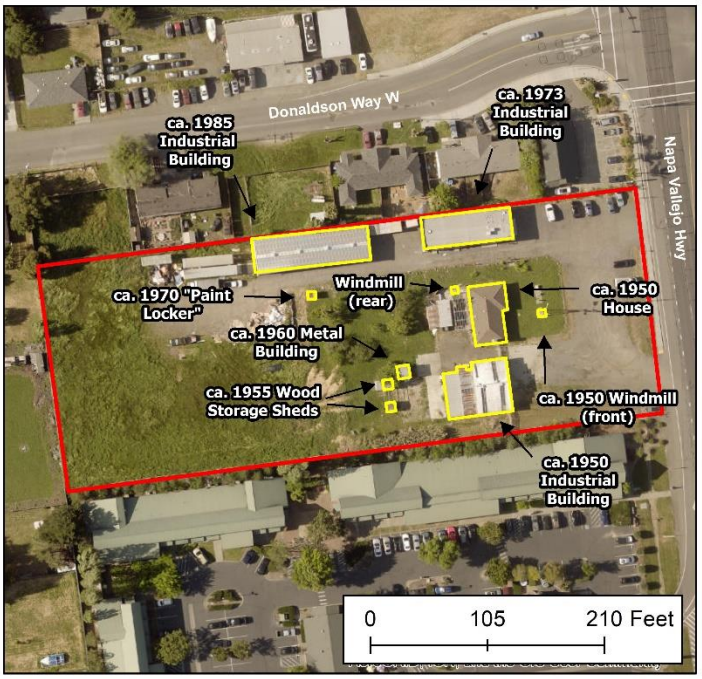
Criterion 4 most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion 4 can also apply to buildings that contain important information. For a building to be eligible under Criterion 4, it must be a principal source of important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1950 house, ca. 1950 house, ca. 1950 industrial building, ca. 1973 industrial building, two windmills (ca. 1950 and undated), two ca. 1955 wood storage sheds, ca. 1960 metal building, and ca. 1970 "Paint Locker" building do not have the ability to convey information related to architecture, construction, or design; therefore, none of the built environment resources are eligible for listing in the CRHR under Criterion 4.

State of California Natural Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial

Page 18 **of** 18 ***Resource Name or #** 349 Broadway

***Map Name:** USGS 7.5' Cuttings Wharf quadrangle ***Scale:** 1:24000 ***Date of map:** 1981



Resource Location Map

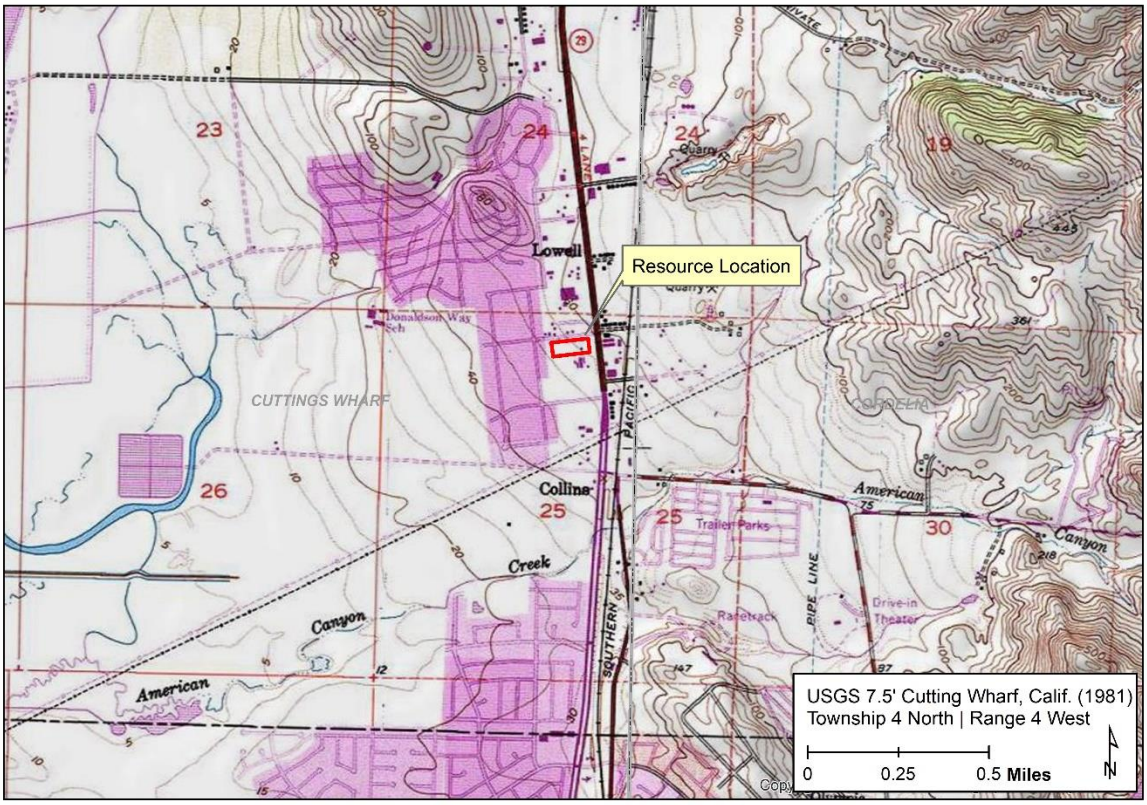
3439 Broadway
American Canyon
Napa County, California
(APN 058-312-010)

LEGEND

Resource Area

Buildings and Structures

EVANS & DE SHAZO, INC
ARCHAEOLOGY HISTORIC PRESERVATION



Appendix D: Earthquake Fault Investigation Report and Geotechnical Investigation Report

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D.1 - Earthquake Fault Investigation Report Hilton Hampton Inn

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RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS
16 Southwood Drive
Orinda, CA 94563
510-520-5592

EARTHQUAKE FAULT INVESTIGATION REPORT
PROPOSED HILTON HAMPTON INN
3439, 3441#A, 3441B AND 3443 BROADWAY
APN 058-312-010
AMERICAN CANYON, CALIFORNIA

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OCTOBER 31, 2020
JOB NO. 1501.100

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS
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RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS
16 Southwood Drive
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510-520-5592

October 31, 2020
Job No. 1501.100

Mr. Jay Patel
Anjani Management LLC
PO BOX 81738
Lafayette, LA 70598

Subject: Earthquake Fault Investigation Report
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B and 3443 Broadway
American Canyon, California

Dear Mr. Patel:

1.0 INTRODUCTION

This report presents the results of our earthquake fault investigation for the proposed Hilton Hampton Inn located at the contiguous property located at 3439, 3441#A, 3441#B and 3443 Broadway (APN 058-312-010) in American Canyon, California. The approximate location of the site is shown on the attached Vicinity Map, Figure 1. Based on our discussion with your representatives, we understand the site is under consideration for development into a Hilton Hampton Inn. We were provided the plan titled "*Horizontal Control Plan, Hilton Hampton Inn, 3443 Broadway, Napa County"* by AMS Associates, Inc. from Walnut Creek, California dated August 4, 2020 that shows the location of the proposed building.

As you are aware, the site is located within the State of California designated Earthquake Fault Zone for the active West Napa fault (CGS, 2018); therefore, a fault investigation is required in accordance with the Alquist-Priolo Earthquake Fault Zoning Act (AP Act). The goal of the AP Act, which went into effect in 1973, is to mitigate the hazard of surface fault rupture (SFR) by preventing construction of structures intended for human occupancy with a human occupancy rate of more than 2,000 person-hours per year across the surface trace of an active fault. To be zoned under the AP Act, a fault must be "*sufficiently active*" during Holocene time (within the past roughly 11,700 years) and be "sufficiently *well-defined*" near the ground surface. A portion of the State of California's 2018 Earthquake Zones of Required Investigations Map (EZRIM) is provided on Figure 2 for reference. Since the State's 2018 mapping did not include the adjacent quadrangles to the south and east, the 1983 Special Studies Zones Map is also provided on Figure 3 for a larger viewing of the State designated regulatory hazard zone for the West Napa fault.

For new structures to be constructed in designated Earthquake Fault Zones, the AP Act generally requires a fault investigation be performed. The intent of the fault investigation is to evaluate a fault's location and

determine appropriate fault setbacks to prevent building directly above the zone of ground deformation associated with SFR. The most conclusive of all investigative techniques is exploratory trenching.

Based on the results of this investigation, we conclude that the proposed project is feasible as shown on the above-mentioned plan. Recommended fault setbacks based on this study are provided on the attached Site Plan, Figure 4. The recommended fault setbacks do not impact the currently proposed building location.

2.0 PURPOSE AND SCOPE OF SERVICES

The purpose of this investigation was to conduct a subsurface fault exploration to evaluate the potential for surface fault rupture (SRF) at the site and to recommend buildings setbacks from identified fault traces. We performed the following scope of services for the project:

1. Conducted geologic research regarding the West Napa fault.
2. Review of previous fault investigation reports for nearby development sites.
3. Reviewed stereo-paired aerial photographs of the site vicinity.
4. Prepared interim sediment control documents required by the City of American Canyon.
5. Marked the site for underground utility clearance.
6. Contracted with a private utility locator.
7. Contracted with an excavation company to dig and backfill a 270-feet-long exploratory trench.
8. Cleaning and logging of the trench exposure by geologists from our office.
9. Interaction with the City's third party peer reviewer for the project, KC Engineering.
10. Engineering geologic evaluation of our findings.
11. Consultation with your design team regarding our findings.
12. Preparation of this report.

3.0 WEST NAPA FAULT ZONE

The West Napa fault is a roughly 56 kilometer long, right-lateral strike-slip fault that extends from the Carquinez straits at the south end to the just west of the Town of St Helena to the north. The fault is part of the San Andreas fault system that forms the boundary between the Pacific and North American tectonic plates. Displacement along the fault zone is right-lateral strike slip with a significant down to the east vertical component through the Napa Valley. The surface expression of the fault includes offset drainages, east-facing scarps, and linear drainages, tonal contrasts in soils and geomorphic lineaments such as saddles and linear breaks in slope. The rate of movement along the main trace of the West Napa fault is believed to be between about 1 to 4 millimeters per year. Slip appears to be distributed across a network of fault splays within the West Napa Fault Zone.

The State of California seismic hazards zonation program compiles fault information and evaluates activity for zonation in accordance with the A-P Act based on Fault Evaluation Reports. The West Napa fault was

first evaluated by the State of California in 1982 and the results were published in Fault Evaluation Report 129 (FER-129). According to FER-129, the southern portion of the West Napa fault was determined active and sufficiently well-defined between the Napa Airport and the Carquinez Straits. North of the Napa Airport, the fault was not well-defined and Holocene activity had not been sufficiently demonstrated at that time, therefore the State created the regulatory hazard zone for the southern portion of the fault but did not zone the northern portion. The site is located in the southern portion of the fault that was zoned in accordance with AP-Act in 1983 (Figure 3). Near the site, the West Napa fault was mapped as a single well-defined trace trending northwest and stepping right as it passes near Oat hill to the north.

On September 3, 2000 a magnitude M5.1 earthquake occurred with an epicenter located about 10 miles northwest of the Town of Napa in the Hills adjacent to Yountville and Oakville. The earthquake was located in the Maacama Mountains along the west side of the valley and it is not clear if the earthquake is associated with the West Napa or Maacama faults. Prior to the 2000 earthquake, seismicity along the West Napa fault was low; however hundreds of small-scale earthquakes have occurred, generally all located along the west side of the valley within the mapped influence of the West Napa Fault Zone.

The most significant and most studied earthquake along the West Napa fault occurred on August 24, 2014, a M6.0 earthquake occurred with the epicenter located about 6 miles southwest of the Town of Napa, California. The earthquake occurred within the West Napa fault zone with surface rupture reported on 2 main fault splays. The rupture was located in the northern portion of the fault zone, where previously not zoned in accordance with the AP-Act due to a lack of definition and demonstrated activity. The 2014 M6.0 South Napa Earthquake provided information regarding the location of the fault and as result, the Fault Evaluation Report for the West Napa Fault was updated (FER-256) and a new Earthquake Zones of Required Investigations Map was issued on January 11, 2018.

Fault Evaluation Report 256 focused on evaluating new information obtained from the 2014 M6.0 South Napa Earthquake. Faults were mapped based on seismicity, observations of surface fault rupture (SFR), consulting reports and UAVSAR imagery. In the southern portion of the 2014 SFR, FER-256 shows 2 fault splays. The western fault splay is located about 2 miles west of the site. Earthquake epicenters for the 2014 main event and associated aftershocks were located on the western fault. There were no epicenters plotted on the eastern fault; however slip and surface rupture were well documented. The eastern fault splay appears to be slightly east of the previously mapped location of the West Napa fault shown on the 1983 Special Studies Zones map that shows the fault passing through the eastern portion of the site about 100 feet west of the northeast corner of the property. The south end of the 2014 SFR on the eastern splay is shown clipping the northeastern corner of the site as shown on the Quaternary Fault Map provided on Figure 5.

On May 21, 2015 a magnitude M4.1 earthquake occurred with the epicenter located about 9 miles north of the Town of Napa, near Yountville. The event is attributed to the northern end of the West Napa Fault Zone and was considered a stress adjustment from the 2014 event.

4.0 FIELD INVESTIGATION

Exploratory trenching is considered the most conclusive of all investigative techniques used to evaluate the potential for SFR. Our field investigation for this project was conducted between September 23 and 25, 2020. The field investigation consisted of the excavation and logging of 1 exploratory trench totaling about 270 lineal feet. The trench was positioned to extend from the eastern site boundary to the west to overlap with previous fault investigations to shadow the building footprint and cover the State of California regulatory hazard zone. The east end of the trench was stopped about 10 feet west of a marked municipal water line.

The exploratory trench was excavated up to about 9 feet deep by Travis Construction from Martinez, California using a rubber tire-mounted Caterpillar 320 backhoe equipped with a three-foot bucket. Trench excavations were benched for safety in accordance with OSHA regulations. The south trench wall was cleaned by our geologists using hand-picking tools to identify soil stratigraphy and any potential fault-related features. The southern trench wall was graphically logged by our engineering geologist in the field at a scale of 1-inch equals 5 feet. Soil colors noted on the logs were best fit to the Munsell Soil Color Chart and the Rock Color Chart published by the Geological Society of America (2017).

Trench Exposures were reviewed and our interpretations were discussed in the field with the City's third party peer reviewer, KC Engineering Company from Vacaville, California. The trench was loosely backfilled and rolled in lifts with a sheep-foot compaction wheel at the completion of logging. Some settlement and rutting should be expected. The approximate location of the trench is shown on the Site Plan, Figure 4, The Trench Log is provided on Figures 11 and 12.

5.0 FINDINGS

5.1 SITE DESCRIPTION

The site is located on the west side Broadway (Highway 29) about 100 feet south of its intersection with Donaldson Way in American Canyon, California at the approximate location shown on Figure 1. The site consists of 4 building addresses (3439, 3441#A, 3441#B and 3443 Broadway) on a single roughly 2½-acre parcel designated as APN 058-312-010. The rectangular-shaped site measures approximately 200 feet in the north-south direction along Broadway and extends about 540 feet to the west. The site is relatively flat lying, ranging from about Elevation 60 Feet in the northeast corner to about Elevation 52 in the southwest corner.

The site is partially developed with 4 buildings as noted above. Two one-story residential buildings (1439 and 3441 Broadway) are located in the eastern portion of the site and 2 one-story warehouse-type/retail buildings are located along the northern property boundary. The eastern portion of the site is paved with old breaking-down asphalt. The western half of the property is covered with seasonal grasses and is used for horse grazing. A water well and associated windmill are located in the eastern portion of the site in front of the building at 3441 Broadway as shown on the Site Plan, Figure 4.

5.2 REGIONAL GEOLOGIC CONDITIONS

5.2.1 Geology

The site is located in the Coast Ranges Geomorphic Province of California. The Coast Ranges are characterized by a series of northwest-trending, folded and faulted mountain chains and intervening valleys. The Coast Ranges were initially uplifted during collision between the Farallon and North American tectonic plates. The prominent northwest-trending structural trend of the Coast Ranges is the result of subsequent right-lateral strike-slip faulting along the San Andreas fault system, a roughly 600-mile-long fault that is considered to be the generally accepted boundary between the Pacific and North American tectonic plates. The fault trends northwest from the Gulf of California, through the Coast Ranges and ends in the Pacific Ocean at the triple junction near Point Arena. The majority of active deformation in the San Francisco Bay Area is believed to have occurred over the past few million years. As a result, the area is highly faulted and folded.

Regional geologic maps (listed in the references) show the site to be underlain by an alluvial fan deposits that were generated from the hills to the east. The fan deposits are considered Late Pleistocene to Early Holocene[1] in age according to regional geologic maps (Sims *et al.*, 1973, Sowers et al, 1998, and Witter *et al*, 2006). The distal ends of the fan are generally older than the near source portions. Additionally, the older Pleistocene soils are much sandier and more oxidized than the clay-rich Holocene soils. The broad large-scale maps by Sowers *et al.* (1998) and Witter *et al.*, (2006) interpreted Late Pleistocene to Early Holocene alluvial fan deposits, map symbol "*Qf*" underlying the site. The mapping of Sims *et al.* (1973) delineated younger Holocene deposits from the older Pleistocene deposits. At the site, the Sims *et al.* (1973) map shows the site to be underlain by older alluvium, map symbol "*Qoal*". The regional geologic maps all show the West Napa Fault about 100 feet west of the northeastern corner of the site. A portion of the Dibblee and Minch (2006) geologic map is provided on Figure 6 and the older 1973 map by Sims *et al*. is provided on Figure 7 for reference.

5.2.2 Earthquake Faults

The site is in an area considered to have a relatively high seismicity due to the proximity of several active faults in the region as shown on figure 8. As previously discussed, the site is located within a State of California designated Earthquake Zones of Required Investigation for the active West Napa fault (Figure 2). The State of California considers a fault active if it has demonstrated movement within the Holocene Epoch of geologic time, within the past roughly 11,700 years. Only Holocene-active faults that are sufficiently active and sufficiently well-defined near the ground surface are zoned in accordance with the A-P Act.

Table 1 below lists known active faults that are believed to present the highest potential levels of ground shaking at the site, their distances from the site based on the KML files in the Quaternary Fault and Fold

[1] The beginning of the Holocene Epoch of geologic time was about 11,700 years before present. The older Pleistocene Epoch extends from about 11,700 years back to about 1.5 million years before present.

Database (QFFD), estimated slip rate, and potential maximum moment-magnitude event. Faults listed below are those shown in the 2008 Fault Source Map contained in the 2014 Fault Parameters by the U.S. Geological Survey's Earthquake Hazards Program, arranged in order of increasing distance from the site.

TABLE 1. Potential Active Earthquake Fault Sources

FAULT SOURCE[2]	APPROXIMATE DISTANCE TO FAULT TRACE (Miles)[3]	COMPASS DIRECTION TO FAULT	SLIP RATE (Millimeters per year)[4]	MAXIMUM E.Q. MAG. (Mm)[5]
West Napa fault	See Figure 4		1 ± 1	6.5
Green Valley fault	6	NE	5 ± 3	6.2
Cordelia fault	7¼	NE		
Rodgers Creek fault - Southern	9½	SW	9 ± 2	7.0
Hayward fault - Northern	10½	SW	9 ± 2	7.1
Concord fault	11	SE	4 ± 2	6.2
Greenville fault – Clayton Section	21	SE	2 ± 1	6.5
Mt. Diablo Thrust[6]	22½	SE	2 ± 1	6.6
Calaveras fault - Northern	25	S	6 ± 2	6.8
San Andreas fault – 1906 Rupture	29	SW	24 ± 3	7.9
Greenville fault – Marsh Creek Section	33½	SE	2 ± 1	6.5
San Gregorio	30	SW	7 ± 3	7.2
Maacama	30	NW	9 ±	6.9

Potentially active faults are faults with Quaternary displacement (within the past 1.6 million years) but do not show evidence for Holocene activity, these faults are considered Pre-Holocene faults (Special Publication 42, 2018 update) and do not meet the criteria for zoning under the AP Act. Some faults in this category may be active with a smaller role in the tectonic setting or with a larger recurrence interval than would be detected under the AP-Act or simply have not been adequately characterized to date.

Quaternary faults in close proximity to the site include the South Hampton fault and Franklin fault located about 3½ miles to the southwest and 7 miles to the southeast, respectively. While these faults are not zoned as active faults, there is some debate about their role in the tectonic setting as slip is transferred from the north end of the Calaveras fault to the northwest into the West Napa and Rodgers Creek fault systems. The Soda Canton fault is located along the east side of Napa Valley about 10 ½ miles northeast of

[2] Fault sources included in the 2014 Fault Parameters provided by the U.S. Geological Survey's Uniform Earthquake Rupture forecast version 3.0.
[3] Fault locations and distances to the site were determined from the KML files provided from the Quaternary Fault and fold Database and were measure from the center of the proposed development site.
[4] Slip rates obtained from Cao *et a*l. (2003).
[5] Maximum earthquake magnitude (Mm) calculated by Cao et al. (2003).
[6] The Mount Diablo Thrust fault is a blind fault that is not zoned in accordance with the A-P Act due to insufficient evidence of activity and surface expression. While it is mapped a Quaternary fault, it is considered a potential seismic source and is therefore also included in Table 1 above.

the site. The Tolay and Lakeview faults are located about 11 and 12 miles to the west respectively. The Bennet Valley fault is located about 12½ miles to the northwest, and the Burdell Mountain fault is about 15½ miles southwest of the site.

5.3 FAULT INVESTIGATIONS FOR NEARBY DEVELOPMENT SITES

We reviewed nearby fault investigation reports prepared for developments located in the State of California designated Earthquake Fault zone for the West Napa fault. Our review was limited to about a ½ mile radius from the site since there is sufficient data to demonstrate the approximate location of the fault and that the active fault extends can be located near the ground surface. Available reports from the CGS are from the years prior to 2000; therefore some more recent reports were not available at the time of our study. The 2005 study by Twinning Laboratories and 2018 study by Earth Focus were provided to us by the peer reviewer. Studies by RGH in 2005 and 2007 were described in the 2018 Earth Focus report.

AP 2483

Kleinfelder Inc. performed several fault studies south of American Canyon Road. In 1990 they reported no fault at the Walgreens shopping center located on the south side of American Canyon Road as shown on Figure 9. Trenches were not excavated as part of the study.

AP 2798

Wallace Kuhl & Associates Inc. performed a fault investigation of the American Canyon City and Arts Center in 1994 which is located about ¼ mile north of site as shown on Figure 7. The investigation included 2 exploratory trenches that were interpreted to expose no indications of active faulting. The report references the mapped trace of the West Napa fault located along the western property boundary based on the 1983 Special Studies Zones map.

AP 2950

In 1992 Kleinfelder, Inc. performed a fault study at the Eagle Crest subdivision which is located about ¾ miles to the southeast of the site. The study encountered the West Napa fault in 3 of 4 exploratory trenches and setbacks were recommended for buildings intended for human occupancy. The Kleinfelder trenches were reviewed by the CDMG.

A supplemental fault investigation was performed in 1994 by Terraseach Inc. to further evaluate the fault identified by Kleinfelder. Terraseach excavated 5 additional trenches on trend with the fault interpreted by Kleinfelder. Terraseach interpreted a fault in the center of the site in 2 trenches (T-2 and T-4) similar to the Kleinfelder locations an inactive fault (T-3) that is on trend with the identified faults and no faulting at the north and south projections of the identified fault (T-1 and T-5). The peer reviewer, Darwin Meyers Associates suggested establishing setbacks as projected. The location of the AP 2950 site is south of the map area shown on Figure 9.

AP 3341

The 2005 investigation by Twinning Laboratories was located on the northeast corner of American Canyon

Road and Highway 29, about ¼ mile southeast of the site studied herein. The Twinning study included excavation and logging of 5 exploratory trenches; 4 of which encountered the West Napa fault. Setbacks were recommended for buildings intended for human occupancy.

Figure 9 shows the location of the site, Twinning's exploratory trenches and their interpretation of the fault location (purple line). The fault generally aligns as a strait projection from the southern end of the eastern fault mapped as the 2014 SFR and studies at the Eagle Crest subdivision (discussed below). The site has recently been developed with townhomes while observing 50-foot wide setbacks on each side of the fault.

3519 Broadway – not on file

Earth Focus Geological Services, Inc. performed a fault investigation of the 3519 Broadway site which is located on the north side of Donaldson Way about 200 feet north of the project site. Earth Focus excavated and logged 2 exploratory trenches up to about 9 feet deep in the eastern portion of the property as shown on Figure 9. The West Napa fault was encountered in both trenches. The fault offset soil horizons and formed a groundwater barrier with elevated water levels on the east side of the fault that was within about 4 feet of the ground surface. The active fault zone identified in the trenches was interpreted to be about 8 feet wide and extend to near the ground surface. The fault projects to the northeast corner of the project site.

Vacant Parcel on northwest intersection of Crawford Way and Highway 29 – not on file

This firm and author performed a fault investigation at the vacant parcel located on the southwest corner of Highway 29 (Broadway) and Crawford Way in 2018. The study included a single exploratory trench totaling about 320 lineal feet. The trench extended from near the eastern property boundary to just past the southwestern boundary of the Earthquake Zone of Required Investigation as shown on Figure 9. The trench was excavated and logged up to about 9 feet deep. There were no indications of active faulting in the trench. The site is located about 650 feet south; therefore, we utilized the trench information to the 3439 Broadway site to shadow the western portion of the AP Zone.

3448 Broadway – not on file

RGH performed a fault investigation of the American Canyon Car Wash site located at 3448 Broadway in 2007. The car wash is located directly east across Broadway about 125 feet from the project site studied herein. The investigation included a 190 foot long trench up to about 9 feet deep. The trench exposed continuous un-faulted soil layers. RGH concluded the West Napa fault was about 200 feet to the west of the site. Green vegetation from the trench excavation can be seen on the 2007 Google Earth images.

Corner of Broadway and Holcomb Lane

In 2007 RGH performed a fault investigation of the parcel located at the corner of Broadway and Holcomb Lane, about 425 feet southeast from the project site studied herein. The investigation included 2 trenches up to about 11 feet deep. The West Napa fault was encountered in trench T-1. The fault was about 2

feet wide with elevated groundwater levels on the east side of the fault. RGH recommended 50-foot setbacks from the identified fault trace. Green vegetation from the trench excavation can be seen on the 2007 Google Earth images.

Canyon Plaza – not on file

Canyon Plaza was constructed on the north side of Crawford Way between 2002 and 2004. The development is located directly south of the project site studied herein as shown on Figure 7. We could not locate reports or documents regarding faulting or geotechnical investigations at the site. However, we understand that Neil O. Anderson & Associates performed an investigation in the northeast corner of the site in 1999. Based on review of the 2018 Earth Focus report, we understand that a trench was excavated in the northeast corner of the plaza and that the trench log did not reflect the presence of an active fault.

Google Earth images from 2002 suggest a linear green vegetated area trending northeast to southwest across the field directly north of Crawford Way. The linear vegetation is similar to the trench locations observed in the area from other studies in 2007; therefore we believe there is additional data that was not located.

Smith Ranch – not on file.

Berlogar Geotechnical Consultants performed a fault exploration of the Smith Ranch property in the early 2000's as the approximate location shown on Figure 7. The investigation was located on the east side of the railroad tracks northeast of the site. The investigation included excavation of an exploratory trench extending east from the railroad tracks. No fault indications of active faulting were identified.

5.4 AERIAL PHOTOGRAPH INTERPRETATION

We reviewed 10 sets of stereo-paired aerial photographs covering the site vicinity between the years 1958 and 2005. Aerial photographs were obtained from the archive library at Pacific Aerial Surveys in Novato, California. Aerial photographs were viewed by our engineering geologist using an Old Delft ODSII scanning stereo-scope. Since this was a study of regional-scale to evaluate the locations of active faults impacting the site, photographs were at a scale adequate to review the regional conditions, generally between 1:12,000 and 1:24,000. Additional images were viewed online from the U.C. Santa Barbara library and from the Google Earth timeline function.

Based on our review of the aerial photographs, the West Napa fault is expressed as a sharp tonal contrast trending northwest through the site vicinity. The earlier photograph viewed from 1958 through 1966 showed the clearest indications of the fault as a sharp contrast between darker soils on the east side and lighter colors of the west. The photo-lineament aligns with the faults encountered in nearby studies of Twinning (2005), RGH (2007) and Earth Focus (2018). The photo-lineament we interpret to represent the location of the West Napa fault is shown on a copy of the 1958 aerial photograph on Figure 9. The photo-lineament suggests the West Napa fault passes through the northeast corner of the site.

5.5 EXPLORATORY TRENCH T-1

Our engineering geologist visually inspected and logged the southeast wall of the trench T-1 exposure. The site is underlain by a thin layer of Holocene soil development on Pleistocene–aged alluvial fan deposits. Based on our observations of pedogenic[7] features such as color, texture, clay skins and carbonate development we were able to delineate 13 units in the stratigraphy (units A through M on the log of T-1).

The upper 4 feet of the trench exposed dark gray-brow clay-rich soils that we encountered continuous undisturbed soil layers for the full length of the trench (Units A, B and C) were interpreted to represent Holocene soil development. Unit C consisting of a well-developed B_k horizon that has carbonate nodules up to about ½-inch in diameter that is likely an early Holocene soil. Below the Holocene soils, Pleistocene fan deposits consisted of continuous layers of olive-brown sandy clays with variable amounts of carbonate nodules, veins and pockets. Clay skins developed on ped surfaces and pockets and veins of carbonate up to 2-inches wide were observed throughout the trench. The size of the carbonates indicated these soils are Pleistocene in age and therefore provide conclusive stratigraphy to evaluate active faulting. We observed some channeling in the fan deposits, specifically between Stations 0+25 and 0+30 on the Trench Log and at the west end of the trench. We did not encounter a fault or any evidence of fault-related features such as shears, buckles or offsets in the trench exposure.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this project, we conclude that the West Napa fault crosses through the northeast corner of the property as shown on Figure 4. Trench T-1 penetrated into un-faulted Pleistocene fan deposits and no indications of active or potentially active faulting were encountered. The West Napa fault is located just east of the end of our trench and could not be reached due to the presence of utility lines near the property boundary. This trench, in addition to the existing trenches to the south effectively shadow the site within the State of California designated Zone of Required Investigation for the West Napa fault.

Establishing setbacks from active faults should take into account the location of the fault as well as the area of anticipated ground deformation from any given earthquake event. Based on the results of this investigation, we recommend a 50-foot setback for buildings intended for human occupancy. The setback should be measured from the east end of Trench T-1 as shown on Figure 4. The recommended setbacks do not impact the currently proposed building location.

It should be noted that the fault crosses municipal water line at the east end of the site. Due to the fault-water line crossing, we recommend that any utilities entering the property enter from the southeast corner to avoid the fault at the connections. Additionally, measures should be taken to protect the water main where it will be breached by fault movement. Methods to protect the water main could include

[7] Pedogenesis is the process of soil formation.

placing the pipe in a protective sleeve or providing flexible connections. The Utility companies should be consulted on methods to reduce the impacts of fault offset from breaking the lines causing damage to the site.

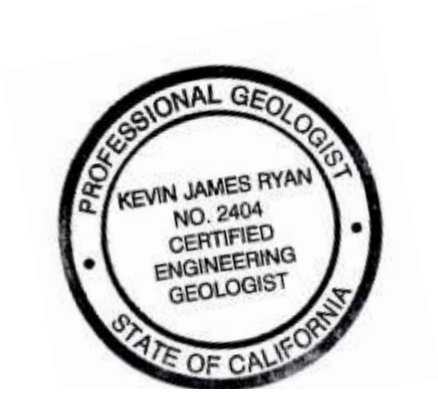
The exploratory trench was backfilled with the excavated materials at the completion of logging. The backfill was placed in lifts and wheel rolled with a sheep-foot compaction wheel. While the trench backfill was compacted it is not considered engineered fill suitable to support the new building and should be removed and replaced with engineered fill during site development.

7.0 LIMITATIONS

The results of this project are based upon the information provided to us regarding site improvements, the findings of our field investigation, geologic research, and professional judgment. This project has been conducted in accordance with currently accepted engineering geologic standards only; no other warranty is expressed or implied. Site conditions and locations of features discussed in the text of the report are those that existed during our field visit in October 2020 and are not necessarily representative of other features, locations or times. If subsurface conditions encountered during construction vary from those interpreted in this report, our firm should be contacted to review the conditions for any changes in our recommendations. The review would be acknowledged in writing.

Respectfully submitted,
RYAN GEO*LOGICAL* CONSULTING, INC.

Kevin James Ryan, P.G., C.E.G.
Principal Engineering Geologist



REFERENCES

California Division of Mines and Geology, 1983, Official map of Alquist-Priolo Earthquake Fault Hazard Zones, Cuttings Wharf Quadrangle [superseded by 2018 EFRIM): California Division of Mines and Geology, scale 1:24,000.

California Division of Mines and Geology, April 13, 1982, Fault Evaluation Report FER-129, West Napa fault in the Napa and Cuttings Warf 7.5-minute Quadrangles, Napa and Solano Counties, California. [superseded by FER-256).

California Geological Survey, January 11, 2018, Earthquake Zones of Required Investigation, Napa Quadrangle.

California Geological Survey, January 11, 2018, Fault Evaluation Report FER-256, West Napa fault in the Napa and Cuttings Warf 7.5-minute Quadrangles, Napa and Solano Counties, California.

California Geological Survey, 2018 Interim Revision, Fault rupture hazard zones in California, Alquist-Priolo Earthquake Fault zoning Act with index to Earthquake Fault Zones Maps: Special Publication 42.

California Geological Survey, 2002, Guidelines for evaluating the hazard of surface fault rupture: Note 49.

Clahan, K.B., Wagner, D.L., Saucedo, G.J., Randolph-Loar, C.E. and Sowers, J.M., 2004, Geologic map of the Napa 7.5' quadrangle, Napa County, California: California Geological Survey.

California Division of Mines and Geology, 1993, Revised official map of Alquist-Priolo Earthquake Fault Hazard Zones, Cordelia Quadrangle: California Division of Mines and Geology, scale 1:24,000.

Darwin Meyer Associates, January 12, 1995, Peer review of Alquist-Priolo report, Eagle Crest subdivision, SW Quadrant Broadway Road and American Canyon Road: AP 2950.

Dibblee, T.W., and Minch, J.A., 2006, Geologic map of the Cordelia & Fairfield South quadrangles, Napa & Solano Counties, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-190, scale 1:24,000.

DMG Staff, 2000, Digital images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, central coast region: California Division of Mines and Geology, CD 2000-004, scale 1:24,000.

DMG Staff, 2000, Digital images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, northern and eastern region: California Division of Mines and Geology, CD 2000-005, scale 1:24,000.

Earthquake Engineering Research Institute, October 2014, M 6.0 South Napa Earthquake of August 24, 2014, EERI Special Report.

Earth Focus Geological Services, Inc., April 20, 1928, Fault hazards evaluation report, State of California Earthquake Fault Zone for the West Napa fault, Vacant 2.52-Acre Parcel, 3519 Broadway, APN 058-311-013.: Project No. F18-01521.

Fox, K.F. Jr., 1973, Tectonic setting of late Miocene, Pliocene and Pleistocene rocks in part of the Coast Ranges north of San Francisco, California: U.S. Geological Survey Professional Paper 1239.

Fox, K.F., Sims, J.D., Bartow, J.A. and Helley, E.J., 1973, Preliminary geologic map of Eastern Sonoma and Western Napa County, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-483, Basic Data Contribution 56.

Helley, E.J. and Herd, D.G., 1977, Map showing faults with Quaternary displacement, northeastern San Francisco Bay region, California: U.S. Geological Survey, Miscellaneous Field Studies Map MF-881, scale 1:125,000.

Graymer, R.W., Brabb, E.E., and Jones, D.L., 1999, Geology of the Cordelia and the northern part of the Benicia 7.5 minute quadrangles, California: a digital map database: U.S. Geological Survey, Open-File Report OF-99-162, scale 1:24,000.

Manson, M.W., 1988, Landslide hazards in the Cordelia-Vallejo area, Solano and Napa counties, California: Landslide Hazard Identification Map No. 13: California Division of Mines and Geology, Open-File Report 88-22, scale 1:24,000.

Ryan Geological Consulting, Inc., May 1, 2018, Final fault investigation report, APN's 058-032-001 & 058-290-012, Highway 29 and Crawford Way, American Canyon, California: Project No. 1366.100.

Sims, J.D., Fox, K.F., Bartow, J.A., and Helley, E.J., 1973, Preliminary geologic map of Solano County and parts of Napa, Contra Costa, Marin, and Yolo Counties, California: U.S. Geological Survey, Miscellaneous Field Studies Map MF-484, scale 1:62,500.

Sowers, J.M., Noller, J.S., and Lettis, W.R., 1995, Maps showing quaternary geology and liquefaction susceptibility in the Napa, California, 1:100,000 sheet: U.S. Geological Survey, Open-File Report OF-95-205, scale 1:100,000.

Sowers, J.M., Noller, J.S., and Lettis, W.R., 1998, Quaternary geology and liquefaction susceptibility, Napa, California

1:100,000 quadrangle, a digital database: U.S. Geological Survey, Open-File Report OF-98-460, scale 1:100,000.

Terraseach Inc., October 6, 1994, Fault hazard investigation on Eagle Crest property, Broadway Road at American Canyon Road, American Canyon, California: Project No. 6616.001. AP 2950.

Twinning Laboratories Inc., July 20, 2004, Fault investigation report, Proposed residential development northeast of Highway 29 and American Canyon Road, American Canyon, Napa County, California. Project Number: A07259.01-02.

Wagner, D.L., and Gutierrez, C.I., 2010, Geologic map of the Napa 30' x 60' quadrangle, California: California Geological Survey, Preliminary Geologic Maps, scale 1:100,000.

Wagner, D.L., and Gutierrez, C.I., 2017, Preliminary Geologic Map of the Napa and Bodega Bay 30' x 60' Quadrangles, California: California Geological Survey, Preliminary Geologic Maps, scale 1:100,000.

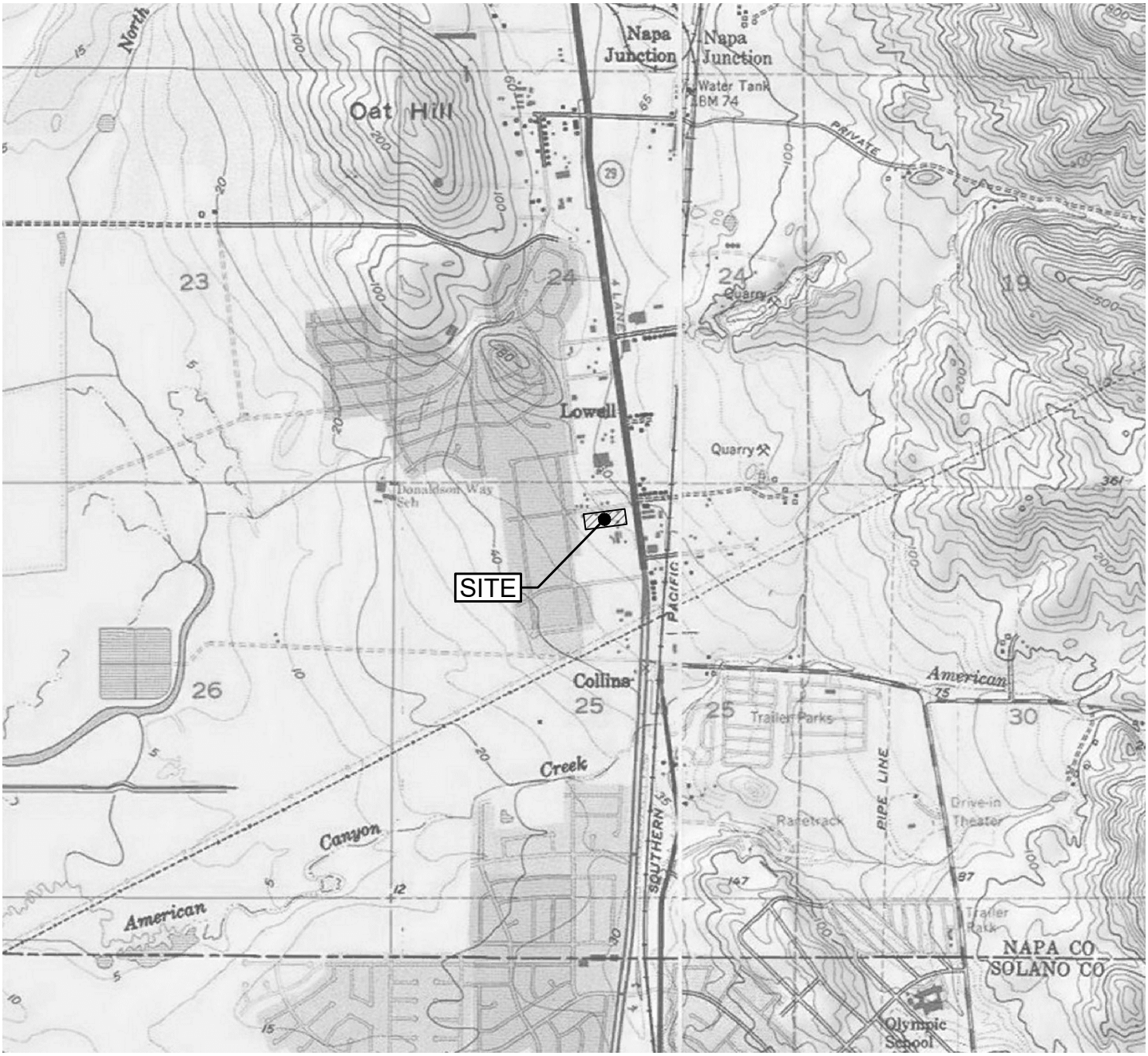
Wagner, D.L., Gutierrez, C.I., and Clahan, K.B., 2006, Geologic map of the south half of the Napa 30x60-minute quadrangle, California. [superseded by Wagner and Gutierrez, 2010, California Geological Survey Preliminary Geologic Maps]: California Geological Survey, Preliminary Geologic Maps, scale 1:100,000.

Wallace Kuhl & Associates Inc., August 29, 1994, Geologic Hazards report, American Canyon City Arts Center, 3751 Broadway (Highway 29), American Canyon, California. WKA No. 2761.01. AP 2798.

Witter, R.C., Knudsen, K.L., Sowers, J.M., Wentworth, C.M., Koehler, R.D., Randolph, C.E., Brooks, S, K., and Gans, K.D., 2006, Maps of Quaternary deposits and liquefaction susceptibility in the central San Francisco Bay region, California: U.S. Geological Survey, Open-File Report OF-2006-1037, scale 1:200,000.

AERIAL PHOTOGRAPHS

FILM ID	FLIGHT LINE	FRAMES	NOMINAL SCALE	DATE FLOWN
KAV 8930	15	30,31	1:15,000	2-3-05
AV 5140	30	33,34	1:24,000	4-26-96
AV 3619	6	36A,37A,38A	1:28,200	5-19-89
AV 2854	5	5,6,7	1:12,000	5-13-86
AV 2050	8	14,16	1:54,000	11-2-81
AV 1700	8	13,14	1:54,000	5-11-79
AV 215	8	11,12	1:54,000	9-4-75
AV 844	13	14,15	1:30,000	4-20-68
AV 550	8	8,9,10	1:36,000	7-25-63
SF-AREA	2	8,9,10	1:36,000	3-2-58



N

0 2000

1"=2000'

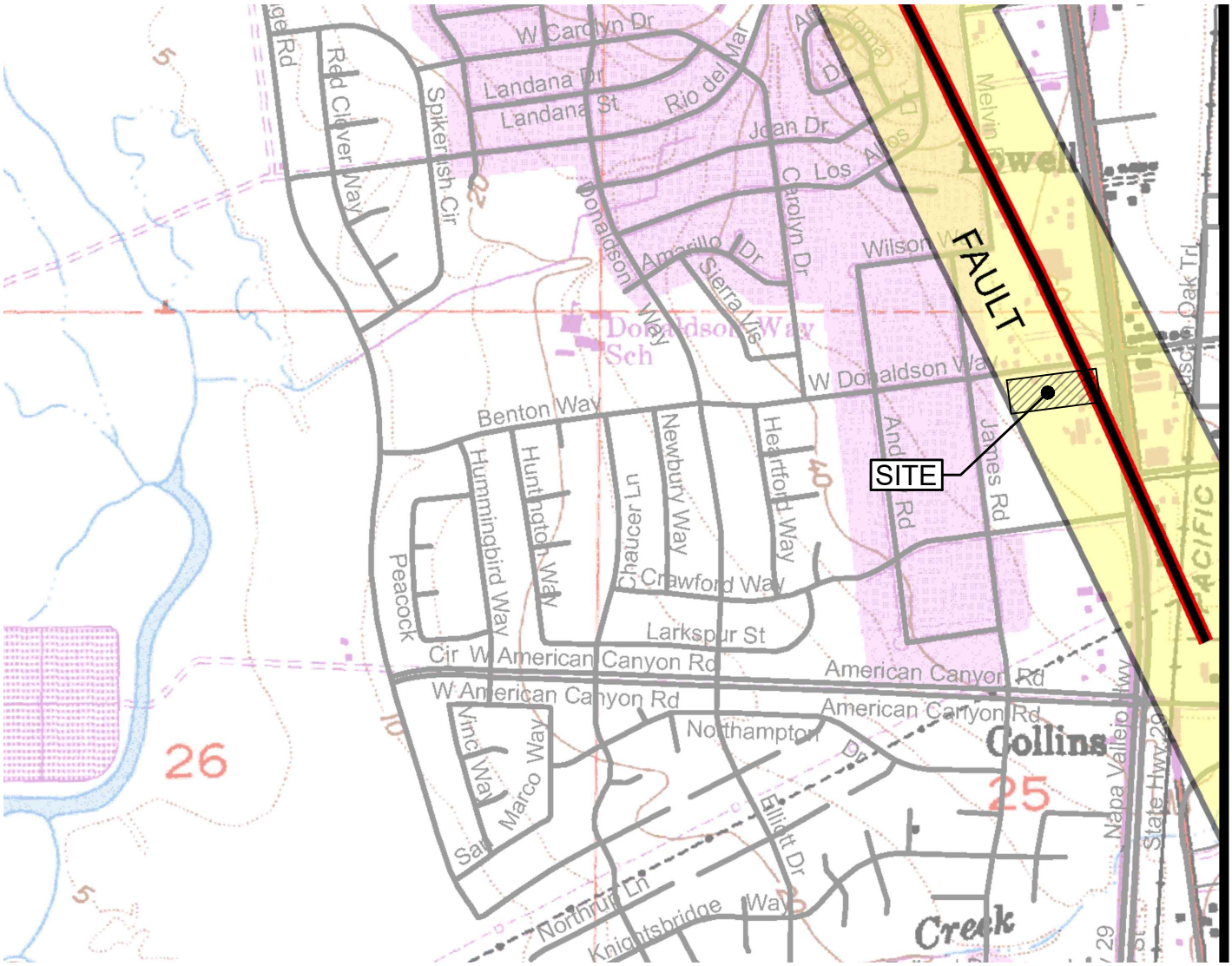
BASE: PORTIONS OF U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLES, CUTTINGS WHARF AND CORDELIA, CALIFORNIA AT A SCALE OF 1:24,000.

VICINITY MAP

Earthquake Fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-31-2020	Project No. 1501.100	Figure 1

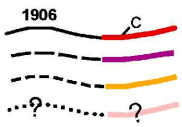
RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

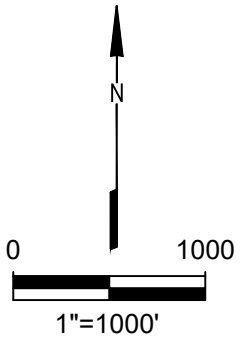


MAP EXPLANATION

Earthquake Fault Zones
Zone boundaries are delineated by straight-line segments; the boundaries define the zone encompassing active faults that constitute a potential hazard to structures from surface faulting or fault creep such that avoidance as described in Public Resources Code Section 2621.5(a) would be required.

Active Fault Traces
Faults considered to have been active during Holocene time and to have potential for surface rupture: Solid Line in Black or Red where Accurately Located; Long Dash in Black or Solid Line in Purple where Approximately Located; Short Dash in Black or Solid Line in Orange where Inferred; Dotted Line in Black or Solid Line in Rose where Concealed; Query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by fault creep.





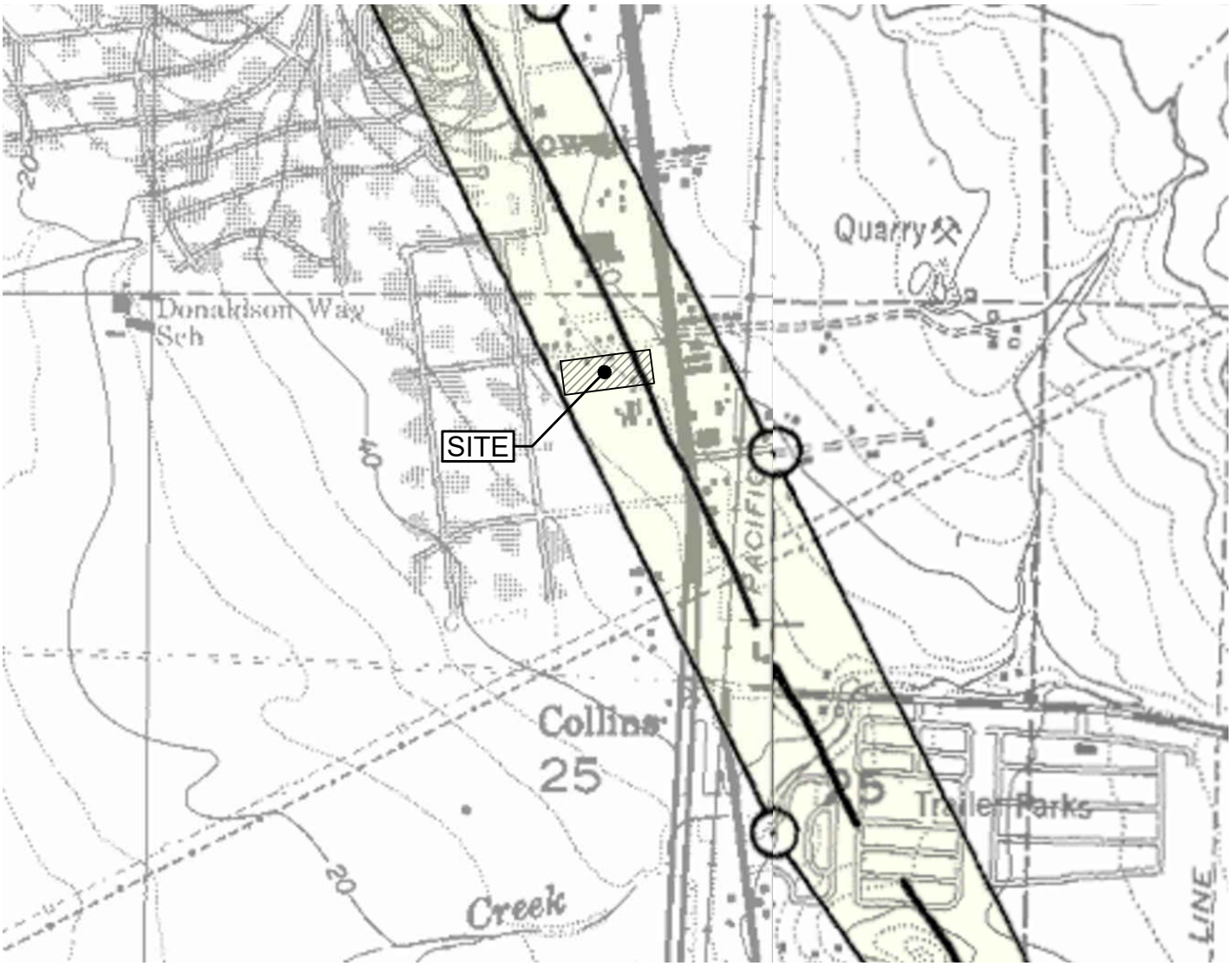
EARTH QUAKE ZONES OF REQUIRED INVESTIGATION MAP (STATE OF CALIFORNIA 2018)

Earthquake Fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-31-2020	Project No. 1501.100	Figure 2

BASE: PORTION OF STATE OF CALIFORNIA EARTHQUAKE ZONES OF REQUIRED INVESTIGATION , CUTTINGS WHARF QUADRANGLE, CALIFORNIA AT A SCALE OF 1:24,000.

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



Potentially Active Faults

1906 C

Faults considered to have been active during Holocene time and to have a relatively high potential for surface rupture; solid line where accurately located, long dash where approximately located, short dash where inferred, dotted where concealed; query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by creep or possible creep.

Special Studies Zone Boundaries

These are delineated as straight-line segments that connect encircled turning points so as to define special studies zone segments.

Seaward projection of zone boundary.

N

0 1000

1"=1000'

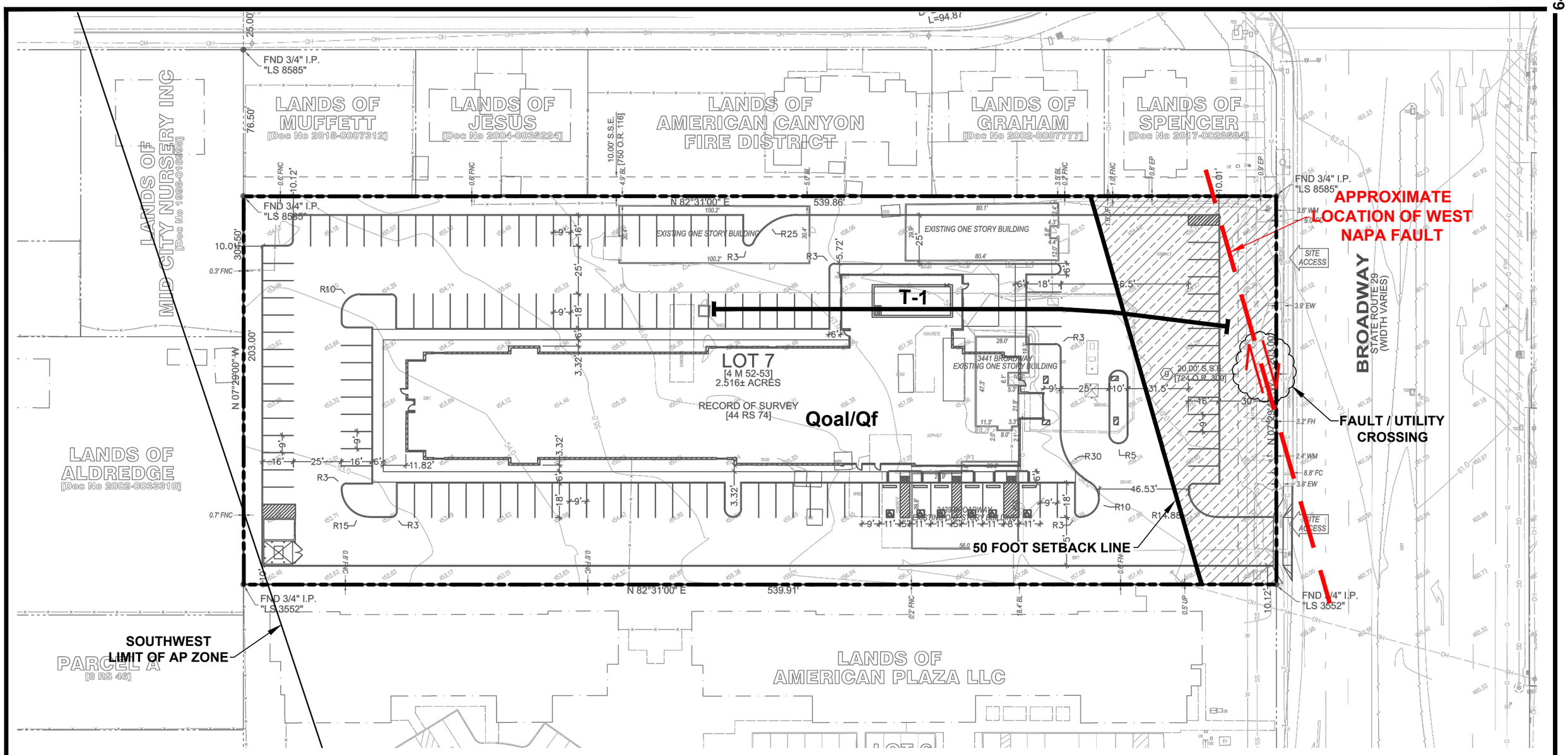
SPECIAL STUDIES ZONES (STATE OF CALIFORNIA 1983)

Earthquake Fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 11-7-2020	Project No. 1501.100	Figure 3

BASE: PORTION OF STATE OF CALIFORNIA SEISMIC HAZARD ZONES , CUTTINGS WHARF AND CORDELIA QUADRANGLES, CALIFORNIA AT A SCALE OF 1:24,000.

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



N

0 50

1"=50'

EXPLANATION

PROPERTY BOUNDARY

T-1 APPROXIMATE TRENCH LOCATION

Qoal/Qf OLDER ALLUVIUM / QUATERNARY FAN DEPOSITS

APPROXIMATE LOCATION OF WEST NAPA FAULT

RECOMMENDED FAULT SETBACK ZONE, NO STRUCTURES INTENDED FOR HUMAN OCCUPANCY

SITE PLAN

EARTHQUAKE FAULT INVESTIGATION
Proposed Hilton Hampton Inn Site
apn 058-312-010
3439, 3441#A, 3441#B and 3443 Broadway
American Canyon, CA

Date: 10-31-2020	Project No. 1501.100	Figure 4

RYAN GEO*LOGICAL* CONSULTING, INC.
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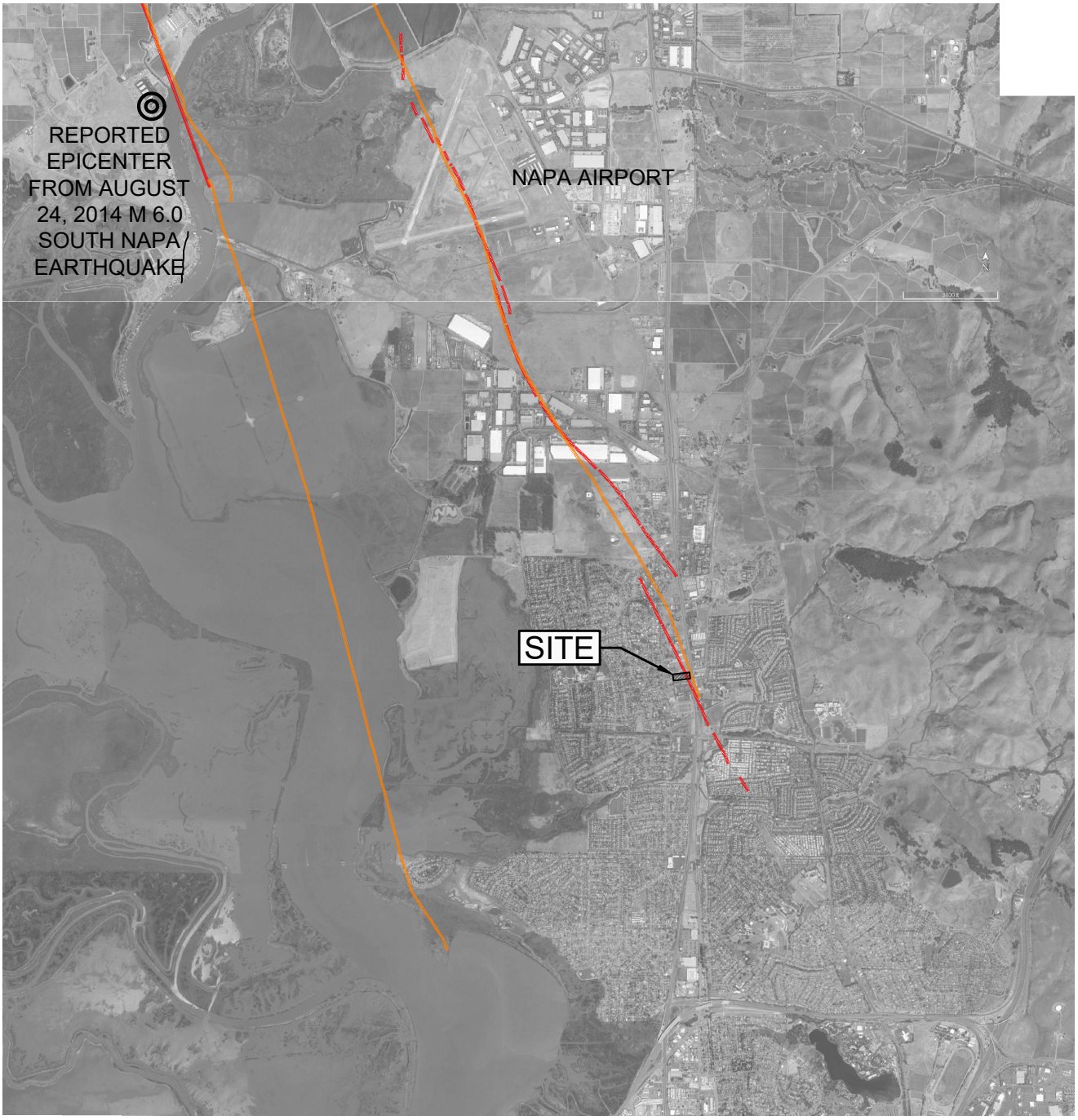


EXPLANATION

QUATERNARY FAULT TRACES IN THE DATABASE FOR FAULT NO. 36A

FAULTS FROM FER 256 PLATE 4

N

0 5000

1"=5000'

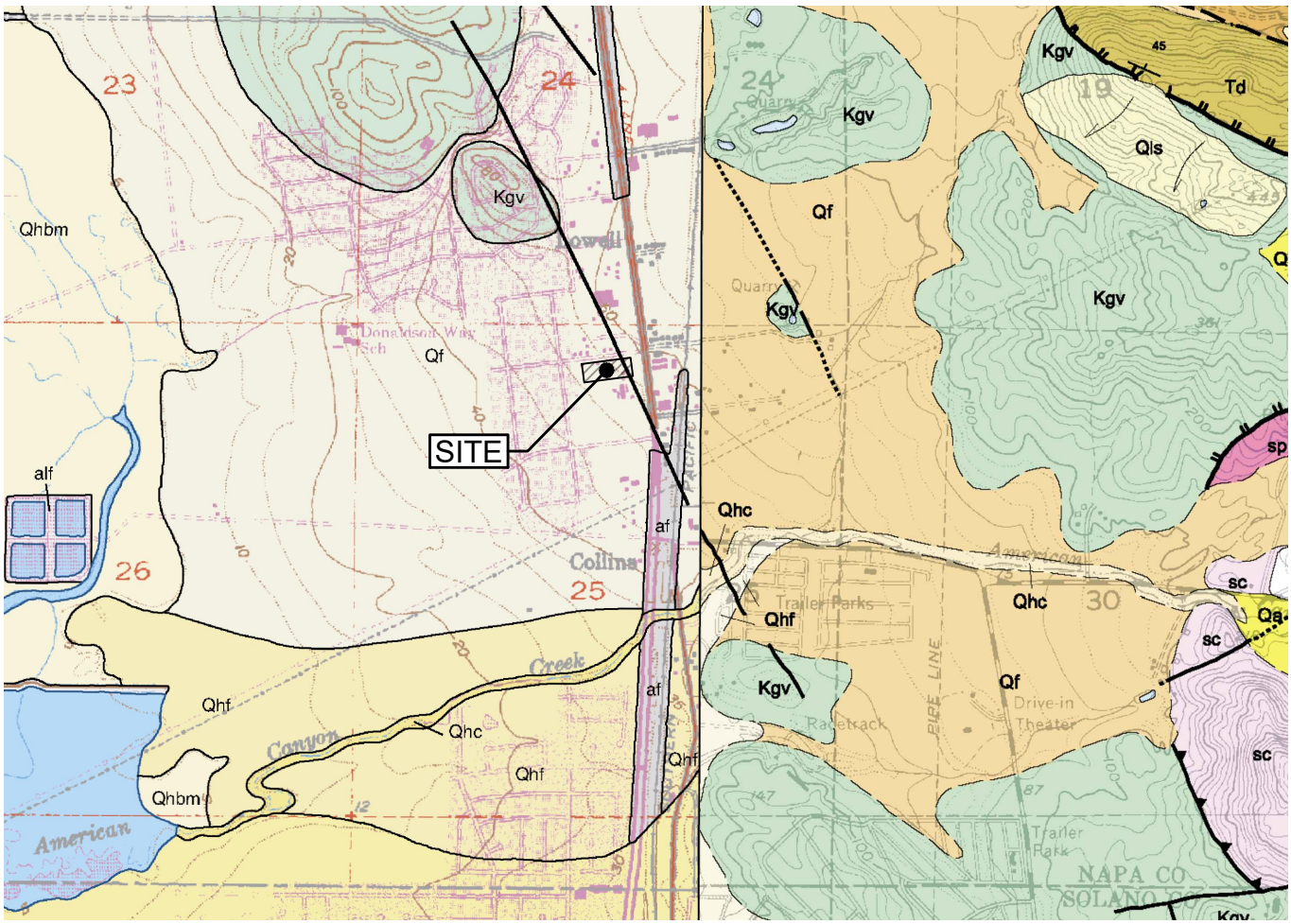
BASE: BRYANT, W.A., COMPILER, 2000, FAULT NUMBER 36A, WEST NAPA FAULT, BROWNS VALLEY SECTION, IN QUATERNARY FAULT AND FOLD DATABASE OF THE UNITED STATES: U.S. GEOLOGICAL SURVEY WEBSITE, HTTP://EARTHQUAKES.USGS.GOV/HAZARDS/QFAULTS

QUATERNARY FAULT MAP

Earthquake Fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-31-2020	Project No. 1501.100	Figure 5

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



EXPLANATION

CONTACT - DEPOSITIONAL OR INTRUSIVE CONTACT, DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED

FAULT - DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED SAWTEETH ARE ON UPPER PLATE OF LOW ANGLE THRUST FAULT

af — ARTIFICIAL FILL

Qhf — HOLOCENE FAN DEPOSITS. HOLOCENE ALLUVIAL FAN SEDIMENTS, DEPOSITED BY STREAMS EMANATING FROM THE MOUNTAINS AS DEBRIS FLOWS, HYPERCONCENTRATED MUDFLOWS, OR BRAIDED STREAM FLOWS. SEDIMENTS INCLUDE SAND, GRAVEL, SILT AND CLAY, THAT ARE MODERATELY TO POORLY SORTED, AND MODERATELY TO POORLY BEDDED

Qf — LATE PLEISTOCENE TO HOLOCENE FAN DEPOSITS. GENTLY SLOPING, FAN-SHAPED, RELATIVELY UNDISSECTED ALLUVIAL SURFACES WHERE LATE PLEISTOCENE OR HOLOCENE AGE WAS UNCERTAIN OR WHERE THE DEPOSITS OF DIFFERENT AGE INTERFINGER SUCH THAT THEY COULD NOT BE DELINEATED AT THE MAP SCALE. SEDIMENTS INCLUDE SAND, GRAVEL, SILT, AND CLAY, THAT ARE MODERATELY TO POORLY SORTED, AND MODERATELY TO POORLY BEDDED.

N

0 2000

1"=2000'

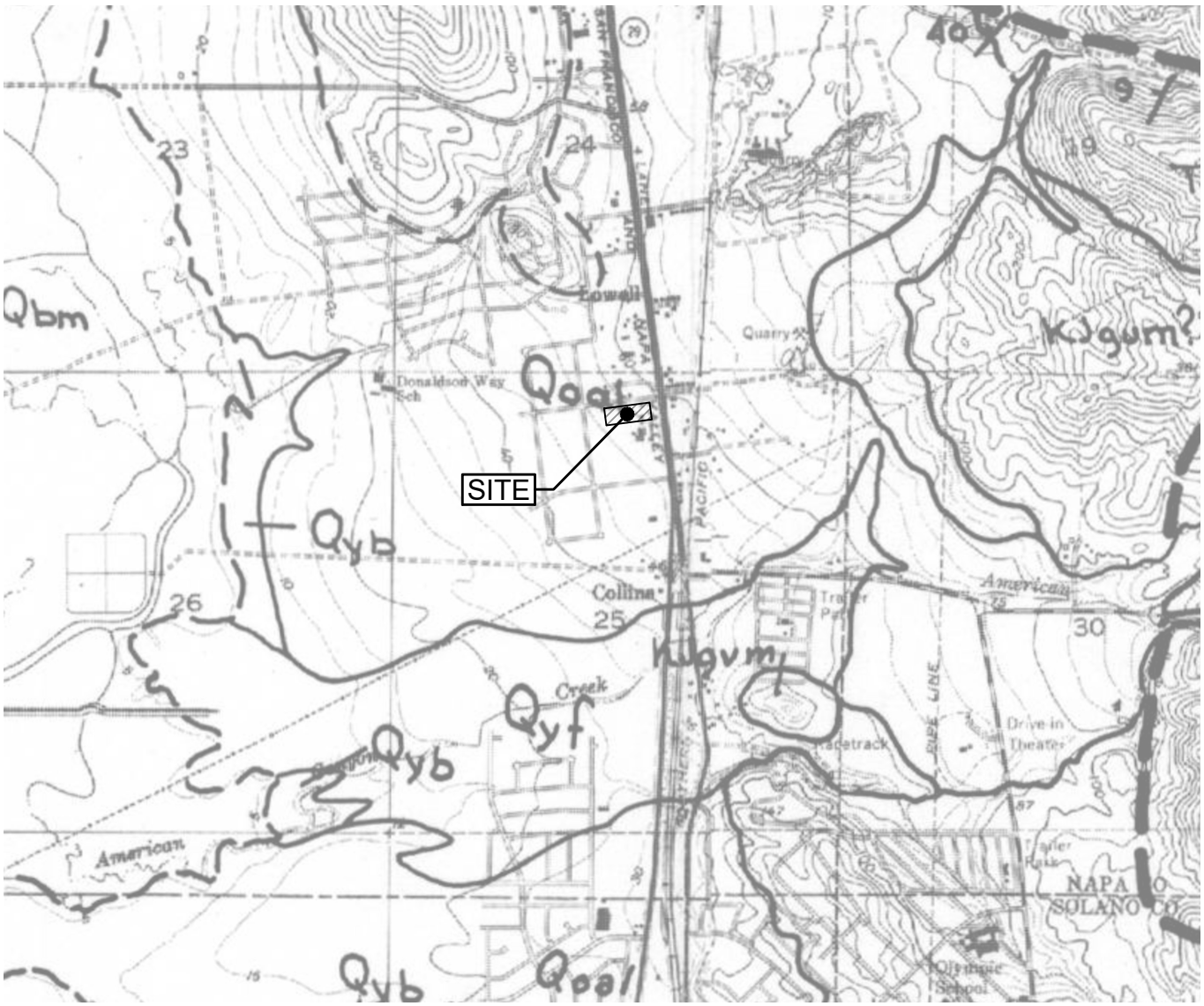
BASE: PORTIONS OF GEOLOGIC MAP OF THE CUTTINGS WHARF AND CORDELIA QUADRANGLES, NAPA AND SOLANO COUNTIES, VERSION 1.0 BY STEPHEN BEZORE, ET ALL, 2002

REGIONAL FGEOLOGIC MAP
Dibblee and Minch, 2006)

Earthquake Fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-312020	Project No. 1501.100	Figure 6

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



N

0 2000

1"=2000'

EXPLANATION

———	CONTACT - DEPOSITIONAL OR INTRUSIVE CONTACT, DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED
Qoal	OLDER ALLUVIUM MAINLY FLOOD-PLAIN AND ALLUVIAL-FAN DEPOSITS ADJACENT TO MOUNTAINOUS AREAS; SAND, GRAVEL, SILT, AND CLAY IRREGULARLY INTERSTRATIFIED, COMMONLY UNCONSOLIDATED.

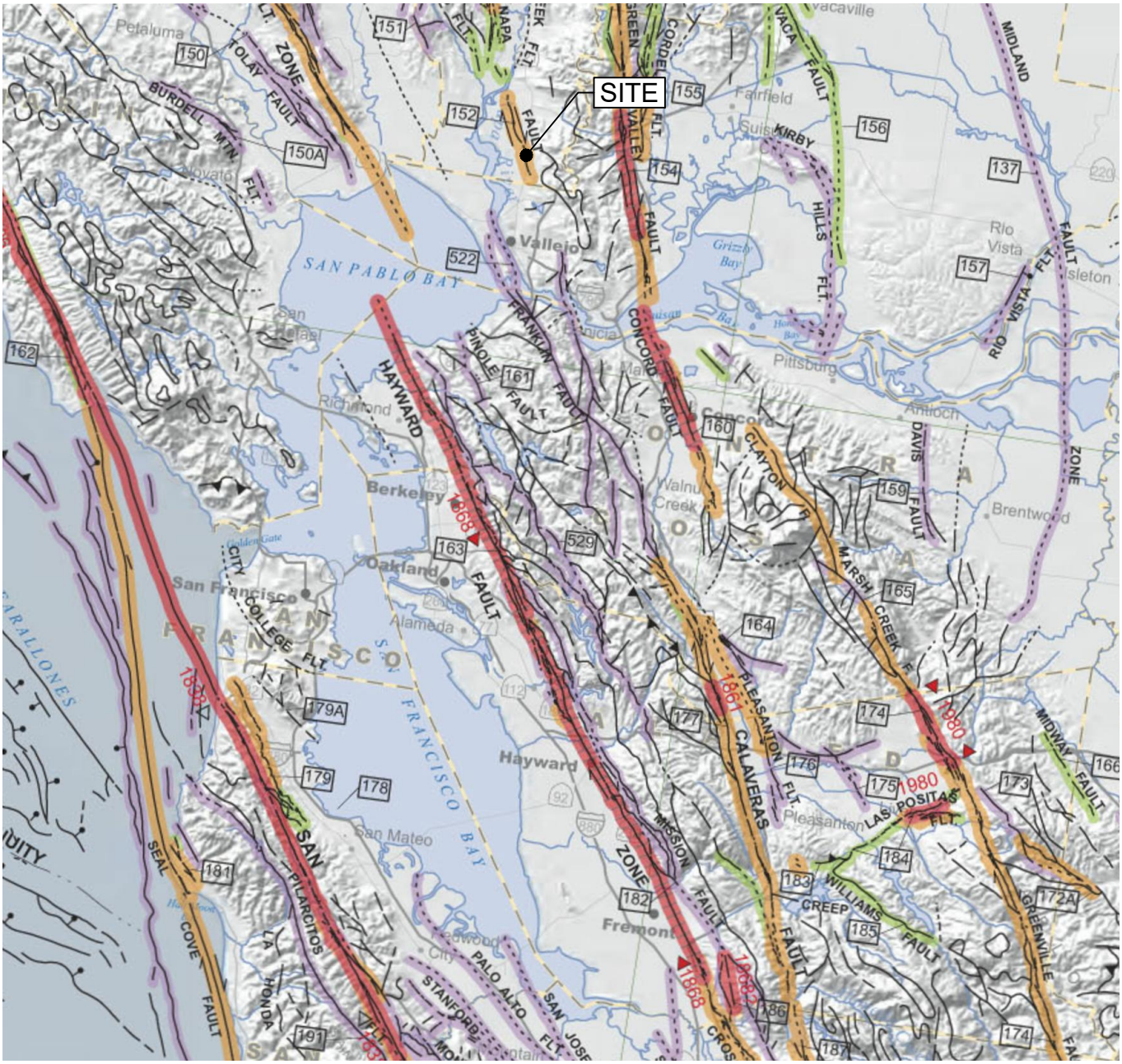
BASE: PORTIONS OF PRELIMINARY GEOLOGIC MAP OF SOLANO COUNTY AND PARTS OF NAPA, CONTRA COSTA, MARIN, AND YOLO COUNTIES, CALIFORNIA, COMPILED BY: J.D SIMS, K.F FOX JR, J.A BARTOW AND E.J. HELLEY, 1973

PRELIMINARY GEOLOGIC MAP
(Sims et al, 1973)

Earthquake Fault Investigation Proposed
Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-312020	Project No. 1501.100	Figure 7

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



EXPLANATION

FAULT ALONG WHICH HISTORIC (LAST 200 YEARS) WITH HISTORIC RECORD DISPLACEMENT HAS OCCURRED

HOLOCENE FAULT DISPLACEMENT (WITHIN PAST 11,700 YEARS) WITHOUT HISTORIC RECORD

LATE QUATERNARY FAULT DISPLACEMENT (WITHIN PAST 700,000 YEARS)

QUATERNARY FAULT (AGE UNDIFFERENTIATED)

PRE-QUATERNARY FAULT

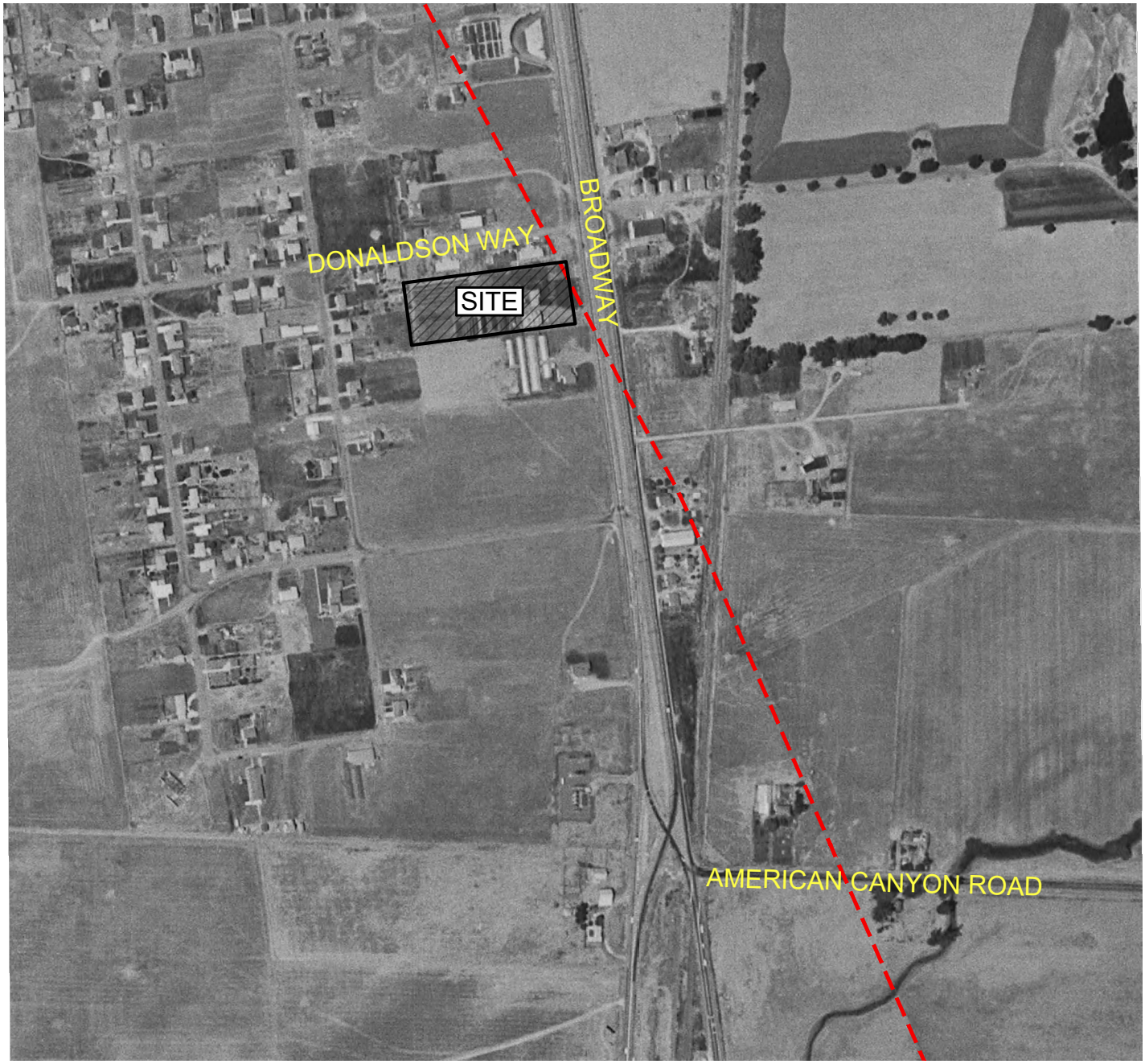
BASE: JENNINGS, J.W. AND BRYANT, W.A., 2010 FAULT ACTIVITY MAP OF CALIFORNIA: CALIFORNIA GEOLOGICAL SURVEY, GEOLOGIC DATA MAP NO. 6.

BAY AREA FAULT MAP (Jennings, 2012)

Earthquake fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-31-2020	Project No. 1501.100	Figure 8

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



EXPLANATION

PHOTO LINEAMENT

N

0 500

1"=500'

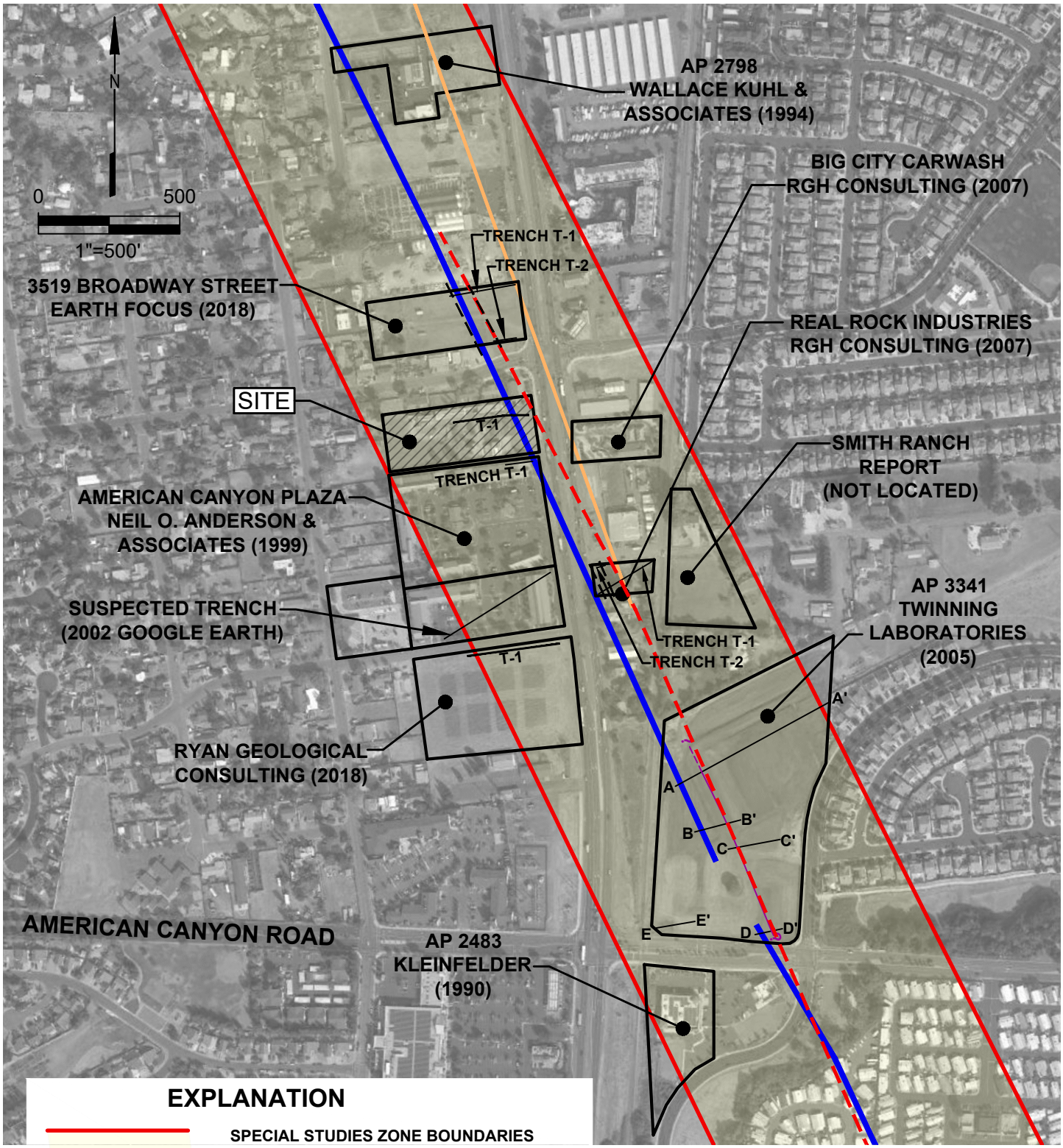
BASE: AERIAL PHOTO DATED 1958

AERIAL PHOTO INTERPRETATION MAP

Earthquake fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-31-2020	Project No. 1501.100	Figure 9

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



EXPLANATION

SPECIAL STUDIES ZONE BOUNDARIES
THESE ARE DELINEATED AS STRAIGHT-LINE SEGMENTS.

MAPPED FAULT TRACES
(STATE OF CALIFORNIA, 2018)

APPROXIMATE LOCATION OF FAULT INVESTIGATION REPORTS ON FILE WITH STATE OF CALIFORNIA

APPROXIMATE TRENCH LOCATIONS

FAULTS LOCATED IN AP STUDIES

AIR PHOTO LINEAMENT

FAULT INTERPRETATION MAP

Earthquake Fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

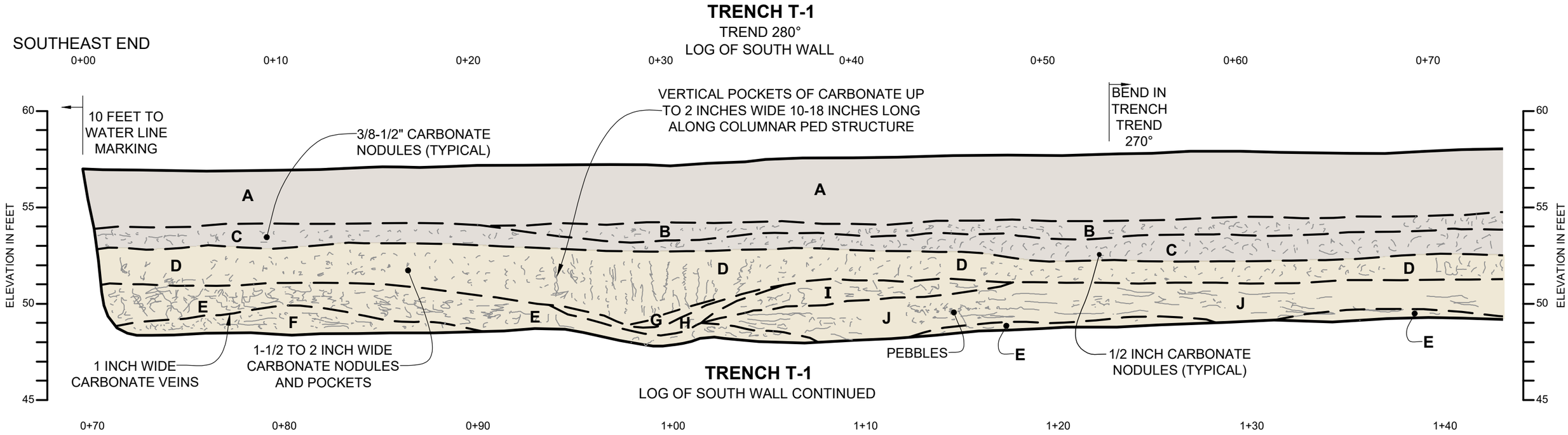
Date: 10-31-2020	Project No. 1501.100	Figure 10

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

TRENCH T-1

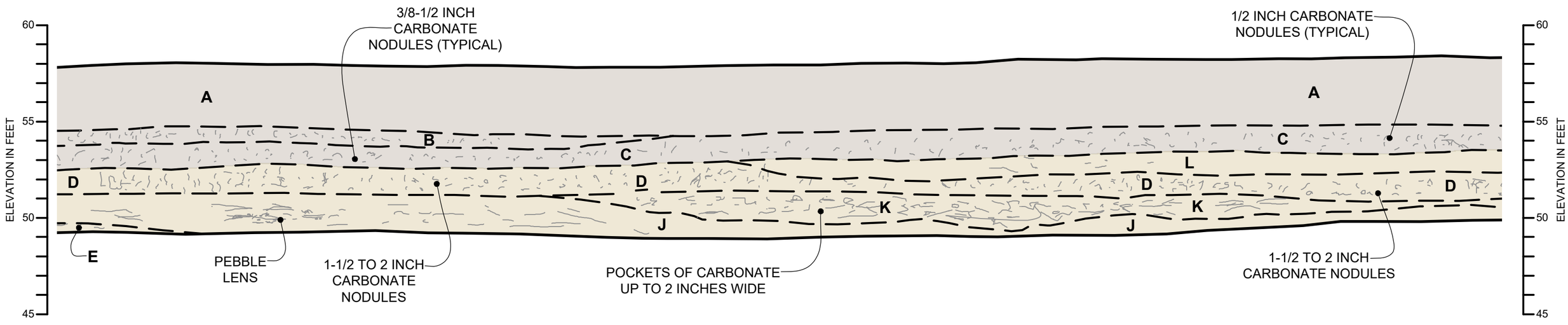
TREND 280°

LOG OF SOUTH WALL



TRENCH T-1

LOG OF SOUTH WALL CONTINUED



TRENCH T-1 EXPLANATION

GROUND SURFACE AND BOTTOM OF TRENCH

GEOLOGIC CONTACT, SOLID WHERE SHARP, DASHED WHERE APPROXIMATE

HOLOCENE SOIL DEVELOPMENT

PLEISTOCENE FAN DEPOSITS

A FAT CLAY, BLACK (10YR 2/1), MOIST, VERY STIFF, BLOCKY PED STRUCTURE

B CLAY, DARK YELLOWISH BROWN (10YR 5/4), MOIST, STIFF, SOIL INVERSION CRACKS FILLED WITH UNIT A

C CLAY, VERY DARK GRAY (10YR 3/1), MOIST, STIFF TO VERY STIFF, CARBONATE NODULES AND POCKETS UP TO 1/2 INCH DIAMETER

D CLAY, OLIVE-BROWN (2.5Y 4/3), MOIST, VERY STIFF, CARBONATE NODULES UP TO 1-1/2 INCH DIAMETER, BLOCKY PED STRUCTURE WITH CLAYSKINS ON PED SURFACES

E SANDY CLAY, BROWN (7.5YR 5/4), MOIST, STIFF, ABUNDANT CARBONATE POCKETS UP TO 3 INCHES WIDE

F SILTY SAND, STRONG BROWN (7.5YR 4/6), MOIST, DENSE, MEDIUM-TO COARSE-GRAINED SAND, TRACE CLAY

G SILTY SAND, BROWNISH YELLOW (10YR 6/6), WITH ABUNDANT OXIDATION STAINS, MOIST, DENSE TO VERY DENSE, FINE-GRAINED SAND, SOME CLAY

H SANDY CLAY, DARK BROWN (7.5YR 3/4), MOIST,STIFF

I CLAYEY SAND, OLIVE-BROWN (2.5Y 4/3), MOIST, DENSE, MEDIUM-GRAINED SAND, TRACE CARBONATE

J SANDY SILT WITH CLAY, LIGHT OLIVE-BROWN (2.5Y 5/3), MOIST, STIFF, COARSE-GRAINED SAND, TRACE CARBONATE

K SANDY CLAY, OLIVE-BROWN (2.5Y 4/3), MOIST, STIFF, MEDIUM-GRAINED SAND, CARBONATE POCKETS UP TO 1-1/2 INCH WIDE

L CLAY, OLIVE-BROWN (2.5Y 4/3), MOIST, STIFF, BLOCKY PED STRUCTURE WITH CLAY SKINS ON PED SURFACES

M CLAY, LIGHT OLIVE-BROWN (2.5Y 5/3), MOIST, VERY STIFF, BLOCKY PED STRUCTURE WITH CLAYSKINS ON PED SURFACES, FINE-GRAINED SAND

TRENCH T-1

Earthquake fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-31-2020	Project No. 1501.100	Figure 11

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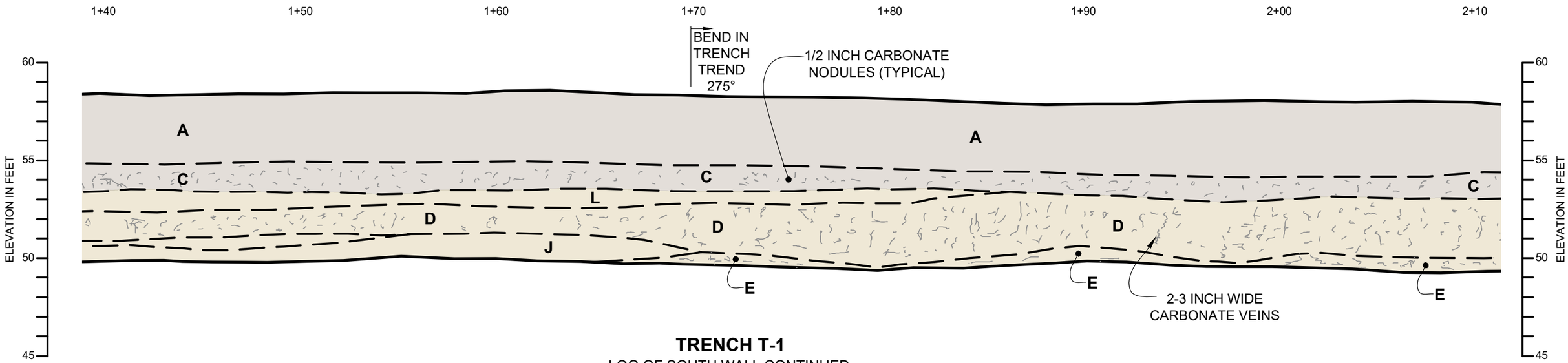
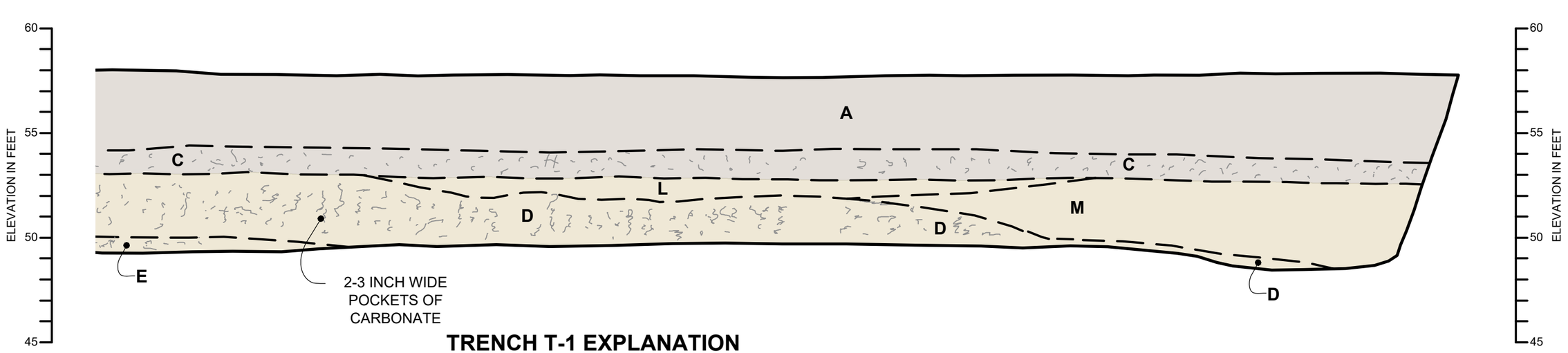
TRENCH T-1
LOG OF SOUTH WALL CONTINUED



TRENCH T-1
LOG OF SOUTH WALL CONTINUED

WEST END



TRENCH T-1 EXPLANATION

GROUND SURFACE AND BOTTOM OF TRENCH

GEOLOGIC CONTACT, SOLID WHERE SHARP, DASHED WHERE APPROXIMATE

HOLOCENE SOIL DEVELOPMENT

PLEISTOCENE FAN DEPOSITS

A FAT CLAY, BLACK (10YR 2/1), MOIST, VERY STIFF, BLOCKY PED STRUCTURE

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G SILTY SAND, BROWNISH YELLOW (10YR 6/6), WITH ABUNDANT OXIDATION STAINS, MOIST, DENSE TO VERY DENSE, FINE-GRAINED SAND, SOME CLAY

H SANDY CLAY, DARK BROWN (7.5YR 3/4), MOIST,STIFF

I CLAYEY SAND, OLIVE-BROWN (2.5Y 4/3), MOIST, DENSE, MEDIUM-GRAINED SAND, TRACE CARBONATE

J SANDY SILT WITH CLAY, LIGHT OLIVE-BROWN (2.5Y 5/3), MOIST, STIFF, COARSE-GRAINED SAND, TRACE CARBONATE

K SANDY CLAY, OLIVE-BROWN (2.5Y 4/3), MOIST, STIFF, MEDIUM-GRAINED SAND, CARBONATE POCKETS UP TO 1-1/2 INCH WIDE

L CLAY, OLIVE-BROWN (2.5Y 4/3), MOIST, STIFF, BLOCKY PED STRUCTURE WITH CLAY SKINS ON PED SURFACES

M CLAY, LIGHT OLIVE-BROWN (2.5Y 5/3), MOIST, VERY STIFF, BLOCKY PED STRUCTURE WITH CLAYSKINS ON PED SURFACES, FINE-GRAINED SAND

TRENCH T-1

Earthquake fault Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 10-31-2020	Project No. 1501.100	Figure 12

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D.2 - Geotechnical Investigation Report Hilton Hampton Inn

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GEOTECHNICAL INVESTIGATION
PROPOSED HILTON HAMPTON INN
3439, 3441#A, 3441B AND 3443 BROADWAY
APN 058-312-010
AMERICAN CANYON, CALIFORNIA

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DECEMBER 15, 2020
JOB NO. 1501.101

RYAN GEO*LOGICAL* CONSULTING, INC.
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Boring Logs and Key to Boring Log Symbols

APPENDIX B
Laboratory Test Results

APPENDIX C
Liquefaction Analysis

RYAN GEO*LOGICAL* CONSULTING, INC.
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December 15, 2020
Job No. 1501.101

Mr. Jay Patel
Anjani Management LLC
PO BOX 81738
Lafayette, LA 70598

Subject: Geotechnical Investigation
Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B and 3443 Broadway
American Canyon, California

Dear Mr. Patel:

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed Hilton Hampton Inn located at the contiguous property at 3439, 3441#A, 3441#B and 3443 Broadway (APN 058-312-010) in American Canyon, California. The approximate location of the site is shown on the attached Vicinity Map, Figure 1. Based on our discussion with your representatives, we understand the site is under consideration for development into a Hilton Hampton Inn. We were provided the plan titled "*Horizontal Control Plan, Hilton Hampton Inn, 3443 Broadway, Napa County"* by AMS Associates, Inc. from Walnut Creek, California dated August 4, 2020 that shows the location of the proposed building.

As you are aware, the site is located within the State of California designated Earthquake Fault Zone for the active West Napa fault (CGS, 2018); therefore, a fault investigation is required in accordance with the Alquist-Priolo Earthquake Fault Zoning Act (AP Act). We previously conducted a fault investigation of the site and presented the results in our report dated October 31, 2020. A portion of the State of California Earthquake Zones of Required Investigations Map is provided on Figure 2 for reference. Recommended fault setbacks are shown on the Site Plan, Figure 3.

2.0 PURPOSE AND SCOPE OF SERVICES

The purpose of this investigation was to conduct a geotechnical exploration to evaluate the subsurface conditions at the site and to provide design-level geotechnical recommendations for site development. We performed the following scope of services for the project:

1. Reviewed readily available maps and literature pertinent to the site.
2. Reviewed existing information contained in our files.
3. Marked the site for underground utility clearance.
4. Obtained drilling permits from Napa County.

5. Contracted with drilling companies to drill 4 exploratory borings up at about 24½ feet below the ground surface (bgs) and perform 2 cone penetration tests (CPT's) up to 32 feet bgs.
6. Performed lab testing on selected representative samples collected from the borings.
7. Engineering geologic and geotechnical engineering evaluation of our findings.
8. Consultation with your design team regarding our findings.
9. Preparation of this report.

3.0 FIELD INVESTIGATION

Our field investigation for this project was conducted between September 22 and October 5, 2020. The investigation included the drilling and logging of 4 exploratory borings, designated as B-1 through B-4, and performing 2 CPTs, designated as CPT-1 and CPT-2, at the approximate locations shown on the Site Plan, Figure 2. Prior to beginning our field investigation, we obtained a drilling permit from the Napa County as required. Boring and CPT locations were cleared of underground utilities by contacting Underground Service Alert (USA) and by Geo Tech Utility Locating, a private utility locator out of Moraga, California.

3.1 EXPLORATORY BORINGS

Exploratory borings (B-1 through B-4) were advanced to depths between about 21½ and 24½ feet below the ground surface (bgs) by Pearson Drilling from Forestville, California on September 22, 2020. Borings were advanced using a truck-mounted B-24 drill rig equipped with solid-stem flight augers. The approximate locations of the borings drilled as part of this project are shown on the Site Plan, Figure 3.

The materials encountered in each boring were logged and classified in the field and supplemental review was conducted in our office. Drive samples were collected at various intervals with a 2½-inch inside diameter split-barrel Modified California (MC) sampler lined with brass/steel sample tubes. The sampler was driven 18 inches at the desired sample depth by dropping a 140-pound hammer from a height of about 30 inches using an auto-hammer. The number of times the hammer was dropped (blow counts) were recorded in 6-inch increments. The blow counts required to drive the MC sampler the final 12 inches of the interval were converted to approximate SPT N-values using a factor of 0.6 to account for sampler type and approximate hammer energy. The converted SPT N-values are presented on the respective Boring Logs provided on Figures A-1 through A-7, followed by a Key to Boring Symbols on Figure A-8.

3.2 CONE PENETRATION TESTS

Cone penetration tests CPT-1 and CPT-2 were advanced to obtain in-situ soil data at the approximate locations shown on the Site Plan, Figure 3. CPT-1 and CPT-2 were advanced to depths of 24 and 32 feet bgs, respectively, by Benevent Building from Concord, California on October 5, 2020. The CPTs were performed by hydraulically pushing a 1.7-inch-diameter cone-tipped probe with a projected area of 15 square centimeters into the ground until refusal was met. The cone-tipped probe measured tip resistance and the friction sleeve behind the cone tip measured frictional resistance. Electrical strain gauges within the cone continuously measured soil parameters for the entire depth advanced. Soil data, including tip resistance and frictional resistance, were recorded by a computer while the test was conducted. The CPT

logs showing tip resistance and friction ratio, as well as interpreted soil behavior type are presented on Figures B-1 and B-2 in Appendix C.

4.0 LABORATORY TESTING

Laboratory testing was performed on selected representative samples of the earth materials collected from the borings. We transported samples to the B. Hillebrandt Soil Testing laboratory in Alamo, California for density, moisture content, gradation and Atterberg limits (plasticity) to evaluate the in-situ conditions and expansion potential of the soils at the site. The results of the laboratory tests are summarized on the respective Boring Logs. Laboratory test results are provided in Appendix B.

5.0 FINDINGS

5.1 SITE DESCRIPTION

The site is located on the western side Broadway (Highway 29) about 100 feet south of its intersection with Donaldson Way in American Canyon, California at the approximate location shown on Figure 1. The site consists of 4 building addresses (3439, 3441#A, 3441#B and 3443 Broadway) on a single roughly 2½-acre parcel designated as APN 058-312-010. The rectangular-shaped site measures approximately 200 feet in the north-south direction along Broadway and extends about 540 feet to the west. The site is relatively flat lying, ranging from about Elevation 60 Feet in the northeastern corner to about Elevation 52 in the southwestern corner.

The site is partially developed with 4 buildings as noted above. Two 1-story residential buildings (1439 and 3441 Broadway) occupy the eastern portion of the site and two 1-story warehouse-type/retail buildings are located along the northern property boundary. The eastern portion of the site is paved with old distressed asphalt concrete. The western half of the property is covered with seasonal grasses and is used for horse grazing. A water well and associated windmill are in the eastern portion of the site in front of the building at 3441 Broadway as shown on the Site Plan, Figure 3.

5.2 REGIONAL GEOLOGIC CONDITIONS

5.2.1 Geology

The site is in the Coast Ranges Geomorphic Province of California. The Coast Ranges are characterized by a series of northwest-trending, folded and faulted mountain chains and intervening valleys. The Coast Ranges were initially uplifted during collision between the Farallon and North American tectonic plates. The prominent northwest-trending structural trend of the Coast Ranges is the result of subsequent right-lateral strike-slip faulting along the San Andreas fault system, a roughly 600-mile-long fault that is considered to be the generally accepted boundary between the Pacific and North American tectonic plates. The fault trends northwest from the Gulf of California, through the Coast Ranges and ends in the Pacific Ocean at the triple junction near Point Arena. Most of the active deformation in the San Francisco Bay Area is believed to have occurred over the past few million years. As a result, the area is highly faulted and folded.

Regional geologic maps (listed in the references) show the site to be underlain by an alluvial fan deposits that were generated from the hills to the east. The fan deposits are considered Late Pleistocene to Early Holocene[1] in age according to regional geologic maps (Sims *et al.*, 1973, Sowers et al, 1998, and Witter *et al*, 2006). The distal ends of the fan are generally older than the near-source portions. Additionally, the older Pleistocene soils are much sandier and more oxidized than the clay-rich Holocene soils. The broad large-scale maps by Sowers *et al.* (1998) and Witter *et al.*, (2006) interpreted Late Pleistocene to Early Holocene alluvial fan deposits, map symbol "*Qf*" underlying the site. The mapping of Sims *et al.* (1973) delineated younger Holocene deposits from the older Pleistocene deposits. At the site, the Sims *et al.* (1973) map shows the site to be underlain by older alluvium, map symbol "*Qoal*". The regional geologic maps all show the West Napa Fault about 100 feet west of the northeastern corner of the site. A portion of the Dibblee and Minch (2006) geologic map is provided on Figure 4 and the older 1973 map by Sims *et al*. is provided on Figure 5 for reference.

5.2.2 Earthquake Faults

The site is in an area considered to have a relatively high seismicity due to the proximity of several active faults in the region as shown on Figure 6. As previously discussed, the site is located within a State of California designated Earthquake Zones of Required Investigation for the active West Napa fault (Figure 2). We previously conducted a fault investigation of the site and concluded that the West Napa fault was present near the eastern site boundary as shown on Figure 3. The State of California considers a fault active if it has demonstrated movement within the Holocene Epoch of geologic time, within the past roughly 11,700 years. Only Holocene-active faults that are sufficiently active and sufficiently well-defined near the ground surface are zoned in accordance with the A-P Act.

Potentially active faults are faults with Quaternary displacement (within the past 1.6 million years) but do not show evidence for Holocene activity, these faults are considered Pre-Holocene faults (Special Publication 42, 2018 update) and do not meet the criteria for zoning under the AP Act. Some faults in this category may be active with a smaller role in the tectonic setting or with a larger recurrence interval than would be detected under the AP-Act or simply have not been adequately characterized to date.

Quaternary faults near the site include the South Hampton fault and Franklin fault located about 3½ miles to the southwest and 7 miles to the southeast, respectively. While these faults are not zoned as active faults, there is some debate about their role in the tectonic setting as slip is transferred from the north end of the Calaveras fault to the northwest into the West Napa and Rodgers Creek fault systems. The Soda Canton fault is located along the eastern side of Napa Valley about 10½ miles northeast of the site. The Tulay and Lakeview faults are located about 11 and 12 miles to the west, respectively. The Bennet Valley fault is located about 12½ miles to the northwest, and the Burdell Mountain fault is about 15½ miles southwest of the site.

[1] The beginning of the Holocene Epoch of geologic time was about 11,700 years before present. The older Pleistocene Epoch extends from about 11,700 years back to about 1.5 million years before present.

Table 1 below lists known active faults that are believed to present the highest potential levels of ground shaking at the site, their distances from the site based on the KML files in the Quaternary Fault and Fold Database (QFFD), estimated slip rate, and potential maximum moment-magnitude event. Faults listed below are those shown in the 2008 Fault Source Map contained in the 2014 Fault Parameters by the U.S. Geological Survey's Earthquake Hazards Program, arranged in order of increasing distance from the site.

TABLE 1. Potential Active Earthquake Fault Sources

FAULT SOURCE[2]	APPROXIMATE DISTANCE TO FAULT TRACE (Miles)[3]	COMPASS DIRECTION TO FAULT	SLIP RATE (Millimeters per year)[4]	MAXIMUM E.Q. MAG. (Mm)
West Napa fault	See Figure 3		1 ± 1	6.97
Green Valley fault	6	NE	5 ± 3	6.30
Cordelia fault	7¼	NE		
Rodgers Creek fault - Southern	9½	SW	9 ± 2	7.58
Hayward fault - Northern	10½	SW	9 ± 2	7.00
Concord fault	11	SE	4 ± 2	6.45
Greenville fault – Clayton Section	21	SE	2 ± 1	6.86
Mt. Diablo Thrust[5]	22½	SE	2 ± 1	6.72
Calaveras fault - Northern	25	S	6 ± 2	6.86
San Andreas fault – 1906 Rupture	29	SW	24 ± 3	7.38
Greenville fault – Marsh Creek Section	33½	SE	2 ± 1	6.64
San Gregorio	30	SW	7 ± 3	7.44
Maacama	30	NW	9 ±	6.9

5.2.3 Seismicity

Historically, several large magnitude earthquakes (greater than M6.0) have occurred in the S.F. Bay Area across several faults including the San Andreas, Hayward, Calaveras and West Napa faults. A summary of the earthquake events are provided below.

Since 1800, four major earthquakes have been recorded on the San Andreas Fault. In 1836, an earthquake occurred on the San Andreas Fault with an estimated Moment Magnitude of about 6.25 and an estimated maximum intensity of VII on the Modified Mercalli (MM) scale. The earthquake epicenter is believed east of Monterey Bay in the San Juan Valley (Toppozada and Borchardt 1998). In 1838, an earthquake with a Mw of 7.5 occurred along the peninsula between San Francisco and San Juan Buatista; this earthquake had an estimated intensity of about VIII-IX on the MM scale. The San Francisco Earthquake of 1906

[2] Fault sources included in the 2014 Fault Parameters provided by the U.S. Geological Survey's Uniform Earthquake Rupture forecast version 3.0.
[3] Fault locations and distances to the site were determined from the KML files provided from the Quaternary Fault and fold Database and were measure from the center of the proposed development site.
[4] Slip rates obtained from Cao *et a*l. (2003).
[5] The Mount Diablo Thrust fault is a blind fault that is not zoned in accordance with the A-P Act due to insufficient evidence of activity and surface expression. While it is mapped a Quaternary fault, it is considered a potential seismic source and is therefore also included in Table 1 above.

caused the most significant damage in the history of the Bay Area in terms of loss of lives and property damage. The 1906 earthquake had a Mw of 7.9 and a maximum intensity of XI on the MM scale. This earthquake created approximately 470 kilometers of surface rupture along the San Andreas Fault from Shelter Cove to San Juan Bautista and was felt approximately 560 kilometers away in Oregon, Nevada, and Los Angeles. The Loma Prieta Earthquake of October 17, 1989 had a magnitude M_w of 6.9 with an intensity of IX on the MM scale. The Loma Prieta earthquake occurred in the Santa Cruz Mountains about 79 kilometers south of the site.

In the East Bay, an earthquake measuring an estimated maximum intensity of X on the MM scale occurred on the southern segment of the Hayward fault between San Leandro and Fremont in 1968. The estimated magnitude of the earthquake was 7.0. In 1861, an earthquake of unknown magnitude (probably about M_w 6.5) was reported on the Calaveras Fault. The most recent significant earthquake on this fault was the 1984 Morgan Hill earthquake (M_w = 6.2).

In the North Bay, on August 24, 2014, an earthquake occurred on a splay of the West Napa fault about 69 kilometers northwest of the site. The epicenter of this earthquake was located about 10 kilometers southwest of the Town of Napa, California. The earthquake had a Mw of 6.0 and a maximum intensity of VIII on the MM scale.

The site is in an area considered to have a relatively high seismicity due to the proximity of several active faults in the region. Given the relatively high seismicity in the region, the site is expected to experience at least one moderate to large magnitude earthquake in the future. The 2013 Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3) estimates there is 100% likelihood that the San Francisco Bay Area will experience a moderate to large earthquake in the next 30 years as summarized in Table 2 below.

TABLE 2. Likelihood and Recurrence of Selected Earthquakes in the San Francisco Bay Region

Richter Magnitude (greater than or equal to)	Average recurrence interval (years)	30-year likelihood of one or more events (%)
5	1.3	100
6	8.9	98
6.7	29	72
7	48	51
7.5	124	20
8	824	4

5.3 SUBSURFACE CONDITIONS

During this investigation, we encountered Pleistocene-age alluvial fan deposits that extend to the full depth explored, about 32 feet bgs. In Borings B-1 and B-2, we encountered about one foot of gravelly clay fill overlying the alluvium. The upper 3 to 5 feet of the alluvial fan deposits have developed a dark brown clay-rich soil during the Holocene times. Below depths of 3 to 5 feet bgs, the fan deposits consist of thin layers of sandy clay that are brown to yellow-brown, moist and stiff to very stiff in geotechnical terms.

Several carbonate-rich horizons were encountered in the exploratory trench from our October 31, 2020 report and in our recent borings. Atterberg limits tests performed on selected representative samples of the soils indicate the upper 3 to 5 feet or dark brown soil is highly expansive based on Plasticity Indices (PI's) between 27 and 35. For detailed descriptions of the subsurface materials encountered during this investigation refer to the individual boring logs in Appendix A.

5.4 GROUNDWATER

The West Napa fault is a well-established groundwater barrier. Groundwater elevations measured in nearby wells show the groundwater to be significantly higher on the eastern side of the fault, within a few feet of the ground surface. Groundwater levels on the west side of the fault are much lower.

At the site, groundwater was encountered in Borings B-1 through B-4 at depths between about 13 and 22 feet bgs. Groundwater levels in B-1 and B-2 were allowed to stabilize prior to grouting. Water levels rose 5 to 6 feet within a couple hours at the B-1 and B-2 locations. In our opinion, these groundwater levels most likely represent perched water layers and not the groundwater aquifer. The well log from a 200-feet-deep irrigation well that was installed in 2015 at the approximate location shown on Figure 3 indicated first water at a depth of 25 feet and a static water level at 30 feet bgs. The well has a reported yield of about 25 gallons per minute. These water levels are all west of the fault.

On the western side of the fault, our exploratory trench near the corner of Crawford Way and Broadway encountered groundwater about 8½ feet bgs (Ryan, 2018). Groundwater was encountered at depths between about 3 and 4½ feet in exploratory trenches excavated near the northwestern corner of Donaldson Way and Broadway. (Earth Focus Geological Services, 2018). Water levels in the trench were reported to be on the eastern side of the fault and not encountered west of the fault within their approximately 8 feet deep trench. East of the fault, groundwater elevations reported in the Cook Environmental Services, Inc April 4, 2012 report show the depth to groundwater ranging between about 1 ½ to 7 feet bgs in monitoring wells MW-5 through MW-8 near the corner of Donaldson Way and Broadway, about 150 feet north of the site. Groundwater levels should be expected to undergo significant fluctuations depending on seasonal rainfall and local irrigation practices. Groundwater levels encountered in our borings at the site are summarized in Table 3 below.

TABLE 3. Groundwater Elevations Measured in on-site Borings

LOCATION	Depth to Groundwater (feet)	Time Allowed to Stabilize (hours)	Depth to Stabilized Groundwater (Feet)	Groundwater Elevation (Feet MSL)
B-1	21½	2	16½	41 (perched)
B-2	18½	1½	13½	43 (perched)
B-3	13	n/a		40½ (perched)
B-4	17	n/a		37½ (perched)
Irrigation Well	25 (first water)		30 (static)	28 to 33 (2015 data)

5.4 GEOLOGIC HAZARD CONSIDERATIONS

5.4.1 Surface Fault Rupture

The site is located within a State of California designated Earthquake Fault Zone for the active West Napa fault. As previously mentioned, we conducted a fault exploration at the site as summarized in our October 31, 2020 report. The results of the fault investigation indicated that the West Napa fault is present along the eastern site boundary. Based on our fault investigation, we recommend a 50-foot setback for buildings intended for human occupancy as shown on Figure 3. The setback is measured from the eastern end of Trench T-1. The risk of surface fault rupture at the site is considered high within the setback zone. The risk of surface fault rupture is high within the setback zone.

5.4.2 Strong Ground Shaking

Given the relatively high seismicity in the region, the site is expected to experience at least one moderate to large magnitude earthquake in the future. The Working Group on Earthquake Probabilities (2008) estimates there is a roughly a 65% probability that the San Francisco Bay Area will experience a magnitude 6.7 (or greater) earthquake within the next 30 years. Strong ground shaking from a major earthquake is a hazard that cannot be eliminated, but the effects can be reduced by observation of sound construction practices and observance of current seismic design codes as provided below in Section 6.9. Given the high likelihood of a moderate to strong earthquake occurring in the vicinity, ground shaking can vary depending on the site geology, proximity to the earthquake epicenter, and quality of construction. Table 4 below presents the Modified Mercalli Intensity Scale that measures earthquakes based on their effects at any given location correlated to the Righter Magnitude which measures earthquake energy.

TABLE 4. Modified Mercalli Intensity Scale

Intensity Value	Intensity Description	Richter Magnitude
I	Not felt except by a very few persons under especially favorable circumstances.	2
II	Felt only by a few persons at rest, especially on upper floors on buildings. Delicately suspended objects may swing.	2
III	Felt noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly, vibration similar to a passing truck. Duration estimated.	3
IV	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	4
V	Felt by nearly everyone, many awakened. Some dishes and windows broken; a few instances of cracked plaster; unstable object overturned. Disturbances of trees, poles may be noticed. Pendulum clocks may stop.	4
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; and fallen plaster or damaged chimneys. Damage slight.	5
VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.	5 to 6

VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly build structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.	6
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	7
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.	7
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	8+
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown in to the air.	8+

5.4.3 Liquefaction Potential

Liquefaction is a temporary transformation of a saturated cohesionless soil into a viscous fluid due to a reduction in strength during cyclic loading such as that produced by earthquakes. When a saturated, cohesionless soil liquefies, it experiences a temporary loss of shear strength created by a transient rise in excess pore pressure generated by strong ground motion. Soils susceptible to liquefaction include loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures and sand boils are evidence of excess pore pressure generation and liquefaction. Liquefaction typically occurs in the upper 50 feet.

Liquefaction susceptibility was assessed using CPT data and the software CLiq 3.0.2.4 (GeoLogismiki, 2019). CLiq uses CPT data collected during advancement of the CPT probe and assesses liquefaction potential, including post-earthquake vertical settlement, given a user-defined earthquake magnitude and PGA. We performed liquefaction triggering analyses using our CPT data in accordance with the methodology proposed by Boulanger and Idriss (2014). Post-earthquake settlements were evaluated using the relationship proposed by Zhang, Robertson, and Brachman (2002) to estimate post-liquefaction volumetric strains and corresponding ground surface settlement; a relationship that is an extension of the work by Ishihara and Yoshimine (1992).

In accordance with the 2019 CBC, we used a PGA of 1.0g in our liquefaction potential evaluation, which is consistent with the Maximum Considered Earthquake Geometric Mean (MCEG) peak ground acceleration adjusted for site effects (PGA_M). We also used a moment magnitude of 6.97, corresponding to the mean characteristic moment magnitude of the West Napa fault, as presented in Table 1. We conservatively

assumed "during earthquake" depth of 10 feet bgs. Based on the Atterberg limits testing, we used an I_c cut-off value of 2.4 in our analysis. The results of our liquefaction potential analysis are presented in Appendix C.

Our liquefaction analysis indicates there are very thin (less than six inches thick), discontinuous layers of medium dense sand, silty sand and sandy silt below the groundwater that are susceptible to liquefaction. We estimate total settlement associated with liquefaction (referred to as post-liquefaction reconsolidation) after a major event on a nearby fault will be less than about 1/4 inch and differential settlement will not exceed 1/4 inches over a horizontal distance of 30 feet.

Considering the depth, thickness, and relative density of the potentially liquefiable layers, we conclude the potential for liquefaction-induced ground settlement, surface manifestations (i.e. sand boils) and lateral spreading is nil.

5.4.4 Cyclic Densification

Cyclic densification (also referred to as differential compaction) of non-saturated sand (sand above groundwater table) can occur during an earthquake, resulting in settlement of the ground surface and overlying improvements. The results of our CPTs indicate the soil above the groundwater at the site generally consists of cohesive soil which is not susceptible to cyclic densification due to its relatively high fines content and cohesion. Therefore, we conclude the potential for ground surface settlement resulting from cyclic densification at the site is nil.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 GENERAL

Based on the results of this investigation, we conclude that the proposed development of the site is feasible from a geologic hazards and geotechnical engineering perspective. The primary geologic and geotechnical factors impacting site development are observing the recommended fault setback shown on the Site Plan, expansive soil characteristics, fault/utility crossings and relatively shallow groundwater conditions east of the fault. Design-level geotechnical recommendations for site improvement are provided below.

6.2 EARTHQUAKE FAULT SETBACKS

As previously mentioned, we conducted an earthquake fault exploration of the site as summarized in our October 31, 2020 report. Based on the results of our fault investigation, we concluded that the West Napa fault is present near the eastern site boundary and recommended a 50-foot setback for buildings intended for human occupancy. The recommended fault setbacks are shown on the attached Site Plan, Figure 3. The recommended fault setbacks do not impact the currently proposed building location.

The West Napa fault crosses the existing water and sewer lines along the eastern site boundary as shown on the Site Plan, Figure 3. The utility main lines are expected to be offset and damaged during movement

along the fault. To reduce the potential for the new on-site utilities for the hotel building to be offset and damaged during an earthquake, we recommend that all utility connections to the new development connect to the main lines on the southern side of the fault crossings. Flexible pipe connections should be considered.

6.3 EXPANSIVE SOIL CONSIDERATIONS

The soil materials underlying the site are considered highly expansive. When expansive soils are subjected to increases in moisture content, such as during the rainy season, they swell if unconfined. Similarly, when allowed to dry, the expansive soils shrink. If concrete slabs or shallow foundations confine the expansive soils, they can exert significant pressures when subjected to changes in moisture. Foundations gaining support from the expansive soil zone have potential to move up and down seasonally along with the soils.

Expansive clays are chronic in the northern Bay Area. Over the past several decades, expansive soil movements have caused extensive damage to residential and commercial structures, slabs, and pavements throughout the region. The local climate, with its pronounced wet and dry seasons, is a main cause of seasonal moisture changes that cause the expansive soils to shrink and swell.

There are several methods available for reducing the adverse effects of expansive soils. These include removing the expansive soils, replacing expansive soils with non-expansive engineered fill, deepening foundations to develop support below the zone of significant seasonal moisture change (about 24 to 36 inches), designing foundation/slab systems to resist uplift pressures generated by swelling soils, and/or providing drainage and landscaping to minimize seasonal moisture fluctuations in the near-surface soils.

Drainage and landscaping improvements adjacent to slabs and foundations should be designed to promote efficient runoff during the rainy season and to provide sufficient irrigation in landscaped areas to prevent drying of the upper soils during the summer. The recommendations below are intended to minimize the adverse effects of expansive soils.

6.4 SITE PREPARATION AND GRADING

6.4.1 Demolition of Existing Structures

We understand that the existing buildings are to be demolished to facilitate the new development. Site demolition should include the removal of all foundation elements, existing pavements and flatwork and remove underground utilities. In general, abandoned underground utilities should be removed to the project limits or service connections and properly capped or plugged with concrete. Where existing utility lines will not interfere with the proposed construction, they may be abandoned in-place provided the lines are filled with lean concrete or cement grout to the project limit. Holes resulting from the removal of any obstructions that extend below the proposed finished grade should be cleared and backfilled with suitable material compacted to the requirements given below under Section 6.3.2. We recommend that the excavations to remove buried foundation, utilities, undocumented fill, etc. be carried out under the observation of a representative from our firm to check that these excavations are properly backfilled.

6.4.2 Earthwork Recommendations

All earthwork operations performed to achieve site grades should be completed in accordance with the following recommendations:

1. The existing soils at the site are considered suitable for re-use as engineered fill provided they are free of organics, debris or any other geotechnically unsuitable materials.
2. Any vegetation and organic topsoil should be stripped in areas to receive improvements (i.e., building, pavement, or flatwork).
3. All areas to receive engineered fill should be scarified to a minimum depth of 12 inches, moisture-conditioned to at least 4 percent above optimum[6] moisture content and compacted to between 87 and 92 percent relative compaction[7].
4. The fill should not contain debris or rock fragments larger than 6 inches in diameter.
5. Fill should be placed in thin lifts, typically 6 to 10 inches in loose thickness, depending on compaction equipment, moisture-conditioned to at least 4 percent over optimum, and compacted to between 87 and 92 relative compaction. Low-plasticity fill (defined as soil with a PI less than 15) should be moisture-conditioned to above optimum moisture content and compacted to at last 90 percent relative compaction.
6. Pavement subgrade areas should be moisture-conditioned to above optimum moisture content and compacted to at least 90 percent to provide a smooth unyielding surface. If low-plasticity soil is exposed at pavement subgrade elevation, the subgrade should be compacted to at least 95 percent relative compaction.
7. Observations and field density tests should be performed during fill compaction to verify the required moisture content and relative compaction have been achieved. If the moisture and compaction are not within the recommended ranges, adjustment in the contractor's procedures should be made until the requirements are met.
8. Our firm should be notified at least five business days of any earthwork activities. The contractor's proposed procedures and methods should be discussed between the contractor, owner, and soil engineer. This can facilitate the performance of grading operations and minimize construction delays.

6.4.3 Select Fill

Fill may consist of onsite soil or imported select fill. Select fill should be free of organic matter, contain no rocks or lumps larger than three inches in greatest dimension, have a liquid limit less than 40 and plasticity index less than 15, and be approved by the geotechnical engineer. Fill, including select fill should be placed in lifts not exceeding eight inches in loose thickness, moisture-conditioned to above optimum moisture content, and compacted to at least 90 percent relative compaction. Fill consisting of clean sand

[6] Optimum moisture is the moisture content by weight corresponding to the maximum dry density.
[7] Relative compaction refers to the in-place dry density of a soil expressed as a percentage of the maximum dry density as per the ASTM D-1557 compaction testing procedure.

or gravel (defined as soil with less than five percent fines by weight) should be compacted to at least 95 percent relative compaction. Select fill placed within six inches of soil subgrade for pavement (concrete or asphalt concrete) that will be subjected to vehicular traffic, as well as the overlying Class 2 aggregate base, should be compacted to at least 95 percent relative compaction and be non-yielding.

Samples of proposed select fill material should be submitted to the geotechnical engineer at least five business days prior to use at the site. The grading contractor should provide analytical test results or other suitable environmental documentation indicating the imported fill is free of hazardous materials at least three days before use at the site. If this data is not provided, a minimum of two weeks will be required to perform any necessary analytical testing.

6.4.4 Lime-Treated Soil

One method to mitigate the detrimental effects of expansive near-surface soil and to protect the clay subgrade from excessive wetting or drying would be to treat the upper 18 inches of the building pad subgrade with lime. Where there are patios or sidewalks adjacent to the building, the lime treatment should extend to the outside edge of the patios or sidewalks. If there is landscaping adjacent to the building, the lime treatment should only extend to the edge of the proposed building.

Lime treatment of fine-grained soils generally includes site preparation, application of lime, mixing, compaction, and curing of the lime-treated soil. Field quality control measures should include checking the depth of lime treatment, degree of pulverization, lime spread rate measurement, lime content measurement, and moisture content and density measurements, and mixing efficiency.

The lime treatment process should be designed by a contractor specializing in its use and who is experienced in the application of lime in similar soil conditions. Based on our experience with lime treatment, we judge that the specialty contractor should be able to treat the highly expansive on-site material to produce a non-expansive fill for building pad subgrades and, if desired, for exterior flatwork and pavement subgrades. For planning purposes, we recommend assuming the lime treatment will consist of five percent Dolomitic Quicklime by dry weight of soil. The dry weight of soil should be assumed to be 105 pounds per cubic foot (pcf) for calculating lime quantities. The specialty contractor should: 1) perform a lime demand test prior to treatment to determine the percentage of Quicklime required to achieve a pH of 12.4 or higher in the treated soil, 2) perform an Atterberg limits test to confirm the proposed percentage of Quicklime will reduce the plasticity index of the treated soil to 15 or less, and 3) prepare a lime treatment procedure for our review prior to construction.

6.4.5 Exterior Concrete Flatwork

We recommend a minimum of six inches of Class 2 aggregate base be placed beneath proposed exterior concrete flatwork; the aggregate base should extend at least six inches beyond the slab edges. Aggregate base placed beneath exterior slabs-on-grade should be moisture-conditioned and compacted in accordance with the requirements provided above for select fill.

6.4.6 Utility Trench Backfill

Excavations for utility trenches can be readily made with a backhoe. All trenches should conform to the current CAL-OSHA requirements. To provide uniform support, pipes or conduits should be bedded on a minimum of four inches of sand or fine gravel. After the pipes and conduits are tested, inspected (if required) and approved, they should be covered to a depth of six inches with sand or fine gravel, which should be mechanically tamped. Backfill for utility trenches and other excavations is also considered fill, and should be placed and compacted as according to the recommendations previously presented. If imported clean sand or gravel (defined as soil with less than five percent fines) is used as backfill, it should be compacted to at least 95 percent relative compaction. Jetting of trench backfill should not be permitted. Special care should be taken when backfilling utility trenches in pavement areas. Poor compaction may cause excessive settlements, resulting in damage to the pavement section.

Foundations for the proposed building should be bottomed below an imaginary line extending up at a 1.5:1 (horizontal to vertical) inclination from the base of utility trenches. Alternatively, the portion of the utility trench (excluding bedding) that is below the 1.5:1 line can be backfilled with controlled low-strength material (CLSM) with a 28-day unconfined compressive strength of at least 100 pounds per square inch (psi).

Where utility trenches enter the building pad, an impermeable plug consisting of CLSM, at least three feet in length, should be installed. Furthermore, where sand- or gravel-backfilled trenches cross planter areas and pass below asphalt or concrete pavements, a similar plug should be placed at the edge of the pavement. The purpose of these recommendations is to reduce the potential for water to become trapped in trenches beneath the building or pavements. This trapped water can cause heaving of soils beneath slabs and softening of subgrade soil beneath pavements.

6.4.7 Surface Drainage and Landscaping

Positive surface drainage should be provided around the building to direct surface water away from the foundations. To reduce the potential for water ponding adjacent to the building, we recommend the ground surface within a horizontal distance of five feet from the building slope down away from the building with a surface gradient of at least two percent in unpaved areas and one percent in paved areas. In addition, roof downspouts should be discharged into controlled drainage facilities to keep the water away from the foundations.

6.4.8 Storm Water Treatment Facilities

If storm water treatment systems (infiltration basins, rain gardens, bio-retention systems, vegetated swales, flow-through planters, etc.) are to be constructed at the site, they should be provided with subdrains. Within 10 feet of the proposed building, excavations for storm water treatment systems should have an impermeable liner in addition to the subdrain. Due to the low permeability of the near-surface soil, these systems should not be designed for exfiltration into the subgrade soil. The drainage layer beneath the “treatment” soil should consist of a minimum 12-inch-thick layer of Caltrans Class 2

Permeable drainage material and include a minimum four-inch-diameter perforated drainpipe (perforations facing down).

6.5 FOUNDATION DESIGN

The proposed building may be supported on deepened spread footings bearing on undisturbed native soil. For this foundation option, a conventional slab-on-grade floor underlain by at least 18 inches of select fill may be used. Continuous footings should be at least 18 inches wide and isolated spread footings should be at least 24 inches wide. Exterior spread footings should be bottomed at least 30 inches below the lowest adjacent exterior finished grade or 24 inches below the adjacent building pad subgrade (measured from the top of the lime-treated soil/select fill), whichever is lower. These embedment depths may be decreased by six inches where there is pavement or concrete flatwork adjacent to the building. To mitigate the potential for moisture changes in the soil the slab-on-grade floor, the exterior footings should be connected by either a grade beam or turned-down slab edge bottomed at the same depth as the footings. Interior footings should be bottomed at least 24 inches below the adjacent building pad subgrade. Footings to be constructed near underground utilities should be bottomed below an imaginary line extending up at an inclination of 1.5:1 (horizontal:vertical) from the bottom of the utility trench.

Footings may be designed using allowable bearing pressures of 3,000 psf for dead-plus-live loads and 4,000 psf for total design loads, which include wind or seismic forces. We estimate settlement of footings using these allowable bearing pressures will be less than 3/4 inch and differential settlement will be less than 1/2 inch over a horizontal distance of 30 feet.

Lateral loads may be resisted by a combination of passive pressure on the vertical faces of the footings and friction between the bottoms of the footings and the underlying soil. To compute lateral resistance for footings for sustained load conditions, we recommend using an equivalent fluid weight of 240 pounds per cubic foot (pcf). For transient load conditions, we recommend using a uniform pressure of 1,500 psf to compute passive resistance. The upper foot of soil should be ignored for passive resistance unless confined by a slab or pavement. Frictional resistance should be computed using a base friction coefficient of 0.30. The passive pressure and frictional resistance values include a factor of safety of at least 1.5 and may be used in combination without reduction.

Footing excavations should be free of standing water, debris, and disturbed materials prior to placing concrete. If footings are excavated during the rainy season they should incorporate a rat slab to protect the footing subgrade. This will involve over-excavating the footing by about 2 to 3 inches and placing lean concrete or CLSM in the bottom (following inspection by our engineer). A rat slab will help protect the footing subgrade during placement of reinforcing steel. Water, if present, can then be pumped from the excavations prior to placement of structural concrete. The bottoms and sides of the footing excavations should be moistened following excavation and maintained in a moist condition until concrete or the rat slab is placed. We should check footing excavations prior to placement of reinforcing steel to check for proper bearing. We should re-examine the excavations just prior to placement of concrete to confirm the

bottoms and sides of the excavations have sufficient moisture content.

6.6 CONCRETE SLAB-ON-GRADE FLOOR

The floor slab for the building may consist of a slab-on-grade floor underlain by at least 18 inches of non-expansive material. The slab-on-grade floor should be at least five inches thick, reinforced with No. 4 bars at 18 inches on center, and underlain by a minimum of four inches of either Class 2 aggregate base (AB) or a four-inch-thick capillary break, as described below. The Class 2 AB or capillary break should be placed on 18 inches of properly compacted lime-treated on-site soil or imported select fill.

A capillary moisture break and vapor retarder are generally not required below parking slabs-on- grade because there is sufficient air circulation to limit condensation of moisture on the slab surface; however, we recommend a capillary break and vapor retarder be placed in areas where there is a floor covering, areas used for storage, and any enclosed rooms. Where a capillary moisture break/vapor retarder is not used, we recommend four inches of Class 2 aggregate base compacted to at least 95 percent relative compaction be placed beneath the parking garage slab.

A capillary moisture break consists of at least four inches of clean, free-draining gravel or crushed rock. The vapor retarder should meet the requirements for Class B vapor retarders stated in ASTM E1745. The vapor retarder should be placed in accordance with the requirements of ASTM E1643. These requirements include overlapping seams by six inches, taping seams, and sealing penetrations in the vapor retarder. The particle size of the capillary break material should meet the gradation requirements presented in Table 5.

TABLE 5. Gradation Requirements for Capillary Moisture Break

Sieve Size	Percentage Passing Sieve
1 inch	90 – 100
3/4 inch	30 – 100
1/2 inch	5 – 25
3/8 inch	0 – 6

Concrete can be placed directly on the vapor retarder provided the water/cement (w/c) ratio of the concrete does not exceed 0.45 and water is not added in the field. If necessary, workability may be increased by adding plasticizers. In addition, the concrete should be properly cured. Before floor coverings are placed over the slab, the contractor should check that the concrete surface and the moisture emission levels (if emission testing is required) meet the manufacturer's requirements.

6.7 Permanent Retaining Walls

Permanent retaining walls, including foundation stem walls and elevator pit walls, should be designed to resist, static lateral earth pressures, lateral pressures caused by earthquakes, vehicular surcharge

pressures, and surcharges from adjacent foundations, where appropriate. We recommend retaining walls be designed using the lateral earth pressures presented in Table 6 below.

TABLE 6. Lateral Earth Pressures for Retaining Wall Design

Drained/Undrained Retaining Wall	At-Rest Static Condition (Restrained)	Seismic Condition
Drained	60 pcf	40 pcf + 32 pcf
Undrained	91 pcf	82 pcf + 15 pcf

1. Equivalent fluid weight (triangular distribution); pcf = pounds per cubic foot

The recommended lateral earth pressures above are based on a level backfill condition with no additional surcharge loads. Where the below-grade walls are subject to traffic loading within a horizontal distance equal to 1.5 times the wall height, an additional uniform lateral pressure of 50 psf, applied to the entire height of the wall.

The design pressures for drained conditions recommended are for fully drained walls above the design groundwater level. Although below-grade walls will be above the design groundwater level, water can accumulate behind the walls from other sources, such as rainfall, irrigation, and broken water lines, etc. One acceptable method for back-draining a basement wall is to place a prefabricated drainage panel against the back of the wall. The drainage panel should extend down to a perforated PVC collector pipe at the design high groundwater level (or higher if allowed by the structural engineer). The pipe should be surrounded on all sides by at least four inches of Caltrans Class 2 permeable material or 3/4-inch drain rock wrapped in filter fabric (Mirafi NC or equivalent). A proprietary, prefabricated collector drain system, such as Tremdrain Total Drain or Hydroduct Coil (or equivalent), designed to work in conjunction with the drainage panel may be used in lieu of the perforated pipe surrounded by gravel described above. The pipe should be connected to a suitable discharge point; a sump and pump system may be required to drain the collector pipes, in the event the elevation is insufficient to gravity drain to the storm drain system.

To protect against moisture migration, below-grade walls should be waterproofed and water stops should be placed at all construction joints. If backfill is required behind below-grade walls, the walls should be braced, or hand compaction equipment used, to prevent unacceptable surcharges on walls (as determined by the structural engineer).

6.8 PAVEMENT DESIGN

Design recommendations for asphalt concrete (AC) and Portland cement concrete pavements and concrete pavers are presented in the following sections.

6.8.1 Flexible (Asphalt Concrete) Pavement Design

The State of California flexible pavement design method was used to develop the recommended asphalt

concrete pavement sections. For pavement design, we assumed a resistance value (R-value) of 5, which is appropriate for the expansive, near-surface clay at the site. Recommended pavement sections for traffic indices ranging from 4.5 to 7.5 are presented in Table 7.

TABLE 7. AC Pavement Sections

TI	Asphaltic Concrete (inches)	Class 2 Aggregate Base R = 78 (inches)
4.5	2.5	9.5
5.0	3.0	10.0
5.5	3.0	12.0
6.0	3.5	13.0
6.5	4.0	13.5
7.0	4.0	15.5
7.5	4.5	16.5

The upper eight inches of the subgrade should be moisture-conditioned and compacted in accordance with requirements presented in Section 6.4.2. In addition, the soil subgrade should be a firm and non-yielding surface. The subgrade should be proof-rolled under the observation of our field engineer to confirm it is non-yielding prior to placing the aggregate base materials. The aggregate base should be moisture-conditioned to near optimum and compacted to at least 95 percent relative compaction.

Where pavements are adjacent to irrigated landscaped areas, curbs adjacent to those areas should extend through the aggregate base and at least three inches into the underlying soil to reduce the potential for irrigation water to infiltrate into the pavement section. Where pavements are adjacent to storm water treatment facilities, such as bio-swales, flow-through planters, or bio-retention basins, or any other landscaped areas in which a significant thickness of loose, uncompacted soil will be present, the curbs may need to extend deeper to bottom at least three inches into underlying subgrade soil.

6.8.2 Rigid (Portland Cement Concrete) Pavement

Concrete pavement design is based on a maximum single-axle load of 20,000 pounds and a maximum tandem axle load of 32,000 pounds and light truck traffic (i.e., a few trucks per week). The recommended rigid pavement section for these axle loads is 6.5 inches of Portland cement concrete over six inches of Class 2 aggregate base. Where fire truck traffic is expected, the pavement section should consist of seven inches of Portland cement concrete over six inches of Class 2 aggregate base.

The modulus of rupture of the concrete should be at least 500 psi at 28 days. Contraction joints should be constructed at 15-foot spacing. Where the outer edge of a concrete pavement meets asphalt concrete pavement, the concrete slab should be thickened by 50 percent at a taper not to exceed a slope of 1 in 10. For areas that will receive weekly garbage truck traffic, we recommend the slab be reinforced with a minimum of No. 4 bars at 16-inch spacing in both directions. Recommendations for subgrade preparation and aggregate base compaction for concrete pavement are the same as those described above for asphalt

concrete pavement.

6.9 CBC SEISMIC DESIGN PARAMETERS

Due to the relatively high seismicity of the San Francisco Bay region, the site should be expected to undergo at least one moderate to strong earthquake during the lifespan of the project. Ground shaking from a strong earthquake is a hazard that cannot be eliminated but can be partially mitigated through proper attention to seismic structural design and observance of good construction practices. The approximate coordinates for the center for the site are 38.1704 degrees north latitude and –122.2540 degrees west longitude. For seismic design, we recommend that Site Class D (*Stiff Soil*) be used. We understand the proposed building will be designed in accordance with the 2019 California Building Code (CBC). The 2019 CBC is based on the guidelines contained within ASCE 7-16 which stipulates that where S1 is greater than 0.2 times gravity (g) for Site Class D, a ground motion hazard analysis is needed unless the seismic response coefficient (Cs) value will be calculated as outlined in Section 11.4.8, Exception 2. Assuming the Cs value will be calculated as outlined in Section 11.4.8, Exception 2, we recommend the seismic design parameters listed below in Table 8:

TABLE 8. CBC Seismic Design Values

Type	Value[8]	Description
S_S	2.202 g	MCE_R ground motion. (for 0.2 second period)
S_1	0.793 g	MCE_R ground motion. (for 1 second period)
S_{MS}	2.643 g	Site-modified spectral acceleration value
S_{M1}	1.348	Site-modified spectral acceleration value
S_{DS}	1.34 g	Numeric seismic design value at 0.2 second SA
S_{D1}	0.899	Numeric seismic design value at 1 second SA
SDC	E	Seismic Design Category
F_a	1.2	Site Amplification Factor at 0.2 sec
F_v	1.4	Site Amplification Factor at 1.0 sec
PGA	0.92	MCE_G Peak Ground Acceleration
PGA_m	1.01	Site-Modified Peak Ground Acceleration

7.0 GEOTECHNICAL SERVICES DURING CONSTRUCTION

Prior to construction, our firm should review the project plans and specifications to verify that they conform to the intent of our recommendations. During construction, our field engineer should provide on-site observations to check site preparation and to perform testing during placement and compaction of fill. These observations will allow us to compare actual with anticipated soil conditions and to verify that the contractor's work conforms to the geotechnical aspects of the plans and specifications.

[8] Values obtained from the OSHPD Design Maps website at https://seismicmaps.org

8.0 LIMITATIONS

The results of this project are based upon the information provided to us regarding site improvements, the findings of our field investigation, lab testing program, geologic research, and professional judgment. This project has been conducted in accordance with currently accepted engineering geologic and geotechnical engineering standards only; no other warranty is expressed or implied. Site conditions and locations of features discussed in the text of the report are those that existed during our field visit in October 2020 and are not necessarily representative of other features, locations or times. If subsurface conditions encountered during construction vary from those interpreted in this report, our firm should be contacted to review the conditions for any changes in our recommendations. The review would be acknowledged in writing.

Respectfully submitted,
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REFERENCES

American Concrete Institute (2001), "Guide for Design and Construction of Concrete Parking Lots", report ACI 330R-01.

Boulanger, R.W and Idriss, I.M. (2014), "CPT and SPT Based Liquefaction Triggering Procedures", Center for Geotechnical Modeling, Department of Civil and Environmental Engineering, University of California, Davis, Report No. UCD/CGM-14/01, April.

California Building Code (2019).

California Division of Mines and Geology (1996), Probabilistic seismic hazard assessment for the State of California, DMG Open-File Report 96-08.

Cao, T., Bryant, W. A., Rowshandel, B., Branum D. and Wills, C. J. (2003). "The Revised 2002 California Probabilistic Seismic Hazard Maps"

California Division of Mines and Geology, 1983, Official map of Alquist-Priolo Earthquake Fault Hazard Zones, Cuttings Wharf Quadrangle [superseded by 2018 EFRIM): California Division of Mines and Geology, scale 1:24,000.

California Division of Mines and Geology, April 13, 1982, Fault Evaluation Report FER-129, West Napa fault in the Napa and Cuttings Warf 7.5-minute Quadrangles, Napa and Solano Counties, California. [superseded by FER-256).

California Geological Survey, January 11, 2018, Earthquake Zones of Required Investigation, Napa Quadrangle.

California Geological Survey, January 11, 2018, Fault Evaluation Report FER-256, West Napa fault in the Napa and Cuttings Warf 7.5-minute Quadrangles, Napa and Solano Counties, California.

California Division of Mines and Geology, 1993, Revised official map of Alquist-Priolo Earthquake Fault Hazard Zones, Cordelia Quadrangle: California Division of Mines and Geology, scale 1:24,000.

Dibblee, T.W., and Minch, J.A., 2006, Geologic map of the Cordelia & Fairfield South quadrangles, Napa & Solano Counties, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-190, scale 1:24,000.

Earth Focus Geological Services, Inc., April 20, 1928, Fault hazards evaluation report, State of California Earthquake Fault Zone for the West Napa fault, Vacant 2.52-Acre Parcel, 3519 Broadway, APN 058-311-013.: Project No. F18-01521.

Field, E.H., Biasi, G.P., Bird, P., Dawson, T.E., Felzer, K.R., Jackson, D.D., Johnson, K.M., Jordan, T.H., Madden, C., Michael, A.J., Milner, K.R., Page, M.T., Parsons, T., Powers, P.M., Shaw, B.E., Thatcher, W.R., Weldon, R.J., II, and Zeng, Y., (2013). Uniform California earthquake rupture forecast, version 3 (UCERF3)—The time-independent model: U.S. Geological Survey Open-File Report 2013–1165, 97 p.Fox, K.F. Jr., 1973, Tectonic setting of late Miocene, Pliocene and Pleistocene rocks in part of the Coast Ranges north of San Francisco, California: U.S. Geological Survey Professional Paper 1239.

Fox, K.F., Sims, J.D., Bartow, J.A. and Helley, E.J., 1973, Preliminary geologic map of Eastern Sonoma and Western Napa County, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-483, Basic Data Contribution 56.

Helley, E.J. and Herd, D.G., 1977, Map showing faults with Quaternary displacement, northeastern San Francisco Bay region, California: U.S. Geological Survey, Miscellaneous Field Studies Map MF-881, scale 1:125,000.

Graymer, R.W., Brabb, E.E., and Jones, D.L., 1999, Geology of the Cordelia and the northern part of the Benicia 7.5 minute quadrangles, California: a digital map database: U.S. Geological Survey, Open-File Report OF-99-162, scale 1:24,000.

Ryan Geological Consulting, Inc., October 31, 2020, Earthquake fault investigation report, Proposed Hilton

Hampton Inn, 3943, 3441 #a, 3441 #b and 3443 Broadway, APN 058-312-010, American Canyon, California: Project No. 1501.100.

Ryan Geological Consulting, Inc., May 1, 2018, Final fault investigation report, APN's 058-032-001 & 058-290-012, Highway 29 and Crawford Way, American Canyon, California: Project No. 1366.100.

Sims, J.D., Fox, K.F., Bartow, J.A., and Helley, E.J., 1973, Preliminary geologic map of Solano County and parts of Napa, Contra Costa, Marin, and Yolo Counties, California: U.S. Geological Survey, Miscellaneous Field Studies Map MF-484, scale 1:62,500.

Sowers, J.M., Noller, J.S., and Lettis, W.R., 1995, Maps showing quaternary geology and liquefaction susceptibility in the Napa, California, 1:100,000 sheet: U.S. Geological Survey, Open-File Report OF-95-205, scale 1:100,000.

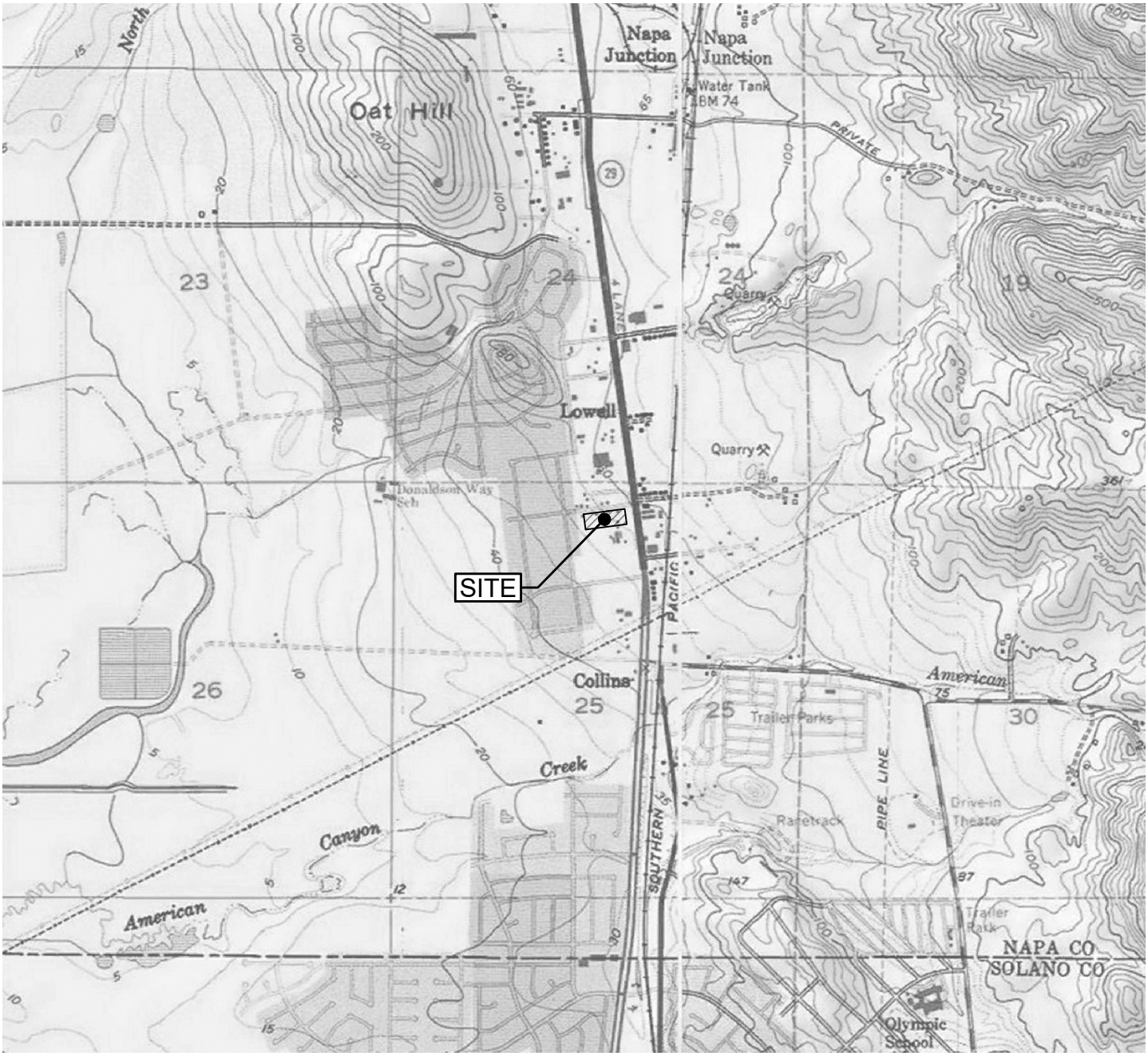
Sowers, J.M., Noller, J.S., and Lettis, W.R., 1998, Quaternary geology and liquefaction susceptibility, Napa, California 1:100,000 quadrangle, a digital database: U.S. Geological Survey, Open-File Report OF-98-460, scale 1:100,000.

Wagner, D.L., and Gutierrez, C.I., 2010, Geologic map of the Napa 30' x 60' quadrangle, California: California Geological Survey, Preliminary Geologic Maps, scale 1:100,000.

Wagner, D.L., and Gutierrez, C.I., 2017, Preliminary Geologic Map of the Napa and Bodega Bay 30' x 60' Quadrangles, California: California Geological Survey, Preliminary Geologic Maps, scale 1:100,000.

Wagner, D.L., Gutierrez, C.I., and Clahan, K.B., 2006, Geologic map of the south half of the Napa 30x60-minute quadrangle, California. [superseded by Wagner and Gutierrez, 2010, California Geological Survey Preliminary Geologic Maps]: California Geological Survey, Preliminary Geologic Maps, scale 1:100,000.

Witter, R.C., Knudsen, K.L., Sowers, J.M., Wentworth, C.M., Koehler, R.D., Randolph, C.E., Brooks, S, K., and Gans, K.D., 2006, Maps of Quaternary deposits and liquefaction susceptibility in the central San Francisco Bay region, California: U.S. Geological Survey, Open-File Report OF-2006-1037, scale 1:200,000.



N

0 2000

1"=2000'

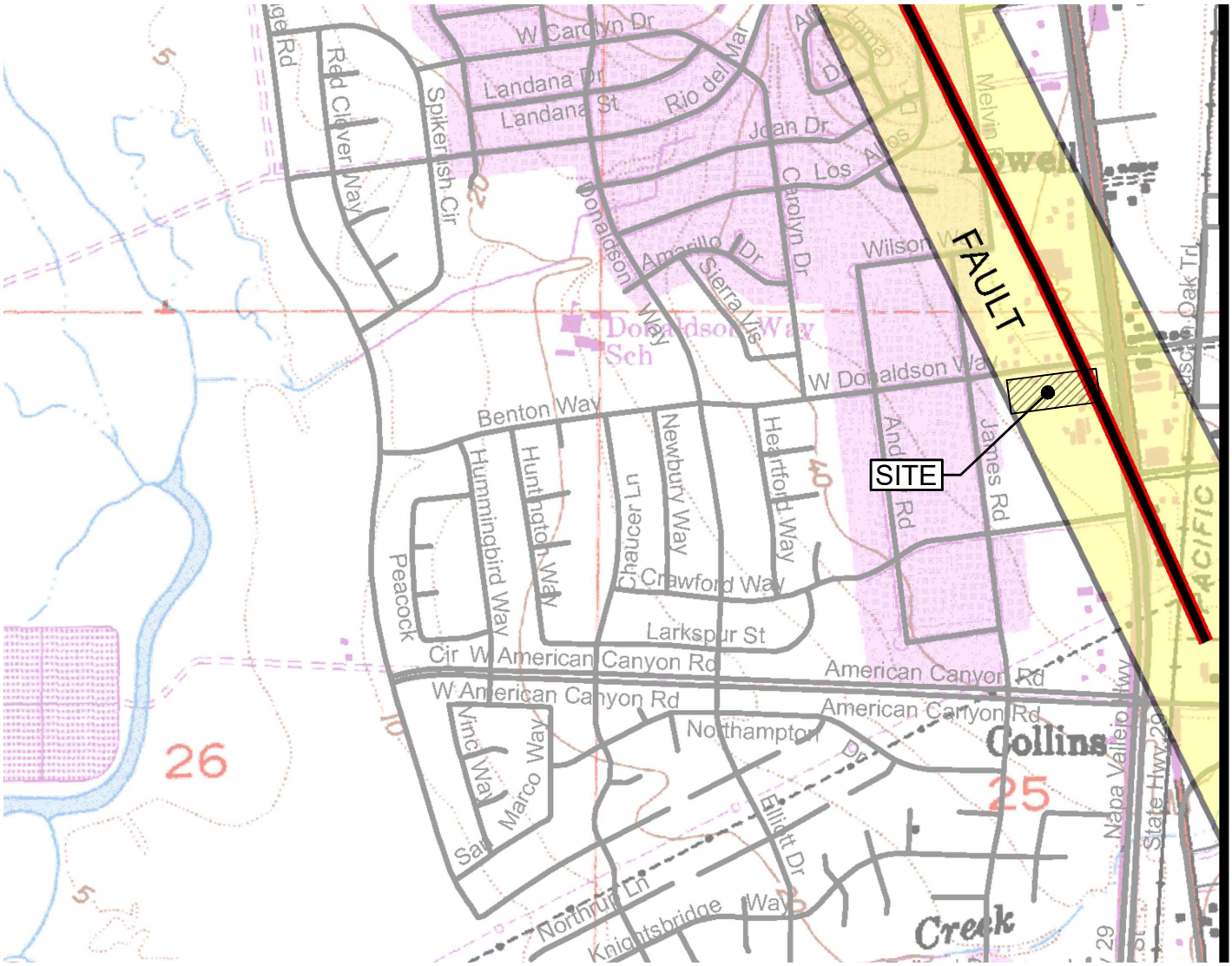
BASE: PORTIONS OF U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLES, CUTTINGS WHARF AND CORDELIA, CALIFORNIA AT A SCALE OF 1:24,000.

VICINITY MAP

Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 12-15-2020	Project No. 1501.101	Figure 1

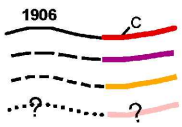
RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

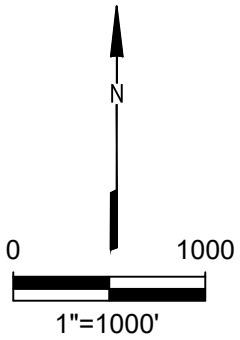


MAP EXPLANATION

Earthquake Fault Zones
Zone boundaries are delineated by straight-line segments; the boundaries define the zone encompassing active faults that constitute a potential hazard to structures from surface faulting or fault creep such that avoidance as described in Public Resources Code Section 2621.5(a) would be required.

Active Fault Traces
Faults considered to have been active during Holocene time and to have potential for surface rupture: Solid Line in Black or Red where Accurately Located; Long Dash in Black or Solid Line in Purple where Approximately Located; Short Dash in Black or Solid Line in Orange where Inferred; Dotted Line in Black or Solid Line in Rose where Concealed; Query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by fault creep.





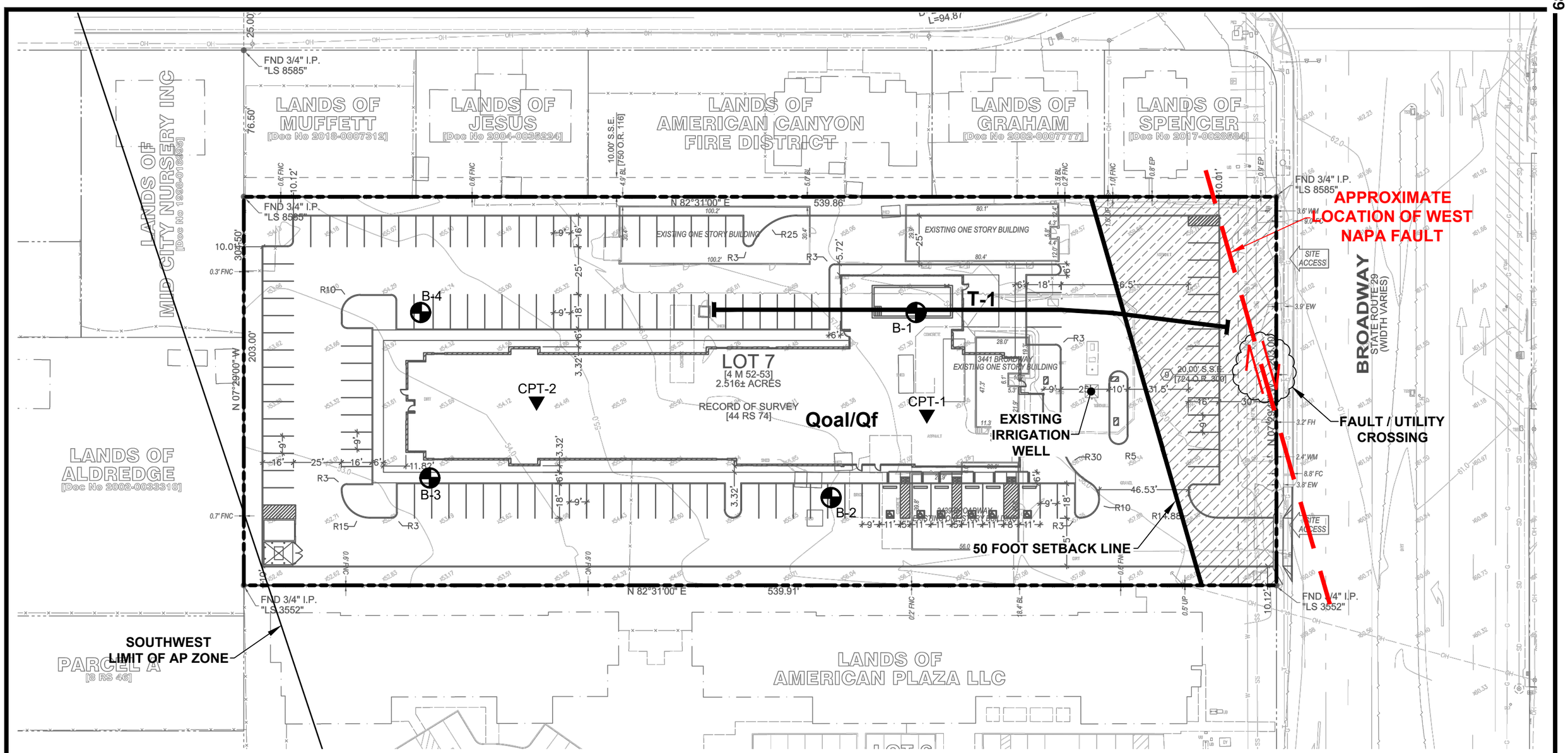
EARTH QUAKE ZONES OF REQUIRED INVESTIGATION MAP (STATE OF CALIFORNIA 2018)

Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 12-15-2020	Project No. 1501.101	Figure 2

BASE: PORTION OF STATE OF CALIFORNIA EARTHQUAKE ZONES OF REQUIRED INVESTIGATION , CUTTINGS WHARF QUADRANGLE, CALIFORNIA AT A SCALE OF 1:24,000.

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



EXPLANATION

N

0 50

1"=50'

PROPERTY BOUNDARY

T-1 — APPROXIMATE TRENCH LOCATION

B-4 — APPROXIMATE LOCATION OF EXPLORATORY BORING

CPT-2 — APPROXIMATE LOCATION OF CONE PENETRATION TEST

Qoal/Qf — OLDER ALLUVIUM / QUATERNARY FAN DEPOSITS

APPROXIMATE LOCATION OF WEST NAPA FAULT

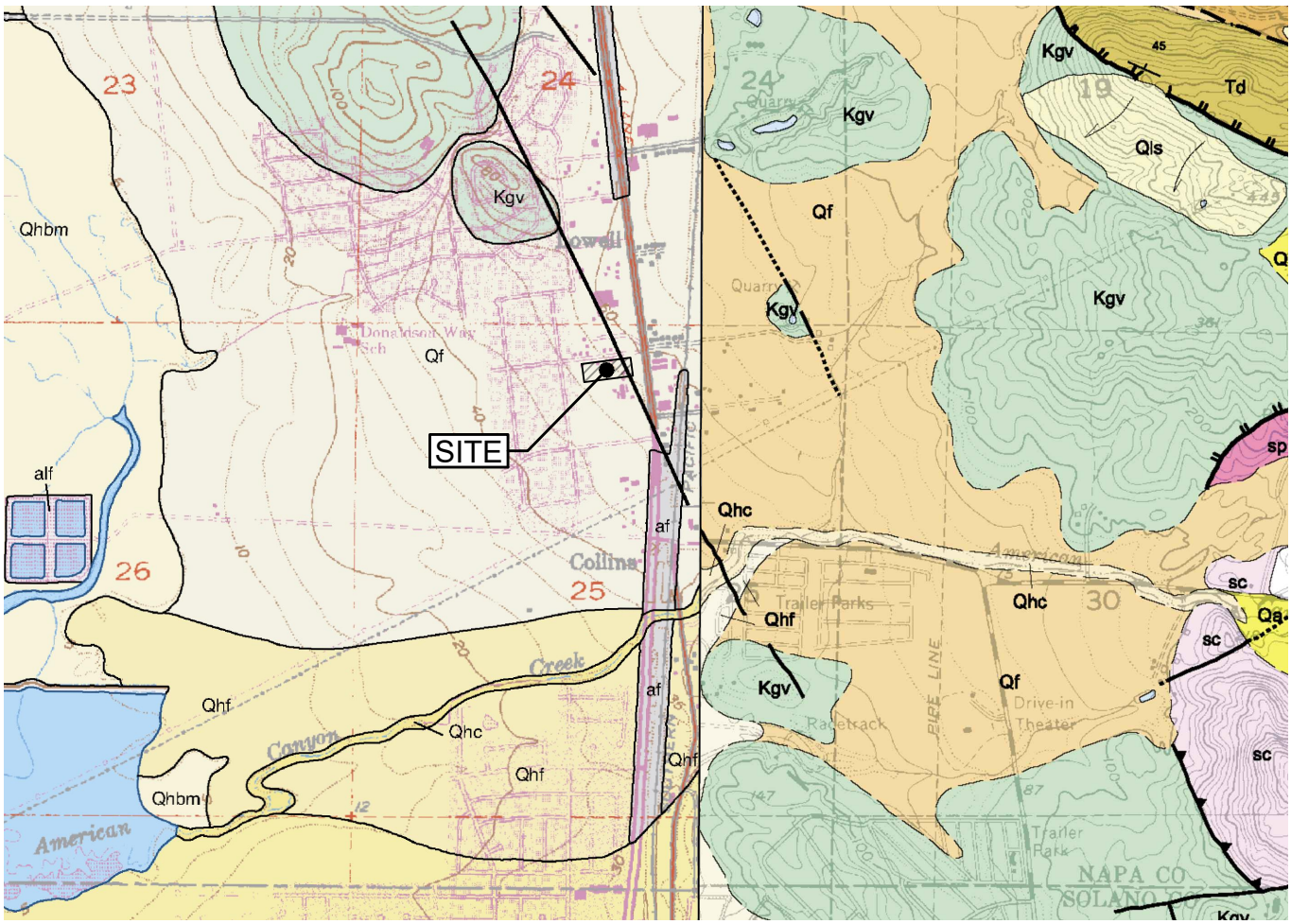
RECOMMENDED FAULT SETBACK ZONE, NO STRUCTURES INTENDED FOR HUMAN OCCUPANCY

SITE PLAN

Proposed Hilton Hampton Inn Site
apn 058-312-010
3439, 3441#A, 3441#B and 3443 Broadway
American Canyon, CA

Date: 12-15-2020	Project No. 1501.101	Figure 3

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



EXPLANATION

CONTACT - DEPOSITIONAL OR INTRUSIVE CONTACT, DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED

FAULT - DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED SAWTEETH ARE ON UPPER PLATE OF LOW ANGLE THRUST FAULT

af ARTIFICIAL FILL

Qhf HOLOCENE FAN DEPOSITS. HOLOCENE ALLUVIAL FAN SEDIMENTS, DEPOSITED BY STREAMS EMANATING FROM THE MOUNTAINS AS DEBRIS FLOWS, HYPERCONCENTRATED MUDFLOWS, OR BRAIDED STREAM FLOWS. SEDIMENTS INCLUDE SAND, GRAVEL, SILT AND CLAY, THAT ARE MODERATELY TO POORLY SORTED, AND MODERATELY TO POORLY BEDDED

Qf LATE PLEISTOCENE TO HOLOCENE FAN DEPOSITS. GENTLY SLOPING, FAN-SHAPED, RELATIVELY UNDISSECTED ALLUVIAL SURFACES WHERE LATE PLEISTOCENE OR HOLOCENE AGE WAS UNCERTAIN OR WHERE THE DEPOSITS OF DIFFERENT AGE INTERFINGER SUCH THAT THEY COULD NOT BE DELINEATED AT THE MAP SCALE. SEDIMENTS INCLUDE SAND, GRAVEL, SILT, AND CLAY, THAT ARE MODERATELY TO POORLY SORTED, AND MODERATELY TO POORLY BEDDED.

N

0 2000

1"=2000'

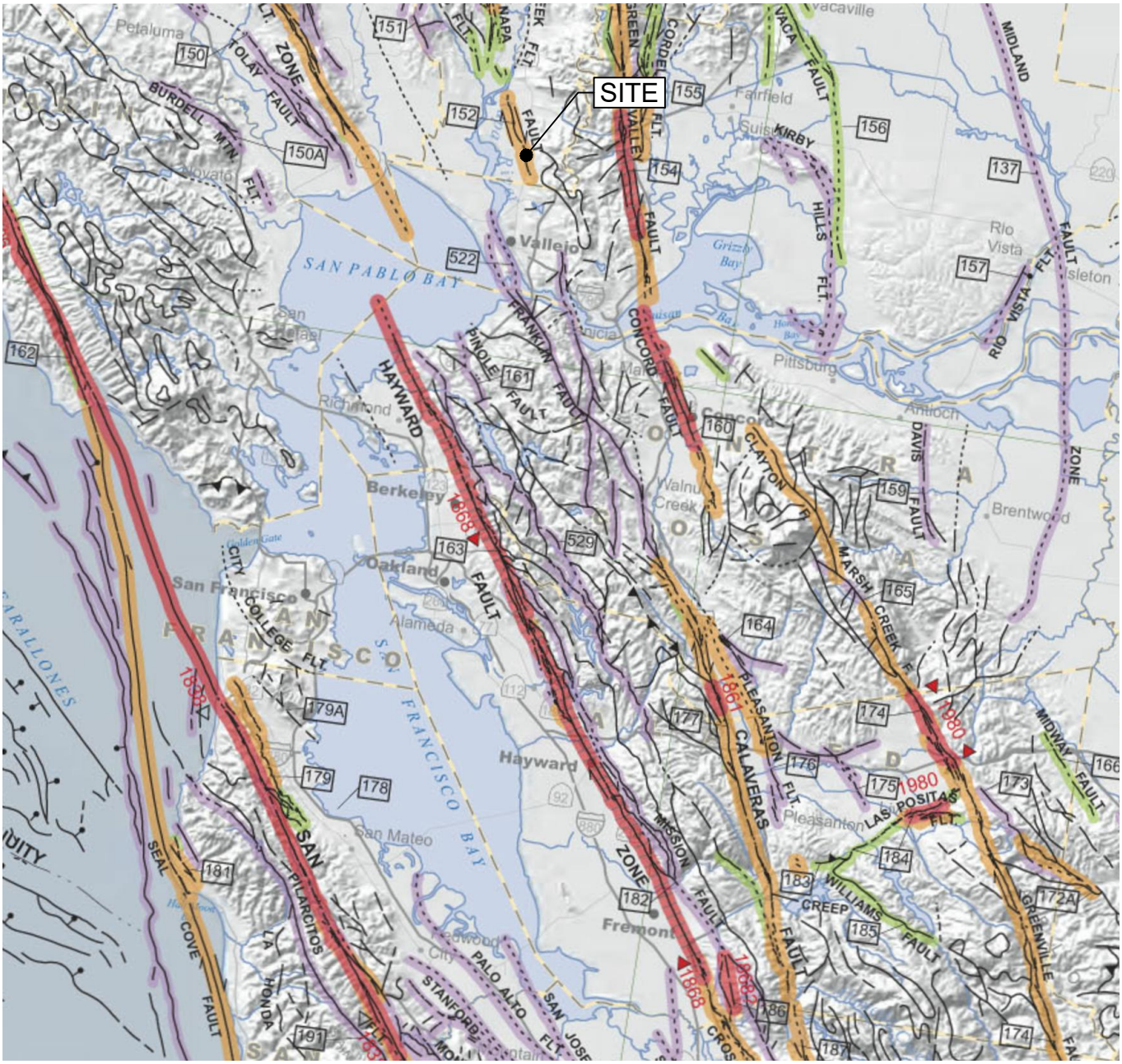
BASE: PORTIONS OF GEOLOGIC MAP OF THE CUTTINGS WHARF AND CORDELIA QUADRANGLES, NAPA AND SOLANO COUNTIES, VERSION 1.0 BY STEPHEN BEZORE, ET ALL, 2002

REGIONAL GEOLOGIC MAP (DIBBLEE and MINCH, 2006)

Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 12-15-2020	Project No. 1501.101	Figure 4

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS



EXPLANATION

FAULT ALONG WHICH HISTORIC (LAST 200 YEARS) WITH HISTORIC RECORD DISPLACEMENT HAS OCCURRED

HOLOCENE FAULT DISPLACEMENT (WITHIN PAST 11,700 YEARS) WITHOUT HISTORIC RECORD

LATE QUATERNARY FAULT DISPLACEMENT (WITHIN PAST 700,000 YEARS)

QUATERNARY FAULT (AGE UNDIFFERENTIATED)

PRE-QUATERNARY FAULT

N

0 50,000

1"=50,000'

BAY AREA FAULT MAP (JENNINGS, 2010)

Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 12-15-2020	Project No. 1501.101	Figure 5

BASE: JENNINGS, J.W. AND BRYANT, W.A., 2010 FAULT ACTIVITY MAP OF CALIFORNIA: CALIFORNIA GEOLOGICAL SURVEY, GEOLOGIC DATA MAP NO. 6.

RYAN GEO*LOGICAL* CONSULTING, INC.
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EXPLANATION

- VERY HIGH SUSCEPTIBILITY
- HIGH
- MODERATE
- LOW
- VERY LOW

N

0 2000

1"=2000'

LIQUEFACATION POTENTIAL MAP

Proposed Hilton Hampton Inn
APN 058-312-010
3439, 3441#A, 3441#B, and 3443 Broadway
American Canyon, CA

Date: 12-15-2020	Project No. 1501.101	Figure 6

BASE: PORTION OF PRELIMINARY MAPS OF QUATERNARY DEPOSITS AND LIQUEFACTION SUSCEPTIBILITY, NINE-COUNTY SAN FRANCISCO BAY REGION, CALIFORNIA: A DIGITAL DATABASE

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

APPENDIX A

BORING LOGS AND KEY TO BORING LOG SYMBOLS

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

LOG OF BORING B-1

Project No. 1501.101	**Client:** Anjani Management LLC	**Date Drilled:** 9-22-20
Project Name: Hilton Hampton Inn 3439 Broadway, American Canyon, CA	**Drilling Method:** Solid-flight Auger	**Elevation:** 57-1/2 feet MSL

SAMPLER TYPE:	**DRILLER**	**GROUNDWATER**
2.5-inch I.D. Split Barrel 140 lb/30" drop	Pearsons Drilling	Encountered: 21-1/2 feet
Standard Penetration Test	Truck-Mounted B-24 Drill Rig	Rose to: 16 feet in 2 hours

Moisture Content (%)	Dry Unit Weight (PCF)	SPT N-Value	Depth (feet)	Sample Symbol	USCS Classification	MATERIAL DESCRIPTION AND REMARKS
						Surface Conditions: Grass
			0		CL	GRAVELLY CLAY, dark grayish brown, moist, stiff
15.7	94	13				FILL
					CL	SANDY CLAY, very dark brown, moist, stiff, blocky ped structure Liquid Limit = 43 Plasticity Index = 27
					CL	SANDY CLAY, dark yellowish brown, moist, stiff to very stiff
16.9	114	21	5		CL	SANDY CLAY, dark yellowish brown, moist, stiff to very stiff, trace fine-grained sand, trace pebbles, carbonate nodules up to 1/2-inch diameter
					CL	CLAY, yellowish brown, moist, very stiff, carbonate nodules up to 1-inch diameter, abundant carbonate veins, trace coarse-grained sand
14.1	117	25	10		CL	SANDY CLAY, yellowish brown, moist, very stiff, fine-grained sand, trace pebbles 97% Passing #4 Sieve 87% Passing #40 Sieve 55% Passing #200 Sieve
23.6	102	16	15		CH	SANDY FAT CLAY, brownish yellow, moist, stiff, fine-grained sand Liquid Limit = 50 Plasticity Index = 35 Groundwater measured 9/22/2020 @ 11:30AM
					CL	SANDY CLAY, brown , moist, stiff, trace pebbles, carbonate pockets and nodules up to 2 inch diameter, fine-grained sand
20.5	111	13	20		CL	SANDY CLAY, gray, moist, stiff to very stiff, some carbonate, fine-grained sand, trace coarse-grained sand and pebbles

Logged by: KR

FIGURE A-1

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

LOG OF BORING B-1

Project No. 1501.101	**Client:** Anjani Management LLC	**Date Drilled:** 9-22-20
Project Name: Hilton Hampton Inn 3439 Broadway, American Canyon, CA	**Drilling Method:** Solid-flight Auger	**Elevation:** 57-1/2 Feet MSL

SAMPLER TYPE:	**DRILLER**	**GROUNDWATER**
2.5-inch I.D. Split Barrel 140 lb/30" drop	Pearsons Drilling	Encountered: 21-1/2 feet
Standard Penetration Test	Truck-Mounted B-24 Drill Rig	Roe to: 16 feet in 2-1/2 hrs

Moisture Content (%)	Dry Unit Weight (PCF)	SPT N-Value	Depth (feet)	Sample Symbol	USCS Classification	MATERIAL DESCRIPTION AND REMARKS
20.5	111	13	20		CL	SANDY CLAY, brown, moist, stiff, fine-grained sand, trace pebbles, carbonate pockets and nodules up to 2 inch diameter
					CL	SANDY CLAY, gray, moist, stiff to very stiff, some carbonate, coarse-grained sand and pebbles Groundwater encountered 9/22/2020 @ 9:00AM
24.6	102	11			CL	SANDY CLAY, brown, moist, stiff, trace pebbles, fine-grained sand, carbonate nodules up to 2 inches, very stiff drilling below 22 feet 99% Passing #4 Sieve, 93% Passing #40 Sieve 65%Passing #200 Sieve
			25			Boring terminated at 24-1/2 feet Groundwater encountered at 21-1/2 feet during drilling, rose to 16 feet in 2-1/2 hrs. Backfilled with grout.
			30			
			35			
			40			

Logged by: KR

FIGURE A-2

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

LOG OF BORING B-2

Project No. 1501.101	**Client:** Anjani Management LLC	**Date Drilled:** 9-22-20
Project Name: Hilton Hampton Inn 3439 Broadway, American Canyon, CA	**Drilling Method:** Solid-flight Auger	**Elevation:** 56 Feet MSL

SAMPLER TYPE:	**DRILLER**	**GROUNDWATER**
2.5-inch I.D. Split Barrel 140 lb/30" drop	Pearsons Drilling	Encountered: 18-1/2 feet
Standard Penetration Test	Truck-Mounted B-24 Drill Rig	Rose to: 13 feet in 1-1/2 hrs

Moisture Content (%)	Dry Unit Weight (PCF)	SPT N-Value	Depth (feet)	Sample Symbol	USCS Classification	MATERIAL DESCRIPTION AND REMARKS
						Surface Conditions: Grass
			0		CL	GRAVELLY CLAY, dark grayish brown, moist
-	-	24				FILL
					CL	SANDY CLAY, very dark brown, moist, stiff, blocky ped structure, fine-grained sand
13.2	110	33	5		CL	SANDY CLAY, dark gray, dry to moist, stiff, blocky ped structure,fine-grained sand, carbonate nodules up to 1/2 inch diameter, Liquid Limit = 45 Plasticity Index = 30
					CL	SANDY CLAY, brown, moist, stiff, fine-grained sand, trace pebbles
17.6	117	40	10		CL	SANDY CLAY, yellowish brown, moist, very stiff, medium-grained sand and pebbles, carbonate pockets up to 1-inch wide 100% Passing #4 Sieve 94% Passing #40 Sieve 67% Passing #200 Sieve
						Groundwater measured 9/22/2020 @11:40 AM
21.4	108	20	15		CH	SANDY FAT CLAY, brownish yellow,, moist, stiff, carbonate pockets up to 1-1/2 inch wide
					CL	CLAY, yellowish brown 10YR 5/8), moist, stiff, trace pebbles and fine-grained sand
						Groundwater encountered 9/22/2020 @ 10:00AM
25.6	103	13	20		SC	SANDY CLAY, yellowish brown (10YR 5/8), moist, stiff, fine-to medium-grained sand, trace pebbles 100% Passing #4 Sieve, 94% Passing #40 Sieve, 57% Passing #200 Sieve

Logged by: KR

FIGURE A-3

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

LOG OF BORING B-2

Project No. 1501.101	**Client:** Anjani Management LLC	**Date Drilled:** 9-22-20
Project Name: Hilton Hampton Inn 3439 Broadway, American Canyon, CA	**Drilling Method:** Solid-flight Auger	**Elevation:** 56 FEET MSL

SAMPLER TYPE:	**DRILLER**	**GROUNDWATER**
2.5-inch I.D. Split Barrel 140 lb/30" drop	Pearsons Drilling	Encountered: 18-1/2 feet
Standard Penetration Test	Truck-Mounted B-24 Drill Rig	Rose to: 13 feet in 1-1/2 hrs

Moisture Content (%)	Dry Unit Weight (PCF)	SPT N-Value	Depth (feet)	Sample Symbol	USCS Classification	MATERIAL DESCRIPTION AND REMARKS
25.6	103	13			SC	SANDY CLAY, yellowish brown, moist, stiff, fine-to medium-grained sand, trace pebbles
-	-	17	20			100% Passing #4 Sieve 94% Passing #40 Sieve 57% Passing #200 Sieve
			-			
			-			Boring terminated at 21-1/2 feet Groundwater encountered at 18-1/2 feet during drilling, rose to 13 feet in 1-1/2 hrs. Backfilled with grout
			-			
			-			
			25			
			-			
			-			
			-			
			-			
			30			
			-			
			-			
			-			
			-			
			35			
			-			
			-			
			-			
			-			
			40			

Logged by: KR

FIGURE A-4

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

LOG OF BORING B-3

Project No. 1501.101	**Client:** Anjani Management LLC	**Date Drilled:** 9-22-20
Project Name: Hilton Hampton Inn 3439 Broadway, American Canyon, CA	**Drilling Method:** Solid-flight Auger	**Elevation:** ¸ 3-1/2 ì°°φ ∂ηψ

SAMPLER TYPE:	**DRILLER**	**GROUNDWATER**
2.5-inch I.D. Split Barrel 140 lb/30" drop	Pearsons Drilling	Encountered: 13 feet
Standard Penetration Test	Truck-Mounted B-24 Drill Rig	Rose to: n/a

Moisture Content (%)	Dry Unit Weight (PCF)	SPT N-Value	Depth (feet)	Sample Symbol	USCS Classification	MATERIAL DESCRIPTION AND REMARKS
			0			
16.3	88	12		■	CH	SANDY CLAY, very dark brown, dry to moist, stiff, blocky ped structure Liquid Limit = 48 Plasticity Index = 31
16.6	116	21	5	■	CL	SANDY CLAY, dark yellowish brown, moist, stiff to very stiff, coarse-grained sand 98% Passing #4 Sieve 83% Passing #40 Sieve 54% Passing #200 Sieve
20.0	110	18	10	■	CL	CLAY light yellowish brown, moist, stiff, trace pebbles, trace to some fine-grained sand, carbonate pockets up to 1-inch wide
					CL	CLAY, yellowish brown, moist, stiff, trace fine grained sand Groundwater encountered 9/22/2020 during drilling, grouted upon completion.
25.7	96	7	15	■	CL	SANDY CLAY, mottled yellow-brown and gray, moist to wet, medium stiff to stiff, fine-grained sand 97% Passing #4 Sieve, 93% Passing #40 Sieve 63% Passing #200 Sieve
-	-	11		▨	CL	SANDY CLAY, yellowish brown, moist, medium stiff, fine-grained sand
-	-	32		▨	CL	SANDY CLAY, brown, moist, very stiff, fine-grained sand
			20			Boring terminated at 18-1/2 feet Groundwater encountered at 13 feet during drilling, grouted upon completion of drilling Backfilled with grout

Logged by: KR

FIGURE A-5

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

LOG OF BORING B-4

Project No. 1501.101	**Client:** Anjani Management LLC	**Date Drilled:** 9-22-20
Project Name: Hilton Hampton Inn 3439 Broadway, American Canyon, CA	**Drilling Method:** Solid-flight Auger	**Elevation:** 54-1/2 FEET MSL

SAMPLER TYPE:	**DRILLER**	**GROUNDWATER**
2.5-inch I.D. Split Barrel 140 lb/30" drop	Pearsons Drilling	Encountered: 17 feet
Standard Penetration Test	Truck-Mounted B-24 Drill Rig	Rose to: n/a

Moisture Content (%)	Dry Unit Weight (PCF)	SPT N-Value	Depth (feet)	Sample Symbol	USCS Classification	MATERIAL DESCRIPTION AND REMARKS
			0			
17.3	98	13			CH	SANDY CLAY, very dark brown, dry to moist, stiff, blocky ped structure, fine-grained sand
18.5	109	14	5		CL	SANDY CLAY, light yellowish brown, moist, stiff, fine-grained sand, carbonate pockets up to 1-1/2 inches wide
16.8	119	17	10		CL	SANDY CLAY, yellowish brown, moist, stiff, fine-grained sand stiff drilling below 10 feet
23.2	107	13	15		CL	SANDY CLAY, mottled yellow-brown and gray, moist, stiff, fine-grained sand, carbonate nodules up to 1-inch diameter
24.0	104	15			CL	SANDY CLAY, yellow-brown, moist, stiff, fine-grained sand, abundant carbonate nodules and pockets Groundwater encountered during drilling, grouted upon completion
-	-	13	20		CL	SANDY CLAY, yellow-brown, moist, stiff, fine-to medium-grained sand

Logged by: KR

FIGURE A-6

RYAN GEO*LOGICAL* CONSULTING, INC.
PROVIDING LOGICAL GEOLOGICAL SOLUTIONS

LOG OF BORING B-4

Project No. 1501.101	**Client:** Anjani Management LLC	**Date Drilled:** 9-22-20
Project Name: Hilton Hampton Inn 3439 Broadway, American Canyon, CA	**Drilling Method:** Solid-flight Auger	**Elevation:** 54-1/2 FEET MSL

SAMPLER TYPE:	**DRILLER**	**GROUNDWATER**
2.5-inch I.D. Split Barrel 140 lb/30" drop	Pearsons Drilling	Encountered: 17 feet
Standard Penetration Test	Truck-Mounted B-24 Drill Rig	Rose to: n/a

Moisture Content (%)	Dry Unit Weight (PCF)	SPT N-Value	Depth (feet)	Sample Symbol	USCS Classification	MATERIAL DESCRIPTION AND REMARKS
-	-	13			CL	SANDY CLAY, yellow-brown (10YR 4/4), moist, stiff, fine-to medium-grained sand
-	-	14	20			
			-			Boring terminated at 21-1/2 feet Groundwater encountered at 17 feet, grouted upon completion. Backfilled with grout
			-			
			-			
			25			
			-			
			-			
			-			
			-			
			30			
			-			
			-			
			-			
			-			
			35			
			-			
			-			
			-			
			-			
			40			

Logged by: KR

FIGURE A-7

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			CLASSIFICATION SYMBOL	TYPICAL NAMES
COARSE GRAINED SOILS MORE THAN HALF OF THE MATERIAL IS LARGER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LITTLE TO NO FINES	GW	WELL GRADED GRAVELS, GRAVEL/SAND MIXTURES
			GP	POORLY GRADED GRAVELS, GRAVEL/SAND MIXTURES
		GRAVEL WITH OVER 12% FINES	GM	SILTY GRAVELS, POORLY GRADED GRAVEL/SAND/SILT MIXTURES
			GC	CLAYEY GRAVELS, POORLY GRADED GRAVEL/SAND/CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS WITH LITTLE TO NO FINES	SW	WELL GRADED SANDS, GRAVELLY SANDS
			SP	POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, POORLY GRADED SAND/SILT MIXTURES
			SC	CLAYEY SANDS, POORLY GRADED SAND/CLAY MIXTURES
FINE GRAINED SOILS MORE THAN HALF OF THE MATERIAL IS SMALLER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt	PEAT AND OTHER HIGHLY ORGANIC SILTS

KEY TO BORING LOG SYMBOLS

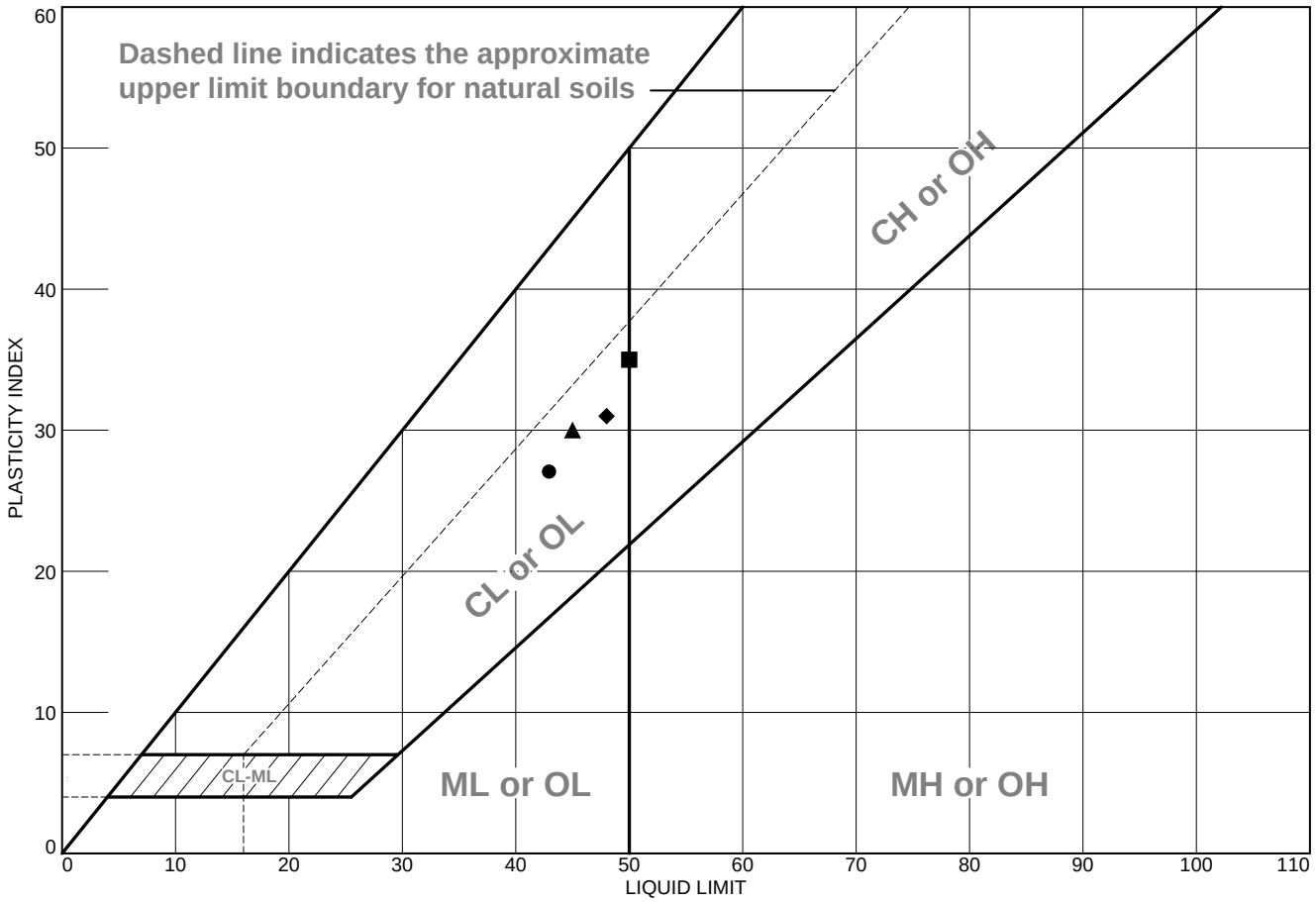
Depth in Feet	Moisture Content (%)	Dry Unit Weight (pcf)	Blows per foot	Unified Soil Classification System	
					Bulk Sample
					2.5-inch I.D. Split Barrel Sample
					2.8-inch I.D. Shelby Tube Sample
					No Sample recovered
					Standard Penetration Test interval
					Well-defined stratum change
					Gradual stratum change
					Interpreted stratum change
					Apparent ground water level measured at date noted; seasonal weather conditions, site topography, etc., may cause fluctuations in water level indicated on boring logs
					Stabilized ground water level measured at date noted

Note: Soils described as dry, moist, and wet are estimated to be dry of optimum, near optimum, and more wet than optimum moisture content, respectively. Saturated soils are estimated to be within areas of free groundwater.

FIGURE A-8

APPENDIX B
Laboratory Test Results

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Dark brown sandy lean CLAY	43	16	27			CL
■	Yellowish brown sandy fat CLAY	50	15	35			CH
▲	Grayish brown sandy lean CLAY	45	15	30			CL
◆	Dark brown sandy lean CLAY	48	17	31			CL

Project No. 1501.101 **Client:** Ryan Geological

Project: Hilton Hampton Inn

Remarks:

●**Source of Sample:** B-1 **Depth:** 1.5 - 2.0'

■**Source of Sample:** B-1 **Depth:** 14.0 - 14.5'

▲**Source of Sample:** B-2 **Depth:** 4.5 - 5.0'

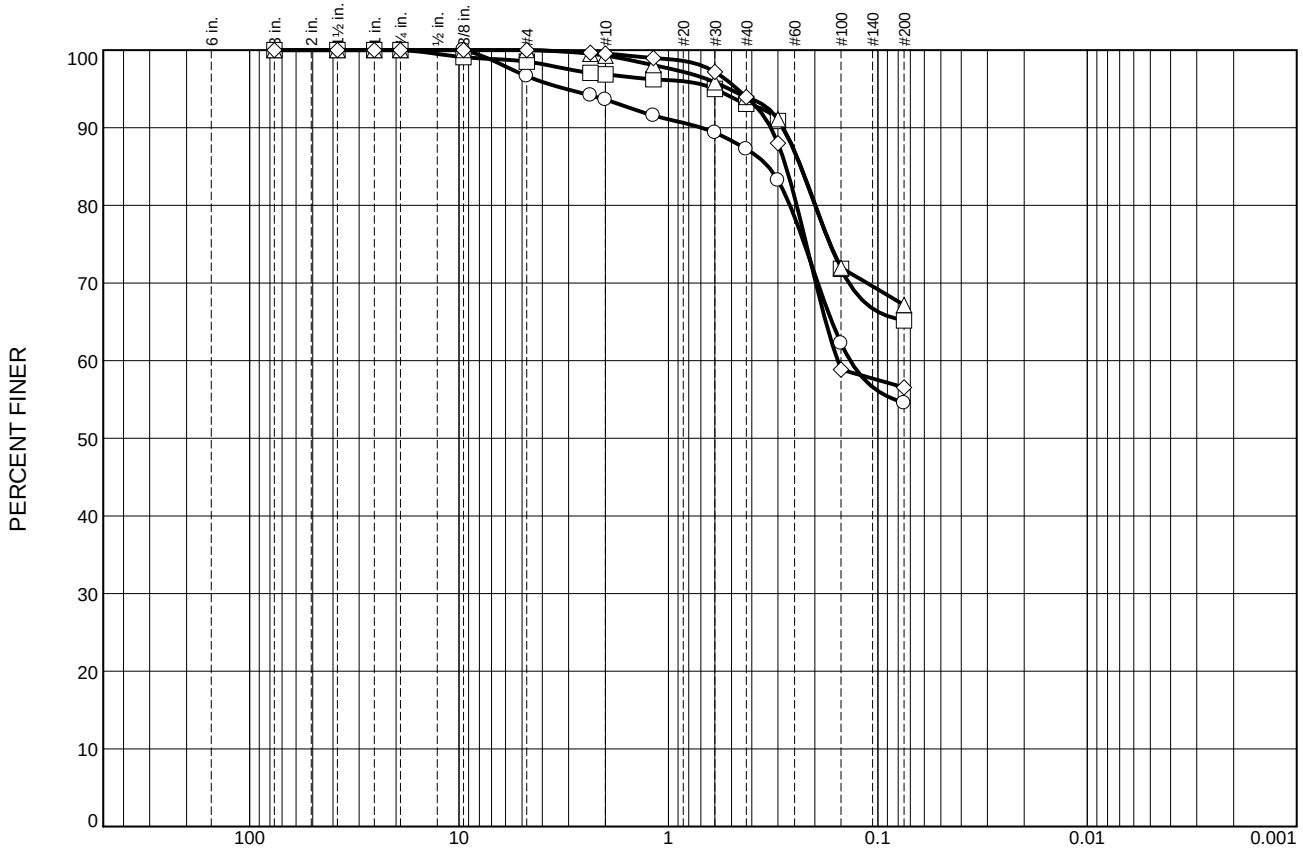
◆**Source of Sample:** B-3 **Depth:** 1.5 - 2.0'

B. HILLEBRANDT SOILS TESTING, INC.
+1 510-409-2816
SoilTesting@aol.com

Figure B-1

Tested By: BH

Particle Size Distribution Report



	% +3"	% Gravel	% Sand	% Silt	% Clay
○	0.0	3.4	42.0	54.6	
□	0.0	1.5	33.3	65.2	
△	0.0	0.0	32.8	67.2	
◇	0.0	0.0	43.4	56.6	

SOIL DATA

SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	B-1		9.5 - 10.0'	Olive brown sandy CLAY	CL
□	B-1		23.0 - 23.5'	Yellowish brown sandy CLAY	CL
△	B-2		9.0 - 9.5'	Yellowish brown sandy CLAY	CL
◇	B-2		18.5 - 19.0'	Yellowish brown sandy CLAY	CL

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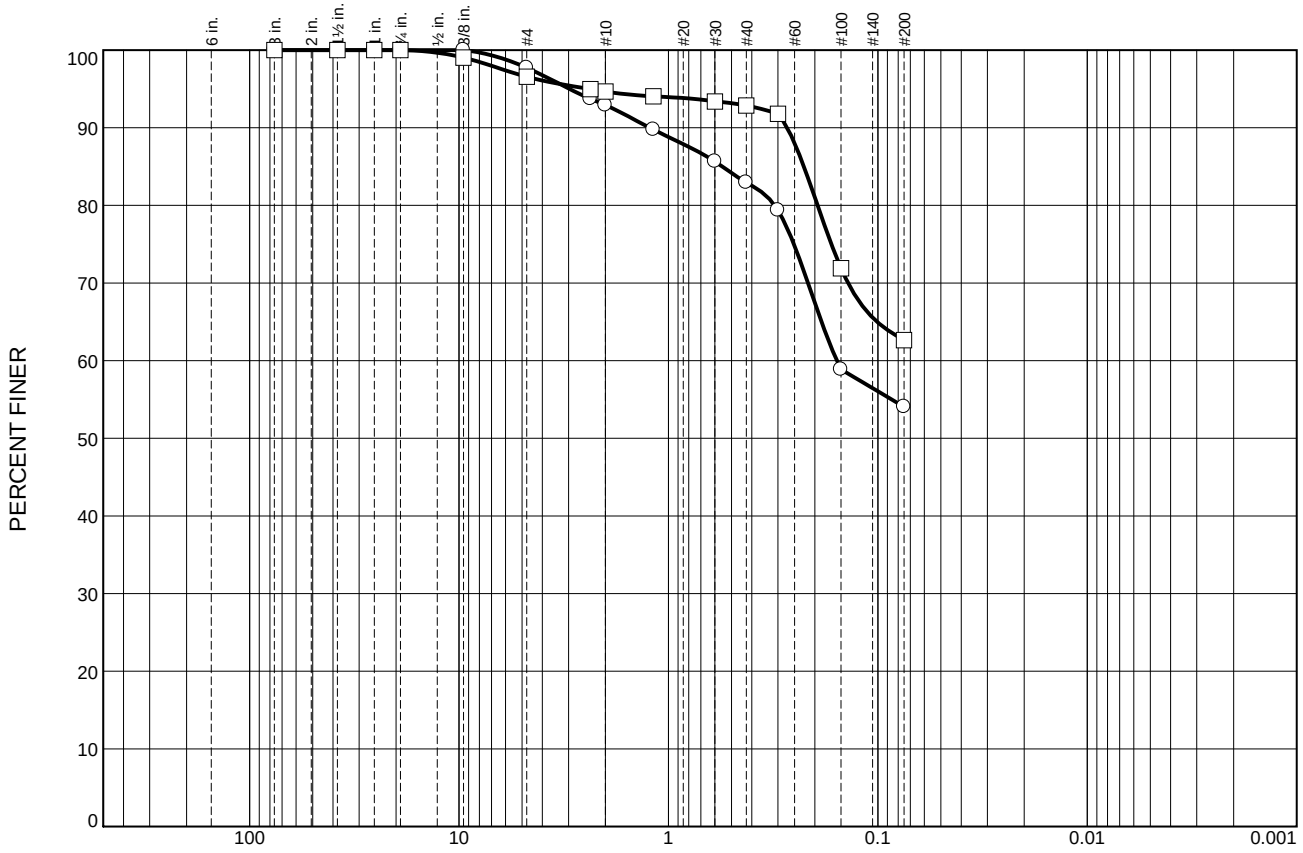
Client: Ryan Geological
Project: Hilton Hampton Inn
Project No.: 1501.101

Figure B-2

Tested By: BH

Particle Size Distribution Report



	% +3"	% Gravel	% Sand	% Silt	% Clay
○	0.0	2.3	43.6	54.1	
□	0.0	3.4	34.0	62.6	

SOIL DATA

SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	B-3		4.5 - 5.0'	Dark yellowish brown sandy CLAY	CL
□	B-3		14.5 - 15.0'	Yellowish brown sandy CLAY	CL

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SoilTesting@aol.com

Client: Ryan Geological
Project: Hilton Hampton Inn
Project No.: 1501.101

Figure B-3

Tested By: BH

APPENDIX C
LIQUEFACTION ANALYISIS

LIQUEFACTION ANALYSIS REPORT

Project No : 1501.101

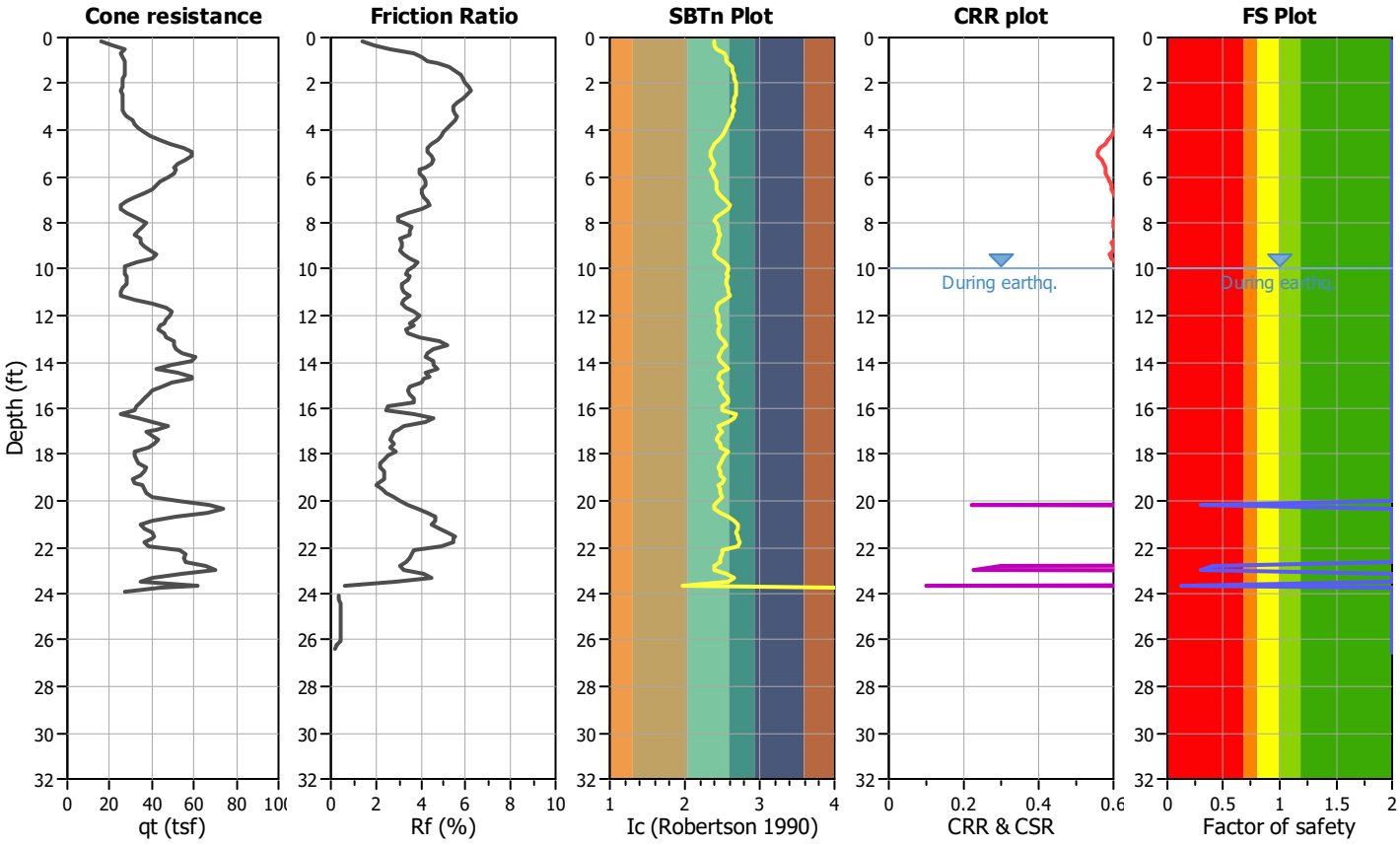
Location : American Canyon

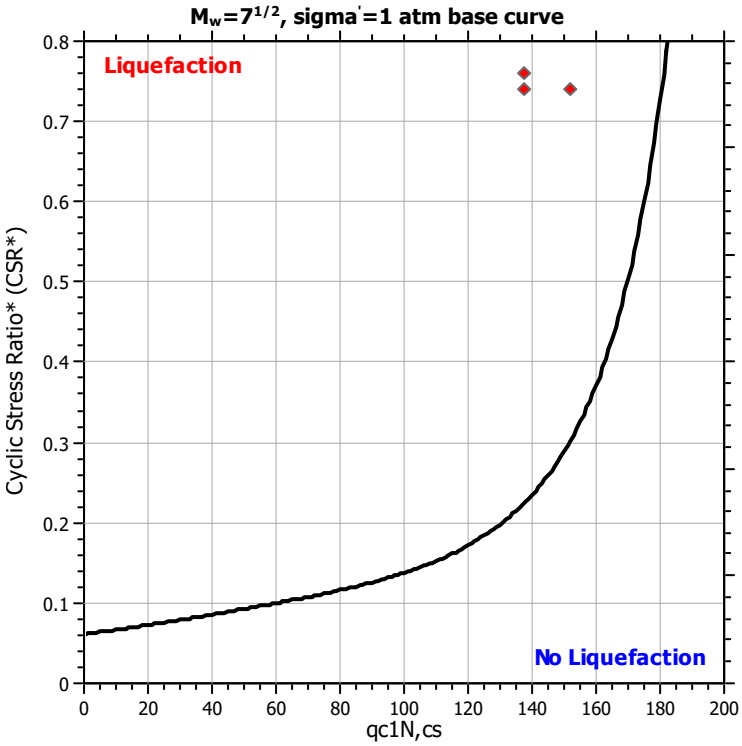
CPT file : 3439 Broadway American Canyon east CPT-1

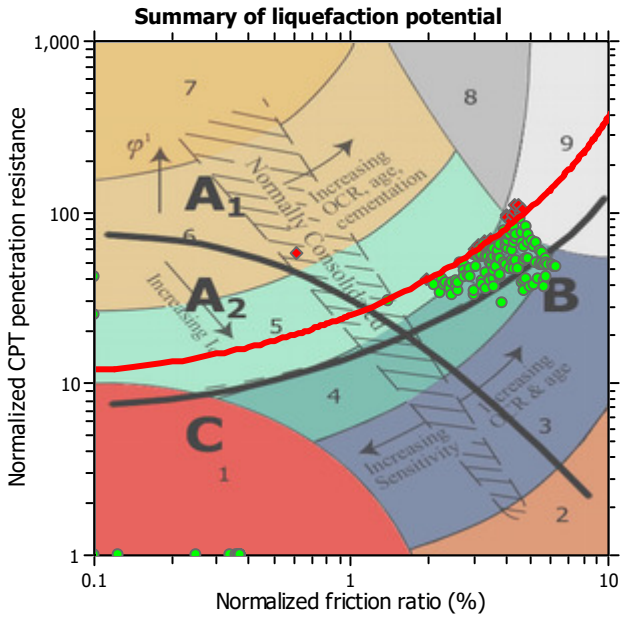
CPT-1

Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	10.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	10.00 ft	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.97	Ic cut-off value:	2.40	Trans. detect. applied:	Yes	MSF method:	Method
Peak ground acceleration:	1.00	Unit weight calculation:	Based on SBT	K_σ applied:	No		



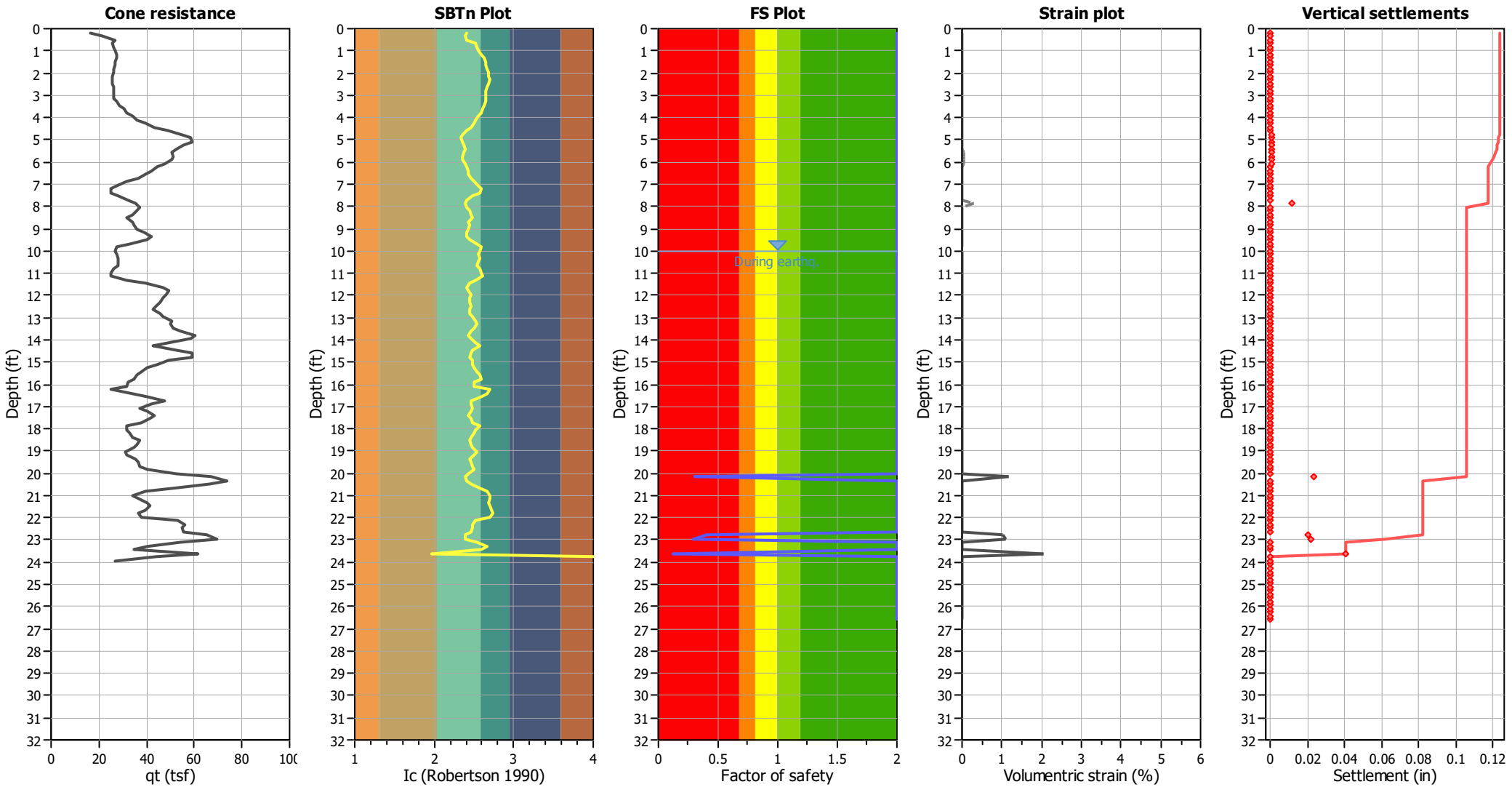




Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

Estimation of post-earthquake settlements

CPT-1



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

LIQUEFACTION ANALYSIS REPORT

Project No : 1501.101

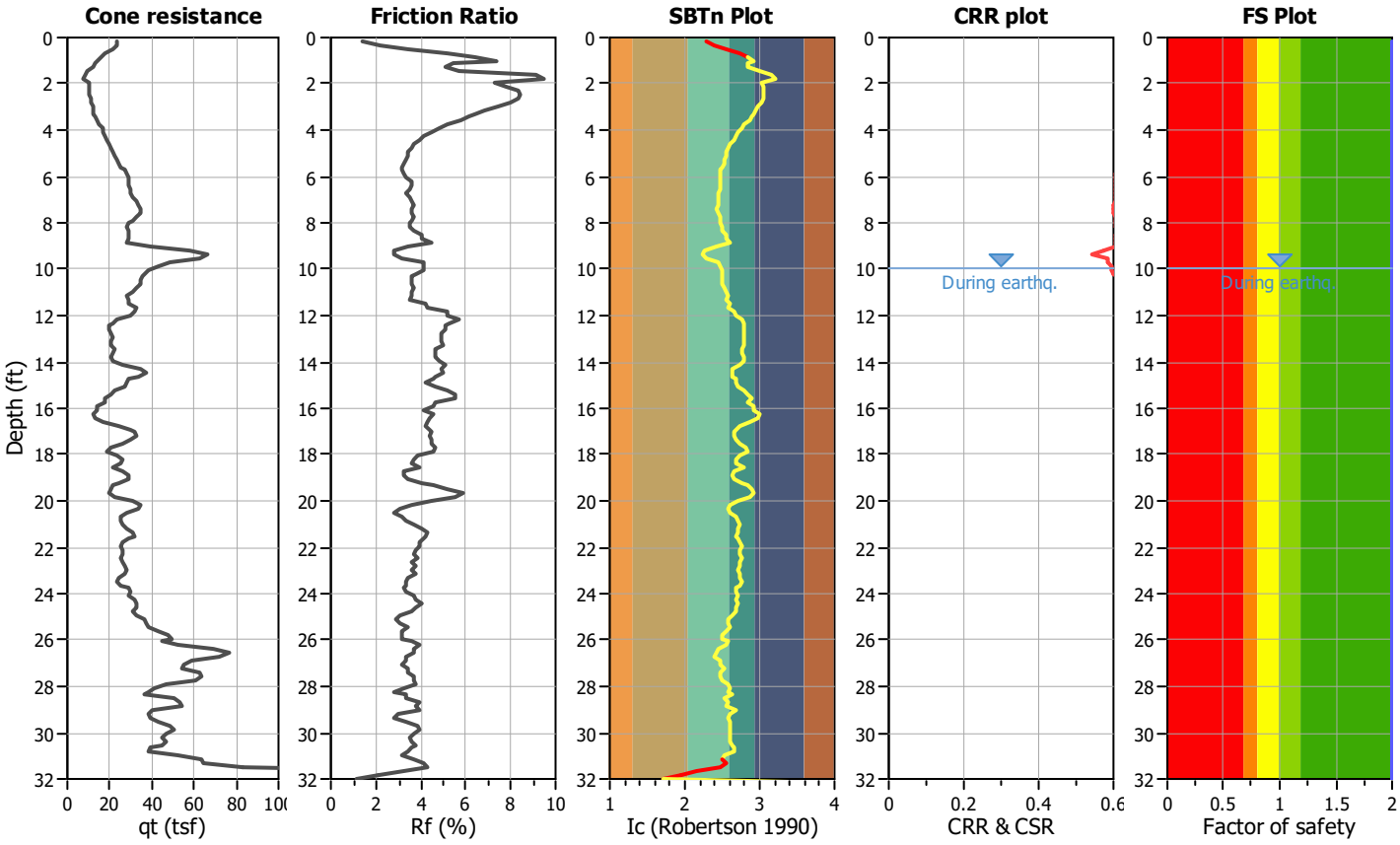
Location : American Canyon

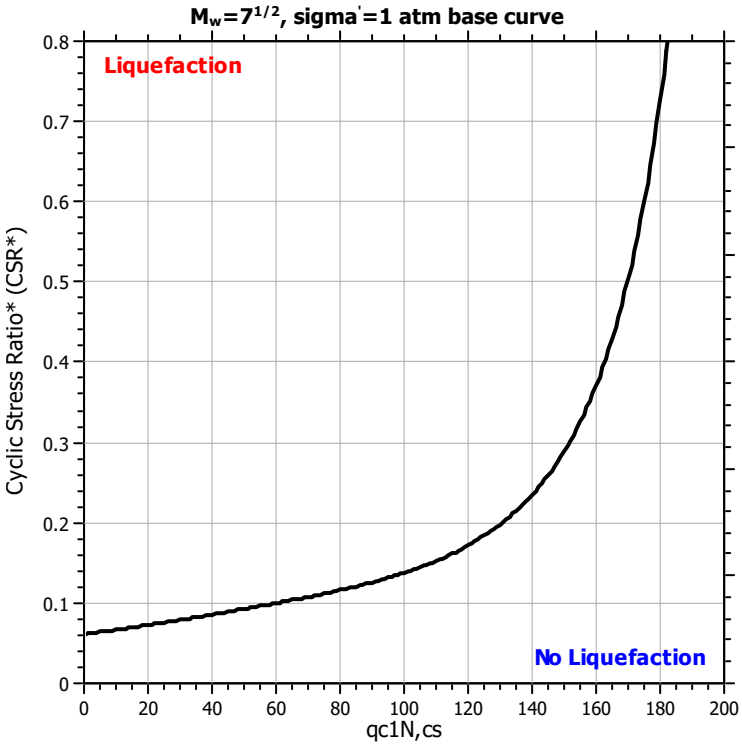
CPT file : 3439 Broadway American Canyon west CPT-2

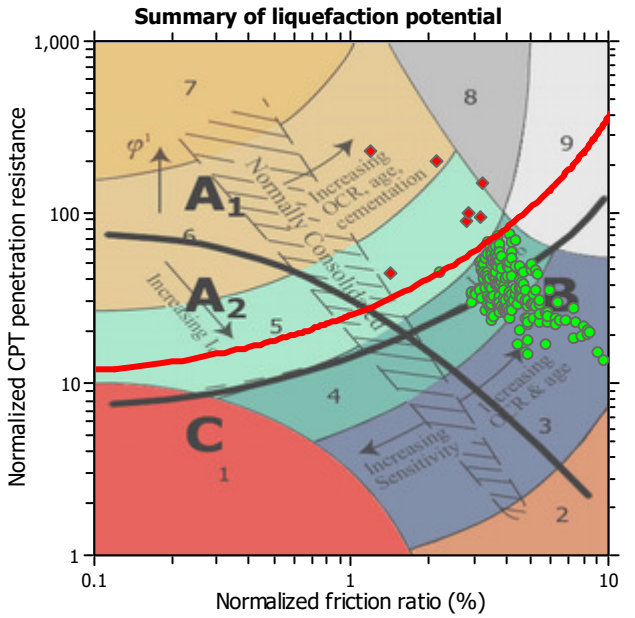
CPT-2

Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	10.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	10.00 ft	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.97	Ic cut-off value:	2.40	Trans. detect. applied:	Yes	MSF method:	Method
Peak ground acceleration:	1.00	Unit weight calculation:	Based on SBT	K_σ applied:	No		



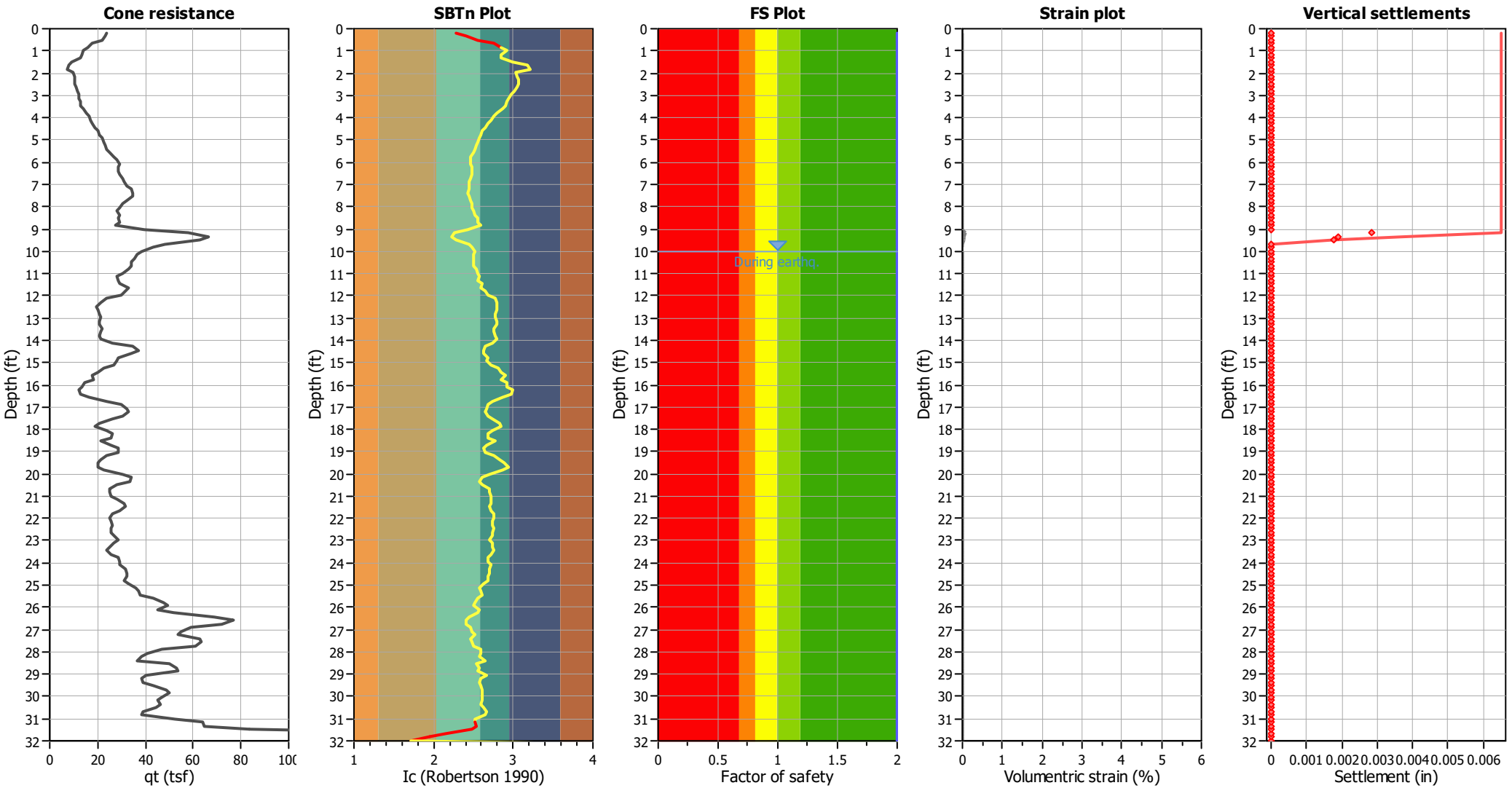




Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

Estimation of post-earthquake settlements

CPT-2



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

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Appendix E:
Phase I Environmental Site Assessment

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Prepared For

Ms. Maurissa Heffran

Gateway Crossing, Inc.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

3439, 3441, and 3443 Broadway Street

APN 058-312-010

American Canyon, California

April 2016

Prepared By

ENVIRONMENTAL RESOURCE GROUP, INC.

1038 REDWOOD HIGHWAY, SUITE 1

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B-6 ENVIROSITE CORPORATION GOVERNMENT RECORDS REPORT

APPENDIX C INTERVIEW RECORDS/ENVIRONMENTAL QUESTIONNAIRE

APPENDIX D QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

DEFINITIONS (ASTM 1527-13)

Activity and Use Limitations (AULs) – *"activity and use limitations – legal or physical restrictions or limitations on the use of, or access to, a site or a facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and/or surface water on the Target Property…"*

Controlled Recognized Environmental Condition (CREC) – *"a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA [No Further Action] letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (e.g. Target Property use restrictions, AULS, institutional controls, or engineering controls)…a CREC shall be listed in the Findings Section of the Phase I ESA Report, and as a REC in the Conclusions Section of the… report."*

Historical Recognized Environmental Condition (HREC) – *"a past release of any hazardous substances or petroleum products that has occurred in connection with the Target Property and has been addressed to the satisfaction of the applicable regulatory authority or meeting **unrestricted residential use** criteria established by a regulatory authority, without subjecting the Target Property to any required controls (e.g., Target Property use restrictions, AULs, institutional controls, or engineering controls). Before calling the past release an HREC, the **EP (Environmental Professional)** must determine whether the past release is a REC at the time the Phase I ESA is conducted (e.g., if there has been a change in the regulatory criteria). If the EP considers this past release to be a REC at the time the Phase I ESA is conducted, the conditions shall be included in the conclusions section of the report as a REC."*

Migrate/Migration – *"refers to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, or vapor in the subsurface."*

Recognized Environmental Condition (REC) – *"the presence or likely presence of any hazardous substances or petroleum products, **in, on, or at** a Target Property: (1) due to any **release** to the **environment**; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."*

Release (CERCLA Definition) 42 U.S.C. §9601(22) defines a **"release"** as *"any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discharging of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant)."*

EXECUTIVE SUMMARY

Environmental Resources Group ("ERG") performed a Phase I Environmental Site Assessment ("ESA") of the Target Property located at 3439, 3441, and 3443 Broadway Street, American Canyon, California (the "Target Property"), Napa County Assessor's Parcel Number (APN) 058-312-010 on behalf of current site owners: Mr. Dion Heffran and Ms. Maurissa Heffran[1] of Gateway Crossing, Inc. (GCI) (User or Client) (Figure 1).

ERG performed the Phase I ESA following the guidelines in the American Society of Testing and Materials (ASTM) Standard Designation E1527-13, *"Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,"* and the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries (AAI), as required under Section 101(35)(b)(ii) and (iii) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (EPA AAI Rule), and Code of Federal Regulations (40 CFR) 312.

Phase I ESAs are conducted to identify existing or potential Recognized Environmental Conditions (RECs), Historical RECs (HRECs), or Controlled RECs (CRECs) (as defined by ASTM Standard E1527-13 and EPA AAI Rule) in connection with the Target Property, as well as to provide appropriate inquiry into the previous ownership and use of the Target Property (where applicable).

Scope of Services

The Scope of Services includes "All appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice", as defined in 42 USC 9601(35) (B). The Scope of Services includes observations for RECs, as well as a review of reasonably ascertainable information in regulatory files provided within reasonable time and cost constraints. Accordingly, it cannot be guaranteed that all files are examined, or that every contingency is investigated. These limitations are in conformance with the stated guidelines of ASTM E1527-13. An evaluation of business environmental risk associated with a parcel of commercial real estate is not included in this assessment. This Phase I ESA included assessment of interior areas of the Target Property, general reconnaissance of adjacent properties, background research, a review of available and pertinent local, state, and federal regulatory records regarding the presence of hazardous materials and/or petroleum products at the Target Property.

The Scope of Services for this Phase I ESA does not include analysis of Controlled Substances (CS), Asbestos-Containing Materials (ACM), lead-based paint (LBP), or other non-CERCLA related conditions. Licensed professionals should be contacted to assess their potential presence if there is suspicion that these substances or conditions are on the Target Property.

Purpose

ERG understands that this Phase I ESA is being conducted for purposes of financing a proposed future renovation of the Target Property.

[1] According to Mr. Heffran, his family purchased the subject property in late 2014.

SUMMARY OF PHASE I ESA RESULTS

Current Use

The Target Property is improved with four separate structures including (from south to north): an approximately 1,200 square foot one-story building with an address of 3439 Broadway; an approximately 1,100 square foot one-story residence with an address of 3443 Broadway; an approximately 2,500 square foot one-story commercial-type building with an address of 3441 Broadway; and an approximately 3,000 square foot warehouse-type structure located behind (west of) 3441 Broadway. The current uses of the four site buildings are as follows:

- 3439 Broadway: The current tenant of this building is "Your Style Décor", an upholstery and furniture repair and restoration company.

- 3443 Broadway: A single family residence, which includes a chicken coop and storage shed behind the house structure.

- 3441 Broadway – front building: Currently vacant commercial building which had been most recently leased by the Canyon Gallery & Art Center, an art studio and gallery.

- 3441 Broadway – rear building: Currently utilized for new, unassembled furniture storage for an off-site furniture retailer.

Historical Use

Historical documents indicate the Target Property was undeveloped land prior to the 1950s. The residential building at 3443 Broadway and the building south of the residence at 3439 Broadway were constructed sometime in the early 1950s. The third Target Property structure at 3441 Broadway was constructed at the site by 1974. The fourth site significant structure on the Target Property, the warehouse building to the west of the 3441 Broadway structure, was constructed under a building permit obtained by prior site owner Mr. Robert Gish in 1984.

The buildings were hooked up to the municipal sewer system in 1965 and to the municipal water system in 1971. The vicinity of the Target Property was generally developed with residential structures to the north and west, with agricultural greenhouses to the south, and a mix of residential and commercial structures to the east of Broadway from the 1950s through the 1970s.

Target Property buildings were apparently most recently utilized by an art studio (3441 Broadway building) since approximately 2010; a furniture restoration company (Your Décor at the 3439 Broadway building) since approximately 2009; new, unassembled furniture storage in the warehouse building west of 3441 Broadway since September 2015. The warehouse building was reportedly originally constructed in 1984 for a sign manufacturing company, and was later utilized for donation and supply storage for a local youth support program.

Summary of Records Review

The Target Property is listed on two environmental databases: one for Mr. Walter Gish at 3439 Broadway on the HAZNET, CA database; and one for The Sign Factory at 3441 Highway 29 on the FRS – Emission Inventory System (EIS).

The HAZNET listing shows that in 2008, Mr. Gish generated 1.52 tons of waste oil and mixed oil. Those wastes were disposed at an off-site facility in Alameda County, California. The EIS listing for The Sign Factory was reportedly for an air point pollution emitter, and did not indicate any further information on the listing.

Records reviewed at the American Canyon Building Department (ACBD) file indicate that Gateway Crossing has applied for an entitlement to construct a new hotel on the Target Property.

Records at the Napa County Department of Planning, Building, and Environmental Services (NCDPBES) indicated that a former approximately 75 foot deep water supply well located approximately 20 feet east of the Target Property residential structure was abandoned under permit in March 2015. Following well abandonment, a new 200 foot deep water supply well was installed approximately 10 feet east of the residential structure. This new water supply well has not been hooked up to any water supply lines, but was reportedly installed to supply landscaping irrigation water for Gateway Crossing's proposed redevelopment of the site.

Nearby Environmental Properties

Review of available environmental databases, historical aerial photographs, and city directories indicate the Target Property is located in a mixed residential and light commercial area of American Canyon. However, some of the commercial properties in the site vicinity have included gas stations with registered USTs and/or former LUST cases. Sites with known or documented releases (i.e., environmental sites) that are located within relative close proximity to the Target Property, and are in the up-gradient (or near cross-gradient) direction relative to the expected groundwater flow direction (primarily to the west toward the Napa River delta and estuary) were further evaluated. Most of the sites are listed as Completed-Case Closed with the regulating agency, and are not expected to pose significant environmental risk to the Target Property.

The nearest up-gradient site to the Target Property where releases were known to impact groundwater was the Arco station at 3462 Broadway, approximately 250 feet to the northeast. This Arco LUST case was closed in February 2012. Part of the Arco LUST site case closure activities included sampling the former water supply well on the Target Property. Analytical results indicated no petroleum hydrocarbon compounds detected in the groundwater sample collected from the former Target Property water supply well. Thus, the closed Arco LUST case is not expected to pose a significant environmental risk to the Target Property.

An adjacent site to the north of the Target Property was included in the RCRA Non-Generator database. The listing was for the Northern Abatement Company at 3473 Broadway from 1990, adjacent to the northeast corner of the Target Property. It is assumed that the Northern Abatement Company previously had offices in the building adjacent to the Target Property, however did not produce, store, or dispose of hazardous waste at the adjacent property.

Site Reconnaissance

The Target Property was inspected by the ERG representative on March 15, 2016. Mr. Julio Monocada, Property Manager for Gateway Crossing, escorted the ERG representative throughout the Target Property. The Target Property is improved with a four separate structures including (from south to north): an approximately 1,200 square foot one-story building with an address of 3439 Broadway; an approximately 1,100 square foot one-story residence with an address of 3443 Broadway; an approximately 2,500 square foot one-story commercial-type building with an address of 3441 Broadway;

and an approximately 3,000 square foot warehouse-type structure located behind (west of) 3441 Broadway.

The current uses of the four buildings are as follows:

- 3439 Broadway: The current tenant of this building is "Your Style Décor", a custom furniture design and restoration company.

- 3443 Broadway: A single family residence, which includes a chicken coop and storage sheds behind the house structure.

- 3441 Broadway – front building: Currently vacant commercial building which had been most recently leased by the Canyon Gallery & Art Center, an art studio and gallery. A

- 3441 Broadway – rear building: Currently utilized for new, unassembled furniture storage for an off-site furniture retailer. This building has no running water or bathroom facilities.

A chicken coup, a dog pen, a garden shed, and a steel Conex storage container are located to the west of residential structure. The storage container was locked at the time of the site reconnaissance, and reportedly contained items belonging to the residential structure tenant.

A small approximately 6-foot by 6-foot metal shed labeled "paint locker" is located to the north of the 3,000 square foot warehouse structure. Empty shelving lined the interior of this structure at the time of the site reconnaissance and no staining was noted on the floor of the structure or in the vicinity of the structure doorway.

Further west of the site structures was an open grassy field area. A medium-sized box-type truck trailer was stored in this field, approximately 40 feet west of the warehouse structure. This truck trailer was locked at the time of the site reconnaissance.

An approximately 12 foot by 10 foot wooden storage shed was located to the west of the 3441 Broadway building. Nothing was stored inside this storage structure at the time of the site reconnaissance and no staining was noted on the floor of the structure or in the vicinity of the structure doorway.

An abandoned water well with associated windmill was observed located approximately 20 feet east of the residential structure. A new well casing was also observed between the abandoned water well and the residential structure. The new well casing was not connected to any piping.

Several empty 1- and 5-gallon cans/buckets of interior and exterior latex paints were noted stored in a storage closet of the vacant 3441 Broadway building. This building also included two bathrooms which included large utility sinks. A natural gas-powered water heater was also noted within one of the buildings storage closets.

Your Style Décor, an upholstery and furniture repair and restoration company, currently occupies the 3439 Broadway building. This is the only current tenant where small quantities (1-gallon or less) of various hazardous materials such as spray paints, wood stains, lacquers, lubricants, and cleaners are currently utilized.

Paved and gravel parking areas are located to the east of the front three structures, and a paved driveway leads to the west towards and alongside the warehouse structure. *De minimis* oil and paint stains were observed on the paved driveway and area between the warehouse and 3441 Broadway structures.

No significant issues of environmental concern were identified in the site visit.

Recognized Environmental Conditions (RECs)

This site assessment has revealed no evidence of adverse RECs or potential RECs associated with the Target Property.

Historical Recognized Environmental Condition (HREC)

HRECs include chemical releases that occurred in the past, but resulting concentrations of hazardous materials or petroleum products in soil and/or groundwater remain within the regulating agency health criteria, and the site has been closed by said agency *without* land use restrictions (i.e., the property could be redeveloped for *unrestricted residential use*).

No HRECs were identified.

Controlled Recognized Environmental Condition (CREC)

A CREC includes releases of hazardous materials or petroleum products that are allowed to remain in place following closure by a regulating agency, but the site is subject to implementation of required controls (e.g., Target Property use restrictions, Activity Use Limitations [AULs], deed restrictions, engineering controls, or remediation systems, etc.).

No CRECs were identified.

De Minimis Conditions

De minimis environmental conditions include:

- Minor staining at various exterior parking and driveway areas.
- Minor chemical (paints, lacquers, stains, lubricants, and cleaners) in interior areas of the 3439 Broadway building by Your Décor furniture restoration.

Data Gaps

In the opinion of the preparers of this Phase I ESA, no significant data gaps, as defined in ASTM 1527-13, were encountered during the conduct of this Phase I ESA.

Opinion

It is the opinion of the Environmental Professional that research performed in this Phase I ESA substantially complies with the scope and limitations of ASTM E 1527-13 and EPA AAI Rule. Exceptions and/or limiting conditions (where applicable) are discussed in Section 1.6.

Conclusions

Available documentation has provided environmental information to support the following conclusions:

- No evidence of current, historical, or controlled RECs were identified at the Target Property.

- Based on the November 2006 sampling of the Target Property's former irrigation water supply well, no petroleum hydrocarbon contaminants are present in groundwater beneath the site.

Recommendations

No Phase II investigations are recommended at this time. However, based on the age of the Target Property structures, ERG recommends that prior to any major renovation or demolition, a complete asbestos survey be conducted of the of the easternmost buildings on the Target Property.

1.0 INTRODUCTION

Environmental Resources Group ("ERG") performed a Phase I Environmental Site Assessment ("ESA") of the Target Property located at 3439, 3441, and 3443 Broadway Street, American Canyon, California (the "Target Property"), Napa County Assessor's Parcel Number (APN) 058-312-010 on behalf of current site owners: Mr. Dion Heffran and Ms. Maurissa Heffran[2] of Gateway Crossing, Inc. (GCI) (User or Client) (Figure 1).

ERG performed the Phase I ESA following the guidelines in the American Society of Testing and Materials (ASTM) Standard Designation E1527-13, *"Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,"* and the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries (AAI), as required under Section 101(35)(b)(ii) and (iii) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (EPA AAI Rule) and Code of Federal Regulations (40 CFR) 312.

1.1 PURPOSE

The purpose of this Phase I ESA is to identify existing or potential Recognized Environmental Conditions (RECs), Historical RECs (HRECs), or Controlled RECs (CRECs) (as defined by ASTM Standard E1527-13 and EPA AAI Rule) in connection with the Target Property, as well as to provide appropriate inquiry into the previous ownership and use of the Target Property (where applicable).

It is our understanding that this Phase I ESA is being conducted for purposes of financing a proposed future renovation of the Target Property. The current use scenario and zoning of Community Commercial will remain unchanged.

1.2 SCOPE OF SERVICES

ERG has performed an ESA on the Target Property in general conformance with the scope and limitations of ASTM Practice E1527-13 and EPA AAI Rule. Any exceptions to or deletions from this practice are described in Section 1.6 of this report.

The Scope of Services includes "All appropriate inquiry into the previous ownership and uses of the Target Property consistent with good commercial or customary practice", as defined in 42 USC 9601(35)(B). The Scope of Services includes observations for RECs, as well as a review of ***reasonably ascertainable information*** in regulatory files provided within reasonable time and cost constraints. Accordingly, it cannot be guaranteed that all files are examined, or that every contingency is investigated. These limitations are in conformance with the stated guidelines of ASTM E1527-13. An evaluation of business environmental risk associated with a parcel of commercial real estate is not included in this assessment.

- In general accordance with ASTM E1527-13, the Scope of Services for Phase I ESAs generally consists of the following tasks:

[2] According to Mr. Heffran, his family purchased the subject property in late 2014.

- Acquiring available site-specific information (e.g., title, environmental lien information, former environmental investigation documentation, etc.) regarding the Target Property from the User.

- Providing key site personnel (e.g., owner, property manager, etc.) an Environmental Questionnaire to evaluate current and historical uses of the Target Property.

- Reviewing an Envirosite Corporation (Envirosite) Government Records Report to identify potential issues of environmental concern at the Target Property, and within the Target Property vicinity.

- Researching and reviewing readily available Local regulatory agency (i.e., Certified Unified Program Agency [CUPA]) files and online State database files. The records review includes files for the Target Property available at State, County, and/or Local offices or online databases. Where available, records were reviewed for adjacent properties identified in the Government Records Report, as appropriate. In some cases, the status of a site may be determined from telephone interviews of staff persons of these offices.

- Reviewing historical aerial photographs, Sanborn Fire Insurance Maps (Sanborn Maps), historical topographic maps, and city directories, where available.

- Performing a site reconnaissance of the Target Property and nearby properties, including photo-documenting current property conditions. The site reconnaissance consists of an inspection of conditions at the Target Property, and identification of nearby property uses. Interviews are conducted of persons associated with the Target Property (e.g., the current owner or occupant) who are reasonably available at the time of the site reconnaissance, and by telephone when such interviews are possible.

- Interviewing readily available persons with knowledge of the Target Property and/or surrounding properties.

- Preparing a report presenting the findings, conclusions, and recommendations of the Phase I ESA research.

The Scope of Services for this Phase I ESA does not include analysis of Controlled Substances (CS), Asbestos-Containing Materials (ACM), lead-based paint (LBP), or other non-CERCLA related conditions. Licensed professionals should be contacted to assess their potential presence if there is suspicion that these substances or conditions are on the Target Property.

1.3 USER RELIANCE

This Phase I ESA report is for the exclusive use of Mr. Dion Heffran and Ms. Maurissa Heffran of GCI ACI, their Agents and Assignees, financing institutions involved in the financing of the sale and/or development of the Target Property, and any relevant and prevailing regulatory agency. Use of this report by any other party shall be at such party's sole risk.

1.4 USER-PROVIDED INFORMATION

The User provided no previous Phase I ESAs or other environmental investigation reports or title records for the Target Property. The User has specialized knowledge and experience related to the history of the site, as described in the environmental questionnaire contained herein. The User is not aware of any environmental cleanup liens against the Target Property that are filed or recorded under federal, tribal, state or local law.

1.5 SIGNIFICANT ASSUMPTIONS

ERG informs the Client that there is a possibility that even with the proper application of the methodologies employed in this ESA, conditions may exist on the Target Property that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. ERG believes that the information obtained from the record review and the interviews concerning the Target Property is reliable. However, ERG cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete.

Significant assumptions regarding this Phase I ESA are summarized below:

- This Phase I ESA is intended to assess environmental conditions of a specific parcel of commercial real estate.

- This Phase I ESA reflects a commercially prudent and reasonable inquiry designed to identify RECs in connection with a Target Property.

- ERG assumes that Target Property information obtained from the review of various sources records is reliable. However, no warranty or guarantee of the information provided by these sources is accurate or complete is implied or stated.

- All information regarding operations, plans, specifications, conditions, or test data which is provided to ERG by Client, owners or third parties (including without limitation, any point of contact at the Target Property), is deemed by ERG to be correct and complete without any independent verification by ERG. ERG assumes no responsibility for the accuracy of such information and shall not be liable if reliance on such information results in incorrect conclusions or results.

1.6 LIMITATIONS AND EXCEPTIONS

This Phase I ESA was conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13 and the EPA AAI Rule. It is understood by the parties hereto that the Client who has requested this assessment will use this assessment to provide baseline environmental information to the User(s) for purposes of future redevelopment and construction planning for the existing building, and potential future financing for redevelopment of a portion of the Target Property. ERG intends no other use or disclosure.

This report is issued with the understanding that it is to be used only in its entirety. The Scope of Services performed to complete this Phase I ESA was limited in nature. This service has been performed

in accordance with generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. ERG must alert the Client that this evaluation may not reveal if hazardous substance or petroleum hydrocarbon releases have occurred on or near the Target Property, and this Phase I ESA does not guarantee the condition of the Target Property. Furthermore, the absence of potential gross contamination sources, historical or present, does not necessarily imply that the Target Property is free of contamination. ERG and its Environmental Professional (EP) representative do not warrant or guarantee that no significant events or releases or conditions could have arisen during time periods with data gaps.

This assessment was not intended to predict future site conditions. A risk assessment was not performed, and the Scope of Services does not include a determination of the extent of business environmental risk, or the public health impact of known or suspected hazardous substances or petroleum hydrocarbons. This assessment does not address whether requirements in addition to All Appropriate Inquiry have been met to qualify for the innocent landowner, contiguous Target Property owner, or bona fide prospective purchaser limitations on liability protections under CERCLA. This assessment does not address any additional requirements or environmental assessment obligations of State or Local laws or Federal laws, other than the All Appropriate Inquiry provisions of the landowner liability protections.

ERG and its EP representative are not responsible for conditions or consequences arising from facts and information that were withheld or concealed, or not fully disclosed at the time this evaluation was performed. In accordance with ASTM E1527-13, to achieve the objectives of this project, ERG based its conclusions and recommendations upon ***reasonably available*** information obtained during the period the investigation was conducted, including: historical records, maps, aerial photographs, personal interviews, and/or records held by relevant government and private agencies. Consequently, this information is subject to the limitations of historical documentation, including availability, completeness, and accuracy of records, and the personal recollections of those persons contacted. ERG and its EP representative are not responsible for errors or omissions in agency files or public or private databases, or non-disclosure by Target Property owners or representatives.

The content and conclusions provided by ERG in this report are based solely on the information collected during our investigation and activities at the Target Property, our present understanding of the Target Property conditions, and our professional judgment in light of such information at the time this report was prepared. Part of the findings in this investigation is based on data provided by others. This report presents ERG's professional opinion, and no warranty, expressed or implied, is made. The Client has the right to reproduce in full and provide copies of this report to interested parties, including his Agents and Representatives.

The information and opinions rendered in the report are exclusively for use by the Client and its approved User(s). ERG will not distribute or publish this report without the Client's consent, except as required by law or court order. ERG and its EP representative have no responsibilities or liability whatsoever to persons or entities other than the Client if they so choose to use this report.

1.7 SPECIAL TERMS AND CONDITIONS

The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting constraints imposed by the User. No subsurface exploratory drilling or sampling was done

under the scope of this Phase I ESA. Unless specifically stated otherwise in the report, no chemical analyses have been performed during the course of this Phase I ESA.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This Phase I ESA is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

The content and conclusions provided by ERG in this report are based solely on the information collected during our investigation and activities at the Target Property, our present understanding of the Target Property conditions, and our professional judgment in light of such information at the time this report was prepared. Part of the findings in this investigation is based on data provided by others.

This report presents ERG's professional opinion, and no warranty, expressed or implied, is made. Mr. Dion Heffran and Ms. Maurissa Heffran of GCI have the right to reproduce in full and provide copies of this report to interested parties, including their Agents and Representatives.

1.8 MATTERS KNOWN TO CLIENT

The Client, User(s), Target Property representative(s), or owner(s) should have provided ERG any and all information known to said persons which pertains to: (1) the existence or possible existence at, on, under or in the vicinity of the Target Property, of any hazardous substances or petroleum hydrocarbons; (2) any conditions at, on, under or in the vicinity of the Target Property, which might represent a potential safety hazard or danger to human health or the environment; (3) any permit, manifest, title record, lien or other record of compliance or non-compliance with any Federal, State or Local laws, or court or administrative order or decrees; which could affect the recommendations or conclusions reached by ERG in the performance of its services.

2.0 SITE DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The Target Property is located at 3439, 3441, and 3443 Broadway Street, American Canyon, California, to the west of Broadway (also known as California Highway 29) and approximately 100 feet south of Donaldson Way West. The Target Property consists of a rectangular-shaped parcel comprising approximately 2.5 acres and is described as Napa County Assessor's Parcel Number (APN) 058-312-010 in the City of American Canyon (City). The Target Property is zoned Community Commercial and is located in a mixed commercial and residential area of the City of American Canyon.

2.2 CURRENT USE OF THE TARGET PROPERTY

The Target Property is improved with four separate structures including (from south to north): an approximately 1,200 square foot one-story building with an address of 3439 Broadway; an approximately 1,100 square foot one-story residence with an address of 3443 Broadway; an approximately 2,500 square foot one-story commercial-type building with an address of 3441 Broadway; and an approximately 3,000 square foot warehouse-type structure located behind (west of) 3441 Broadway. The current uses of the four site buildings are as follows:

- 3439 Broadway: The current tenant of this building is "Your Style Décor", an upholstery and furniture repair and restoration company.

- 3443 Broadway: A single family residence, which includes a chicken coop and storage shed behind the house structure.

- 3441 Broadway – front building: Currently vacant commercial building which had been most recently leased by the Canyon Gallery & Art Center, an art studio and gallery.

- 3441 Broadway – rear building: Currently utilized for new, unassembled furniture storage for an off-site furniture retailer.

The four site buildings are located on the eastern portion of the site, near Broadway. The western half of the site is currently an undeveloped grass field. Parking for the site structures consists of paved and gravel areas east of the site structures and south of the 3441 Broadway structures.

2.3 CURRENT USE OF ADJOINING PROPERTIES

Parcels adjacent to the Target Property are used for commercial and residential purposes:

- The Target Property is bounded on the north by residential properties along the southern side of Donaldson Way as well as the American Canyon Plaza and the southwest corner of Broadway and Donaldson Way. American Canyon Plaza is a small commercial center which includes a hair salon, an eyelash salon, and a bead shop.

- The Target Property is bounded on the east by Broadway Street, a six lane boulevard with landscaped median. Properties located east of Broadway include Navajo Rug Cleaning Company and American Canyon Car Wash located east of Broadway.

- The Target Property is bounded on the south by Canyon Plaza, which is a commercial shopping and office complex. No industrial tenants were noted at the Canyon Plaza.

- The Target Property is bounded to the west by residential properties.

2.4 PHYSICAL SETTING SOURCES

2.4.1 Topography

As indicated on the USGS Cuttings Warf Quadrangle topographic map, the Target Property is located at an elevation of approximately 55 feet above mean sea level (USGS, 1981). The topography in the Target Property vicinity is relatively flat, and slopes gently to the west-southwest, towards the Napa River, located approximately 1.5 miles to the west.

2.4.2 Geology and Hydrogeology

The Target Property is located in the Coast Ranges Geomorphic Province of California, a region underlain by a complex assemblage of consolidated marine sedimentary rocks, semi-consolidated and unconsolidated terrestrial deposits, and metamorphic blocks The Napa River delta is located approximately 1.5 miles west of the target property, and the Target Property is underlain by alluvial sediments deposited by streams flowing toward the delta from low-lying hills east of the Target Property. The alluvial sediments reported in the Target Property vicinity have generally been reported as a mixture of clays and silts with and lesser amounts of sand and gravel (Norris & Webb, 1976).

Based on information provided in the State Water Resources Control Board's (SWRCB) Geotracker public environmental database web site (http://geotracker.waterboards.ca.gov/), first groundwater has been reportedly encountered at approximately 2 to 5 feet below ground surface (bgs) at several properties located within approximately ¼ - mile east and northeast of the site. The specific groundwater flow direction beneath the subject property is not known however, based surface topography, groundwater flow is expected to be to the west or southwest, towards the Napa River delta and estuary.

3.0 RECORDS REVIEW

As part of this assessment, ERG reviewed available agency files and records for the Target Property, environmental reports, and regulatory databases (Appendices B-1 through B-7). A summary of historical use information obtained in this Phase I ESA is presented below, followed by summaries of the findings from environmental sources reviewed for the ESA.

3.1 REGULATORY AGENCY FILE REVIEW

The following sections summarize the review of available regulatory agency files.

3.1.1 San Francisco Regional Water Quality Control Board (RWQCB)

The RWQCB was contacted by e-mail to inquire about the subject property on March 11, 2016. On March 24, 2016 the RWQCB responded by telephone that they had no records for the subject property. ERG also queried the Geotracker database maintained by the State Water Resources Control Board (SWRCB). There were no records in the Geotracker database for the subject property.

3.1.2 California Department of Toxic Substances Cotrol (DTSC)

A records request for the site was submitted to the DTSC March 11, 2016. On March 14, 2016 the DTSC responded that they had no records for the subject property. ERG also queried the Envirostor database maintained by the DTSC and no records for the subject property were found in the database review.

3.1.3 CUPA – Napa Fire Department

The Certified Unified Program Agency (CUPA) is the consolidation of six state environmental programs into one program. This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. The six programs are the Hazardous Materials Business

Plan/Emergency Response Plan, Hazardous Waste, Tiered Permitting, Underground Storage Tanks, Aboveground Storage Tanks (SPCC only) and the Uniform Fire Code Hazardous Materials Management Plan.

The CUPA is a local agency that has been certified by DTSC to implement the six state environmental programs within the local agency's jurisdiction. The Napa Fire Department (NFD) is the CUPA for the Target Property. On March 21, 2016, NFD Fire Marshal Mr. Darren Drake indicated by telephone that the NFD has no files on the Target Property.

3.1.4 American Canyon Building Department

Files held by the American Canyon Building Department (ACBD) were reviewed at their offices on March 15, 2016. Information gathered from the file review included that the site buildings were connected to the municipal sanitary sewer system in 1965 and to the municipal water system in 1971.

Plans for construction of the 3,000 square foot warehouse structure located west of the 3441 Broadway Structure were approved in 1984. The building permit for the warehouse structure was granted Mr. Robert Gish, the Target Property owner at that time. The construction plans indicated that the building was going to be utilized by a sign manufacturing company.

More recently, Gateway Crossing Inc. filed for an Entitlement Application for a new hotel to be constructed on the site on June 11, 2015. The file also included documentation regarding the installation of a new water supply well to 200 feet bgs dated June 26, 2015. According to Mr. Dion Heffran of Gateway Crossing, the water supply well was installed to provide irrigation water to the proposed hotel development on the Target Property.

3.1.5 Napa County Department of Planning, Building, and Environmental Services

The Napa County Department of Planning, Building, and Environmental Services (NCDPBES) was the Local Oversite Program (LOP) Agency for Napa County until 2012, when they the LOP was transferred to the RWQCB. The NDDPBES files did not include any information regarding hazardous materials use or storage at the Target Property. The file included information on the 3,000 square foot warehouse structure constructed in 1984, indicating that there would be no running water or sewer hook-ups to the building (the building was to only be utilized as a storage warehouse). Also included in the file is a well abandonment report dated March 13, 2015, for a former 75 foot water supply well with a 5-inch diameter steel casing.

A Well Completion Report for the Target Property's new water supply well was also included in the file. The Well Completion Report indicates that the new well was drilled and installed to 200 feet bgs from March 16 through 20, 2015. The well is constructed of 8.75-inch diameter, schedule 40 PVC casing, and is perforated from 70 to 200 feet bgs. The well has a sanitary surface seal to 55 feet bgs. The static water level in the well following well development was at approximately 30 feet bgs. The new well is located approximately 30 feet east of the residential structure on the Target Property.

3.2 STANDARD ENVIRONMENTAL RECORD SOURCES

Standard environmental record sources reviewed in this Phase I ESA included aerial photographs and historical topographic maps, Sanborn Fire Insurance Maps, City of American Canyon City Directories, and an Envirosite Government Records Report. The reports are presented in Appendices B-2 through B-6.

3.2.1 Aerial Photographs

For this Phase I ESA, historical aerial photographs from Historical Information Gatherers (HIG) were reviewed to identify areas of potential environmental concern. The results of the review are summarized below (Appendix B-2):

- 1948 – The Target Property and adjacent properties to the north, west, and south appear to be undeveloped vacant grassland. Broadway is present to the west of the Target Property, with a ranch and barn located to the west of Broadway and several small residential-type structures located north of the barn-type structure.

- 1958 and 1968 – The Target Property includes the current residential-type building (3443 Broadway) and the building south of the residence (3439 Broadway). An apparent small orchard is located to the west of the site structures, with fallow grassland apparent to the west of the orchard. Adjacent properties to the north and west are developed with residential structures. Additional residential structures appear to have been constructed to the north and west between 1958 and 1968. The property to the south appears to include several long greenhouse structures. Land to the east of Broadway appears to be a mix of agricultural and residential ranch-type properties.

- 1974 – The Target Property includes the three current site structures located to the west of Broadway (3439, 3441, and 3443 Broadway). The small orchard previously noted on the western portion of the Target Property appears to have been removed. Properties adjacent to the Target Property appear generally unchanged from the previous photo.

- 1987 – The aerial photo is very poor quality, but it appears that the Target Property includes all four site structures that are currently located on the property. Additional residential development is apparent to the west of the Target Property, and additional commercial-type development is apparent to the east of Broadway.

- 1993 – The Target Property and vicinity features appear generally similar as on the previous photograph.

- 1998 – The aerial photo is not clear, but general Target Property and vicinity features appear similar to those on the previous photograph.

- 2005 – The Target Property appears similar to today, except that equipment or debris is apparent in the open field to the west of the site structures. The current commercial structure is apparent on the property adjacent to the northeast corner of the Target Property, and the current commercial and office complex (American Canyon Plaza) is located to the south. Three commercial-type buildings are noted to the east of Broadway, and a large vacant lot is apparent south of these commercial buildings.

- 2009 and 2014 – The Target Property appears generally similar to the previous photograph, except that the equipment/debris piles previously noted on the western portion of the property are no longer apparent. Most of the site vicinity appears similar to today except that the former vacant lot to the east of Broadway appears to have been developed with the current American Canyon Carwash facilities.

3.2.2 Historical Topographic Maps

Select historical topographic maps from 1916 to 1981 were reviewed to identify significant changes in ground surface elevations that may indicate fill areas, and other pertinent features of potential environmental concern. The results of the review are summarized below (Appendix B-3):

- 1916 – The Target Property is indicated as located in a generally undeveloped area west of the San Francisco and Napa Valley Railroad (SF&NV-RR) line, approximately ½ mile south of "Napa Junction". The railroad is located just east of the Target Property and Broadway is indicated to the east of the railroad. There is a small structure indicated to the north of the Target Property, near the railroad. Additional small structures and a railroad spur are indicated to the east of the main railroad and Broadway.
- 1949 and 1951 – The Target Property and land to the west of Broadway/CA Hwy 29 remains indicated as vacant land. Broadway is indicated as a 4-lane highway which also encompasses the SF&NV-RR. The previous small structure indicated near the northeast corner of the Target Property is no longer present. Additional small structures are indicated to the east of Broadway.
- 1968 and 1981 – The southernmost two site structures are indicated on the Target Property. Adjacent properties to the north have small structures indicated, and larger structures are indicated on the property to the south. The residential portion of the City of American Canyon is indicated to the west, and some additional structures are indicated to the east of Broadway.

3.2.3 Fire Insurance Maps

No Fire Insurance Map coverage was located for the Target Property.

3.2.4 City Directories

HIG searched for historical city directories for the Target Property area, however their City Directory Report indicated that "No city directories covering the subject property were located" (Appendix B-5).

3.2.5 Government Records Report

A Government Records Report prepared by Envirosite was reviewed for the Target Property and surrounding sites within up to a one-mile radius of the Target Property. This information was reviewed for local, state, and federal listings for cases pertaining to leaking USTs and ASTs, hazardous waste sites, and abandoned sites within the standard radii established by the ASTM. Results of the major database searches are discussed below. Minor databases are discussed if deemed relevant by the EP. In some cases, location information supplied by the regulatory agencies is insufficient to allow the database companies to identify facility locations. These facilities are listed as "un-locatable" sites in the database report. A copy of the Government Records Report is included in Appendix B-6.

3.2.5.1 Target Property

The Target Property is listed on the following databases in the Government Records Report for the respective property addresses:

- HAZNET – CA – Walter Gish at 3439 Broadway Street, American Canyon. This is a 2008 listing for generating and storing waste oil and mixed oil. Reportedly, 1.52 tons of waste oil and mixed oil was disposed of at an off-site facility in Alameda County, California. No treatment or recovery of wastes was reportedly conducted at the Target Property based on this database listing.

- FRS – The Sign Factory at 3441 Highway 29, American Canyon. This FRS listing indicates that the facility was included on the Emission Inventory System (EIS), which maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. No additional information is included in the database listing, however it is likely that the Sign Factory was included on the EIS due to materials utilized in making signs for customers.

The Target Property is not listed on any of the other government records databases reviewed by Envirosite.

3.2.5.2 Surrounding Properties

The following paragraphs summarize the findings of the EDR radius report search. Surrounding properties that pose potential environmental risk to the Target Property based on their hydrogeologic locations and proximity to the Target Property are discussed in greater detail beneath the radius report summary. Based on groundwater elevation data from former monitoring wells at nearby properties to the northeast and southeast, first groundwater should lie within 5 feet bgs and likely flows to the west or southwest, towards the Napa River delta and estuary. For purposes of this evaluation, sites that are located east to northeast of Target Property are considered "upgradient" with regards to assumed groundwater flow direction.

State and Federal Regulatory Review

Federal NPL

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund Program. No NPL sites are located within one mile of the Target Property.

Federal CERCLIS and CERCLIS NFRAP Lists (CERCLIS)

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list is a compilation of sites that the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances. The CERCLIS No Further Remedial Action Planned (NFRAP) list is a compilation of sites that the EPA has investigated and has determined that the facility does not pose a threat to human health or the environment, under the CERCLA framework. No CERCLIS sites are listed within one-half mile of the Target Property. No CERCLIS NFRAP sites are located within one-half mile of the Target Property.

Federal Resource Conservation and Recovery Act (RCRA) CORRACTS Facilities List

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The CORRACTS database is the EPA's list of treatment storage or disposal (TSD) facilities subject to corrective action under RCRA. No RCRA CORRACTS sites are listed within one mile of the Target Property.

Federal Resource Conservation and Recovery Act (RCRA) Non-CORRACTS Treatment Storage and Disposal (TSD) Facilities List

The RCRA TSD database is a listing of reporting facilities that treat, store or dispose of hazardous waste. A listing in this database does not imply a release has occurred at the site, or that there are corrective actions required at a facility. No RCRA TSD sites are listed within one-half mile of the Target Property.

Federal RCRA Generator List

The RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Generator database is a compilation by the EPA of reporting facilities that generate hazardous waste, and includes Large Quantity Generators (LQG) and Small Quantity Generators (SQG). A listing in this database does not imply a release has occurred at the site, or that corrective actions are required at a facility. No LQG or SQG facilities are located within one-quarter mile of the Target Property.

Federal Institutional Control/Engineering Controls Registry (Controls)

The U.S. EPA maintains an Engineering Controls and Institutional Controls Site List. No Controls sites listed are listed within one-half mile of the Target Property.

Response

Response sites are State and Tribal equivalents to National Priority List (NPL) sites. No Response sites are located within one mile of the Target Property.

Envirostor

Envirostor sites are DTSC State and Tribal equivalents to CERCLIS sites. Two Envirostor sites are listed within one mile of the Target Property.

SWF/LF

SWF/LF is a database that documents State and tribal landfill and solid waste disposal sites. No SWF/LF sites are located within one-half mile of the Target Property.

State Leaking Underground Storage Tank List (LUST)

The SWRCB compiles lists of sites at which leaks of hazardous substances from USTs have occurred. Five LUST cases are listed within one-half mile of the Target Property.

In fuel leak cases, research conducted in the State of California by Lawrence Livermore National Laboratory (LLNL) in 1996 indicates that attenuation and degradation of the product in groundwater play major roles in reducing the hydrocarbon contamination to non-detectable levels within several hundred feet of the contaminant source. Moreover, this research indicates that in over 90% of the hydrocarbon contamination cases, with the possible exception of MTBE or other fuel oxygenates, groundwater contaminant plumes do not extend more than 250 feet from the source. Solvent/toxic contamination plumes may extend farther from the source.

Based on the discussion above, fuel leak LUST sites that are within one-eighth mile in the upgradient direction, and upgradient solvent or toxic leak sites are considered to have potential

risk to the subsurface soils and/or groundwater of the Target Property. Only two of the listed LUST sites are located in a potential upgradient direction from the Target Property. Both of these sites are duplicate listings of one property: Ma Makalla DBA Mike's Arco and Williams Arco, both with the site address of 3462 Broadway, approximately 250 feet northeast of the Target Property (at the northeast corner of Donaldson Way East and Broadway. The groundwater flow direction beneath the Arco site was consistently towards the west, making the site generally cross-gradient from the Target Property. This Arco LUST case was closed by the RWQCB in February 2013.

The former water supply well on the Target Property was sampled as part of the Arco LUST case closure activities, as this well was considered a possible sensitive receptor to contaminants which may be present in groundwater. The well was sampled in November 2006 and analyzed for petroleum hydrocarbon constituents including total petroleum hydrocarbon as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tert-butyl ether (MtBE). None of these contaminants were detected in the water sample collected from the former Target Property water supply well.

Spills, Leaks, Investigations, and Cleanups (SLIC)

The SLIC database lists sites with known spills, leaks, investigations, and cleanups within one-half mile of the Target Property. No SLIC sites are located within one-half mile of the Target Property.

State Underground Storage Tank List (UST)

The SWRCB compiles a list of UST locations. One UST site is located within one-quarter mile of the Target Property.

State Above-ground Storage Tank List (AST)

This database includes permitted active, inactive and closed AST facilities recorded with the state. The Target Property is not listed on this database, as this database does not include compressed gas tanks. No AST sites were listed within one-quarter mile of the Target Property.

Local Brownfields Cleanup and Reuse Database (BROWNFIELDS)

The California Department of Toxic Substance Control (DTSC) maintains the Brownfields Cleanup and Reuse Database of sites that have known contamination or sites for which there may be reasons for further investigation. No BROWNFIELDS sites were listed within one-half mile of the Target Property.

Additional Environmental Records

Deed Restriction Sites (DEED)

Deed Restriction sites are typically sites within other regulatory programs that have achieved closure through a deed restriction process. No DEEDs sites are listed within one-half mile of the Target Property.

Other Ascertainable Records

There are numerous other ascertainable records in the Envirosite Government Records report, but many of them overlap with the records stated above. Database listings that are considered relevant for this evaluation are discussed further below.

Formerly Used Defense Site List (FUDS)

The California Department of Toxic Substance Control (DTSC) maintains a list of Formerly Used Defense Sites (FUDS) and Department of Defense (DOD) sites. No FUDS sites are listed within one mile of the Target Property.

RCRA Non-Generator

One RCRA Non-Generator site was located within one-quarter mile of the Target Property. This site is a 1990 listing for the Northern Abatement Company, located at 3473 Broadway, adjacent to the northeast corner of the Target Property. It is assumed that the Northern Abatement Company previously had offices in the building adjacent to the Target Property, however did not produce, store, or dispose of hazardous waste at the adjacent property.

Contaminated Sites – Napa County

No contaminated sites were listed within one-half mile of the Target Property on the Napa County Contaminated Sites database.

Discussion

The Target Property lies within an area that has generally consisted of primarily residential and commercial properties. However, some of the commercial properties in the site vicinity have included gas stations with registered USTs and/or former LUST cases. The User should note that a listing on a database does not necessarily indicate that a spill or release of chemicals has occurred at the site; however, undocumented spills or releases of chemicals cannot be precluded.

Sites with known or documented releases (i.e., environmental sites) that are located within relative close proximity to the Target Property, and are in the upgradient (or near crossgradient) direction relative to the expected groundwater flow direction (primarily to the west toward the Napa River delta and estuary) were further evaluated. Most of the sites are listed as Completed-Case Closed with the regulating agency, and are not expected to pose significant environmental risk to the Target Property.

The nearest upgradient site to the Target Property where releases were known to impact groundwater was the Arco station at 3462 Broadway, approximately 250 feet to the northeast. This Arco LUST case was closed in February 2012. Part of the Arco LUST site case closure activities included sampling the former water supply well on the Target Property. Analytical results indicated no petroleum hydrocarbon compounds detected in the groundwater sample collected from the former Target Property water supply well. Thus, the closed Arco LUST case is not expected to pose a significant environmental risk to the Target Property.

3.3 SPECIALIZED KNOWLEDGE, EXPERIENCE, AND ACTUAL KNOWLEDGE OF THE USER

According to the ASTM standard, it is the User's responsibility to communicate any information that is pertinent to the identification of RECs at the Target Property based on specialized knowledge, experience, and actual knowledge of the User. The User, Mr. Dion Heffran, completed a Site Assessment

User Questionnaire on March 31, 2016, to answer questions regarding any current or historical knowledge he has regarding the Target Property. The User Questionnaire is presented in Appendix C and provides information discussed in the following sections of this report.

3.4 COMMONLY KNOWN AND REASONABLE ASCERTAINABLE INFORMATION

According to the ASTM standard, it is the User's responsibility to communicate any information that is reasonably known or ascertainable regarding RECs at the Target Property. According to the responses on the User Questionnaire, the User is unaware of any commonly known or reasonably ascertainable information regarding potential RECs at the Target Property.

3.5 CHAIN-OF-TITLE

According to ASTM E1527-13 standard, the EP is not responsible for review of recorded land title records or judicial records for environmental liens or AULs. The User did not provide this documentation, and a 50-year chain-of-title was not requested by the User for this investigation.

3.6 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

According to the ASTM E1527-13 standard, the User is required to provide and/or report to the EP any environmental liens or Activity Use Limitations (AULs) identified for the Target Property. The EP was not provided lien or AUL documentation for this Phase I ESA. The current owner, Mr. Don Heffran, stated in his environmental questionnaire that he was unaware of any environmental liens on the Target Property. Additionally, no environmental liens or deed restrictions (Activity and Use Limitations) were identified for the Target Property in the Envirosite Government Records Report (Appendix B-7).

3.7 ADDITIONAL ENVIRONMENTAL RECORD SOURCES

The User was unaware of any previous environmental site assessments on the Target Property.

4.0 INTERVIEWS AND ENVIRONMENTAL QUESTIONNAIRES

For this investigation, current and historical information was obtained from a representative of the current site owner, Mr. Dion Heffran of Gateway Crossing.

Mr. Heffran stated he was not aware of:

- Any liens or AULs for the Target Property.
- Obvious indicators of contamination at the Target Property.
- He did not have any specialized knowledge about the adjoining properties.
- Any previous environmental clean ups at the Target Property.

Mr. Heffran stated he was aware of:

- The past uses of the Target Property.

Mr. Heffran indicated that he purchased the property in late 2014 from Mr. Robert Gish. He indicated that Your Décor furniture restoration had been occupying the 3439 Brooadway Structure since for approximately the past six or seven years.

Mr. Heffran indicated that the previous tenant of the 3441 Broadway commercial building had been the Canyon Gallery and Art Center. The Canyon Gallery and Art Center was an active art studio which gave painting, pottery, and various other media art courses. The art studio and center left the Target Property in late 2015 after being a tenant for approximately five years. Mr. Heffran did not know who the prior occupant of the 3441 Broadway building was.

Mr. Heffran indicated that the warehouse structure west of 3441 Broadway had been utilized for new, unassembled furniture storage by an off-site furniture store since approximately September 2015. Prior to furniture storage, the warehouse was reportedly utilized by a youth support program for storage of donations and other supplies.

Mr. Heffran was aware that the warehouse structure was originally constructed to be utilized by a sign manufacturer in the mid-1980s.

5.0 SITE RECONNAISSANCE

The Target Property was inspected by the ERG representative on March 15, 2016. Mr. Julio Monocada, Property Manager for Gateway Crossing, escorted the ERG representative throughout the Target Property. The Target Property is improved with a four separate structures including (from south to north): an approximately 1,200 square foot one-story building with an address of 3439 Broadway; an approximately 1,100 square foot one-story residence with an address of 3443 Broadway; an approximately 2,500 square foot one-story commercial-type building with an address of 3441 Broadway; and an approximately 3,000 square foot warehouse-type structure located behind (west of) 3441 Broadway. The three easternmost structures: 3439 Broadway, the residential structure at 3443 Broadway, and the front structure at 3441 Broadway are all of cinderblock, slab-on-grade construction. The warehouse building is metal-framed, corrugated metal exterior, slab-on-grade construction. The current uses of the four buildings are as follows:

- 3439 Broadway: The current tenant of this building is “Your Style Décor”, a custom furniture design and restoration company.

- 3443 Broadway: A single family residence, which includes a chicken coop and storage sheds behind the house structure.

- 3441 Broadway – front building: Currently vacant commercial building which had been most recently leased by the Canyon Gallery & Art Center, an art studio and gallery. A

- 3441 Broadway – rear building: Currently utilized for new, unassembled furniture storage for an off-site furniture retailer. This building has no running water or bathroom facilities.

A chicken coup, a dog pen, a garden shed, and a steel Conex storage container are located to the west of residential structure. The storage container was locked at the time of the site reconnaissance, and reportedly contained items belonging to the residential structure tenant.

A small approximately 6-foot by 6-foot metal shed labeled “paint locker” is located to the north of the 3,000 square foot warehouse structure. Empty shelving lined the interior of this structure at the time of

the site reconnaissance and no staining was noted on the floor of the structure or in the vicinity of the structure doorway.

Further west of the site structures was an open grassy field area. A medium-sized box-type truck trailer was stored in this field, approximately 40 feet west of the warehouse structure. This truck trailer was locked at the time of the site reconnaissance.

An approximately 12 foot by 10 foot wooden storage shed was located to the west of the 3441 Broadway building. Nothing was stored inside this storage structure at the time of the site reconnaissance and no staining was noted on the floor of the structure or in the vicinity of the structure doorway.

An abandoned water well with associated windmill was observed located approximately 20 feet east of the residential structure. A new well casing was also observed between the abandoned water well and the residential structure. The new well casing was not connected to any piping.

Several empty 1- and 5-gallon cans/buckets of interior and exterior latex paints were noted stored in a storage closet of the vacant 3441 Broadway building. This building also included two bathrooms which included large utility sinks. A natural gas-powered water heater was also noted within one of the buildings storage closets.

Your Style Décor, an upholstery and furniture repair and restoration company, currently occupies the 3439 Broadway building. This is the only current tenant where small quantities (1-gallon or less) of various hazardous materials such as spray paints, wood stains, lacquers, lubricants, and cleaners are currently utilized.

Paved and gravel parking areas are located to the east of the front three structures, and a paved driveway leads to the west towards and alongside the warehouse structure. *De minimis* oil and paint stains were observed on the paved driveway and area between the warehouse and 3441 Broadway structures.

No significant issues of environmental concern were identified in the site visit.

5.1 TARGET PROPERTY FEATURES, UTILITIES, AND MECHANICAL SYSTEMS

FEATURES	COMMENTS
Roads	No roads are located on the Target Property. A paved parking area and driveway is located east of the 3441 Broadway building and leading back to the warehouse structure to the west. The Target Property is accessed Broadway Street on the east.
Mechanical Systems	The 3439 Broadway structure includes a few mechanical systems, including: sewing machines; drill presses; and band saws. Two small portable air compressors and a small gas powered generator were noted stored in the residential storage shed behind the residential structure.
Aboveground Storage Tanks (ASTs)	No ASTs were observed at the Target Property.
Underground Storage	No evidence of USTs was noted, either during the site visit, or from

Tanks (USTs)	historical documents reviewed.
Surface Water Drainage and Storm Drains	No surface water drains were noted at the Target Property.
Utilities	Electricity and natural gas is provided by Pacific Gas & Electric.
Chemical and Waste Chemical Storage and Disposal	Your Décor utilizes minor quantities of various glues, paints, laquers, and stains in their furniture restoration procedures. These products are stored on shelving above work benches along the west wall of the 3439 Broadway structure. Waste fluids are not produced from Your Décor's furniture restoration procedures.
Heating and Cooling	The residential structure is the only Target Property structure that has an active heating system. This heating system was not inspected as part of this Phase I ESA.
Sewage Treatment	The Target Property is provided sanitary sewage services by the City.
Potable Water Source	The Target Property is provided potable water by the City.
Wells and Cisterns	A new water well casing was observed approximately 10 feet east of the Target Property residential structure. Based on information gathered from Napa County, this well was installed in March 2015. A former water supply well located approximately 20 feet east of the residential structure was abandoned under permit in March 2015, prior to installation of the new water well. The new water well is not connected to any water supply piping. According to Mr. Heffran, the new water well was installed to provide landscape irrigation water for a motel that Gateway Crossing is proposing to construct on the Target Property. No evidence or cisterns was observed during the site reconnaissance.
Wastewater Treatment	No indications of onsite industrial wastewater disposal or treatment facilities were observed during the onsite reconnaissance.
Transformers	No electrical transformers were noted on the Target Property during the site reconnaissance.
Floor Drains	The Target Property buildings are all of slab-on-grade construction and no floor drains are present except in the bathrooms of the three front (easternmost) buildings.

5.2 POTENTIAL ENVIRONMENTAL CONDITIONS

5.2.1 Hazardous Materials and Petroleum Products Used or Stored at the Site

Minor quantities of various paints, cleaners, laquers, stains, and lubricants are utilized by Your Décor in their furniture restoration business. These products are used on an "as needed" basis, and no waste fluids are produced during their application.

5.2.1.1 Unlabeled Containers and Drums

No unlabeled containers or drums were observed during the site reconnaissance.

5.2.1.2 Disposal Locations of Regulated/ Hazardous Waste

No obvious indication of onsite hazardous waste disposal was observed on the Target Property.

5.2.2 Evidence of Releases

No excessively stained areas, stressed vegetation, or other evidence of surface chemical releases was observed during the site reconnaissance. *De minimis* stains were observed at several exterior areas in the parking lot and driveway areas of the Target Property.

5.2.3 Polychlorinated Biphenyls (PCBs)

No equipment or electrical transformers potentially containing PCBs were noted at the Target Property.

5.2.4 Landfills

No evidence of on-site land filling was observed or reported during the site reconnaissance.

5.2.5 Pits, Ponds, Lagoons, Sumps, Catch Basins, and Storm Drains

No evidence of on-site pits, ponds or lagoons was observed or reported during the site reconnaissance.

5.2.6 On-Site ASTs and USTs

No onsite ASTs were and no evidence of onsite USTs was located.

5.2.7 Radiological Hazards

No evidence of radiological substances or equipment was observed or reported on the Target Property.

5.2.8 Asbestos-Containing Materials (ACM)

An asbestos survey was not conducted for this investigation and no previous asbestos surveys were known to have been conducted at the Target Property.

6.0 FINDINGS AND CONCLUSIONS

ERG has performed this Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 and EPA AAI Rule for the Target Property located at 3439, 3441, and 3443 Broadway Street, American Canyon, California (Napa County APN 058-312-010). Any exceptions to or deletions from this practice are described in Section 1.6 of this report.

6.1 RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS)

This site assessment has revealed no evidence of adverse RECs or potential RECs associated with the Target Property.

6.2 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITION (HRECS)

HRECs include chemical releases that occurred in the past, but resulting concentrations of hazardous materials or petroleum products in soil and/or groundwater remain within the regulating agency health criteria, and the site has been closed by said agency *without* land use restrictions (i.e., the property could be redeveloped for *unrestricted residential use*).

No HRECs were identified.

6.3 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITION (CRECS)

A CREC includes releases of hazardous materials or petroleum products that are allowed to remain in place following closure by a regulating agency, but the site is subject to implementation of required controls (e.g., Target Property use restrictions, Activity Use Limitations [AULs], deed restrictions, engineering controls, or remediation systems, etc.).

No CRECs were identified.

6.4 DE MINIMIS ENVIRONMENTAL CONDITIONS

De minimis environmental conditions include:

- Minor staining at various exterior parking and driveway areas.
- Minor chemical (paints, lacquers, stains, lubricants, and cleaners) in interior areas of the 3439 Broadway building by Your Décor furniture restoration.

6.5 DATA GAPS

In the opinion of the preparers of this Phase I ESA, no significant data gaps, as defined in ASTM 1527-13, were encountered during the conduct of this Phase I ESA.

6.6 OPINION

It is the opinion of the Environmental Professional that research performed in this Phase I ESA substantially complies with the scope and limitations of ASTM E 1527-13 and EPA AAI Rule. Exceptions and/or limiting conditions (where applicable) are discussed in Section 1.6.

6.7 DEVIATIONS

This Phase I ESA substantially complies with the scope of services and ASTM E 1527-13 and EPA AAI RULE, except for exceptions and/or limiting conditions as discussed in Section 1.6.

6.8 CONCLUSIONS

Available documentation has provided environmental information to support the following conclusions:

- No evidence of current, historical, or controlled RECs were identified at the Target Property.
- Based on the November 2006 sampling of the Target Property's former irrigation water supply well, no petroleum hydrocarbon contaminants are present in groundwater beneath the site.

6.9 RECOMMENDATIONS

No Phase II investigations are recommended at this time. However, based on the age of the Target Property structures, ERG recommends that prior to any major renovation or demolition, a complete asbestos survey be conducted of the of the easternmost buildings on the Target Property.

7.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONALS

I declare the, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40CFR Part 312.

I have the specific qualifications based on education, training and experience to assess a Target Property of the nature, history, and setting of the subject Target Property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

François A. Bush, P.G. Benjamin Wells, President

April 18, 2016

Date

8.0 REFERENCES

Cook Environmental Services, Inc., 2012. *Verification Monitoring Report, Second Quarter 2012 and Request for No Further Action, Mike's Arco, 3462 Broadway, American Canyon, California 94503, LOP-185*. July 31 (source: Geotracker).

Envirosite Corporation, 2016. *City Directory Report, 3441 Broadway St, American Canyon, CA 94503*. March 18.

Envirosite Corporation, 2016. *Government Records Report, 3441 Broadway St, American Canyon, CA 94503*. March 16.

Envirosite Corporation, 2016. *Historical Topographic Map Report, 3441 Broadway St, American Canyon, CA 94503*. March 16.

Historical Information Gatherers, 2016. *Fire Insurance Maps, 3441 Broadway St, American Canyon, CA 94503*. March 18.

Historical Information Gatherers, 2016. *Historical Aerial Photographs, 3441 Broadway St, American Canyon, CA 94503*. March 18.

Norris, Robert & Webb, Robert - *Geology of California*, 1976.

FIGURES

Source: USGS Cuttings Warf Topographic Quadrangle, 1981

Environmental Resources Group, Inc. **1038 Redwood Highway, Suite 1** **Mill Valley, CA 94941** **415-381-6574**	**SITE LOCATION MAP** 3441 Broadway Street American Canyon, California	**Figure 1** **April 2016**

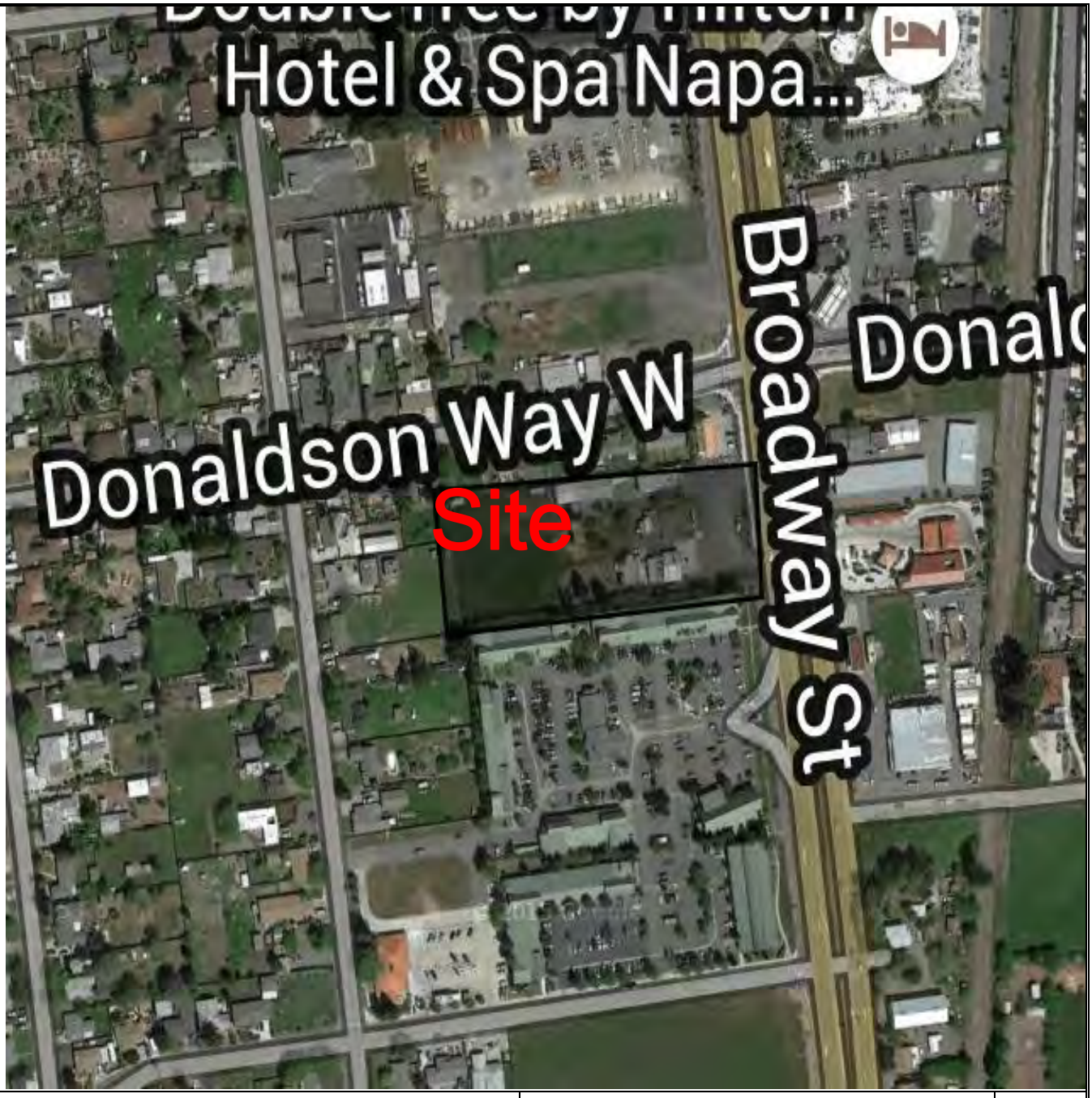


FIGURE 2	SITE PLAN	N↑
ENVIRONMENTAL RESOURCE GROUP **1038 Redwood Highway, Suite 1** **Mill Valley, CA 94941** **415-381-6574**	**3439, 3441, and 3443 Broadway Street** **APN 058-312-010** **American Canyon, California**	

APPENDIX A

SITE PHOTOGRAPHS

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 1. VIEW ACROSS EAST SIDE OF SITE OF 3439, 3443, AND 3441 BROADWAY STRUCTURES (FROM LEFT TO RIGHT)

PHOTO 2. CLOSE UP OF 3439 BROADWAY STRUCTURE

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 3. VIEW TO WEST TOWARDS 3443 AND 3441 STRUCTURES

PHOTO 4. VIEW TO ADJACENT PROPERTY TO THE NORTH – "AMERICAN CANYON PLAZA"

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 5. VIEW TO THE PROPERTY TO THE SOUTH – "CANYON PLAZA"

PHOTO 6. BANDONED IRRIGATION WATER SUPPLY WELL EAST OF 3443 BROADWAY RESIDENTIAL STRUCTURE

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 7. NEW IRRIGATION WATER SUPPLY WELL EAST OF 3443 BROADWAY RESIDENTIAL STRUCTURE

PHOTO 8. CLOSE-UP OF 3441 BROADWAY STRUCTURE

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 9. CLOSE-UP OF 3443 BROADWAY RESIDENTIAL STRUCTURE

PHOTO 10. OPEN FIELD TO WEST OF SITE STRUCTURES

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 11. CHICKEN COOP AND RESIDENCE STORAGE CONTAINER EAST OF RESIDENTIAL STRUCTURE

PHOTO 12. VIEW TO WEST ALONG SOUTHERN PROPERTY BOUNDARY

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 13. RESIDENCE'S GARDEN STORAGE SHED AND DOG PEN

PHOTO 14. PAVED AREA BETWEEN MAIN 3441 BROADWAY BUILDING AND WAREHOUSE STRUCTURE TO WEST

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 15. 3441 BROADWAY WAREHOUSE STRUCTURE WITH BOXED, UNASSEMBLED FURNITURE STORED INSIDE

PHOTO 16. INTERIOR OF 3441 BROADWAY WAREHOUSE STRUCTURE

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 17. FORMER "PAINT LOCKER" TO SOUTH OF 3441 BROADWAY WAREHOUSE STRUCTURE

PHOTO 18. INSIDE OF FORMER "PAINT LOCKER" TO SOUTH OF 3441 BROADWAY WAREHOUSE STRUCTURE

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 19. OPEN FIELD WITH OLD TRUCK TRAILER – WESTERN HALF OF THE TARGET PROPERTY

PHOTO 20. RESIDENCES TO THE WEST OF THE TARGET PROPERTY

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 21. VIEW TO THE EAST ALONG THE SOUTHERN TARGET PROPERTY BOUNDARY (CANYON PLAZA ON OPPOSITE SIDE OF FENCE)

PHOTO 22. VIEW TO EAST ALONG THE SOUTHERN SIDE OF THE 3441 BROADWAY WAREHOUSE STRUCTURE

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 23. VIEW OF PAVED AREA EAST OF 3441 BROADWAY STRUCTURE WITH WOODEN "CRATE" STORAGE STRUCTURE

PHOTO 24. INTERIOR OF WOODEN "CRATE" STORAGE STRUCTURE BEHIND 3441 BROADWAY BUILDING

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 25. BACK ROOM OF 3441 BROADWAY STRUCTURE

PHOTO 26. UTILITY SINK IN 3441 BROADWAY STRUCTURE

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 27. FRONT ROOM OF 3441 BROADWAY STRUCTURE

PHOTO 2826. SEWING ROOM IN YOUR DÉCOR TENANT SPACE (3439 BROADWAY)

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 29. OFFICE AREA OF YOUR DÉCOR TENANT SPACE

PHOTO 30. DRILL PRESS AND BAND SAW IN YOUR DÉCOR TENANT SPACE

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

PHOTO 31. WORK-BENCH AREA OF YOUR DÉCOR TENANT SPACE

PHOTO 32. BOTTLED PAINTS, LACQUERS, STAINS, LUBRICANTS, AND GLUE STORAGE AT YOUR DÉCOR

SITE PHOTOGRAPHS
3439, 3441, AND 3443 BROADWAY (APN 058-312-010), SAMERICAN CANYON, CA

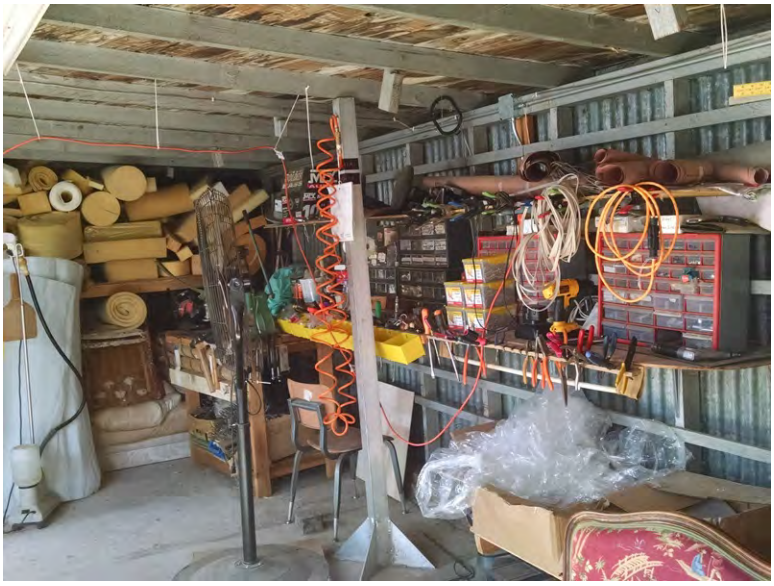


PHOTO 33. TOOL AND FASTENER STORAGE AT YOUR DÉCOR

PHOTO 34. FABRIC STORAGE AND DISPLAY IN FRONT ROOM OF YOUR DÉCOR TENANT SPACE

APPENDIX B

REGULATORY AND HISTORICAL RECORDS DOCUMENTATION

APPENDIX B-1

REGULATORY AGENCY FILE RECORDS

BOARD OF DIRECTORS:
WADE E. HUMPHREY, President
MARGARET R. DESPOTARIS, Vice President
ELCANA C. ELLIS
VICTOR J. WATRAS
JOHN L. YOUNG

AMERICAN CANYON COUNTY WATER DISTRICT
FOR SOUTHERN NAPA COUNTY PROGRESS

OFFICE ADDRESS:
3751 BROADWAY
VALLEJO, CALIF. 94590
PHONE 642-4476
AUDREY L. WAXMAN
BOARD SECRETARY

May 19, 1971

Napa County Planning Commission
1436 Polk Street
Napa, California 94558

RE: Sewer and Water Availability

Gentlemen:

The American Canyon County Water District will provide Sewer and Water service to the persons and property designated below upon their compliance with the District's rules and regulations pertaining thereto:

Names of owner Robert Gish

Location 3439 Broadway Vallejo

Assessors parcel No. 58-206-12

Yours truly
American Canyon County Water District

Peter G. Sarant

Peter G. Sarant
Engineer - Manager

PGS:alw

cc: Napa County Health Department
Mr. Robert Gish

ELIZABETH McKNIGHT, et al.
TO
ROBERT W. GISH, et ux.

58-512-10 & 0
C-3:9F

DEED

THIS INDENTURE made and entered into this 4th day of April, 1949, by and between Elizabeth McKnight, Edith Estelle McKnight, Dorothy Donaldson, formerly Dorothy McKnight, Laura McKnight Thayer, Florence McKnight Cornell, Fletcher McKnight, Edythe McKnight Cave, Harold M. McKnight and Gladys Pauline McKnight, his wife, Vivian Moey McKnight, Samuel J. McKnight, Jr., and Noel M. McKnight, his wife, parties of the first part, and Robert W. Gish and Gwendolyn Gish, husband and wife, parties of the second part,

WITNESSETH: That the said parties of the first part, for and in consideration of the sum of Ten ($10.00) Dollars, lawful money of the United States of America, to them in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged, do by these presents, grant unto the said parties of the second part, all that certain real property situate in the County of Napa, State of California, and bounded and particularly described as follows, to-wit:

Lot Number Seven (7) as the same is shown on that certain map entitled "Map of McKnight Acres", filed for record in the office of the Recorder of Napa County, California, October 14, 1948 in Book 3 of Maps.

Subject to the following restrictions, conditions and reservations:

1. That no buildings or structures of any kind whatsoever shall be built, erected, altered or maintained upon any part of said property unless plans and specifications therefor, disclosing the type of construction, the kind, nature, shape, color and height of the structure and the location thereof on the building site, shall have first been submitted to and approved by the Sellers.

2. It is further understood that this property shall not be re-subdivided unto units containing less than 5,000 square feet, nor have a frontage of less than 50 feet.

TOGETHER with the tenements, hereditaments, and appurtenances thereunto belonging or appertaining and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

TO HAVE AND TO HOLD the same premises together with the appurtenances, unto the said parties of the second part, as joint tenants.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

Elizabeth McKnight
Elizabeth McKnight

By Harold M. McKnight

Edythe McKnight Cave
Edythe McKnight Cave

in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged, do by these presents, grant unto the said parties of the second part, all that certain real property situate in the County of Napa, State of California, and bounded and particularly described as follows, to-wit:

U.S.Rev. Stamps $2.75 4/13/49

Lot Number Seven (7) as the same is shown on that certain map entitled "Map of McKnight Acres", filed for record in the office of the Recorder of Napa County, California, October 14, 1948 in Book 3 of Maps.

Subject to the following restrictions, conditions and reservations:

1. That no buildings or structures of any kind whatsoever shall be built, erected, altered or maintained upon any part of said property unless plans and specifications therefor, disclosing the type of construction, the kind, nature, shape, color and height of the structure and the location thereof on the building site, shall have first been submitted to and approved by the Sellers.

2. It is further understood that this property shall not be re-subdivided unto units containing less than 5,000 square feet, nor have a frontage of less than 50 feet.

TOGETHER with the tenements, hereditaments, and appurtenances thereunto belonging or appertaining and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

TO HAVE AND TO HOLD the same premises together with the appurtenances, unto the said parties of the second part, as joint tenants.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

Elizabeth McKnight
Elizabeth McKnight
By Harold M. McKnight
Harold M. McKnight, Her Attorney in Fact.

Edith Estelle McKnight
Edith Estelle McKnight
By Harold M. McKnight,
Harold M. McKnight, her Attorney in Fact.

Dorothy Donaldson (formerly Dorothy McKnight)
Dorothy Donaldson (formerly Dorothy McKnight)
By Harold M. McKnight
Harold M. McKnight, Her Attorney in Fact

Laura McKnight Thayer
Laura McKnight Thayer
By Harold M. McKnight
Harold M. McKnight, her Attorney in fact

Florence McKnight Cornell
Florence McKnight Cornell
By Harold M. McKnight
Harold M. McKnight, Her attorney in fact

Fletcher McKnight
Fletcher McKnight
By Harold M. McKnight
Harold M. McKnight, His attorney in fact

Edythe McKnight Cave
Edythe McKnight Cave
By Harold M. McKnight
Harold M. McKnight
Her Attorney in Fact

Harold M. McKnight
Harold M. McKnight

Gladys Pauline McKnight
Gladys Pauline McKnight
By Harold M. McKnight
Harold M. McKnight
Her attorney in fact

Vivian Moey McKnight
Vivian Moey McKnight
By Harold M. McKnight
Harold M. McKnight
Her attorney in fact

Samuel J. McKnight, Jr.
Samuel J. McKnight, Jr.
By Harold M. McKnight
Harold M. McKnight
His Attorney in fact

Noel M. McKnight
Noel M. McKnight
By Harold M. McKnight
Harold M. McKnight,
Her attorney in fact

STATE OF CALIFORNIA)
) ss. On this 4th day of April, 1949, before me, the undersigned, a
COUNTY OF SOLANO)

HOME FINDERS, INC., REALTORS
1834 FIRST STREET — NAPA, CALIFORNIA 94558
TELEPHONE (707) 226-3781

July 29, 1976

Napa County Building Inspection Office
1121 First Street
Napa, California 94558

Dear Sirs:

Home Finders, Inc., of 1834 First Street, Napa, California, has opened a new branch Real Estate office at 3941 Broadway, American Canyon, California, and requests permission to install two business signs on the subject property (Parcel #58-206-12. Sign No. 1 is to be placed on the front of the office building at 3941 Broadway. Sign No. 2 is to be placed in the North East corner of Parcel #58-206-12 with a 92' set-back from the center line of Highway 29. Total sign area of both signs to be 96 square feet.

Signs are painted on 4' x 8' sheets of 3/4" exterior grade plywood and will be permanently installed.

Attached are four enclosures;
No. 1 - Plot map of Parcel 58-206-12
No. 2 - Sketch of sign placement on building at 3441 Broadway
No. 3 - Sketch of signs showing lettering color and size.

Your prompt attention in this matter will be greatly appreciated.

Sincerely,

Russell P. Tye
General Manager

RP/jl
enclosures/4

NAPA COUNTY
CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT

USE PERMITS

DEPARTMENT REPORT AND RECOMMENDATION

Meeting of May 2, 1984

Agenda Item: #6

APPLICATION DATA:

APPLICANT: Robert Gisle (#U-508384, filed March 9, 1984)

REQUEST FOR: To expand a non-conforming use with the construction of a 3,000 square foot industrial building for a sign manufacturing company on a 2.52 acre parcel

LOCATION: On the west side of State Highway 29, 100 feet south of Donaldson Way within a C-3:P:F District (AP# 58-312-10)

FINDINGS: [All checked (X) Items Apply to This Application]

SPECIAL INFORMATION:

☒ 1. Details of the proposal are contained in the attached supplemental information sheet.

☒ 2. Comments and recommendations from various County departments and other agencies are attached.

☒ 3. The existing sign manufacturing company operates under a non-conforming use permit approved by the Board of Supervisors on April 13, 1954.

ENVIRONMENTAL ANALYSIS:

[ ] 4. General Rule (Not Subject to CEQA).

[ ] 5. Categorically Exempt pursuant to the California Enviornmental Quality Act (Class # ____).

[ ] 6. Final Environmental Impact Report # _____ prepared by:

(See Agenda Item # ____).

☒ 7. The project is not anticipated to result in significant environmental effects, either individually or cumulatively. There are no unique or rare biological or physical resources that will be adversely effected. A Negative Declaration is recommended. See attached copy

[ ] 8. Denial Not Subject to CEQA.

NAPA COUNTY

CONSERVATION—DEVELOPMENT
AND PLANNING COMMISSION

JAMES H. HICKEY
Secretary-Director

1196 THIRD STREET • NAPA, CALIFORNIA 94559
AREA CODE 707/253-4416

May 3, 1984

Robert W. Gish
3439 Broadway
Vallejo, CA 94590

Dear Mr. Gish:

Your Use Permit Application Number U-503504 to expand a non-conforming use with the construction of a 3,000 sq. ft. industrial building for a sign manufacturing company on a 2.52 acre parcel located on the west side of St. Hwy. 29, 100 ft. south of Donaldson Way has been approved by the Napa County Conservation, Development and Planning Commission based upon the following conditions:

(SEE ATTACHED LIST OF CONDITIONS OF APPROVAL)

APPROVAL DATE: May 2, 1984

Your Use Permit becomes effective ten (10) working days from the approval date, provided all conditions of approval are met or assurances made to guarantee compliance. The ten (10) day waiting period is required to provide sufficient time for anyone wishing to appeal the action of the Commission in approving your Use Permit. In the event an appeal is made to the Board of Supervisors, you will be notified.

Should this Use Permit not be used within one (1) year after the date of approval, it shall be null and void without further action by the Commission or Department.

If you intend to request any time extension for your approved Use Permit, please note that any such request must be submitted to the Conservation, Development and Planning Department at least 30 days prior to the expiration of the present permit.

Very truly yours,

JAMES H. HICKEY
Secretary-Director

JHH:pm

cc: Bill L. Hall
Building Codes Administrator
County of Napa

N
205.0
58-312-5
GWEN GISH
58312-10 2.52 ACRES
ROBERT W. & GWEN L. GISH
PROPOSED NEW BLDG. 30' X 100'
15' HIGH. BUTLER OR ANDERSON TY.
SLAB FLOOR. ALL STEEL BLDG.
SIDE & ROOF 26 GA. GALV. PAINTED.
ABOUT 234'-0" BACK FROM FRONT
& 4'-0" IN FROM NORTH PROPERTY LINE
DONALDSON WAY
C-3-PF
58 312-07
JACK & NORMA
BURRIS
06
08
58-3:2-11
JACK D. & BEVERLY A. DAVIS
540.0
55
EXISTING
EXISTING
EXISTING
LAWN
AREA
PARKING AREA
ABOUT 18,000 SQ FT
58-312-09
PATRICK & BARBARA
RAUBER
KNOX-BOX
STATE HWY. 29
F.H.
GISH
C-3-PF
2-23-84

772

773

P/z file
Napa Gate Prop.

Greg Baer

From: Gano (Somerville), Aileen <Aileen.Gano@countyofnapa.org>
Sent: Friday, June 26, 2015 11:25 AM
To: Greg Baer
Subject: Well on 058-312-010
Attachments: 058-312-010 Well Comp Rpt E15-00146.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

The following condition appears on the permit:

The owner of the parcel is required to do the following by the City of American Canyon:

1) Applicant shall Furnish to the City all well inspection records from the County of Napa.

2) Prior to final inspection or placing the well in service (whichever occurs first) property owner shall obtain an encroachment permit to install backflow prevention devices on all three existing water services serving the property.

I am attaching a copy of the construction report of the well. We still need to receive a copy of the destruction log. I wanted to verify that the Applicant would get the encroachment permit to install backflow prevention devices on all three existing water services serving the property from your office.

Please advise.

Thank you,

Aileen M. Gano, Permit Technician
(Environmental Health Division, Land Use)
Planning, Building & Environmental Services
1195 Third Street, Suite 210, Napa, CA 94559
aileen.gano@countyofnapa.org
www.countyofnapa.org
(707) 259-8396

"And above all, watch with glittering eyes the whole world around you because the greatest secrets are always hidden in the most unlikely places. Those who don't believe in magic will never find it." — Roald Dahl

CONFIDENTIALITY NOTICE: This email message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential, and/or exempt from disclosure under applicable law. If you are not the intended recipient of the message, please contact the sender immediately and delete this message and any attachments. Thank you.

Department of Toxic Substances Control

Matthew Rodriguez
Secretary for
Environmental Protection

Barbara Lee, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Edmund G. Brown, Jr.
Governor

March 14th, 2016

Francois Bush
Environmental Resource Group, Inc.
1038 Redwood Hwy., Suite 1
Mill Valley, CA 94941

SITE SUBJECT: 3439 and 3441 Broadway, American Canyon, CA 94503

PR # 2-031116-01

Dear Mr. Bush:

We have received your Public Records Act Request for information from the Department of Toxic Substances Control.

After a thorough review of our files, we have found that no such records exist at this office pertaining to the site(s) referenced above.

We would like to inform you about Envirostor, a database that provides information and documents on over 5,000 DTSC cleanup sites. EnviroStor can be accessed at: http://www.envirostor.dtsc.ca.gov/public. Also, a computer is available in the Central Files of each DTSC Regional Office for use by community members to view EnviroStor.

If you have any questions, would like further information regarding your request or would like an appointment to visit Berkeley's Central Files, please contact me at (510) 540-3800.

Sincerely,

LiangYu Ma

Regional Central Files Coordinator
Tel: (510) 540-3800 / Fax: (510) 540-3801
Berkeleyfileroom@DTSC.CA.GOV

napa County Assessor

Information as of Lien Date	**January 1st 2015**

View/Print Value Notice

Property Information	
Assessor ID Number	**058-312-010-000**
Tax Rate Area (TRA)	**005007**
Last Recording Date	**4/1/2015**
Current Doc No.	**2015R0008073**
Property Type	**COMMERCIAL IMPROVED**
Acres	**2.52**
Lot Size(SqFt)	**0.00**
Asmt Description	
Asmt Status	**ACTIVE**
Roll Values	
Land	**80571**
Structure	**126889**
Fixtures	**0**
Growing	**0**
Total Land and Improvements	**207460**
Manufactured Home	**0**
Personal Property	**0**
Homeowners Exemption	**0**
Other Exemption	**0**
Net Assessment	**207460**
Building Description(s)	
Building Seq. Number	**2**
Unit Seq. Number	**0**
Building Code	**2**
Number Of Units	
Building Square Footage	
Garage Square Footage	**0.00**
Unfinished Square Footage	
Year Built	**1951**
Bedrooms	
Full Baths	
Half Baths	
Fireplaces	
Pools	**0**

3439 BROADWAY AMCANYON CA
is the listed address associated with this APN.

Hazardous Material Releases & Agricultural Use USTs
for Parcel Number: 058312010000

Buffer Distance: 1500 Feet

*If you have trouble accessing the documents in OnBase when you click on the address link, please click here for further instructions.

Hazardous Materials Business Plan (HMBP)

Permit ID	Permit Status	Permit Name	Site Address
4526	O	AMERICAN CANYON FIRE PROT DIST	225 JAMES RD
249564	O	CENTURY EUROPEAN	9 DONALDSON WAY
266625	O	MIKE'S ARCO MINI MART & GAS	3462 BROADWAY ST

Hazardous Waste

Permit ID	Permit Status	Permit Name	Site Address
2886	O	AMERICAN CANYON FIRE PROT DIST	225 JAMES RD
249563	O	CENTURY EUROPEAN	9 DONALDSON WAY
266626	O	MIKE'S ARCO MINI MART & GAS	3462 BROADWAY ST

Local Oversight Program - Leaking Underground Storage Tank Sites

Permit ID	Permit Status	Permit Name	Site Address
10003	C	AMERICAN CANYON VALLEJO GAS DBA	3438 BROADWAY ST
10020	C	MIKE'S MINI MART & GAS STATION	3462 BROADWAY ST
266460	O	Cal Trans	3466 BROADWAY ST

Non Local Oversight Program - Other Potentially Contaminated Sites

Permit ID	Permit Status	Permit Name	Site Address
248436	O	Canyon Market	3460 Broadway
248437	C	Wilson Way Property	142 Wilson WAY

Underground Storage Tanks (UST)

Permit ID	Permit Status	Permit Name	Site Address
266624	O	MIKE'S ARCO MINI MART & GAS	3462 BROADWAY ST

*If you have trouble accessing the documents in OnBase when you click on the address link, please click here for further instructions.

For issues with the application, please contact: GIS Staff
For permit/document related questions, please contact: John Kara: Environmental Health Manager

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

Page _____ of _____

Owner's Well Number _____

Date Work Began 03/16/2015 Date Work Ended 3/20/2015

Local Permit Agency Napa County

Permit Number E15-00146 Permit Date 3/13/15

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0260105

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N Latitude W Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify _____

Drilling Method Direct Rotary Drilling Fluid Polymer mud

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	25	Brown Clay
25	26	Gravel
26	65	Brown Clay
65	125	Brown Clay with Gravel
125	140	Gravel with streaks of Brown Clay
140	165	Tufa with Brown Clay
165	175	Brown Clay
175	180	Gravel with Brown Clay
180	200	Brown Clay
		Perforation lay out
		P = perforation
		B = blank
		0 to 70 blank
		P
		B 10 ft
		P
		P
		P
		B
		P 200 ft

Total Depth of Boring 200 Feet

Total Depth of Completed Well 200 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City Burlingame State CA Zip 94011

Well Location

Address 3439-3443 Broadway

City American Canyon County Napa

Latitude ___ Deg. ___ Min. ___ Sec. N Longitude ___ Deg. ___ Min. ___ Sec. W

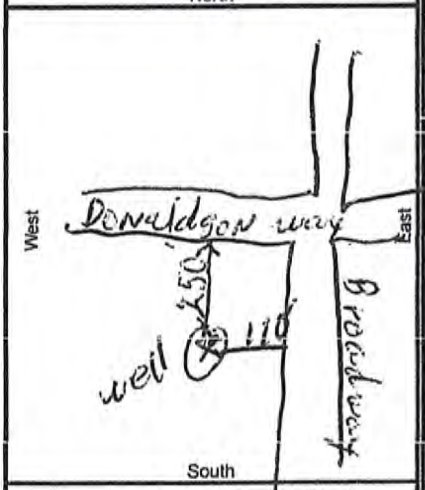
Datum ___ Dec. Lat. ___ Dec. Long. ___

APN Book 058 Page 312 Parcel 010-000

Township ___ Range ___ Section ___

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other _____
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply
☐ Domestic ☐ Public
☑ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other _____

Water Level and Yield of Completed Well

Depth to first water 25 (Feet below surface)

Depth to Static Water Level 30 (Feet) Date Measured 03/20/2015

Estimated Yield * 25 (GPM) Test Type Air Lift

Test Length 4.0 (Hours) Total Drawdown 160 (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	55	11	Blank	PVC Sch. 40	R21	5		
55	70	8.75	Blank	PVC Sch. 40	R21	5		
70	200	8.75	Screen	PVC Sch. 40	R21	5	Milled Slots	0.032

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	55	Cement	vol clay
55	200	Filter Pack	well pack gravel

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other _____

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Pulliam Well Exploration Inc
Person, Firm or Corporation

4371 Cantelow Road Vacaville CA 95688
Address City State Zip

Signed Tom Pulliam 3/21/2015 808-508
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

RECEIVED
APR 21 2015
Napa County Planning Building & Environmental Services

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa CA 94559
www.countyofnapa.org
(707) 253-4417

David Morrison
Director

A Tradition of Stewardship
A Commitment to Service

OFFICE SET.

Well Permit

Application Type:	Environmental / EM Permits / Water Wells / Class I	**Applied Date:**	3/13/2015
Permit Number:	E15-00146	**Issued Date:**	3/13/2015
Parcel Number:	058-312-010-000	**Expiration Date:**	3/12/2017
Site Address:	3439 BROADWAY, American Canyon		
Owner:	GISH GWEN L ETAL TR	**Phone:**	(000) 000-0000
Address:	C/O WALT GISH		
Applicant:	GISH GWEN L ETAL TR	**Phone:**	(707) 446-1217
Business Name:	PULLIAM WELL EXPLORATION INC	**License #:**	808508
Project Type:	Environmental / EM Permits / Water Wells / Class I		

Proposed Use:

Use:	Private	**Name of Public Water System:**	
Well To Service This Parcel Only?:	Yes		

Water Supply:

Septic Setbacks Met?:	Yes	**Well Located in Flood Zone?:**	No
Actual Approved Setback:		**Hazmat Site Within 1500 feet?:**	No
Emergency Exemption Granted?:	No		
Reason For Emergency Exemption:			

Specifications:

Casing Diameter:	5.00 In.	**Method of Seal Placement:**	Tremie
Boring Diameter:	11.00 In.	**Minimum Seal Depth:**	50.00 Ft.
Annular Seal:	3.00 In.	**Material:**	Cement

TO PERMITEE:

Any work performed or operations conducted under the auspices of this permit constitutes acceptance of all conditions, inspections and comments contained in the this permit, and the incorporation of all requirements as set forth in the permit application.

Staff Signature: _____ Date: 3/13/15

CONDITIONS/INSPECTIONS/COMMENTS

Application Type:	Environmental / EM Permits / Water Wells / Class I	**Applied Date:**	3/13/2015
Permit Number:	E15-00146	**Issued Date:**	3/13/2015
Parcel Number:	058-312-010-000	**Expiration Date:**	3/12/2017
Owner:	GISH GWEN L ETAL TR	**Phone:**	(000) 000-0000
Applicant:	GISH GWEN L ETAL TR	**Phone:**	(707) 446-1217

Conditions:

Code	Condition
EM-10	The applicant (owner/contractor) shall comply with all stormwater measures as identified on approved construction drawing for building permit, as they pertain to the sewage disposal system.
EM-2	A copy of the State of California Well Completion Report must be submitted within 60 days of well completion.
City of American Canyon	The owner of the parcel is required to do the following by the City of American Canyon: 1) Applicant shall Furnish to the City all well inspection records from the County of Napa. 2) Prior to final inspection or placing the well in service (whichever occurs first) property owner shall obtain an encroachment permit to install backflow prevention devices on all three existing water services serving the property.

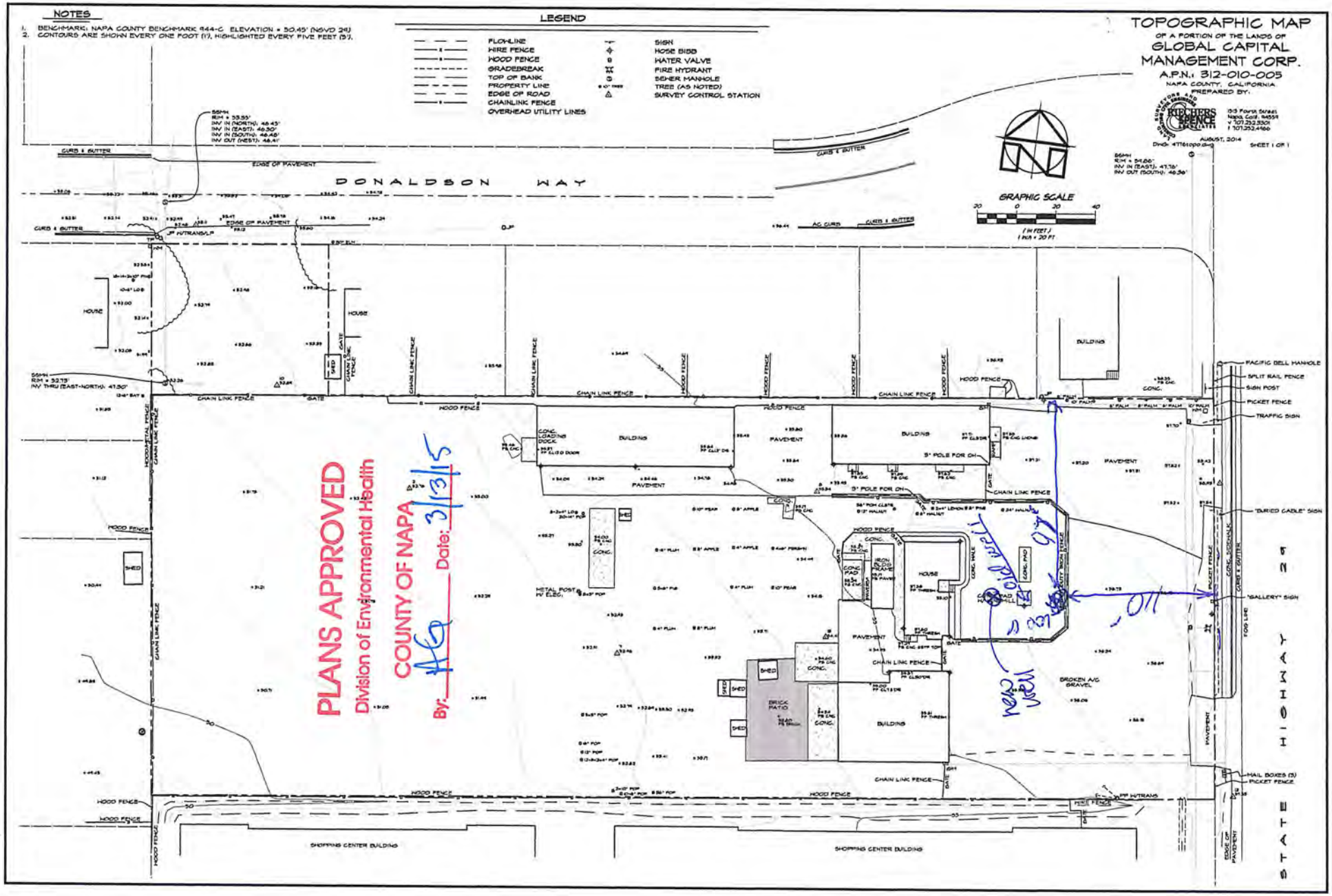
Inspections: **Inspected By:** **Date:**

Inspection Type	
Construction Inspection	55' seal 3/19/15 KMW
Destruction Inspection	76' total depth, 76' destruct - tremie pipe to bottom. Seal brought up to existing concrete pad at grade.
Environmental Management Final	

Steel cased to appears to be 5".

Comments:

Date	Comment
3/13/2015	Call 253-4135 at least 24 hours in advance during normal business hours to schedule inspection requests. Inspections are taken on a first-come-first-served basis so if you need a specific date and time be sure to call well in advance Well permits are issued only to licensed well drillers. A copy of the well driller's license (C-57) must be on file with DEM. If a claim is to be submitted for a refund, per County Code, a 25% processing fee will be retained. Such claims must be made within one year of the date on the receipt.


NOTES
1. BENCHMARK: NAPA COUNTY BENCHMARK 944-C ELEVATION = 50.45' (NGVD 29)
2. CONTOURS ARE SHOWN EVERY ONE FOOT (1'), HIGHLIGHTED EVERY FIVE FEET (5').
LEGEND
FLOWLINE
WIRE FENCE
WOOD FENCE
GRADEBREAK
TOP OF BANK
PROPERTY LINE
EDGE OF ROAD
CHAINLINK FENCE
OVERHEAD UTILITY LINES
SIGN
HOSE BIBB
WATER VALVE
FIRE HYDRANT
SEWER MANHOLE
TREE (AS NOTED)
SURVEY CONTROL STATION
TOPOGRAPHIC MAP
OF A PORTION OF THE LANDS OF
GLOBAL CAPITAL MANAGEMENT CORP.
A.P.N.: 312-010-005
NAPA COUNTY, CALIFORNIA
PREPARED BY:
KIECHERS SPENCE SURVEYING
1313 Foria Street
Napa, Calif. 94559
T 707.252.3301
F 707.252.4660
AUGUST, 2014
SHEET 1 OF 1
GRAPHIC SCALE
20 0 20 40
(IN FEET)
1 INCH = 20 FT
DONALDSON WAY
STATE HIGHWAY 29
PLANS APPROVED
Division of Environmental Health
COUNTY OF NAPA
By: HG Date: 3/13/15
BUILDING
HOUSE
SHED
PAVEMENT
CHAIN LINK FENCE
HOOD FENCE
GATE
CURB & GUTTER
EDGE OF PAVEMENT
SHOPPING CENTER BUILDING
BRICK PATIO
BROKEN A/C GRAVEL
PACIFIC BELL MANHOLE
SPLIT RAIL FENCE
SIGN POST
PICKET FENCE
TRAFFIC SIGN
"BURIED CABLE" SIGN
"GALLERY" SIGN
MAIL BOXES (3)

N
Bird's eye
84'
140'
25 Feet
10 m
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052-712-010

County of Napa GIS

Legend

- Waterlines - City of Calistoga
- Ground Water Deficient Area
- Parcels
- County Boundary

188.1 0 94.04 188.1 Feet

Disclaimer: This map was prepared for informational purposes only.
No liability is assumed for the accuracy of the data delineated hereon.

This map was printed on 2/24/2015

Notes

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa CA 94559
www.countyofnapa.org
(707) 253-4417

David Morrison
Director

A Tradition of Stewardship
A Commitment to Service

APPLICATION
THIS IS NOT A PERMIT

Application Type:	Environmental / EM Permits / Water Wells / Class I		
Permit Number:	E15-00146	**Parcel Number:**	058-312-010-000
Situs Address:	3439 BROADWAY, American Canyon	**Applied Date:**	3/13/2015
Owner:	GISH GWEN L ETAL TR	**Phone:**	(707) 446-1217
Applicant:	Aaron Pulliam	**Phone:**	(707) 446-1217

Worker's Compensation Coverage:

( ) A Certificate of current Worker's Compensation Insurance Coverage is on file with this office (or filed with this application)
( ) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

By executing this application, the undersigned agrees to comply with all conditions, inspections and comments of the issued permit and all federal, state and county code requirements applicable to this permit. Furthermore, I understand that the Department of Environmental Management in no way guarantees trouble-free operation of the system, and that future repair may be necessary.

Owner or Authorized Agent Signature: _____ Date: 3-13-15

784

Planning, Building & Environmental Services
1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org
Hillary Gitelman
Director

A Tradition of Stewardship
A Commitment to Service

WELL CONSTRUCTION APPLICATION

PROPERTY OWNER INFORMATION

Name: Dion HeFFran

Address: 3443 Broadway - American Canyon

APN: ~~312-010-005~~ 058-312-010

Phone #:

WELL DRILLER INFORMATION

Company Name: Pulliam Well Exploration

Contact person: Aaron

Address: 4373 Canfield Vacaville

Phone #: 287-2990
Tom 337-3125

TYPE OF PERMIT (circle one): (Class 1A) Class 1B Class II Deepening
Reconstruction Other:

PROPOSED USE (circle one): Private Public ?

Well to serve this parcel only: (Y) / N
If no, list other APN(s):

Well Located in MST Groundwater Basin: Y / N ?
Well Located in Floodplain: Y / (N) ?

SETBACKS TO WELL:

ON PUBLIC SEWER

Sewer Line:	25	feet
Septic Tank:		feet
Disposal Field:		feet

NOT IN FLOOD ZONE
NOT IN GDA
HAZMAT IN AREA OK

WELL SPECIFICATIONS:

Casing Diameter:	5 inches	Sealing Material:	Cement
Boring Diameter:	11 inches		
Annular Seal:	3 inches	Sealing Method:	Tremy
Minimum Seal Depth:	50 feet		

A MAP OF THE WELL LOCATION SHALL BE ATTACHED TO THIS APPLICATION. THE MAP SHALL INCLUDE THE DISTANCE FROM THE WELL TO PROPERTY LINES, SEWAGE DISPOSAL SYSTEMS, STRUCTURES, ETC AND SHALL INCLUDE ALL OTHER PERTINENT INFORMATION SPECIFIC TO THIS WELL.

Gano (Somerville), Aileen

From: Greg Baer <gbaer@cityofamericancanyon.org>
Sent: Monday, March 09, 2015 1:01 PM
To: Gano (Somerville), Aileen
Subject: RE: Well Application, 3439/3443 Broadway
Attachments: 058312010 Well Application.pdf

Hello Aileen,

The City takes no exception to the issuance of the subject well permit with the incorporation of the following conditions:

1. Applicant shall furnish to the City all well inspection records from the County of Napa.
2. Prior to final inspection or placing the well in service (whichever occurs first) property owner shall obtain an encroachment permit to install backflow prevention devices on all three existing water services serving the property.

Additionally, the City would request that the property owner volunteer to participate in Napa County's Well Monitoring Program.

Please contact me directly if you have any questions.

Best,

Greg Baer
Development Services Engineer, Public Works Department
City of American Canyon | 4381 Broadway, Suite 201 | American Canyon, CA 94503
707-647-4583 | gbaer@cityofamericancanyon.org
www.cityofamericancanyon.org

From: Gano (Somerville), Aileen [mailto:Aileen.Gano@countyofnapa.org]
Sent: Tuesday, February 24, 2015 10:26 AM
To: Greg Baer
Subject: Well Application, 3439/3443 Broadway

Good Morning,

Attached you will find an application for a well within the city limits of American Canyon.

It has been related to me that this well will serve a future Denny's Restaurant. It is my understanding that American Canyon will provide sewer and water for this parcel except for the flushing of toilets in the restrooms and outside water (presumably for landscape purposes). All other water needs will be served by the public agency.

Please respond as soon as possible with your decision regarding permission to drill this well.

If there are any questions, please do not hesitate to contact our office.

Regards,

Aileen M. Gano, Permit Technician

Planning, Building & Environmental Services
1195 Third Street, Suite 210, Napa, CA 94559
aileen.gano@countyofnapa.org
www.countyofnapa.org
(707) 259-8396

"And above all, watch with glittering eyes the whole world around you because the greatest secrets are always hidden in the most unlikely places. Those who don't believe in magic will never find it." — Roald Dahl

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VERIFICATION MONITORING REPORT
SECOND QUARTER 2012
and
REQUEST FOR NO FURTHER ACTION

PROJECT SITE:
Mike's Arco
3462 Broadway
American Canyon, California 94503
LOP-185

PREPARED FOR:
Mike Mokalla
2303 Jefferson Street
Napa, California 94559

SUBMITTED TO:
Jim Newman
Napa County Department of Environmental Management
1195 Third Street, Room 101
Napa, California 94559

PREPARED BY:
Cook Environmental Services, Inc.
1485 Treat Blvd, Suite 203A
Walnut Creek, CA 94576

Project No. 1009

July 31, 2012

PROFESSIONAL CERTIFICATION

VERIFICATION MONITORING REPORT
SECOND QUARTER 2012
and
REQUEST FOR NO FURTHER ACTION

Mike's Arco
3462 Broadway
American Canyon, California 94503
LOP-185

By: Cook Environmental Services, Inc.
Project No. 1009

July 31, 2012

Cook Environmental Services, Inc. prepared this document under the professional supervision of the person whose seal and signature appears hereon. No warranty, either expressed or implied, is made as to the professional advice presented herein. The analysis, conclusions and recommendations contained in this document are based upon site conditions as they existed at the time of the investigation and they are subject to change.

The conclusions presented in this document are professional opinions based solely upon visual observations of the site and vicinity, and interpretation of available information as described in this document. Cook Environmental Services, Inc. recognizes that the limited scope of services performed in execution of this investigation may not be appropriate to satisfy the needs, or requirements of other regulatory agencies or of other users. Any use or reuse of this document or its findings, conclusions or recommendations presented herein is at the sole risk of said user.

Tim Cook, P.E.
Project Manager

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INTRODUCTION

This report presents the results of the second quarter 2012 verification monitoring program at Mike's Arco ("the Site") and a request for no further action at the site. This report is presented in response to an unauthorized release from one or more underground storage tanks (USTs) and/or their related piping. Cook Environmental Services, Inc. (CES) is conducting these activities on behalf of the owner, Mike Mokalla. The Napa County Department of Environmental Management (NCDEM) is the lead oversight agency and the local oversight program (LOP) case number is 185.

SITE LOCATION AND PHYSICAL SETTING

The Site is located at 3462 Broadway in American Canyon, California. The Site occupies the northeast corner of the intersection of Broadway (Highway 29) and Donaldson Way (formerly known as Frisby Lane), approximately 1.5 miles east of the Napa River in Napa County. The Site is approximately five miles north of San Pablo Bay and one mile east of the Napa River estuary, at an elevation of approximately 60 feet above mean sea level (**Figure 1**). Land use in the surrounding area is commercial, light industrial and residential. Existing structures at the Site include a convenience store, a canopy and two pump islands.

Soil beneath the Site is Quaternary alluvial sediment**,** primarily silts and clays. The sediments are derived from Tertiary volcanoclastics. The principal aquifers of the Napa Valley are comprised of Quaternary sand and gravel. Beneficial uses designated for groundwater in the Napa Basin include domestic, municipal, agricultural**,** and industrial. The regional groundwater flow direction near the Site is southeasterly toward the Napa River estuary. The Napa River flows south to its confluence with the San Pablo Bay.

QUARTERLY VERIFICATION MONITORING REPORT

The following tasks were completed this quarter:

- Measured static water levels in wells MW-4, MW-5, MW-6, MW-7, MW-8 and VEW (Vapor Extraction Well);
- Purged and sampled groundwater from these same wells;
- Analyzed groundwater samples for TPH-g, BTEX, and fuel oxygenates;
- Prepared and submitted this *Verification Monitoring Report and Request for No Further Action* to the NCDEM; and
- Uploaded relevant documents to the SWRCB Geotracker database.

FIELD ACTIVITES

The following sections describe groundwater monitoring activities for the second quarter of 2012.

WATER LEVEL MEASUREMENTS AND GROUNDWATER SAMPLING

On May 31, 2012, CES measured water levels in wells MW-4 through MW-8 and VEW using an electronic well sounder. Field procedures for water level measurements and groundwater sampling are described in **Appendix A**. Water level measurements and well purge measurements are recorded on the sampling logs provided in **Appendix B**.

RESULTS

Groundwater Elevation and Gradient

Well construction details are summarized in **Table 1**. Depth to water measurements and calculated water table elevations for this and previous sampling events are summarized in **Table 2**. Groundwater elevations and gradients are depicted on **Figure 3**. The groundwater flow direction on May 31, 2012, based on measurements from wells MW-4, MW-5 and MW-6, was $S21^0W$ with a hydraulic gradient of 0.014. This is consistent with previous measurements and is the expected flow direction based on topography and the proximity of the Napa River.

Analytical Results

The laboratory analytical report is included in **Appendix C**. **Table 3** shows results of field monitoring for dissolved oxygen, temperature and dissolved oxygen (DO). Second quarter 2012 and historical monitoring results are summarized in **Table 3**. **Figure 4** shows TPH-g concentrations in plan view. **Figure 5** shows benzene concentrations in plan view and **Figure 6** shows MtBE concentrations.

Figure 7 is a log scale graph of TPH-g concentrations in well MW-4 versus time, which includes an exponential regression trend line forecast the projected time that concentrations will achieve the WQO TPH-g. We used environmental screening levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board, assuming residential land use. **Figure 8** is a similarly constructed log scale graph for MtBE concentrations in MW-4. **Figure 8a** shows only more recent MtBE data for MW-4.

Figure 9 is a similarly constructed log scale graph for TPH-g concentrations in MW-5. **Figure 10** shows the same regression analysis for benzene in MW-5. **Figure 11** shows benzene concentrations versus time in MW-6. **Figure 12** shows TPH-g concentrations versus time in VEW. **Figure 13** shows benzene concentrations versus time in VEW. These graphs were constructed for wells with contaminants that are currently above their WQOs. All other petroleum constituents were either below reporting limits or applicable WQOs.

REQUEST FOR NO FURTHER ACTION

This request for no further action follows guidance provided in *Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites*, August 10, 1990 and the *Low Threat Underground Storage Tank Policy*, adopted by the State Water Resources Control Board in Resolution 2012-0016 on May 1, 2012.

SITE HISTORY

The Site has operated as a gas station/convenience store since it was developed by the original owner, George Williams, in 1967. A 1,000-gallon single-wall steel underground storage tank (UST) was installed at the time the station was constructed. Two 4,000-gallon single-wall steel USTs were installed in 1968. One 4,000-gallon steel UST was installed in 1971. All of these USTs stored gasoline until the 1,000-gallon tank was converted for the storage of waste oil in 1971. This same tank was taken out of service shortly thereafter. Double-wall product lines and new dispensers were installed in 1988. Based on the available records, it is not clear when the USTs were replaced with double-wall USTs.

A preliminary environmental assessment was conducted at the Site on September 29, 1995. Based on the available records, the reason for this investigation is not clear. W.A. Craig, Inc. collected soil samples from two hand auger borings located south of the USTs, and along product lines. Soil samples were collected at 2, 9, and 12 feet below grade (fbg) and analyzed for total petroleum hydrocarbons as gasoline (TPH-g) using EPA method 8015 modified, and benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA method 8020. Petroleum hydrocarbons constituents were detected in all six soil samples. Groundwater was encountered at a depth of approximately 9 fbg.

In November of 1996, L&S Environmental drilled seven Geoprobe borings to delineate the extent of hydrocarbon contamination. Soil samples were collected from each boring at depths of 6, 11, and 14 fbg, and analyzed for TPH-g, BTEX, total petroleum hydrocarbons such as diesel (TPH-d) using EPA method 8015 modified, oil and grease using EPA method 5520, D&F, chlorinated hydrocarbons using EPA method 8010, and LUFT metals using EPA method 7000 series. TPH-g and BTEX were detected at elevated levels in all samples. TPH-g was detected in soil nearest the former USTs at 2,500 milligrams per kilogram (mg/Kg). Results from this investigation were used to select monitoring well locations. On December 3, 1996, the depth to groundwater was approximately 6 fbg, the flow direction was S87°W and the gradient was 0.0048 foot of vertical drop per foot of horizontal distance (ft/ft). L&S concluded that TPH-g and BTEX compounds were relatively unweathered; however, free phase hydrocarbons were not observed. The closest water well is 350 feet downgradient (i.e., southwest) of the Site at 3439 Broadway. There are six other wells within 1,000 feet of the Site. In November 1996, three monitoring wells were installed to a depth of 20 fbg. L&S Environmental (L&S) prepared a report of these activities in the *Subsurface Site Characterization and Monitor Well Installation Report*, dated January 1997.

A *Remedial Action Work Plan*, dated December 1998, was prepared by L&S and submitted to the NCDEM. The plan proposed to excavate contaminated soil near the former USTs and to dewater the excavation pit. The lateral extent of hydrocarbon contamination was unknown at this time; however, L&S removed a large volume of contaminated soil during Site renovation activities. The exact volume and location of excavated soil is unknown.

On May 17, 2005, Cook Environmental Services, Inc. (CES) installed one additional monitoring well (MW-4) in the same location as the former USTs. CES attempted to abandon wells MW-2 and MW-3 on June 27, 2005. Well MW-2 was easily located and over-drilled to a depth of 20 fbg. The casing and screen were removed from the boring and the borehole was backfilled with neat cement in accordance with Napa County guidelines and requirements. No surface expression of well MW-3 could be identified, therefore a Bobcat loader was used to remove landscaping and scrape away surface soils in an attempt to locate the 2-inch diameter PVC casing. After many hours of scraping with the Bobcat and hand digging in the landscaped area, well MW-3 could not be located, and Joel Coffman of NCDEM was satisfied that an adequate level of effort had been expended in the attempt to locate well MW-3. Therefore, no further action was required to abandon this well.

A *Work Plan for Additional Site Investigation* was submitted to the NCDEM on January 26, 2006. The work plan proposed to install and sample two additional monitoring wells. The NCDEM responded to the work plan in a letter to the owner, dated January 30, 2006, and requested the use of a Hydropunch™ as an alternative drilling method. A *Revised Work Plan for Additional Site Investigation* was submitted to the NCDEM on February 2, 2006, in which CES recommended the installation and sampling at six Geoprobe boring locations to delineate the downgradient extent of hydrocarbon contamination in the soil and groundwater. The NCDEM responded in an email to Tim Cook on February 10, 2006. The county approved the installation of three borings in the far corners of the Site, and these borings were installed on February 14, 2006. Boring B-1, located in a planter area in the northwest corner of the Site, yielded elevated concentrations of petroleum hydrocarbons. Elevated TPH-g and benzene concentrations near this boring were not removed during the 1999 excavation activities. This area is located within 12 feet of the right of way for Highway 29. TPH-g and benzene concentrations in boring B-1 were significantly above San Francisco Bay RWQCB environmental screening levels (ESLs). ESLs are used as a screening tool to determine if soil or groundwater may present a potential hazard to human health or the environment. CES recommended drilling and sampling additional Geoprobe borings to delineate the extent of hydrocarbon contamination downgradient of boring B-1. Results of this investigation are presented in *Quarterly Monitoring Report, First Quarter 2006*, dated April 11, 2006.

In a letter to the owner, dated April 13, 2006, NCDEM requested the submittal of a work plan to conduct the next phase of investigation. The *Work Plan for Additional Site Investigation* was submitted on May 5, 2006 and was approved by NCDEM on May 12, 2006. The work plan proposed the installation of five Geoprobe borings to delineate the extent of contamination near boring B-1. Three of the downgradient borings were drilled in the Caltrans right of way. This investigation was reported in *Site Investigation and Quarterly Monitoring Report, Second Quarter 2006.* This investigation found high concentrations of hydrocarbons in boring B-6 (located approximately 35 feet downgradient of the former USTs) in a planter area next to Highway 29. A groundwater sample from B-6 detected TPH-g at 34,000 micrograms per liter

(u/L), benzene at 8,200 µg/L , toluene at 61 µg/L , ethylbenzene at 470 µg/L and xylenes at 69 µg/L .

All of these constituents are above their respective ESLs. The presence of hydrocarbon contamination in B-6 suggests that the contamination plume migrated to the west side of Highway 29. The groundwater sample from boring B-8, located west (downgradient) of the former USTs and on the opposite side of Highway 29, yielded TPH-g at 2,900 µg/L .

A *Request for Site Closure and Quarterly Monitoring Report, Fourth Quarter 2006*, dated December 8, 2006 recommended closing the UST case based on the limited aerial extent of the residual contamination and the absence of any groundwater quality threat to nearby domestic wells. The RWQCB and NCDEM rejected the request for closure in a letter from NCDEM to the owner, dated March 20, 2007. The NCDEM requested an Interim Remediation Work Plan to address reducing high hydrocarbon concentrations in the northwest corner of the Site.

An *Additional Site Investigation and Interim Remedial Action Work Plan*, dated May 4, 2007, was submitted to the NCDEM. The work plan proposed to install a dual-phase extraction well and four pneumatic injection wells in the northwest corner of the Site. Compressed air would be introduced to the subsurface through the injection wells to fracture the tight clays and provide pathways for soil gas to the vapor extraction unit, and to allow groundwater to be removed from the extraction well. The Work Plan recommended the installation of two new monitoring wells on the west side of Highway 29. The NCDEM approved the work plan in a letter to the owner dated June 4, 2007. A portion of the interim remedial action work plan was conducted in December 2007. One dual phase vapor extraction well (VEW) and four pneumatic fracturing/air sparging wells were installed in the northwest corner of the Site where previous investigations had identified the presence of contaminated soil and groundwater. The dual phase extraction (DPE) system was installed in July 2010 and began operating on August 12, 2010 and operated until December 1, 2010. The performance of the DPE system is described later in this report.

Groundwater monitoring data from 2007 through 2008 indicated that TPH-g and benzene concentrations were increasing in downgradient monitoring wells MW-5 and MW-6. In a letter to the owner, dated October 17, 2008, NCDEM requested additional investigation to delineate the lateral and vertical extent of hydrocarbon contamination downgradient of the Site.

CES prepared an *Additional Site Investigation Work Plan*, dated November 10, 2008, that proposed the installation of eight Geoprobe borings to delineate the extent of contamination downgradient of the Site on the west side of Highway 29. In addition, CES recommended the installation of insitu submerged oxygen curtain (iSOC) devices in wells MW-5 and MW-6, and installation of two additional monitoring wells approximately 15 feet downgradient from the iSOC wells to monitor the effectiveness of this interim remedial measure.

On February 24 and 25, 2009, eight Geoprobe borings were advanced with a dual tube sampler to the termination of the boring at 20 feet below grade (fbg). Soils were screened in the field using a photo-ionization detector (PID). Soil encountered in all borings was primarily stiff

brown silty to sandy clay. Groundwater was first encountered from 8 to 13 fbg. Soil samples from the Geoprobe borings were submitted for chemical analysis, and that analysis detected several petroleum hydrocarbon constituents in soil samples from the Geoprobe borings, most notably in the samples from borings B-9, B-11 and B-12. TPH-g was detected in B-1, from 17 fbg, at 82 milligrams per kilogram (mg/kg), in B-11, from 15 fbg, at 70 mg/kg, and from B-12, from 17 fbg, at 37 mg/kg. The ESL for TPH-g in deep (>3M) soil is 83 mg/kg, thus none of the samples exceeded the ESL. One or more of the BTEX constituents were detected in these same samples but none were detected at concentrations that exceed the ESL for deep soils where groundwater is a drinking water resource. There is not a clear pattern for the distribution of TPH-g concentrations in soil since B-11 is 60 feet closer to the source area than B-9, and the concentrations at B-9 are higher than the concentrations detected in the soil sample from B-11. The only other boring where hydrocarbons were detected in soil was B-14, where the sample from 13 fbg detected TPH-g at 5 mg/kg.

Temporary wells were installed at each Geoprobe location, and groundwater samples were collected and submitted for chemical analysis. Hydrocarbons were detected in only one groundwater sample from the Geoprobe borings. The sample from boring B-11 yielded TPH-g at 470 µg/L and total xylenes at 3.3 µg/L. The ESL is 100 µg/L for TPH-g and 20 µg/L for xylenes, thus TPH-g in the groundwater sample from boring B-11 was the only soil or groundwater sample from the Geoprobe borings that exceeded ESLs. The distribution pattern for groundwater results follows a clear pattern, since the highest concentrations detected previously were in well MW-5, which is located closest to B-11.

Monitoring wells MW-7 and MW-8 were installed on February 26, 2009 at the locations shown on **Figure 2**. Each boring was advanced with a dual tube sampler, and the soils were logged to the termination of the boring at 20 fbg. The soil encountered in all borings was primarily stiff brown silty to sandy clay. Groundwater was first encountered at approximately 12 fbg.

Well MW-7 is located approximately 10 feet downgradient of well MW-5 and well MW-8 is located approximately 10 feet downgradient of well MW-6. The purpose of locating these wells in close proximity to the origin monitoring wells was to monitor the effectiveness of iSOC devices placed in wells MW-5 and MW-6. The iSOC systems were installed in MW-5 and MW-6 in March 2009 and have been operating since that time. In the fourth quarter 2011 Quarterly Monitoring Report, CES recommended no further action if sampling results from the next sampling shows that WQOs would be achieved in a reasonable time period. In a subsequent conversation, Jim Newman of NCDEM recommended that CES remove the iSOC system from wells MW-5 and MW-6 and begin verification monitoring of the wells on the west side of Highway 29 (MW-5, MW-6, MW-7 and MW-8). CES removed the iSOC devices from wells MW-5 and MW-6 on August 18, 2011 and began verification monitoring on September 22, 2011.

In the first quarter 2012 Verification Monitoring Report, CES again recommended no further action if the results of the next monitoring report (i.e., second quarter 2012) show that WQOs

will be achieved in a reasonable time period. In a letter dated May 7, 2012, NCDEM concurred with this recommendation and requested the sampling of all wells, including the VEW well. This report includes the results of the second quarter 2012 monitoring event in which all wells, including the VEW well, were sampled.

SITE CONCEPTUAL MODEL

The information gathered from this and previous site investigations were used to prepare a Site Conceptual Model (SCM). This SCM was developed to present the site characteristics, the current hypothesis for the release scenario, and the likely distribution of chemicals of concern (COCs) at the Site. The SCM links the source to potential receptors through transport of the COCs in air, soil and water. Typically, the SCM provides a framework for additional site investigations to fill data gaps and remedial planning efforts to abate contamination. The SCM is a working hypothesis that is revised as new information becomes available. Descriptive evaluations are developed to identify the potential impacts from hydrocarbons at the Site to human health or beneficial uses of groundwater. This SCM consists of descriptions of the site physical and hydrogeological conditions, the source, nature and extent of the environmental impacts, and the hypotheses of the fate and transport of petroleum hydrocarbons in Site soil and groundwater, and potential sensitive receptor exposure pathways. Site features are depicted on **Figure 2**. Subsurface cross-sections are presented in **Figures 14 and 15**.

Topography and Drainage

The Site is at an elevation of approximately 58 feet above mean sea level in the northern San Francisco Bay Area town of American Canyon. The site slopes gently southwesterly towards the Napa River. The Napa River flows south approximately 1½ miles west of the site to its confluence with San Pablo Bay.

Geology and Soils

The Site area is located in the Coast Ranges Geomorphic Province of California, and is underlain by alluvial sediment deposited by streams eroding the low hills to the east. Cross-sections A-A' and B-B' (**Figure 14** and **Figure 15**) show the stratigraphic profile of the Site. Sediments consist primarily of silty to silty to sandy clay and clayey sand with intermittent lenses of coarser sand.

Groundwater

The Site is within the San Francisco Bay regional watershed. The Quaternary alluvial deposits of the region host beneficial use aquifers. Slightly less than half the region's water supply is derived from groundwater. The balance is obtained from imported surface water.

Groundwater levels in well MW-4 have varied from 2.71 to 9.37 feet below the top of well casing since May 2005. Based on previous measurements at the Site and at a nearby site, the groundwater flow direction is to the south-southwest, toward the Napa River, under a hydraulic gradient of approximately 0.005.

Source, Nature and Extent of Soil and Groundwater Impacts

Results from previous site investigations and groundwater monitoring events indicate soil and groundwater both onsite and offsite have been impacted with gasoline hydrocarbons (TPH-g, BTEX and MtBE). The apparent sources of the petroleum hydrocarbons are one or more USTs that were in operation prior to 1998.

The lateral and vertical extents of hydrocarbons in soil are delineated by the lab results of soil samples collected during previous site investigations. Historical analytical results of soil samples collected during previous investigations are summarized in **Table 4**. Soil analytical results for TPH-g from borings are included in the cross-sections shown on **Figure 14** and **Figure 15**.

The lateral extent of hydrocarbons in groundwater was based on the most recent lab results gathered from May 31, 2012 data (**Figures 4, 5 and 6**). The distributions of these analytes indicate a dissolved TPH-g and MtBE plume with its source at the old UST pit. Free-phase hydrocarbons have not been observed in any of the Geoprobe borings or monitoring wells associated with the Site. Groundwater monitoring data suggests offsite downgradient migration from the vicinity of MW-4 to well MW-5, which is located on the west side of Highway 29.

Fate and Transport of Hydrocarbons in Soil and Groundwater

The primary source of hydrocarbons detected in soil and groundwater is from USTs replaced in 1998. Soil impacted with residual hydrocarbons is limited to the area west of the UST excavation from which soils were removed during remediation of the Site in 1998. These soils were left in place due to the proximity of a 12-inch water main, a 6-inch sewer main, an 8-inch gas main, a storm sewer and Highway 29. A portion of the hydrocarbons released from the former USTs sorbed onto soil in the vadose zone and contribute to relatively stationary sources that release hydrocarbons to groundwater during periods of relatively high groundwater levels during the wet season (November to April). This same area was the focus of the dual phase extraction system. The VEW well was installed in a planter area located in the northwest corner of the Site. This discussion is directed at the fate and transport of residual contamination in this "hotspot".

Soils beneath the site are comprised primarily of silts and clays, which tend to decrease migration rates and interfere with the downward migration of constituents of concern (COCs), especially when they are laterally continuous. Hydrocarbons that desorb from soil particles are mobilized by groundwater advection and flow in a westerly to southwesterly direction from the source area. With the possible exception of MtBE, the COCs tend to travel at a slower rate than the average groundwater velocity due to adsorption onto clayey soil particles. The groundwater data suggests that the downgradient extent of hydrocarbons extends beyond borings B-7 and B-8, which were located on the west side of Highway 29. Soil samples from these same borings suggest that the vertical extent of contamination does not extend beyond a depth of 20 feet. Physical dispersion and to a lesser extent molecular diffusion act on dissolved hydrocarbon

constituents and tend to reduce predicted concentrations and induce a subordinate lateral component to contaminant migration. In addition, natural attenuation processes in soil and groundwater, such as bio-degradation, tend to reduce COC concentrations, especially at the distal margins of the plume.

Transport Mechanisms and Exposure Pathways to Potential Receptors

Residual COCs in soil and groundwater are almost entirely isolated under paved surfaces. Wind erosion of surface soils, storm water, surface water and atmospheric dispersion are not significant transport mechanisms at this Site. Volatilization and enclosed space accumulation from surface and subsurface soil and groundwater through paved surfaces, leaching and groundwater transport mechanisms at this Site. No non-aqueous phase liquids (free-phase product) have been observed in monitoring wells or borings.

There is little potential of contaminated soils at the Site coming into direct contact with humans, except in the case of construction workers excavating in the vicinity of the Site. In these cases, the dermal contact, ingestion and/or inhalation pathways have the potential to be completed.

Volatilized COC vapors from soil and groundwater, such as the BTEX compounds, have the potential to enter into the atmosphere and enclosed spaces, such as the convenience mart and possibly the roofing company building immediately north of the Site. These vapors have the potential to be inhaled by people in these buildings. It is important to note that MtBE is less volatile thus these vapors are less likely to enter enclosed spaces.

COCs in soils have the potential to leach and be transported by groundwater. Downgradient migration of dissolved COCs in groundwater is a transport mechanism that has the greatest potential to impact potable groundwater in downgradient water wells. The Sensitive Receptor Survey completed for this Site found one domestic water well located approximately 300 feet downgradient of the Site that has the highest potential for completing this pathway. This well is located at 3439 Broadway and is owned by Mr. Robert Gish. Mr. Gish reported that this well is 80 feet deep, is powered by a windmill and is used for irrigation, filling the swimming pool and other non-potable uses. Drinking water is derived from the water supply provided by the City of American Canyon. This well was sampled on November 13, 2006 and the samples were analyzed for COCs including TPH-g, BTEX and MtBE. None of these COCs were detected above laboratory detection limits. Laboratory analytical results for the Gish Well water sample are provided in **Appendix D.**

Sensitive Receptor Survey

A sensitive receptor survey was performed for the area within a 2,000 foot radius of the Site. The sensitive receptor survey includes identification of natural surface water bodies, a water well file search of the survey area and identification of land use. Authorization to review State of California Water Well Driller's Reports at the California Department of Water Resources (DWR) was obtained from the NCDEM and the DWR's files were reviewed on November 1, 2006. Well Driller's Reports for Sections 24 and 25, Township 4 North, Range 4 West were

reviewed to evaluate well locations for proximity to the Site. The Public Works Department of the City of American Canyon was contacted to determine if there were wells within the survey area. Whenever possible, water well logs were retrieved. These wells logs are provided in **Appendix E**.

On November 3, 2006, CES conducted a reconnaissance of the list of water wells summarized from City records, DWR well driller's reports, and environmental reports for this site and a nearby LUST site. All of the water wells addresses identified in **Table 5** were located and a visual confirmation of each well was attempted. The owner, well location, well status, depth, screened interval and other information are listed in the table. The well locations are depicted on **Figure 16.**

As shown in **Table 5** and on **Figure 16**, there are 22 records for wells within 2,000 feet of the Site. However, only 12 wells are known to be in use at present and of these only one well is located downgradient of the Site. Well #2 (Gish Well) is located approximately 300 feet downgradient (southwest) of the Site at 3439 Broadway. This well was field located in the front yard of a residence and observed to be used as supplemental water for washing vehicles and irrigation. The City of American Canyon provides the primary source of water to this property.

Preferential Pathway Analysis

CES contacted Underground Service Alert (USA) on November 3, 2006 and requested that all buried public utilities on and near the site be located. PG&E located gas and electrical lines, SBC/ATT located buried phone lines, and the City of American City located water mains and sewer lines. Storm sewer lines were located by CES using storm drain catch basins. This preferential pathway survey was performed on November 7, 2006. Buried utilities located during this survey are shown on **Figure 17**. The survey indicated there are many buried utilities; however, in order for buried utilities to provide a preferential pathway the following conditions must be met:

1. They must be located hydraulically downgradient of the contaminant plume;
2. The trench they are buried in must be at least as deep as the highest recorded groundwater elevation; and
3. The trenches must be backfilled with a material that is more permeable than the native soil.

Based on the first criteria, the phone and electrical lines and the natural gas and sewer line to the Site can be eliminated. Based on the second criteria, the bottom of a utility trench must be at least as deep as the highest recorded groundwater in well MW-4. The shallowest recorded groundwater depth in this well was 2.72 feet below top of casing on April 4, 2006.

The storm drain catch basin at the corner of Broadway and Donaldson Way is within 120 feet of MW-4. This catch basin was filled with sediment to within 18 inches of the surface thus the invert elevation could not be determined in the field. There is a second catch basin located on

the opposite side of Donaldson Way in which the invert is approximately 3.6 feet below grade. Thus the trench containing the storm drain is below the groundwater static level during the spring rainy season when the static water level reaches its maximum elevation. Therefore storm drain trench is a potential pathway for at least a portion of the year.

There is an 8-inch diameter gas main owned by PG&E that runs parallel and approximately 10 feet west of the top of curb that runs along Broadway. There is another smaller gas main that runs parallel and approximately 24 feet south of the top of curb that runs along Donaldson Way. A call was made to PG&E to determine the depth of the trench containing the 8-inch diameter steel natural gas transmission line (8" STL). PG&E stated the exact depth of this trench is unknown since settling, regarding and repaving may have occurred since the line was placed. In general PG&E places 3 to 4 feet of cover over their gas lines. The gas lines are covered top and bottom with sand. If the line is buried with 3 feet of cover, the pipe is 8" diameter and is on top of an 8" thick sand bed, the base of the gas line trench is at approximately 4 feet below grade. Thus the bottom of this trench is below the highest recorded groundwater level could act as a preferential pathway for at least part of the year.

A call was made to the City of American Canyon Department of Public Works to determine the depth of the trench containing the 12-inch diameter ductile steel water main that runs across the Site and parallel to Broadway. The City stated that this main was installed in the 1990s and was typically covered with 48 inches of native soil. Bedding sand or pea gravel was not used on ductile steel pipes during this period. If the line is buried with 4 feet of cover, the pipe is 12-inch diameter and there is no bedding sand or gravel, the base of the water line trench is at approximately 5 feet below grade. Thus the bottom of this trench is below the highest recorded groundwater level and can provide a pathway for at least part of the year; however the native clay soil used as backfill will not likely provide a preferential pathway for the offsite migration of contaminants.

The City was also contacted to determine the depth of the trench containing the 6-inch sewer main running across the Site, approximately 9 feet east of the top of curb running parallel to Broadway. The City did not know the exact depth of this sewer line but stated that it was deeper than 4 feet below grade. There are two sewer lines running down Donaldson Way immediately south of the site. A 12-inch main runs approximately 16 feet south of the top of curb that runs along Donaldson Way. A 6-inch main runs approximately 20 feet south of the top of curb that runs along Donaldson Way. The bottom of the trenches that carry these sewer lines are both deeper than 4 feet. These sewer lines were backfilled with bedding sand. Based on this information the sewer lines are deeper than the highest recorded groundwater elevation and could provide a preferential pathway for the offsite migration of contaminants.

LOW RISK CLOSURE GENERAL CRITERIA

The Low-Threat Underground Storage Tank Case Closure Policy recently adopted by the State Water Resources Control Board established a methodology and guidelines for evaluating an acceptable level of risk from residual contamination in soils and groundwater.

The Policy provides a prescriptive list of general criteria as well as media-specific technical criteria to be met in order for a site to qualify for low-threat closure. The following discussion provides site specific responses to the eight general criteria for low risk site closure.

1. The unauthorized release is located within the service area of a public water system

This criterion is met. The site and surrounding area is served by the City of American Canyon public water system.

2. The unauthorized release consists only of petroleum

This criterion is met. Numerous site investigations established that the only contaminants present in the plume are petroleum and petroleum additives (i.e., MtBE and tBA).

3. The unauthorized release has been stopped

This criterion is met. The unauthorized leak was the result of USTs and related piping that were removed in 1988.

4. Free product has been removed to the maximum extent practicable

This criterion is met. Remedial action removed all free product from the water table.

5. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed

This criterion is met. The conceptual site model (CSM) is provided in the previous section. The CSM describes the affected media (soil and groundwater), local geology, hydrogeology, and identifies all confirmed and potential receptors (water supply wells, surface water bodies, structures and their inhabitants).

6. Secondary source has been removed to the extent practicable

The SWRCB defines "secondary source" as petroleum impacted soil or groundwater located at or immediately beneath the point of release from the primary source. This criterion is met. The secondary source in the vicinity of the former USTs was removed to the maximum extent practicable by excavating approximately 700 tons of soil and 20,000 gallons of groundwater from the UST excavation in 1998. This initial remedial action was performed by L&S Environmental. In a subsequent investigation by CES, a "hot spot" was found in the northwest corner of the Site. A dual phase extraction system was installed in this location and operated from August 12, 2010 to December 1, 2010 during which time the system treated 244,510 gallons of contaminated groundwater. In addition, two insitu oxygen curtain (iSOC) devices were installed in downgradient wells MW-5 and MW-6 to treat dissolved hydrocarbons in

shallow groundwater on the west side of Highway 29. The iSOC wells operated from February 2009 until September 2011. Both the dual phase extraction system and the iSOC devices reduced secondary sources to the maximum extent practicable as seen in wells MW-4 (Figures 7, 8, and 8a), MW-5 (Figures 9 and 10), MW-6 (Figure 11) and the VEW well (Figures 12 and 13).

7. Soil and groundwater have been tested for MTBE and results reported in accordance with Health and Safety Code section 25296.15

This criterion is met since MtBE has been a target analyte in all soil and groundwater sampling events since June 2005.

8. *Nuisance as defined by Water Code section 13050 does not exist at the site*

Section 13050 of the California Water Code, defines "nuisance" as anything which meets all of the following requirements:

(a) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

(b) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

(c) Occurs during, or as a result of, the treatment or disposal of wastes.

These criteria are met. No exposure pathways were identified that pose a risk to human health or environmental receptors, is offensive to the senses or will interfere with the comfortable enjoyment of life or property. No impact from residual contamination will result in the annoyance or damage to the community or neighborhood. There is no active treatment or disposal of waste from the site to result in a nuisance condition.

LOW-RISK CLOSURE MEDIA SPECIFIC CRITERIA

The Low-Risk Underground Storage Tank Site Closure Policy states that:

> "Releases from USTs can impact human health and the environment through contact with any or all of the following contaminated media: groundwater, surface water, soil, and soil vapor. Although this contact can occur through ingestion, dermal contact, or inhalation of the various media, the most common drivers of health risk are ingestion of groundwater from drinking water wells, inhalation of vapors accumulated in buildings, contact with near surface contaminated soil, and inhalation of vapors in the outdoor environment. To simplify implementation, these media and pathways have been evaluated and the most common exposure scenarios have been combined into three media-specific criteria:
>
> 1. Groundwater
> 2. Vapor Intrusion to Indoor Air
> 3. Direct Contact and Outdoor Air Exposure

Candidate sites must satisfy all three of these media-specific criteria as described below."

The discussion below evaluates the risk from residual contamination onsite and offsite in all three media

Groundwater

The Policy states, "If groundwater with a designated beneficial use is affected by an unauthorized release, to satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds WQOs must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites listed below. A plume that is "stable or decreasing" is a contaminant mass that has expanded to its maximum extent: the distance from the release where attenuation exceeds migration."

Of the five site classes, the subject site meets the criteria for Class 2, which is as follows:

a. The contaminant plume that exceeds water quality objectives is less than 250 feet in length.

See **Table 4**, **Figure 4**, **Figure 5**, and **Figure 6**

b. There is no free product.

See General Criteria 4 above

c. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary.

See the Sensitive Receptor Survey in the previous section.

d. The dissolved concentration of benzene is less than 3,000 micrograms per liter, and the dissolved concentration of MTBE is less than 1,000 micrograms per liter.

See **Table 4**, **Figure 4**, **Figure 5**, and **Figure 6**

Vapor Intrusion to Indoor Air

According to the UST Low Risk Closure Policy:

"Exposure to petroleum vapors migrating from soil or groundwater to indoor air may pose unacceptable human health risks. This policy describes conditions, including bioattenuation zones, which if met will assure that exposure to petroleum vapors in indoor air will not pose unacceptable health risks. In many petroleum release cases, potential human exposures to vapors are mitigated by bioattenuation processes as vapors migrate toward the ground surface. For the purposes of this section, the term "bioattenuation zone" means an area of soil with conditions that support biodegradation of petroleum hydrocarbon vapors. The low-threat vapor-intrusion criteria described below apply to sites where the release originated and impacted or potentially impacted

adjacent parcels when: (1) existing buildings are occupied or may be reasonably expected to be occupied in the future, or (2) buildings for human occupancy are reasonably expected to be constructed in the future. Appendices 1 through 4 (attached) illustrate four potential exposure scenarios and describe characteristics and criteria associated with each scenario. Petroleum release sites shall satisfy the media-specific criteria for petroleum vapor intrusion to indoor air and be considered low-threat for the vapor-intrusion-to-indoor-air pathway if:

a. Site-specific conditions at the release site satisfy all of the characteristics and criteria of scenarios 1 through 3 as applicable, or all of the characteristics and criteria of scenario 4 as applicable; or

b. A site-specific risk assessment for the vapor intrusion pathway is conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency; or

c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the regulatory agency determines that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health."

The subject site meets the criteria of Scenario 3 (Appendix 3). Scenarios 1 and 2 do not apply due to a relatively high water table at the site. Scenario 3 criteria apply to an existing building or possible future building and are as follows:

1. *There is a five foot separation between the building foundation and the water table,*

   Although there is some variability of groundwater depths below the ground surface at the site, the mean depth to water for all existing site monitoring wells is 5.19 feet below the top of casing. In addition, these wells are constructed in grade level vaults, with the top of casing a few inches below grade, approximately equal to the thickness of a floor slab. In consideration of these facts, the five foot separation of a building slab from the water table criteria should be met.

2. *TPH concentrations are below 100 mg/Kg in soils above the water table.*

   Table 4 summarizes soil analytical results. Boring locations are shown on **Figure 2**. Although only one soil sample (B-1@5 ft.) was collected at a depth of five feet or less, this sample was collected in one of the most contaminated areas of the site, in the vicinity of the former USTs. **Figure 14** and **Figure 15** show the location of this soil sample location relative to the former UST excavation. TPH-g was detected in boring B-1@5ft. at 150 mg/kg in February of 2006. Benzene was not detected (i.e., <0.050 mg/kg) in this same sample. Due to natural attenuation, it is likely that the current TPH-g concentration at location B-1@5ft. is less than the 100 mg/Kg.

3. *Benzene concentrations in groundwater are less than 100 µg/L (without oxygen data or oxygen concentration in vadose zone is less than four percent), or*

   The VEW well is located in the general vicinity of boring B-1, and groundwater concentrations in VEW are reflective of concentrations in boring B-1. The benzene concentration in groundwater from the VEW well on May 31, 2012 was 180 µg/L. Although the benzene concentration is above 100 ug/L, a review of **Figure 13** indicates that benzene concentrations are trending downward at this location. In fact, our analysis suggests that benzene concentrations will drop to 100 µg/L by the end of this year.

4. *Benzene concentrations in groundwater are less than 1,000 µg/L (oxygen concentration in vadose zone is greater than or equal to four percent).*

   Although the oxygen concentration in the vadose zone is not known, benzene concentrations in groundwater samples collected on May 31, 2012 are below 1,000 ug/L/

Direct Contact

According to the UST Low Risk Closure Policy:

"This policy describes conditions where direct contact with contaminated soil or inhalation of contaminants volatized to outdoor air poses a low threat to human health. Release sites where human exposure may occur satisfy the media-specific criteria for direct contact and outdoor air exposure and shall be considered low-threat if they meet <u>any</u> of the following:

a. Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs). The concentration limits for 0 to 5 feet bgs protect from ingestion of soil, dermal contact with soil, and inhalation of volatile soil emissions and inhalation of particulate emissions. The 5 to 10 feet bgs concentration limits protect from inhalation of volatile soil emissions. Both the 0 to 5 feet bgs concentration limits and the 5 to 10 feet bgs concentration limits for the appropriate site classification (Residential or Commercial/Industrial) shall be satisfied. In addition, if exposure to construction workers or utility trench workers are reasonably anticipated, the concentration limits for Utility Worker shall also be satisfied; or

b. Maximum concentrations of petroleum constituents in soil are less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health; or

c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the regulatory agency determines that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health."

The site is zoned commercial/industrial. The most restrictive criteria (Policy – Table 1) for benzene exposure by volatilization to outdoor air is 8.2 mg/kg in soil from zero to five feet in

depth. Correspondingly, the most restrictive criteria for ethylbenzene is 89 mg/kg and, the most restrictive criteria for naphthalene is 45 mg/kg. The criterion for PAHs is not applicable because no PAHs have been detected at the site. As described in the previous section, only one soil sample (B-1@5 ft) was collected from zero to five feet below grade. Benzene was not detected in this sample. Ethylbenzene was detected in this sample at 0.096 mg/kg. These analytical results indicate that the criteria for direct contact and outdoor air exposure meet the requirements for low risk UST case closure.

CONCLUSIONS

This case meets the criteria for low-threat case closure under the recent SWRCB Policy. Although no recent shallow soil analytical data has been obtained at the site to prove beyond any doubt that soil concentrations are at acceptable levels according to the Policy, the existing data, combined with trend analyses presented in previous sections strongly suggest that soil and groundwater concentration will meet the criteria at this time or in the near future.

RECOMMENDATIONS

Remedial actions at this site have substantially reduced hydrocarbon concentrations in soil and groundwater such that the site qualifies for closure as a low-risk threat, in accordance with the recently adopted *Low-Threat Underground Storage Tank Case Closure Policy*. We recommend case closure upon the removal of all monitoring wells. We will submit a Monitoring Well Abandonment Work Plan upon receipt of NCDEM concurrence with this recommendation.

TABLES

Table 1. Well Construction Summary

Mike's Arco, American Canyon, California

Well	Type Well	Date Installed	Total Depth (ft)	Diameter (in)	Screened Interval (ft)	Water Bearing Unit	Screen Slot Size (in)	TOC Elevation (ft amsl)	Northing Coordinates (ft)	Easting Coordinates (ft)
MW-4	monitoring	06/02/05	15.5	2	5.5-15.5	pea-gravel and sandy clay	0.020	60.98	1,824,433.80	6,488,905.54
MW-5	monitoring	11/19/07	20	2	3-20	clay	0.020	59.67	1,824,400.60	6,488,725.34
MW-6	monitoring	11/19/07	20	2	3-20	clay	0.020	60.61	1,824,333.08	6,488,734.67
MW-7	monitoring	02/26/09	20	2	3-20	clay	0.020	59.39	1,824,396.00	6,488,715.79
MW-8	monitoring	02/26/09	20	2	3-20	clay	0.020	60.16	1,824,332.98	6,488,722.49
VEW	dual phase extraction	11/20/07	20	4	5-20	clay	0.020	61.23	1,824,427.43	6,488,867.13
PF-1S	air sparge	11/20/07	20	1	8-10	clay	3/16" perf	60.61	1,824,429.01	6,488,877.22
PF-1D	air sparge	11/20/07	20	1	18-20	clay	3/16" perf	60.51	1,824,428.84	6,488,877.11
PF-2S	air sparge	11/21/07	20	1	8-10	clay	3/16" perf	60.44	1,824,440.76	6,488,869.49
PF-2D	air sparge	11/21/07	20	1	18-20	clay	3/16" perf	60.69	1,824,440.48	6,488,869.49
PF-3S	air sparge	11/21/2007 & 11/23/07	20	1	8-10	clay	3/16" perf	60.44	1,824,428.01	6,488,856.72
PF-3D	air sparge	11/21/2007 & 11/23/07	20	1	18-20	clay	3/16" perf	60.37	1,824,428.13	6,488,856.56
PF-4S	air sparge	11/19/07	20	1	8-10	clay	3/16" perf	60.21	1,824,414.66	6,488,866.79
PF-4D	air sparge	11/19/07	20	1	18-20	clay	3/16" perf	59.96	1,824,414.37	6,488,856.81

Table 1. Well Construction Summary
Mike's Arco, American Canyon, California

Notes:
ft = feet in = inches TOC = top of casing. Monitoring wells MW-4, MW-5 and MW-6 are 2-inch diameter PVC casing and screen
Dual phase extraction well VEW is 4-inch diameter PVC casing and screen
Monitoring wells surveyed November 29, 2007 by Virgil Chavez Land Surveying.
Horizontal coordinates based on CA Coordinate System NAD-83.
Benchmark elevation = 50.45 feet. Elevations are based on NGVD-29.

Table 2. Water Levels in Wells

Mike's Arco, American Canyon, California

Well ID	MW-4		MW-5		MW-6		MW-7		MW-8		VEW	
TOC Elev	60.98		59.67		60.61		59.39		60.16		61.23	
Date	DTW	Elev	DTW	Elev	DTW	Elev	DTW	Elev	DTW	Elev	DTW	Elev
06/27/05	6.39	54.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
09/28/05	9.37	51.61	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
01/12/06	4.65	56.33	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
04/04/06	2.72	58.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
07/06/06	6.45	54.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
11/03/06	6.11	54.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
12/06/07	5.71	55.27	5.97	53.70	8.60	52.01	NM	NM	NM	NM	6.46	54.77
03/04/08	3.76	57.22	4.10	55.57	6.06	54.55	NM	NM	NM	NM	3.58	57.65
08/07/08	5.51	55.47	6.12	53.55	7.72	52.89	NM	NM	NM	NM	6.49	54.74
09/25/08	6.26	54.72	6.49	53.18	8.13	52.48	NM	NM	NM	NM	6.83	54.4
12/08/08	5.34	55.64	6.44	53.23	8.26	52.35	NM	NM	NM	NM	6.76	54.47
03/20/09	3.99	56.99	4.09	55.58	5.92	54.69	3.93	55.46	5.39	54.77	4.77	56.46
09/09/09	6.56	54.42	6.64	53.03	8.72	51.89	6.43	52.96	7.61	52.55	7.03	54.20
11/10/09	5.50	55.48	5.68	53.99	7.32	53.29	5.50	53.89	6.78	53.38	6.16	55.07
01/27/10	2.98	58.00	2.10	57.57	4.34	56.27	2.00	57.39	3.75	56.41	3.10	58.13
04/22/10	3.63	57.35	3.12	56.55	5.08	55.53	3.02	56.37	4.45	55.71	3.90	57.33
09/18/10	6.50	54.48	6.26	53.41	8.32	52.29	6.28	53.11	7.74	52.42	NM	NM
12/01/10	5.28	55.70	5.10	54.57	7.00	53.61	4.99	54.40	6.44	53.72	NM	NM
03/25/11	2.71	58.27	1.50	58.17	3.81	56.80	1.44	57.95	3.33	56.83	2.47	58.76
06/07/11	3.54	57.44	3.22	56.45	5.12	55.49	2.82	56.57	4.48	55.68	3.61	57.62
09/22/11	4.67	56.31	4.81	54.86	6.59	54.02	4.64	54.75	6.02	54.14	5.28	55.95
11/22/11	NM	NM	5.02	54.65	7.01	53.60	4.95	54.44	NM	NM	NM	NM
03/30/12	NM	NM	2.79	56.88	5.16	55.45	2.74	56.65	4.56	55.60	NM	NM
05/31/12	4.38	56.60	4.50	55.17	6.41	54.20	4.35	55.04	5.86	54.30	4.89	56.34
Δ		NM		-1.71		-1.25		-1.61		-1.30		NM
Maximum	9.37	58.27	6.64	58.17	8.72	56.80	6.43	57.95	7.74	56.83	7.03	58.76
Minimum	2.71	51.61	1.50	53.03	3.81	51.89	1.44	52.96	3.33	52.42	2.47	54.20

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Table 2. Water Levels in Wells
Mike's Arco, American Canyon, California

Notes:
All measurements are in feet. TOC = Top of casing Elev = Elevation above mean sea level based on NGVD 29
DTW = Depth to water below TOC Elevations are based on County of Napa benchmark No. 1249 located at the intersection of James Road and Donaldson Way (elevation 50.54 feet)
Δ = The change in water level for the current quarter
NM = well was either not constructed yet or well was actively pumping at the time of sampling.

Table 3. Groundwater Analytical Results from Monitoring Wells

Mike's Arco American Canyon, California

Well ID	Sample Date	TPH-g	benzene	toluene	ethyl-benzene	xylenes	MtBE	DIPE	tBA	ethanol
MW-4	06/27/05	**1,900**	**4.9**	3.4	1.2	3.4	**5.9**	NA	NA	<50
	09/28/05	**830**	**4.8**	5.8	1.4	14	**10**	NA	NA	<50
	01/12/06	**410**	<0.5	3.1	<0.5	4.8	1.4	NA	NA	<50
	04/04/06	**140**	<0.5	<0.5	<0.5	<0.5	2.3	NA	NA	<50
	07/06/06	<50	<0.5	<0.5	<0.5	<0.5	1.2	NA	NA	<50
	11/03/06	98	<0.5	<0.5	<0.5	<0.5	**9.4**	NA	NA	<50
	12/06/06	<50	<0.5	<0.5	<0.5	<0.5	**12**	<0.5	<5.0	<50
	03/06/08	62	<0.5	0.58	<0.5	0.81	**34**	<0.5	<2.0	<50
	08/07/08	<50	<0.5	<0.5	<0.5	<0.5	**5.7**	<0.5	<2.0	<50
	09/25/08	83	<0.5	<0.5	<0.5	<0.5	**6.5**	<0.5	<2.0	<50
	12/08/08	**120**	**1.2**	0.63	4.6	11	**5.0**	<0.5	<2.0	87
	03/20/09	**150**	**24**	1.2	<0.5	0.93	**14**	<0.5	2.8	<50
	09/09/09	58	<0.5	<0.5	<0.5	<0.5	**5.9**	<0.5	<2.0	<50
	11/10/09	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/10	**160**	**4.5**	0.95	<0.5	0.97	**17**	<0.5	<2.0	<50
	04/22/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/18/10	**110**	<0.5	0.86	<0.5	0.87	**12**	<0.5	<2.0	<50
	12/01/10	**81**	<0.5	<0.5	<0.5	0.75	**14**	<0.5	4.6	<50
	03/25/11	**340**	**1.9**	1	<0.5	2	**11**	<0.5	2.9	<50
	06/07/11	**270**	**1.2**	0.99	<0.5	0.93	**13**	<0.5	3.9	<50
	09/22/11	**180**	<15	1.3	<0.5	1.6	**12**	<0.5	5.4	<50
	05/31/12	**130**	<0.5	0.87	<0.5	0.83	**6.5**	<0.5	<0.5	<50
MW-5	12/06/06	**4,800**	**1,600**	<5.0	<5.0	8.1	<2.5	6.2	**56**	<50
	03/06/08	**7,400**	**2,400**	13	<10	<10	<10	<10	**44**	<50
	08/07/08	**4,000**	**880**	2.7	3.0	3.2	<0.5	8.6	**21**	<50
	09/25/08	**7,600**	**1,800**	4.5	4.5	4.9	<5.0	9	**34**	<50
	12/08/08	**6,200**	**1,700**	6.8	8.6	**22**	<5.0	5.6	<20	<50
	03/20/09	**1,900**	**470**	3.3	3.6	4.0	<1.0	5.8	**18**	<100
	09/09/09	**1,500**	**370**	2.1	1.8	3.0	<0.5	5.5	8.0	<50
	11/10/09	**2,000**	**560**	2.5	2.3	4.1	<10	5.3	6.9	<50
	01/27/10	**2,000**	**390**	3.4	2.9	6.6	<0.5	6.2	6.7	<50
	04/22/10	**2,200**	**370**	3.1	3.2	5.8	<0.5	5.9	7.2	<50
	09/18/10	**2,000**	**280**	2.6	2.3	4.9	<0.5	5.8	7.1	<50
	12/01/10	**720**	**95**	1.4	0.64	1.5	<0.5	4.7	6.7	<50
	03/25/11	**2,200**	**64**	1.4	3.00	4.3	<0.5	2.6	6.7	<50
	06/07/11	**940**	**10**	1.4	0.59	0.53	<0.5	1.4	2.9	<50
	09/22/11	**1,800**	**18**	1.7	1.0	7	<0.5	1.4	5.4	<50
	11/22/11	**2,400**	**51**	2.8	4.4	11	<0.5	1.8	4.3	<50
	03/30/12	**2,400**	**6.4**	1.5	4.7	12	<0.5	1.1	3.9	<50
	05/31/12	**2,600**	**4.6**	1.7	4.0	7.0	<0.5	0.78	2.3	<50
MW-6	12/06/06	<50	<0.5	<0.5	<0.5	<0.5	**26**	<0.5	<5.0	<50
	03/06/08	<50	**14**	<0.5	<0.5	<0.5	**8.9**	3.3	**20**	<50
	08/07/08	<50	<0.5	<0.5	<0.5	<0.5	**6.8**	1.4	5.0	<50
	09/25/08	**120**	**23**	<0.5	<0.5	<0.5	2.9	<0.5	<2.0	<50
	12/08/08	160	**27**	<0.5	4.7	11	2.4	<0.5	<2.0	<50
	03/20/09	<50	**16**	<0.5	<0.5	<0.5	4.0	2.3	9.1	<50
	09/09/09	<50	<0.5	<0.5	<0.5	<0.5	1.2	0.7	<2.0	<50
	11/10/09	<50	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<2.0	<50
	01/27/10	<50	<0.5	<0.5	<0.5	<0.5	1.4	1.2	<2.0	<50

Table 3. Groundwater Analytical Results from Monitoring Wells

Mike's Arco American Canyon, California

Well ID	Sample Date	TPH-g	benzene	toluene	ethyl-benzene	xylenes	MtBE	DIPE	tBA	ethanol
MW-6	04/22/10	420	**180**	0.89	<0.5	0.79	1.3	8.6	**15**	<50
	09/18/10	<50	<0.5	<0.5	<0.5	<0.5	1.6	2.8	2.0	<50
	12/01/10	<50	<0.5	<0.5	<0.5	<0.5	1.2	0.93	<2.0	<50
	03/25/11	**96**	**19**	<0.5	<0.5	0.87	1.3	5	8.3	<50
	06/07/11	<50	<0.5	<0.5	<0.5	0.62	1.0	5.8	9.7	<50
	09/22/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	5.1	<2.0	<50
	11/22/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.83	2.0	<50
	03/30/12	<50	**2.0**	<0.5	<0.5	<0.5	<0.5	2.1	<2.0	<50
	05/31/12	<50	**1.3**	<0.5	<0.5	<0.5	<0.5	3.5	5.3	<50
MW-7	03/20/09	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	2.0	<50
	09/09/09	58	<0.5	<0.5	<0.5	0.85	<0.5	5.3	6.1	<50
	11/10/09	<50	<0.5	<0.5	<0.5	<0.5	<0.5	3.0	2.9	<50
	01/27/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.89	<2.0	<50
	04/22/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<2.0	<50
	09/18/10	86	<0.5	<0.5	<0.5	1.1	<0.5	1.2	<2.0	<50
	12/01/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.58	<2.0	<50
	03/25/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	06/07/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	09/22/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	11/22/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	03/30/12	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	05/31/12	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50
MW-8	03/20/09	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<2.0	<50
	09/09/09	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.57	<2.0	<50
	11/10/09	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<2.0	<50
	01/27/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.54	<2.0	<50
	04/22/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<2.0	<50
	09/18/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<2.0	<50
	12/01/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	03/25/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	06/07/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	09/22/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	11/22/11	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/30/12	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<50
	05/31/12	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50
VEW	12/06/06	**14,000**	**1,700**	12	**54**	**42**	**15**	1.0	**30**	<50
	03/06/08	**8,600**	**1,100**	16	**73**	**56**	<5.0	<5.0	<20	<50
	08/07/08	**3,800**	**450**	4	19	18	**5.7**	0.63	**18**	<50
	09/25/08	**4,600**	**550**	5	10	15	<5.0	<5.0	**55**	<50
	12/08/08	**11,000**	**1,200**	14	44	**65**	<5.0	<5.0	<20	<50
	03/20/09	**5,600**	**830**	12	**42**	**39**	**5.1**	<2.5	**14**	<250
	09/09/09	**6,200**	**1,700**	11	16	17	<1.0	1.1	**43**	<50
	11/10/09	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/27/10	**6,500**	**900**	12	27	**38**	<1.2	<1.2	**16**	<120
	04/22/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
*	09/18/10	**230**	**18**	<0.5	1.5	2.4	4.0	<0.5	9.4	<50
	12/01/10	**2000**	**140**	3.4	6.1	6.5	2.8	<0.5	4.2	<50
	03/25/11	**2000**	**230**	7.8	14	19	<1.0	<1.0	4.2	<50

Table 3. Groundwater Analytical Results from Monitoring Wells

Mike's Arco American Canyon, California

Well ID	Sample Date	TPH-g	benzene	toluene	ethyl-benzene	xylenes	MtBE	DIPE	tBA	ethanol
VEW	06/07/11	**860**	**87**	3.3	6.4	6.1	<0.5	<0.5	2.3	<50
	09/22/11	**3,100**	**260**	8.9	19	28	<0.5	<0.5	2.3	<50
	05/31/12	**2,800**	**180**	5.3	8.5	12	<0.5	<0.5	3.8	<50
ESL		100	1.0	40	30	20	5.0	NE	12	NE

Notes:

Units are micrograms per liter (ug/L). <0.1 = less than the laboratory detection limit
TPH-g = total petroleum hydrocarbons as gasoline, MtBE = methyl tert-butyl ether, tBA = tert butyl alcohol,
DIPE = diisopropyl ether, NA = not analyzed, NE = no ESL established.
Concentrations in excess of SFRWQCB Environmental Screening Levels (ESLs) established for drinking water are in **bold**.
Only fuel oxygenates detected above laboratory method limits are presented. All other fuel oxygenates are below method detection limits.

* VEW sampled from sample port after knockout tank and before carbon drums

Where MtBE analyzed by more than one method, method with lower reporting limit is shown.

Table 4. Summary of Laboratory Analytical Results for Soil Samples
Mike's Arco, American Canyon

Sample ID/Depth	Sample Date	TPH-g	MtBE	benzene	toluene	ethyl-benzene	xylenes
MW-4@15'	5/17/2005	<1.0	0.018	<0.005	<0.005	<0.005	<0.005
B-1@5'	2/15/2006	**150**	<0.005	<0.050	0.28	0.096	0.27
B-1@20'	2/15/2006	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
B-2@20'	2/15/2006	<1.0	0.0082	<0.005	<0.005	<0.005	<0.005
B-3@20'	2/15/2006	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
B-4@17'	6/21/2006	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
B-5@17'	6/21/2006	5.8	0.018	<0.005	<0.005	<0.005	<0.005
B-6@12'	6/21/2006	**1,500**	<0.20	**3.0**	<0.20	1.5	1.6
B-6@19'	6/21/2006	16	<0.005	**0.35**	<0.005	0.037	<0.005
B-7@17'	6/21/2006	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
B-8@12'	6/21/2006	**100**	<0.020	**0.086**	<0.05	0.16	0.20
ESL		100	0.023	0.044	2.9	3.3	1.5

Units are milligrams per kilogram (mg/Kg). <0.005 = less than the specified laboratory detection limit
TPH-g = total petroleum hydrocarbons as gasoline, MtBE = methyl tert butyl ether

Table 5.
Water Supply Wells within 2,000 Feet
Mike's Arco, American Canyon

Well Map Number	Well Owner Mailing Address	Location of Well(s)	Well Use	Year Drilled	Well Status	Total Depth (feet)	Screened Interval (feet)	First Water Depth (feet)	Static Water Depth (feet)	Well Diameter (inches)	Approximate Direction and Distance from Site (feet)
1	Mid City Nursery 3635 Broadway American Canyon, CA 94503 State ID #120032	3635 Broadway American Canyon, CA 94503	Irrigation	March 1991	Active	190	38-100 120-140 160-190	40	12	8 inch PVC	720 feet NW Field Located
2	Robert Gish 3439 Broadway American Canyon, CA 94503 State ID#	3439 Broadway American Canyon, CA 94503 APN 058-030-???	Irrigation, Non-Drinking Water Domestic	1975	Active	Unknown	Unknown	Unknown	Unknown	6 inch Steel	300 feet SW Field Located
3	Richard Hess State ID #	Canyon Plaza 3431 Broadway American Canyon, CA 94503	Domestic	Unknown	Destroyed	Unknown	Unknown	Unknown	Unknown	Unknown	720 feet SW
4	Bernard A. Silvey 845 Marina Dr. Napa, CA 94559 State ID#	3448 Broadway American Canyon, CA 94503 APN 059-040-005	Domestic	Unknown	Inactive	Unknown	Unknown	Unknown	Unknown	Unknown	360 feet S Field Located
5	Albert E. Lehman Jr. 100 Holcomb Ln. American Canyon, CA 94503 State ID#	100 Holcomb Ln. American Canyon, CA 94503 APN 059-080-006	Domestic	Unknown	Active	Unknown	Unknown	Unknown	Unknown	Unknown	900 feet S
6	V.W. White State ID#	170 James Rd. American Canyon, CA 94503	Domestic	May 1974	Unknown	105	35-105	88	30	6 inch PVC	1,140 feet SW
7	?	301 Donaldson Way American Canyon, CA 94503	Domestic	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	840 feet E
8	Estigoy Rest Home 3434 Broadway American Canyon, CA 94503 State ID #72998	3434 Broadway American Canyon, CA 94503 APN 059-080-009	Domestic	Jan 1974	Inactive	115	35-115	35	6	6 inch PVC	840 feet S
9	Elton C. Gloss 3330 Broadway American Canyon, CA 94503 State ID#	3318 Broadway American Canyon, CA 94503	Domestic	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	1,320 feet S
10	Herbert Miller 101 Holcomb Ln American Canyon, CA 94503 State ID# 7298	101 Holcomb Ln. American Canyon, CA 94503 APN 059-080-009	Domestic	Jan 1974	Active	115	35-115	35	6	6 inch PVC	960 feet SE Field Located

Table 5.
Water Supply Wells within 2,000 Feet
Mike's Arco, American Canyon

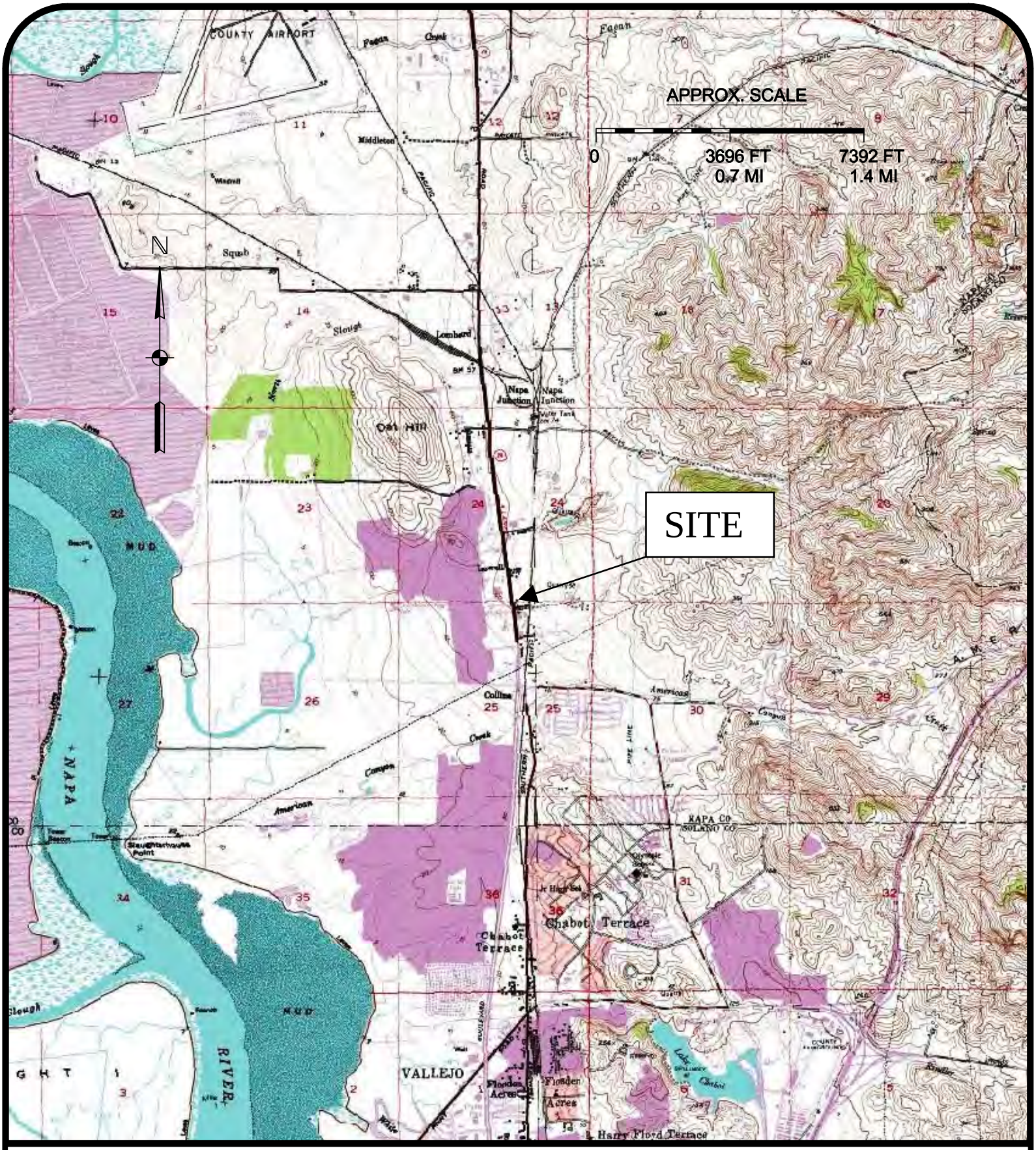
Well Map Number	Well Owner Mailing Address	Location of Well(s)	Well Use	Year Drilled	Well Status	Total Depth (feet)	Screened Interval (feet)	First Water Depth (feet)	Static Water Depth (feet)	Well Diameter (inches)	Approximate Direction and Distance from Site (feet)
11	Matt S. Greenberg 160 Holcomb Ln. American Canyon, CA 94503 State ID#72926	160 Holcomb Ln. American Canyon, CA 94503	Domestic	Apr 1973	Active	100	30-100	14	16	6 inch PVC	1,020 feet SE
12	Elton C. Gloss 3330 Broadway American Canyon, CA 94503 State ID#	3330 Broadway American Canyon, CA 94503 APN 059-080-036	Domestic	Unknown	Active	Unknown	Unknown	Unknown	Unknown	Unknown	1,020 feet S
13	Rose and Gunther Grasser 120 Holcomb Ln. American Canyon 94503 State ID#	120 Holcomb Ln. American Canyon 94503 APN 059-080-039	Domestic	Unknown	Active	Unknown	Unknown	Unknown	Unknown	Unknown	840 feet SE Field Located
14	Audrey V. McDaniels State ID #20027	2,000 feet north of American Canyon Rd, 300 feet east of Broadway	Domestic	Apr 1970	Unknown	130	40-130	40	7	6 inch PVC	210 feet SE
15	Tesoro Petroleum Corporation 200 Concord Plaza Dr San Antonio, TX 78216 State ID#	3438 Broadway American Canyon, CA 94503	Monitoring	May 2003-Sep 2004	Active	Max 25	5-25	7	5	2 inch PVC	600 feet S
16	Fred and Susan Fetty Jr. 3015 Overlook Dr. Vallejo, CA 94591 State ID#	16 Donaldson Wy. American Canyon, CA 94503 APN 059-312-006	Domestic	Unknown	Inactive	Unknown	Unknown	Unknown	Unknown	Unknown	300 feet SW Field Located
17	Victor Smith State ID #095257	400 feet east of railroad tracks, 300 feet south of Frisby Ln	Domestic	Aug 1980	Unknown	80	25-80	62	10	6 inch PVC	840 feet SE
18	Gayle Gibbs 121 Holcomb Ln American Canyon, CA 94503 State ID #	121 Holcomb Ln American Canyon, CA 94503 APN 059-080-034	Domestic	Unknown	Active	Unknown	Unknown	Unknown	Unknown	Unknown	1,020 feet SE
19	Eric Watts 130 Holcomb Ln American Canyon, CA 94503 State ID #	130 Holcomb Ln American Canyon, CA 94503 APN 059-080-040	Domestic	Unknown	Active	Unknown	Unknown	Unknown	Unknown	Unknown	960 feet SE
20	Victor Smith State ID #152048	2,100 feet north of American Canyon Rd, 900 feet east of Broadway	Domestic	Aug 1975	Unknown	115	30-115	Unknown	Unknown	5 inch PVC	730 feet east

Table 5.
Water Supply Wells within 2,000 Feet
Mike's Arco, American Canyon

Well Map Number	Well Owner Mailing Address	Location of Well(s)	Well Use	Year Drilled	Well Status	Total Depth (feet)	Screened Interval (feet)	First Water Depth (feet)	Static Water Depth (feet)	Well Diameter (inches)	Approximate Direction and Distance from Site (feet)
21	Larry D. Williams 140 Holcomb Ln. American Canyon, CA 94503 State ID #	140 Holcomb Ln. American Canyon, CA 94503 APN 059-080-008	Domestic	Unknown	Active	Unknown	Unknown	Unknown	Unknown	Unknown	950 feet SE Field Located
22	S. Elmery/G. Wheeler 141 Holcomb Ln. American Canyon, CA 94503 State ID #	141 Holcomb Ln. American Canyon, CA 94503 APN 059-080-031	Domestic	Unknown	Active	Unknown	Unknown	Unknown	Unknown	Unknown	1,080 feet SE Field Located

Notes:
Well Map Numbers refer to Figure 2 in this report.
Not all wells were field located. Approximate distances from Site were measured from Figure 2 and are approximate.
Sources for well inventory data are California Department of Water Resources Water Well Driller's Reports, data collected by the City of American Canyon Public Works Department, *Subsurface Site Characterization and Monitoring Well Installation at Williams Arco*, L&S Environmental, January 1997, *Subsurface Investigation Report*, Horizon Environmental Inc., December 21, 2004.

FIGURES



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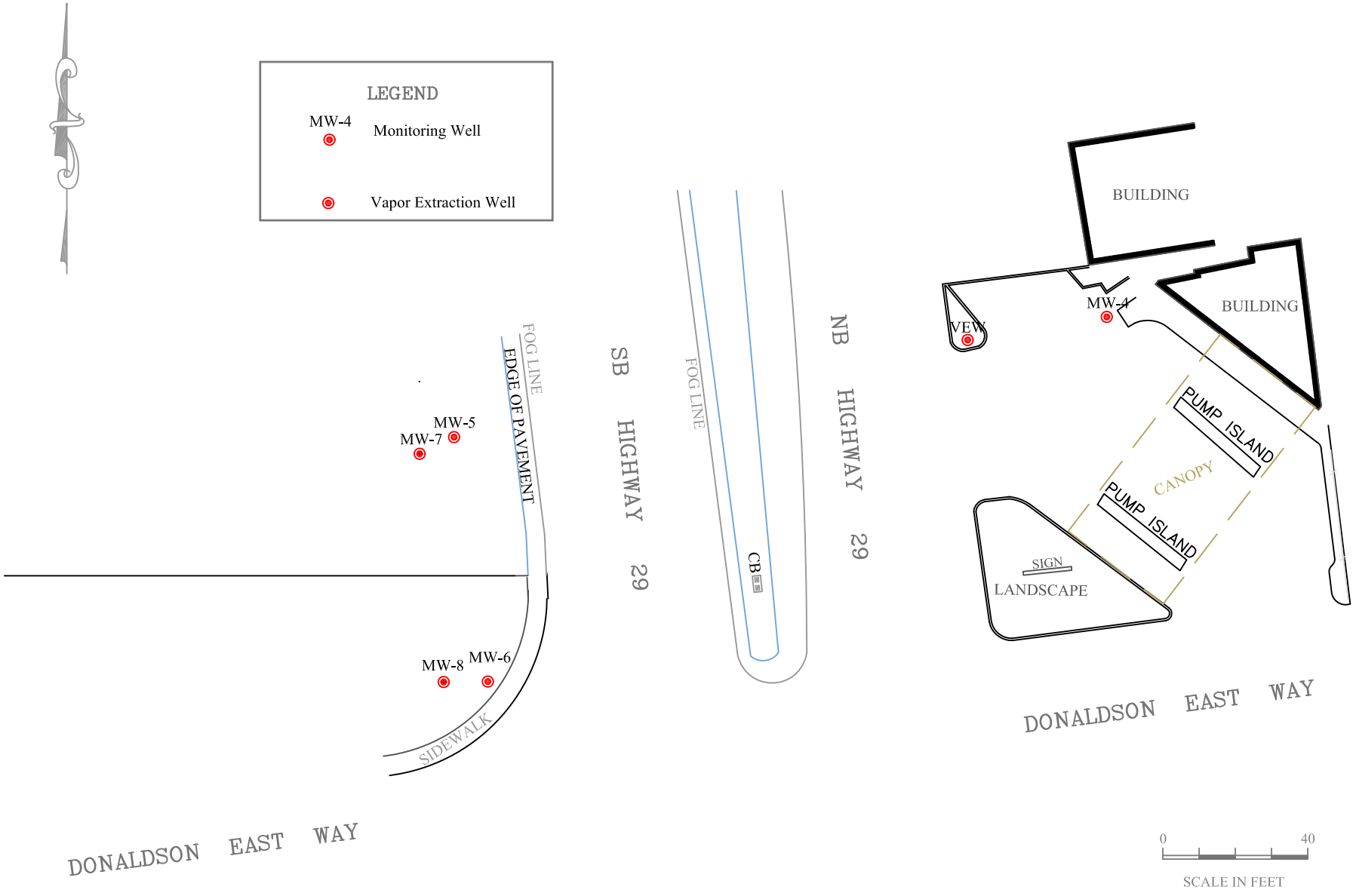
Site Location Map
Mike's Arco
3462 Broadway St.
American Canyon, CA

Project : 1009	Figure : 1
Date: 4/26/12	
Scale: As Shown	

822



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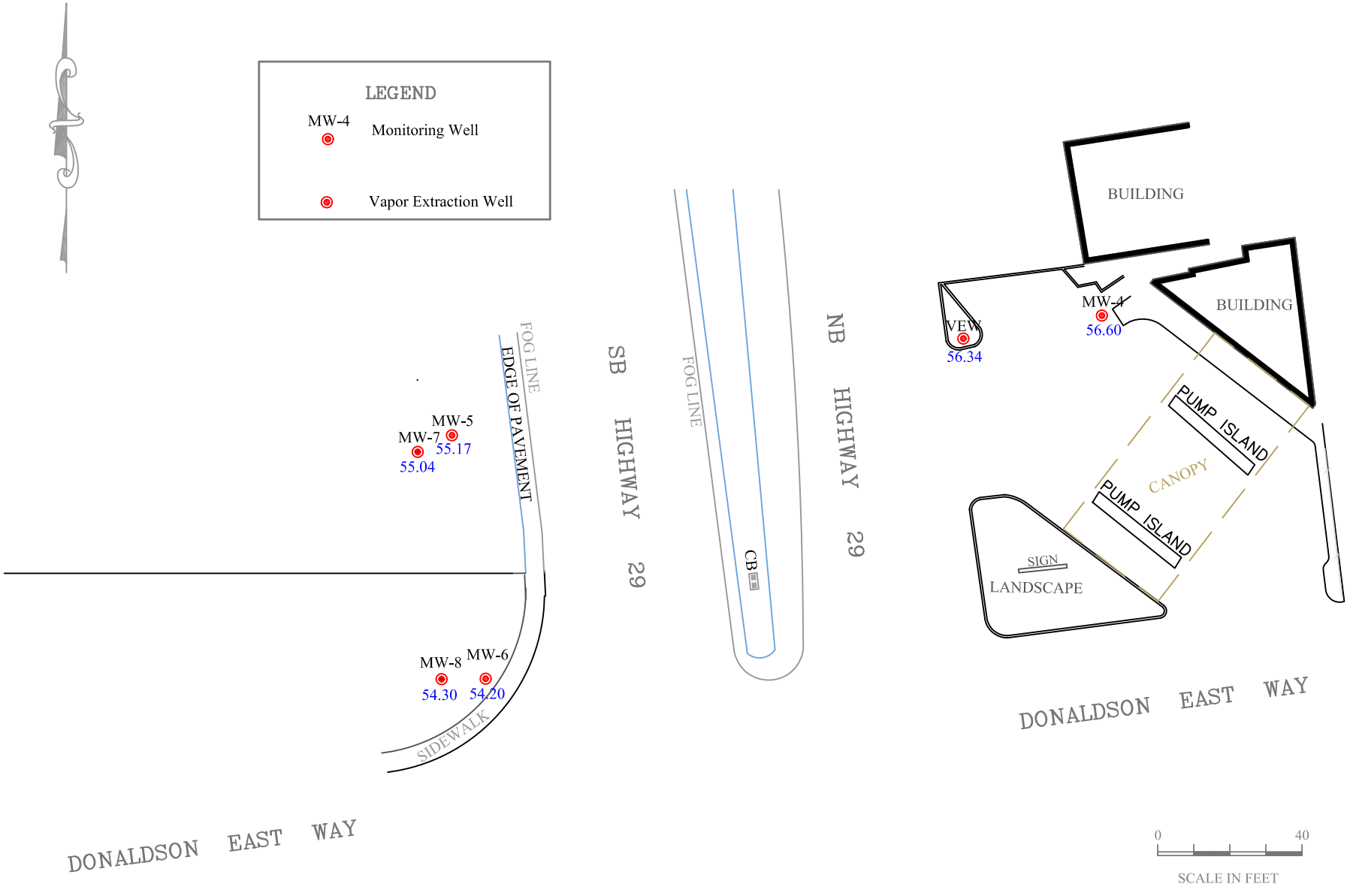
Site Plan

Mike's Arco
3462 Broadway St.
American Canyon, CA

Project : 1009	Figure: 2
Date: 7/6//12	
Scale: 1"= 40 '	



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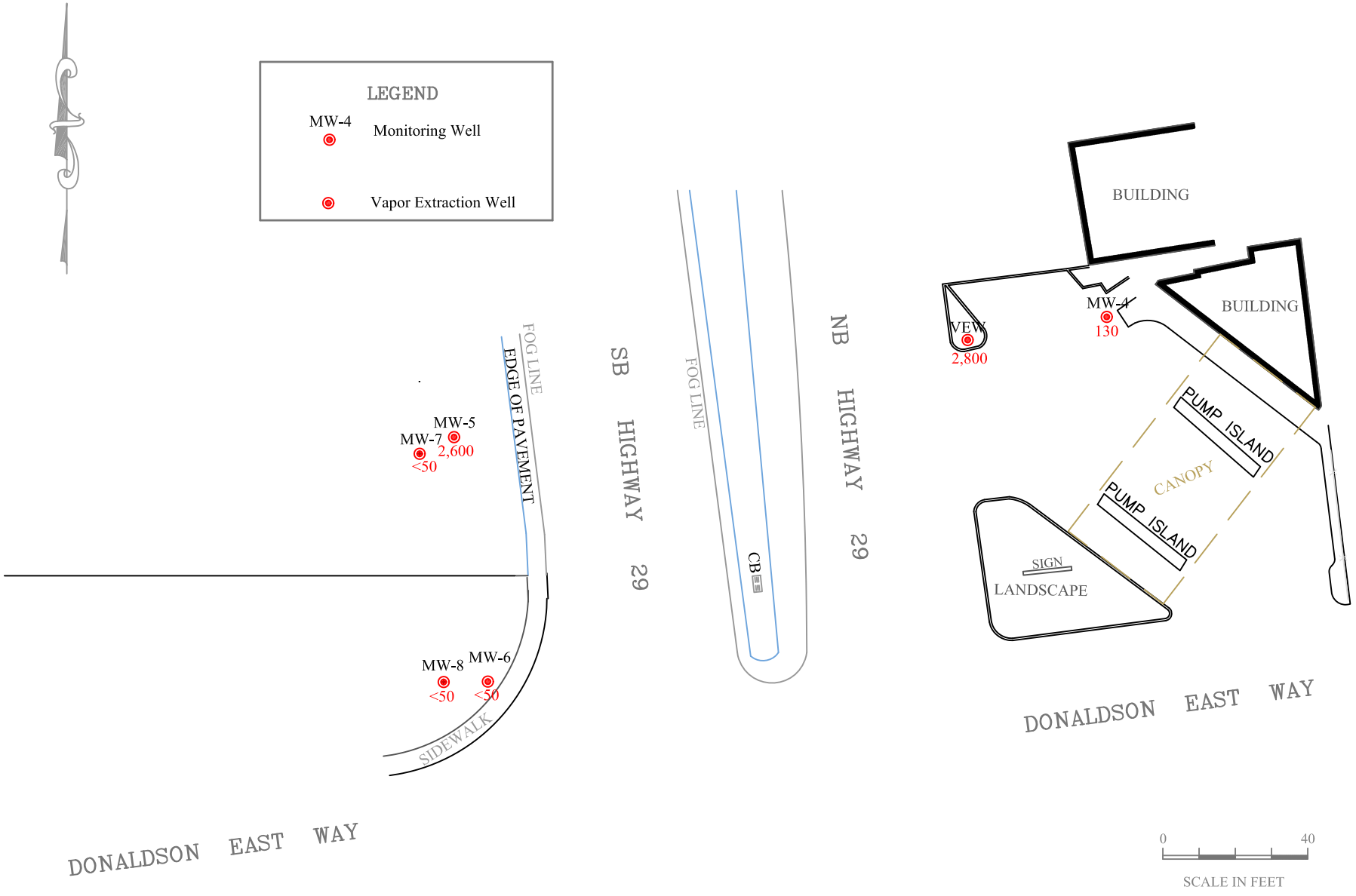
Groundwater Elevations on May 31, 2012

Mike's Arco
3462 Broadway St.
American Canyon, CA

Project : 1009	Figure: 3
Date: 7/6/12	
Scale: 1"= 40 '	

824



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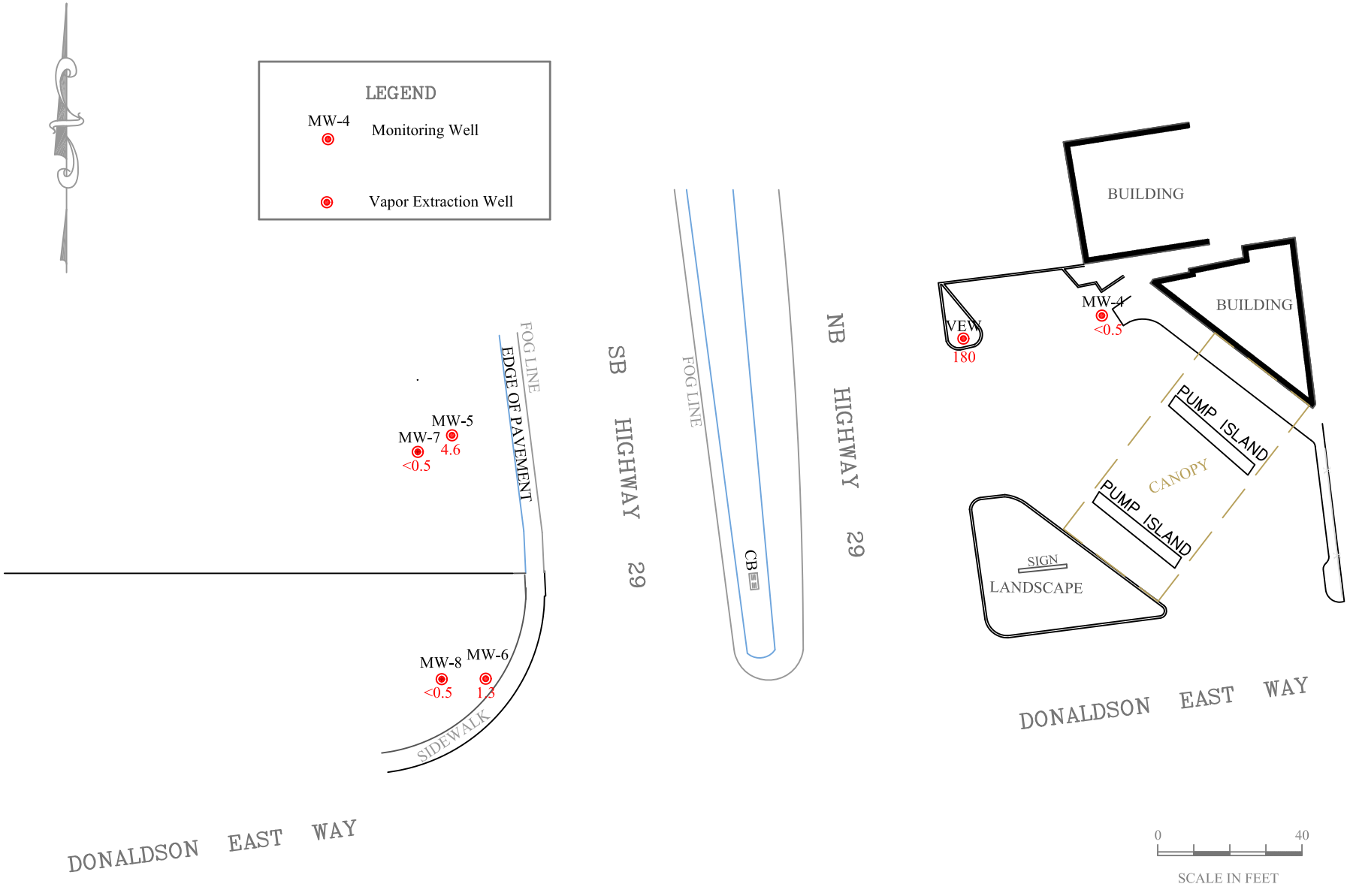
tcook@cookenvironmental.com

TPH-g Concentrations in Groundwater

Mike's Arco
3462 Broadway St.
American Canyon, CA

Project : 1009	Figure: 4
Date: 7/6/12	
Scale: 1"= 40 '	



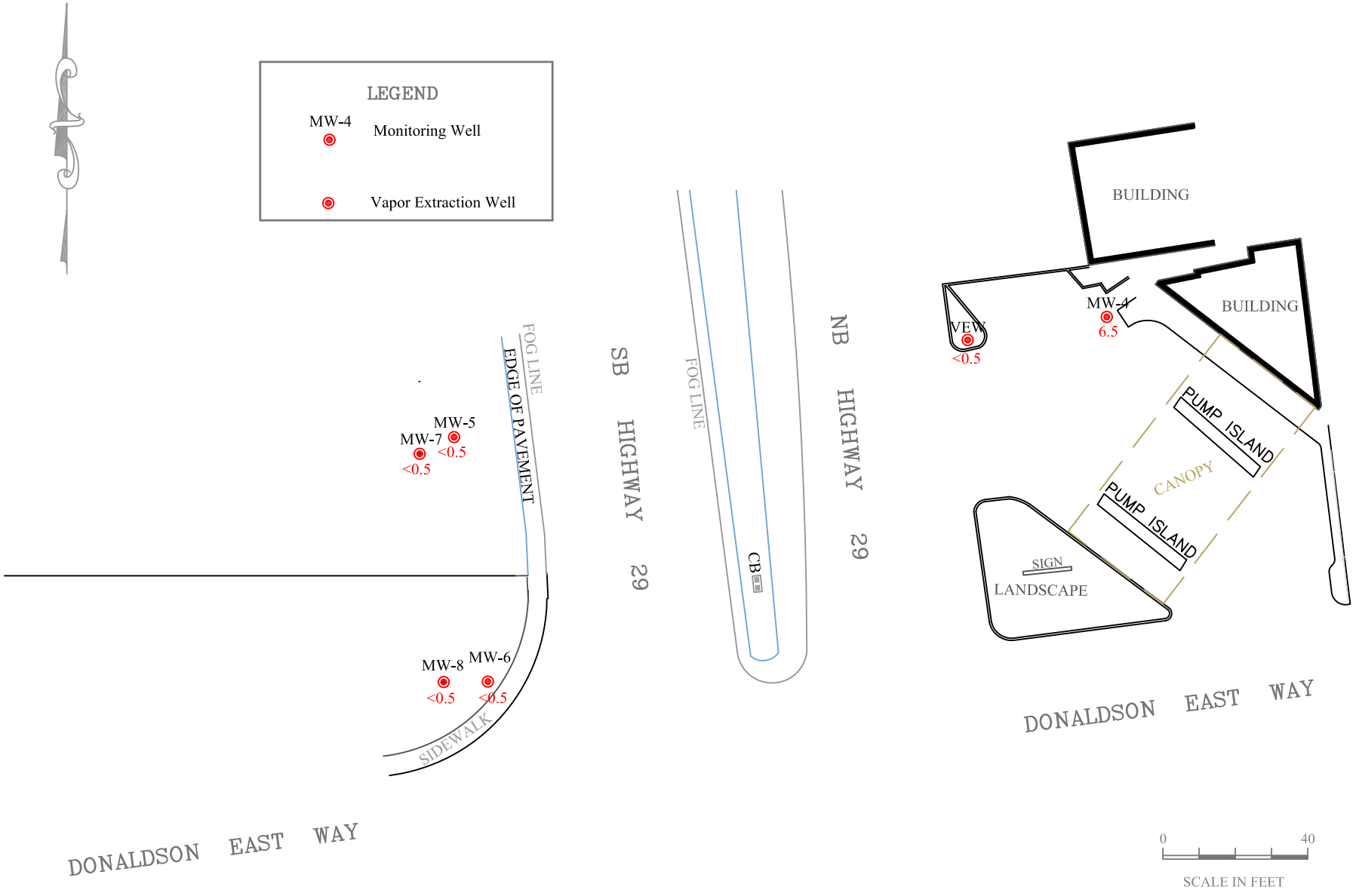
Cook Environmental Services, Inc.
1485 Treat Blve, Suite 203A
Walnut Creek, CA 94576
(925) 478-8390 Office
(925) 787-6869 cell
tcook@cookenvironmental.com

Benzene Concentrations in Groundwater

Mike's Arco
3462 Broadway St.
American Canyon, CA

Project : 1009	Figure: 5
Date: 7/6/12	
Scale: 1"= 40 '	

826



Cook Environmental Services, Inc.
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(925) 787-6869 cell
tcook@cookenvironmental.com

MtBE Concentrations in Groundwater

Mike's Arco
3462 Broadway St.
American Canyon, CA

Project : 1009	Figure: 6
Date: 7/6/12	
Scale: 1"= 40 '	

Figure 7: TPH-g in MW-4

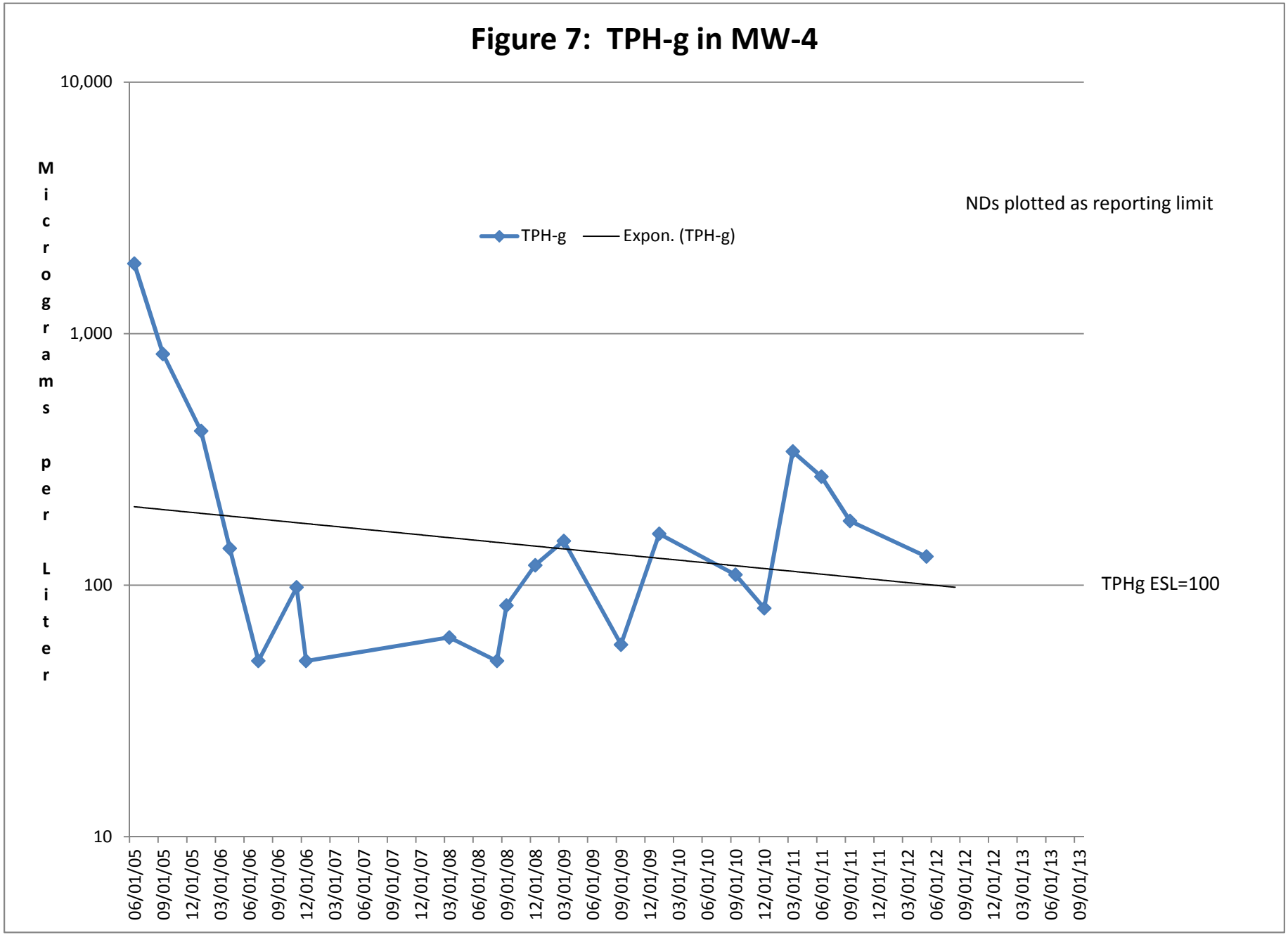


Figure 8: MtBE in MW-4

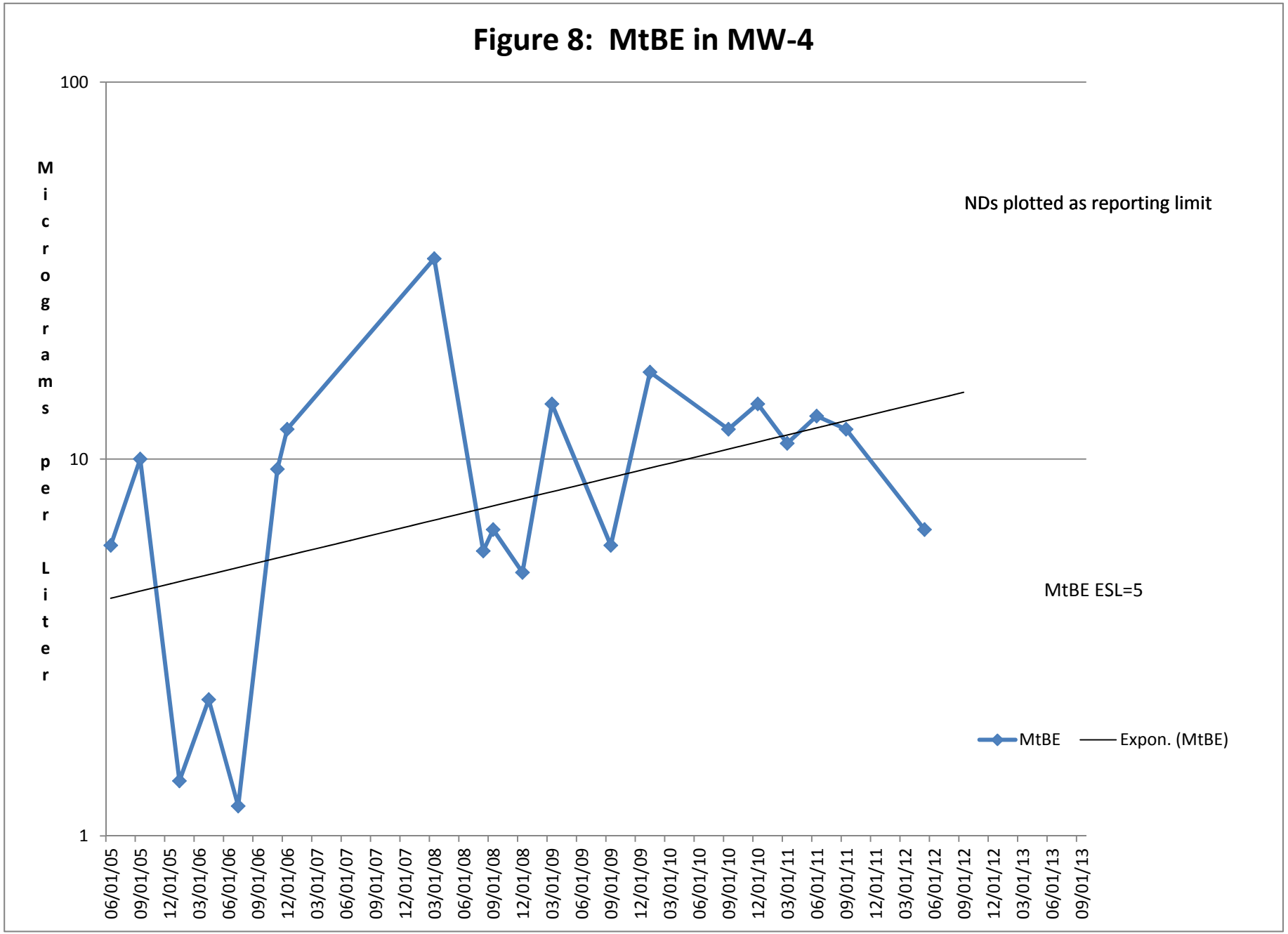


Figure 8a: Recent MtBE in MW-4

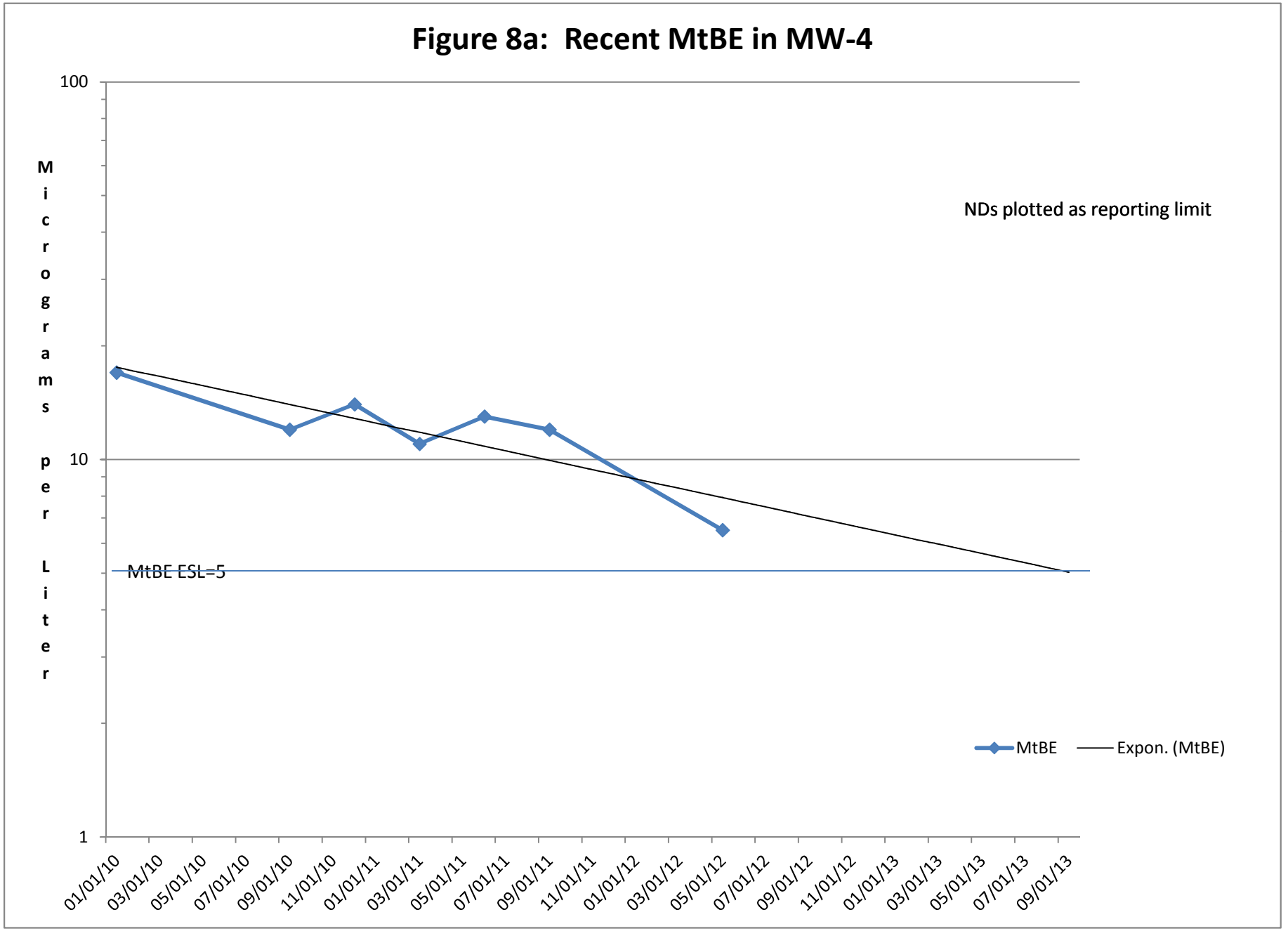


Figure 9: TPH-g in MW-5

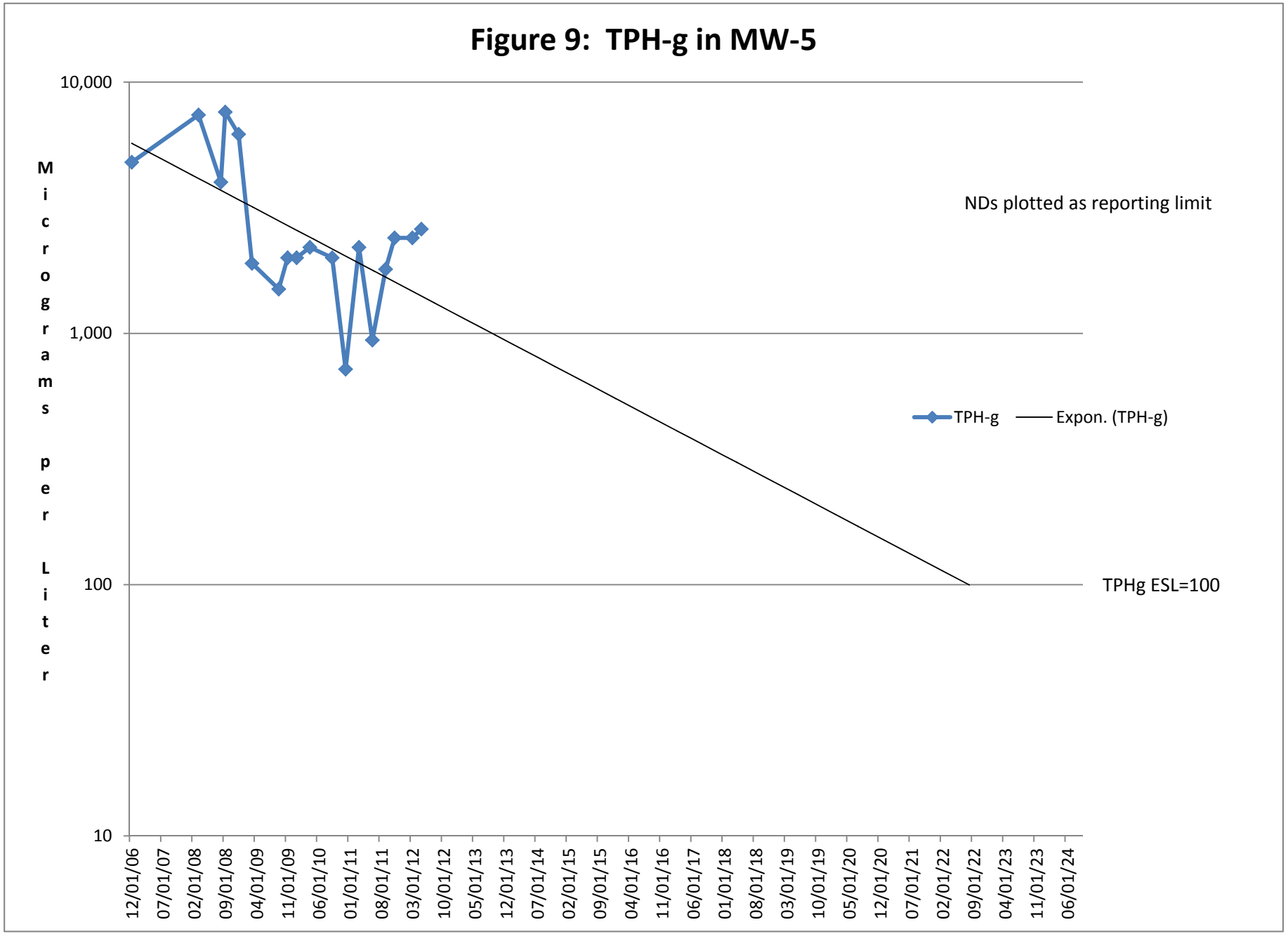


Figure 10: Benzene in MW-5

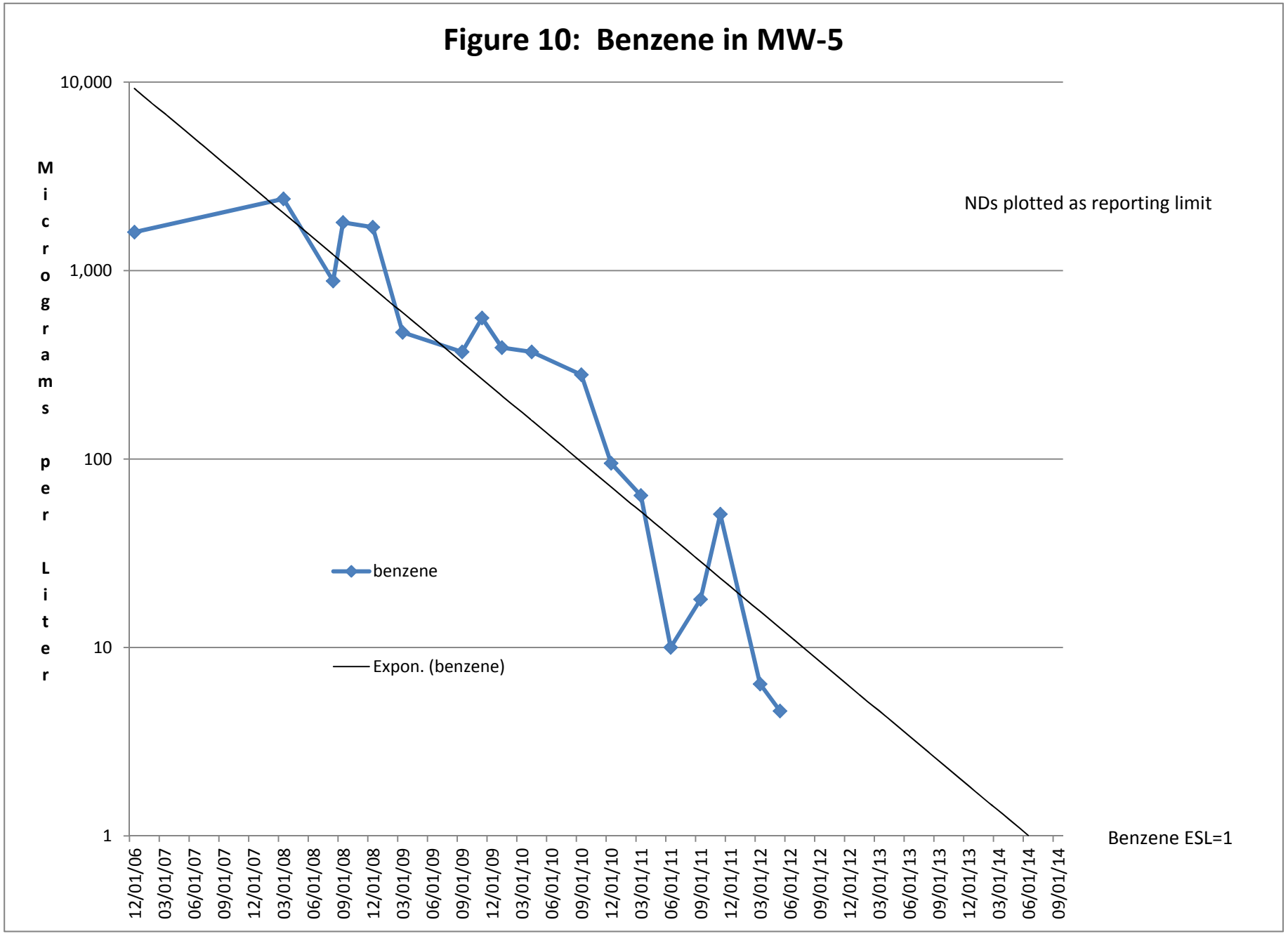


Figure 11: Benzene in MW-6

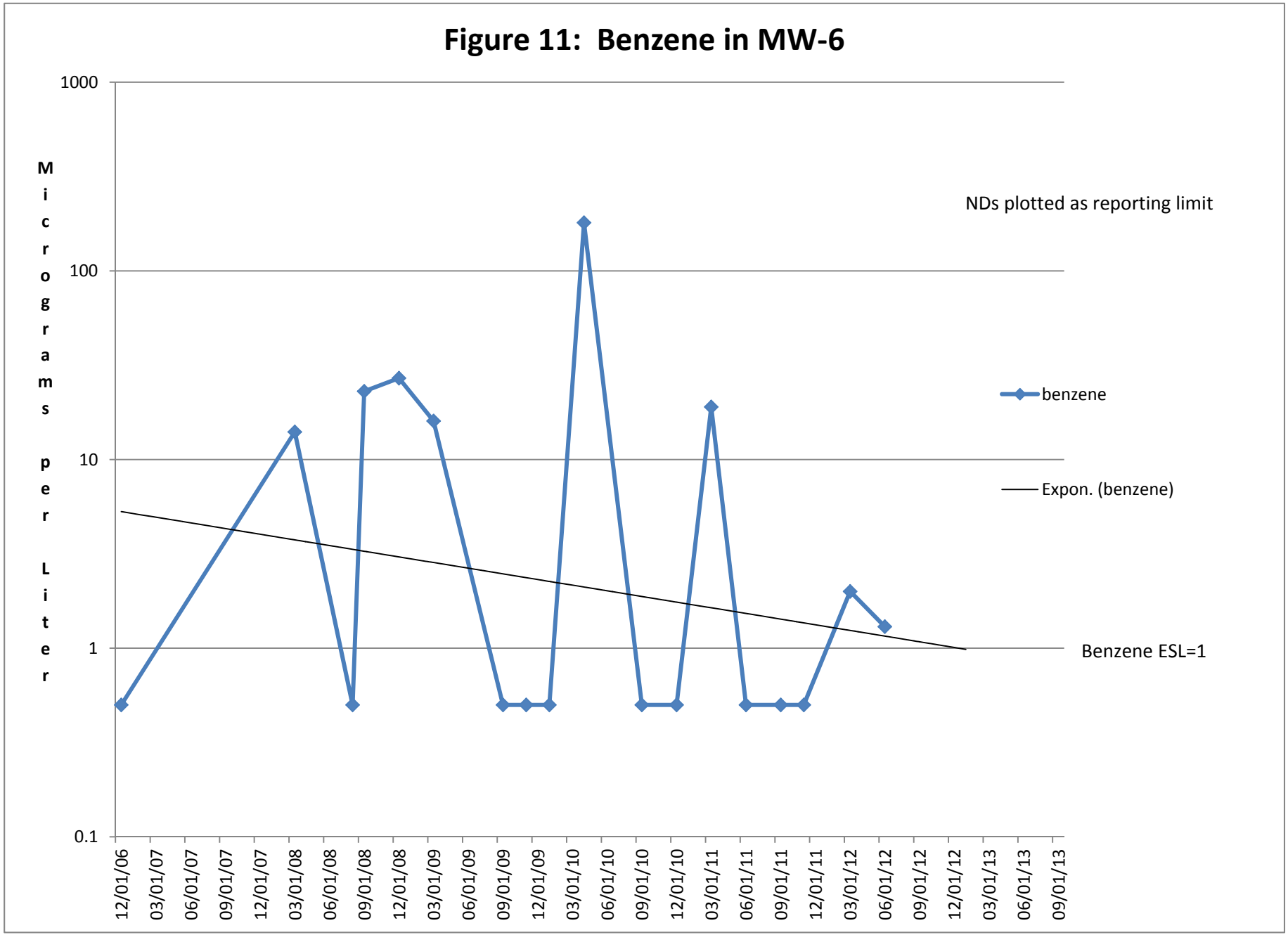


Figure 12: TPH-g in VEW

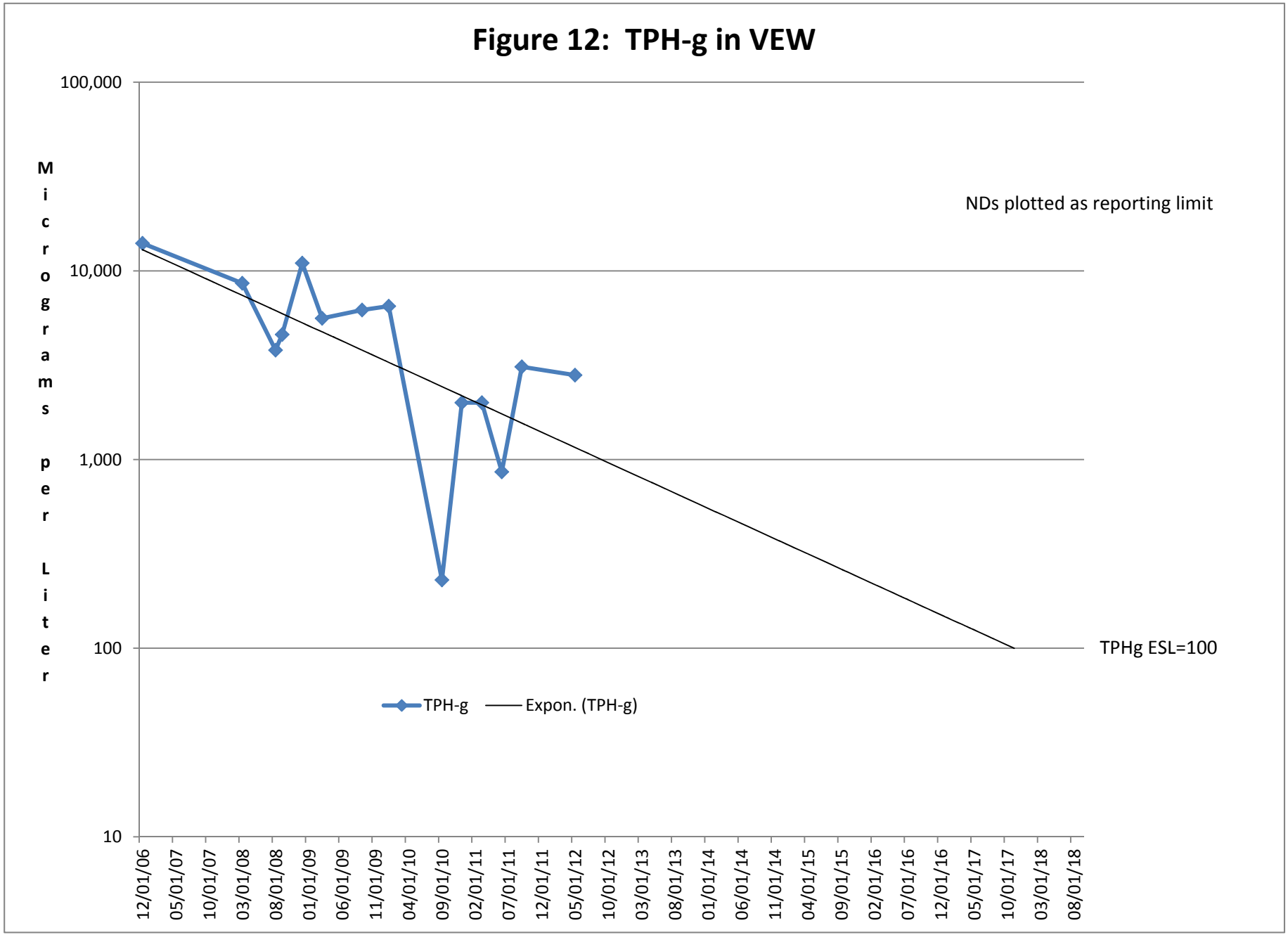
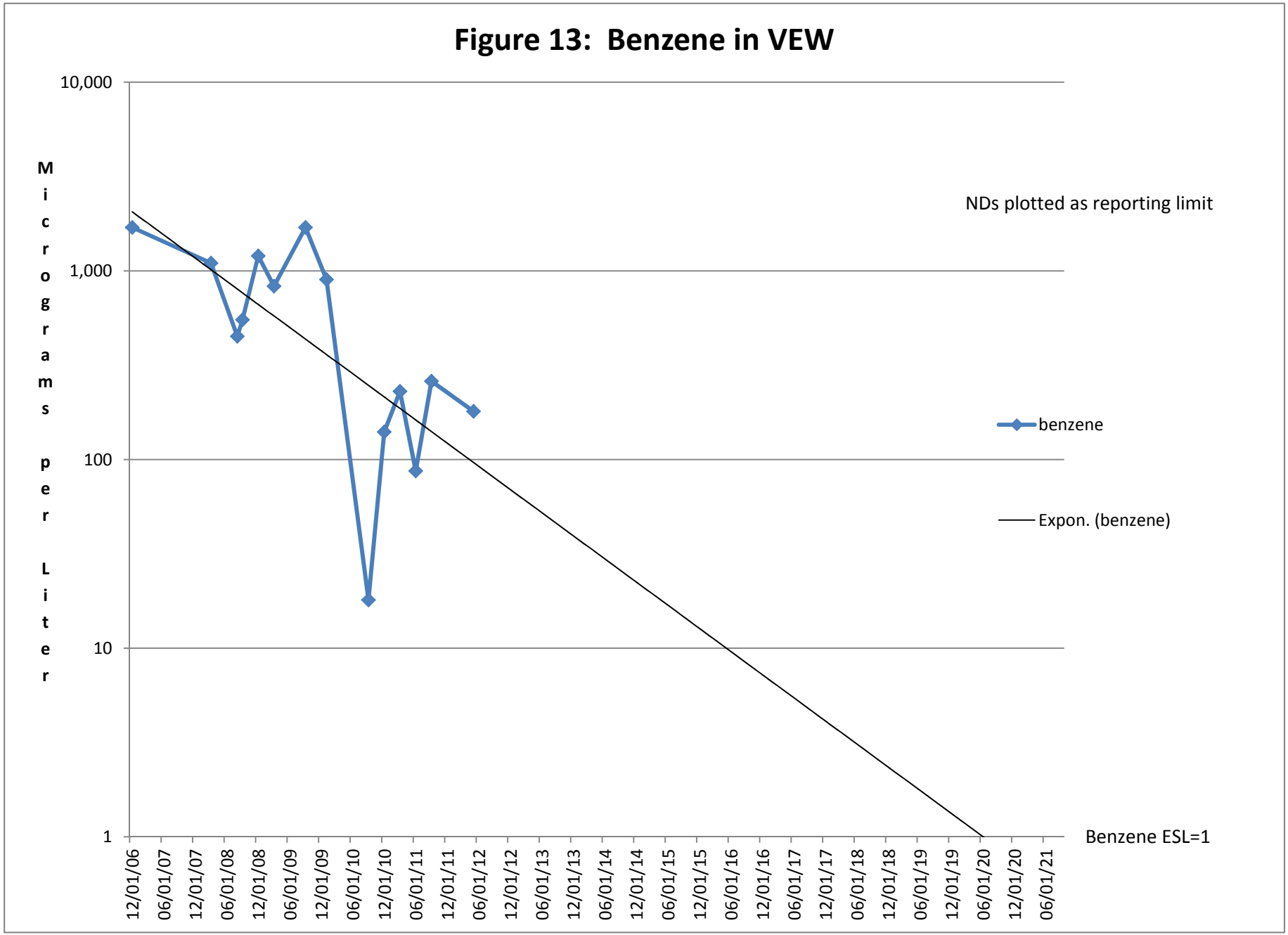
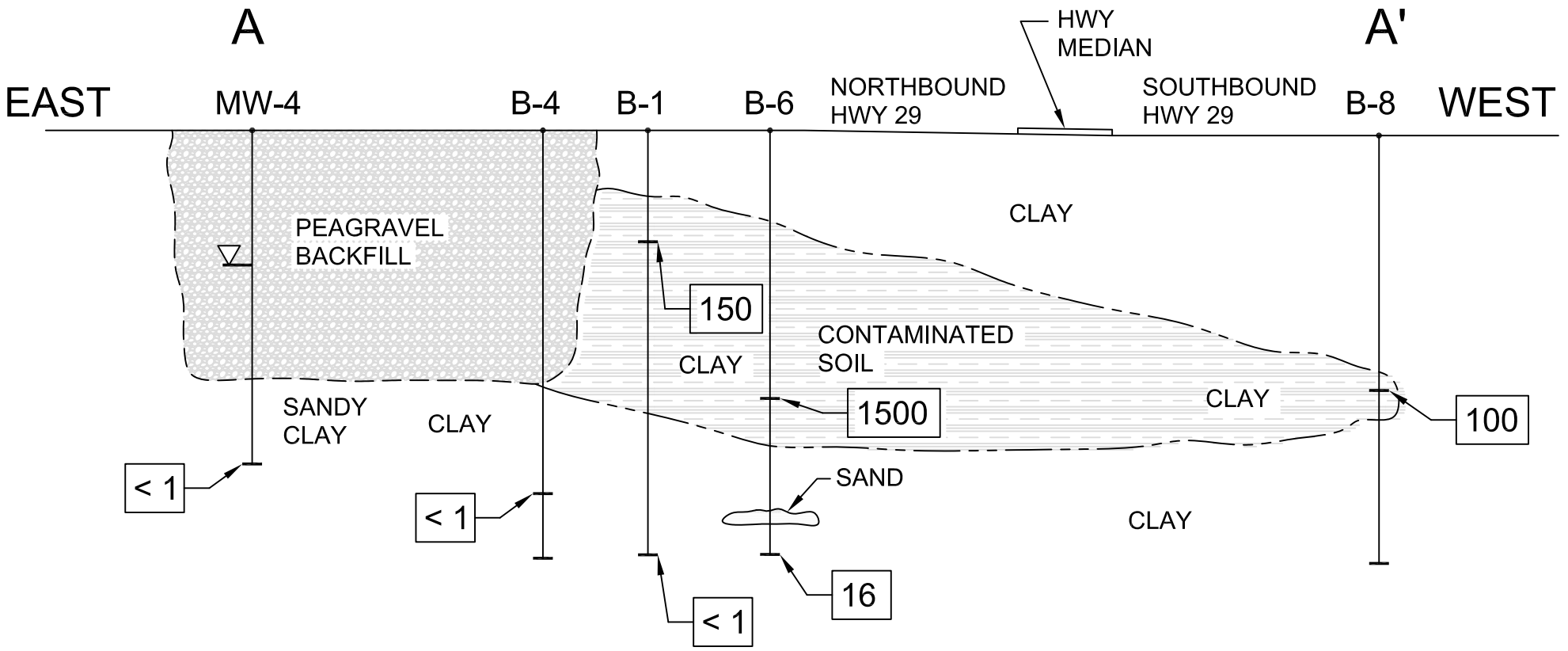


Figure 13: Benzene in VEW





LEGEND

16 TPH-g in soil (mg/kg)

Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 94597
(925) 937-1759 work
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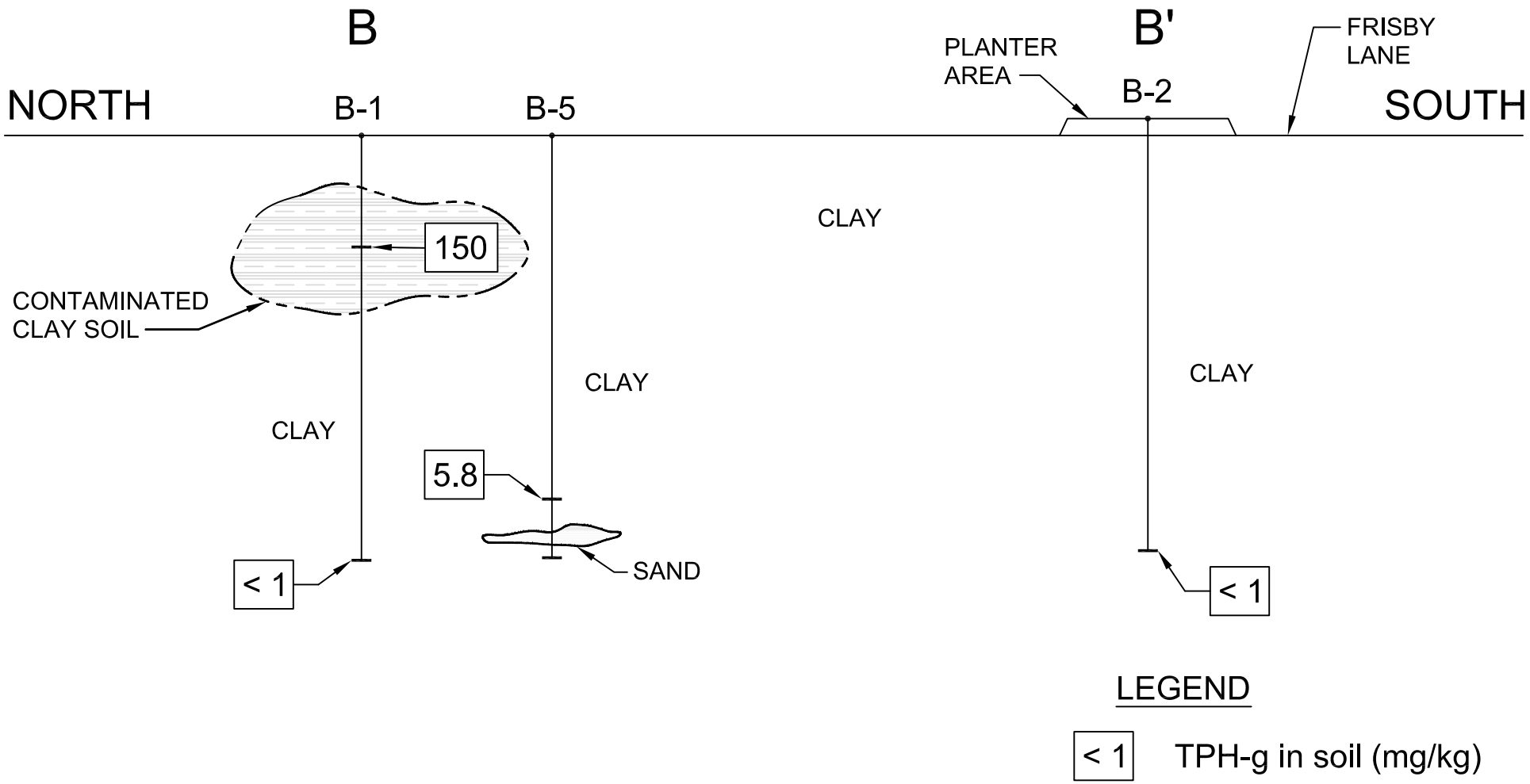
cookenvironmental@att.net

Cross Section A-A'
Mike's Arco
3462 Broadway St.
American Canyon, CA

Project # 1009	Figure 14
7/31/2012	
Not To Scale	



Cook Environmental Services, Inc.
271 Las Juntas Way
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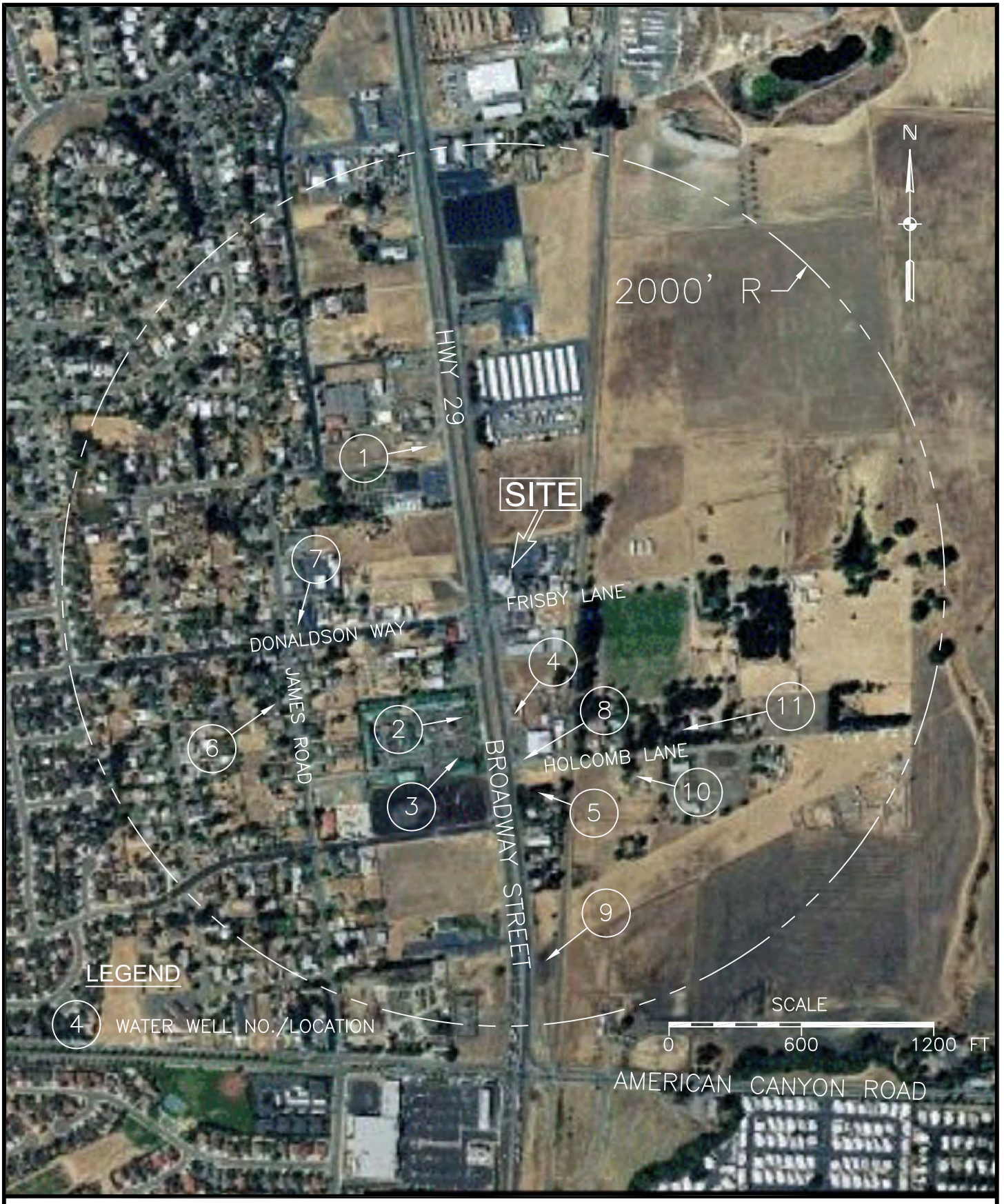
(925) 937-1759 work
(925) 937-6869 cell
cookenvironmental@att.net

Cross Section B-B'
Mike's Arco
3462 Broadway St.
American Canyon, CA

Project # 1009	Figure 15
7/31/2012	
Not To Scale	



Cook Environmental Services, Inc.
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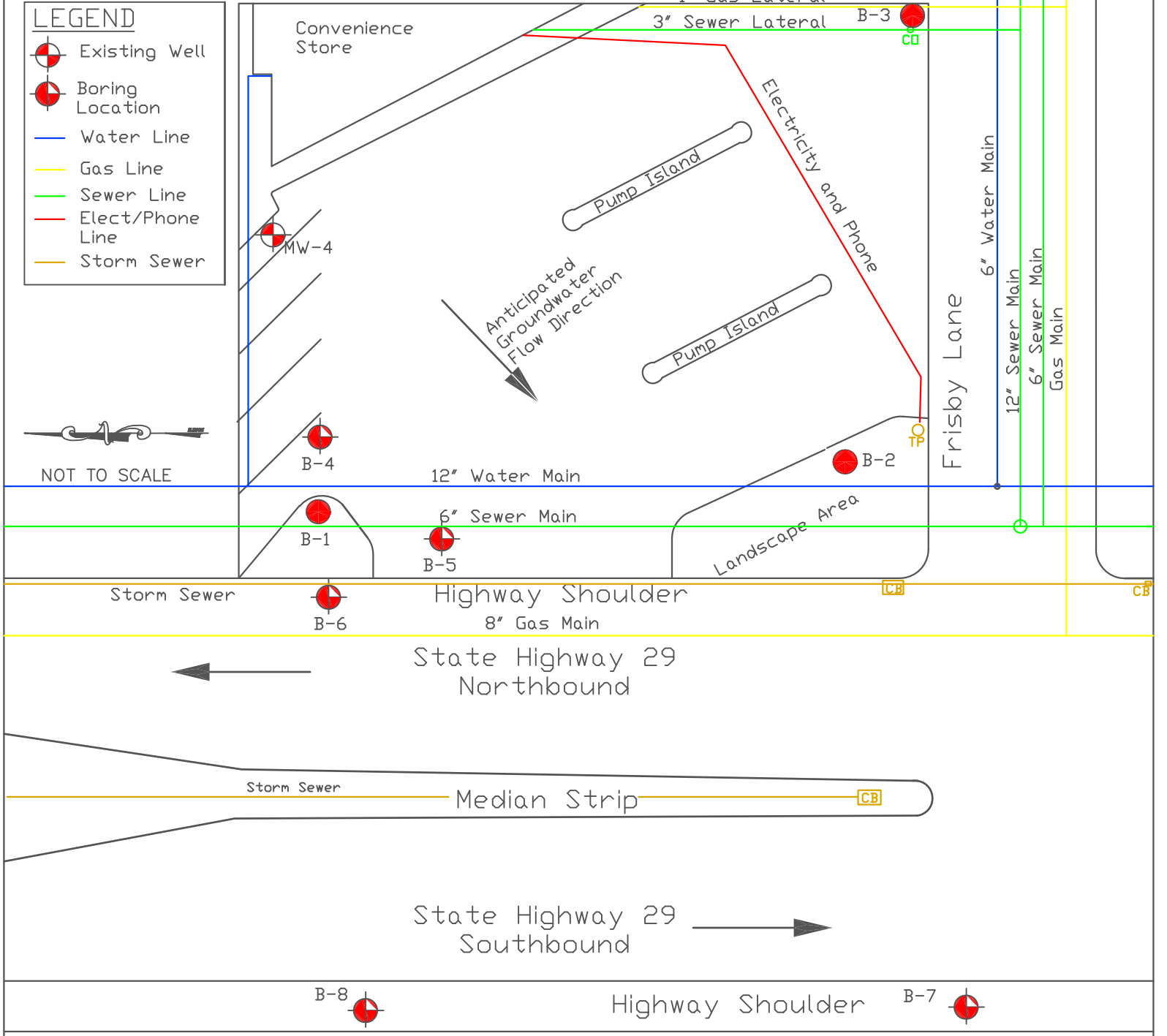
Water Supply Wells
Mike's Arco
3462 Broadway St.
American Canyon, CA

Project # 1009	Figure 16
7/31/2012	
SCALE: 1" = 600'	



Cook Environmental Services, Inc.
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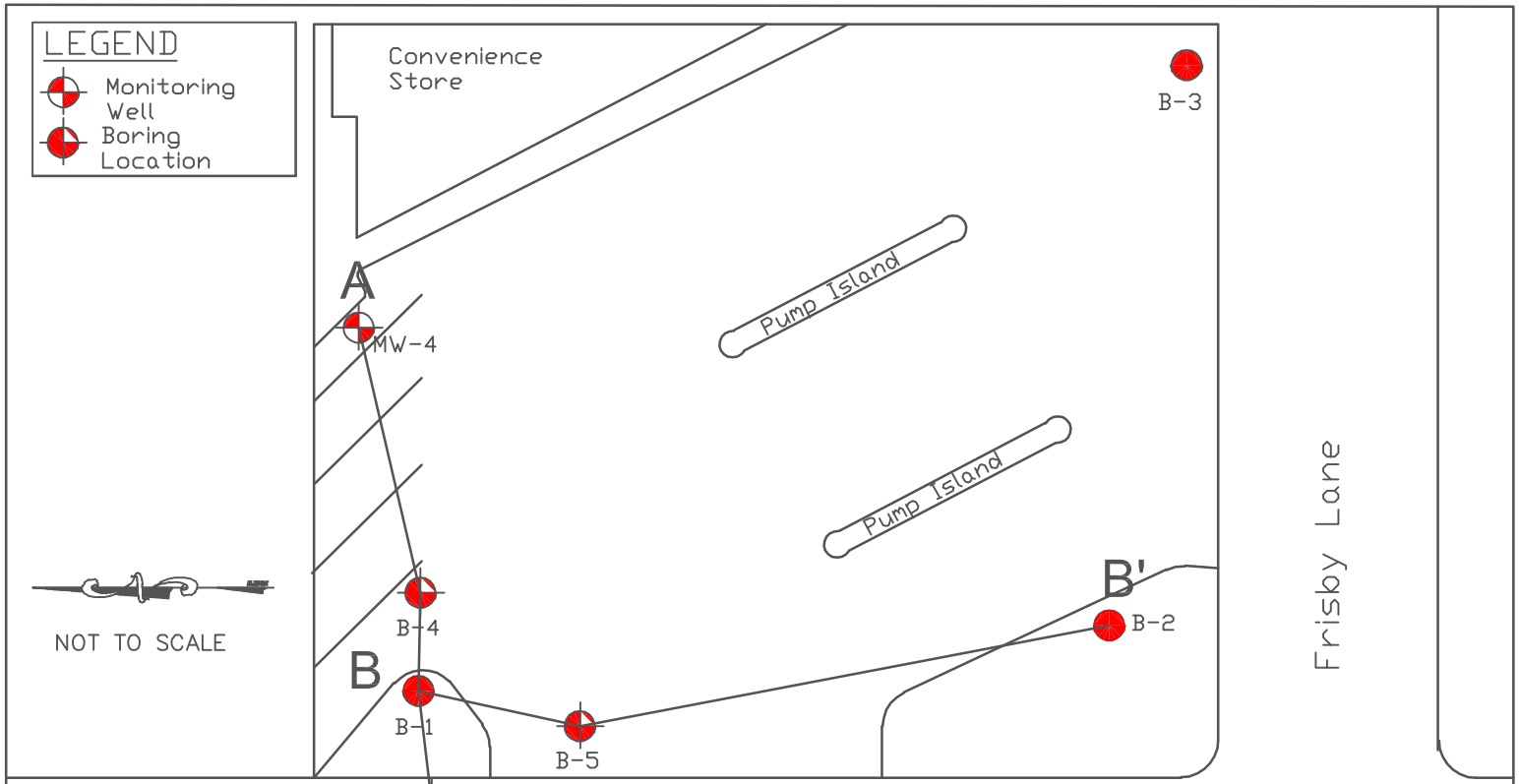
Walnut Creek, CA 94597
(925) 937-1759 work
(925) 937-6869 cell
cookenvironmental@att.net

Buried Utility Location Map
Mike's Arco
3462 Broadway
American Canyon

Project:	1009
Date:	7/31/12
Scale:	not to scale
Figure:	17



Cook Environmental Services, Inc.
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(925) 937-1759 work
(925) 937-6869 cell
cookenvironmental@att.net

Site Features
Mike's Arco
3462 Broadway
American Canyon

Project:	1009
Date:	7/31/12
Scale:	not to scale
Figure:	18

APPENDIX A
Field Procedures

APPENDIX A
FIELD SAMPLING METHODOLOGY
AND ELECTRONIC DATA DELIVERY

Cook Environmental Services, Inc. (CES) groundwater sampling methodology is based on procedures specified in the California State Water Resource Control Board *LUFT Field Manual*.

Monitoring wells were exposed to atmospheric conditions for approximately 30 minutes prior to measurements to equalize barometric pressure in the well. If the well appears to be pressurized, or the groundwater level is fluctuating, measurements are collected until the level stabilizes. CES used an electronic well sounder to measure the static water levels in monitoring wells to the nearest hundredth (0.01) of a foot. Depth-to-water measurements were subtracted from the top of casing elevations to obtain static water elevations.

After the depth to groundwater is measured, the well is checked for the presence of free product with a clear, disposable polyethylene bailer. If free product is present, the thickness of the layer is recorded, and the well is bailed until there is just a sheen.

Samples are collected in order from least contaminated to most contaminated, which minimized the possibility of cross contamination.

With the exception of the VEW well, a clean disposable polyethylene bailer was used to purge each well. During purging the physical parameters of temperature, conductivity, pH and dissolved oxygen (DO) are monitored with field instruments to ensure that these parameters have stabilized to within a variation of fifteen percent. These field instruments are calibrated before each use. Purging is complete when field parameters have stabilized or after three well volumes are removed, whichever is greater.

The sample from the VEW well was collected from a sampling port located downstream of the knockout tank on the dual phase extraction system and immediately upstream of the granular activated carbon vessel. Water is continuously purged from this well as it is undergoing active removal of water and vapor. The sample was collected by turning the valve and placing the VOA bottles directly beneath the sample port. Care was taken not to agitate the sample to prevent volatilization of dissolved contaminants. A full meniscus was observed on the surface of each VOA bottle prior to capping. After each VOA bottle was capped, it was inspected for entrained bubbles. If bubbles were observed, the VOA bottle was emptied and a new sample was collected without any trapped air bubbles.

The purged water was stored on-Site in sealed, labeled 55-gallon steel drums and is periodically removed from the site and disposed of at a licensed facility.

After purging, the water level in the well is allowed to recover to at least 80 percent of its original depth before a sample is collected. A groundwater sample was collected from each well with a clean disposable bailer.

Immediately after purging each well, groundwater samples were collected using the same disposable bailer used to purge the well. Each sample was decanted from the disposable bailer

into the appropriate laboratory prepared sample bottles. If necessary, the laboratory added the appropriate preservative to the sample bottles.

Observations of groundwater conditions during purging, such as odor, volume of water purged, temperature, pH, specific conductivity DO and turbidity were recorded on the sampling logs.

The DO/temperature probe and the well sounder probe were decontaminated after each use by washing in an Alconox® detergent solution followed by a tap water rinse.

Groundwater samples were labeled with the project number, sample ID, and date collected. The same information was recorded on a chain-of-custody form. The samples were placed in an ice chest pending delivery to the ELAP certified laboratory.

Chemical analysis data were submitted electronically to the SWRCB Geographical Environmental Information Management System (GeoTracker) database, as required by AB2886 (Water Code Sections 13195-13198). Electronic analytical reports (EDF files) are prepared and formatted by the laboratory and submitted to GeoTracker by CES. Along with the analytical results, well latitudes, longitudes (GEO_XY files), and elevations (GEO_Z files) are submitted to the database, as necessary. Submittal of a well status and usage report (GEO_WELL file) is required for each monitoring event. Current maps (GEO_MAP files) are also submitted when Site features are added or changed. Each report is submitted in pdf format (GEO_REPORT file) as they are completed.

APPENDIX B

Groundwater Sampling Logs

COOK ENVIRONMENTAL SERVICES, INC. QUARTERLY MONITORING LOG

Site Name:	**Mike's Arco**	Job #	1009
Date:	5/31/2012	Field Tech:	M. Sullivan
Well ID:	**MW-4**	Well Diameter:	2"
Well Depth:	15.5'	Depth to Water:	4.38
Column:	11.12	Casing Volume:	1.89
3 Casing Volumes:	5.67	2" well = col height * 0.17 gal/ft	

Time	Gallons Purged	Temp C	pH	SC (uS)	TDS (mg/L)	DO (mg/L)	Purge Comments
1:51	2	18.2	7.21	739		32.8	Slight HD
	4	18.1	7.18	747		33.5	Odor
	6	17.4	7.18	758		31.5	

Well ID:	**MW-5**	Well Diameter:	2"
Well Depth:	20'	Depth to Water:	4.50
Column:	15.5	Casing Volume:	2.63
3 Casing Volumes:	7.9	2" well = col height * 0.17 gal/ft	

Time	Gallons Purged	Temp C	pH	SC (uS)	TDS (mg/L)	DO (mg/L)	Purge Comments
11:09	2.5	19	6.70	751		~~35.5~~ 35.7	HD Odor
	5.0	18.7	6.81	732		34.5	
	7.9	18.2	6.87	741		36.5	

Well ID:	**MW-6**	Well Diameter:	2"
Well Depth:	20'	Depth to Water:	6.41
Column:	13.59	Casing Volume:	2.31
3 Casing Volumes:	6.93	2" well = col height * 0.17 gal/ft	

Time	Gallons Purged	Temp C	pH	SC (uS)	TDS (mg/L)	DO (mg/L)	Purge Comments
11:46	4	17.8	7.22	645		32.5	
	6	17.7	7.21	660		36.9	
	7	17.7	7.22	1061		32.1	

Well ID:	**MW-7**	Well Diameter:	2"
Well Depth:	20'	Depth to Water:	4.35
Column:	15.65	Casing Volume:	2.66
3 Casing Volumes:	7.98	2" well = col height * 0.17 gal/ft	

Time	Gallons Purged	Temp C	pH	SC (uS)	TDS (mg/L)	DO (mg/L)	Purge Comments
11:22	4	18.5	7.12		716	35.3	
	6	18.1	7.14		715	35.2	
	8	18.0	7.14		710	33.7	

COOK ENVIRONMENTAL SERVICES, INC. QUARTERLY MONITORING LOG

Site Name:	**Mike's Arco**	Job #	1009
Date:	5/31/2012	Field Tech:	M. Sullivan
Well ID:	**MW-8**	Well Diameter:	2"
Well Depth:	20'	Depth to Water:	5.86
Column:	14.14	Casing Volume:	2.40
3 Casing Volumes:	7.21	2" well = col height * 0.17 gal/ft	

Time	Gallons Purged	Temp C	pH	SC (uS)	TDS (mg/L)	DO (mg/L)	Purge Comments
12:03	4	17.7	7.23	687		32.1	
	6	17.8	7.24	683		31.9	
	7.2	17.8	7.25	682		33.4	

Well ID:	**VEW**	Well Diameter:	4"
Well Depth:	20'	Depth to Water:	4.89
Column:	15.11	Casing Volume:	10.07
3 Casing Volumes:	30.23	4" well = col height * 0.66 gal/ft	

Time	Gallons Purged	Temp C	pH	SC (uS)	TDS (mg/L)	DO (mg/L)	Purge Comments
2:11	10	19.0	7.07	729		5.9	
	20	18.4	7.04	714		8.2	
	30.23	18.2	7.02	711		8.4	

2 drums of purged water
1 drum of trash ~~~> need to be picked up

APPENDIX C

Laboratory Analytical Report

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Cook Environmental Services, Inc. 1485 Treat Blvd, Ste. 203A Walnut Creek, CA 94597	Client Project ID: #1009; Mike's Arco	Date Sampled: 05/31/12
		Date Received: 05/31/12
	Client Contact: Tim Cook	Date Reported: 06/05/12
	Client P.O.:	Date Completed: 06/05/12

WorkOrder: 1205903

June 05, 2012

Dear Tim:

Enclosed within are:

1) The results of the **6** analyzed samples from your project: **#1009; Mike's Arco,**
2) QC data for the above samples, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1205903

McCAMPBELL ANALYTICAL, INC.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ■ 5 DAY

EDF Required? YES Coelt (Normal) No Write On (DW) No

Report To: Tim Cook Bill To: Same

Company: Cook Environmental Services

1485 Treat Blvd, Suite 203A

Walnut Creek, CA 94597 E-Mail: tcook@cookenvironmental.com

Tele: (925) 478-8390 Fax: (925) 478-8394

Project #:1009 Project Name: Mike's Arco

Project Location: 3264 Braodway, American Canyon, CA

Sampler Name & Signature: Tim Cook

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260 (9 oxys only)	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)	Other	Other	Other	Comments
MW-4		5/31/12		4	VOA	X					X	X			X										X								
MW-5				4	VOA	X					X	X			X										X								
MW-6				4	VOA	X					X	X			X										X								
MW-7				4	VOA	X					X	X			X										X								
MW-8				4	VOA	X					X	X			X										X								
VEW				4	VOA	X					X	X			X										X								

Relinquished By:	Date:	Time:	Received By:
Tim Cook	5/31	4:05p	Mike Valle
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 5.5c

COMMENTS:

GOOD CONDITION GUAGE & SAMPLE WELLS IN ORDER PRESENTED ON CHAIN

HEAD SPACE ABSENT

DECHLORINATED IN LAB

APPROPRIATE CONTAINERS

PRESERVED IN LAB

PRESERVATION	VOAS	O&G	METALS	OTHER
			pH<2	

Filter Samples for Metals analysis: Yes / No

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1205903 **ClientCode: CESW**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Tim Cook
Cook Environmental Services, Inc.
1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597
925-937-1759 FAX: 925-937-1759

Email: tcook@cookenvironmental.com
cc:
PO:
ProjectNo: #1009; Mike's Arco

Bill to:
Tim Cook
Cook Environmental Services, Inc.
1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597

Requested TAT: 5 days

Date Received: **05/31/2012**
Date Printed: **05/31/2012**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1205903-001	MW-4	Water	5/31/2012	☐	B	A	A									
1205903-002	MW-5	Water	5/31/2012	☐	B	A										
1205903-003	MW-6	Water	5/31/2012	☐	B	A										
1205903-004	MW-7	Water	5/31/2012	☐	B	A										
1205903-005	MW-8	Water	5/31/2012	☐	B	A										
1205903-006	VEW	Water	5/31/2012	☐	B	A										

Test Legend:

1	9-OXYS_W	2	G-MBTEX_W	3	PREDF REPORT	4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **Cook Environmental Services, Inc.** Date and Time Received: **5/31/2012 9:04:46 PM**

Project Name: **#1009; Mike's Arco** LogIn Reviewed by: Zoraida Cortez

WorkOrder N°: **1205903** Matrix: Water Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 5.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Cook Environmental Services, Inc. 1485 Treat Blvd, Ste. 203A Walnut Creek, CA 94597	Client Project ID: #1009; Mike's Arco	Date Sampled: 05/31/12
		Date Received: 05/31/12
	Client Contact: Tim Cook	Date Extracted: 06/01/12-06/05/12
	Client P.O.:	Date Analyzed: 06/01/12-06/05/12

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 1205903

Lab ID	1205903-001B	1205903-002B	1205903-003B	1205903-004B	Reporting Limit for DF =1	
Client ID	MW-4	MW-5	MW-6	MW-7		
Matrix	W	W	W	W		
DF	1	1	1	1	S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	2.3	5.3	ND	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	0.78	3.5	ND	NA	0.5
Ethanol	ND	ND	ND	ND	NA	50
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	NA	0.5
Methanol	ND	ND	ND	ND	NA	500
Methyl-t-butyl ether (MTBE)	6.5	ND	ND	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1:	122	115	121	123		
%SS2:	89	84	91	91		
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Cook Environmental Services, Inc. 1485 Treat Blvd, Ste. 203A Walnut Creek, CA 94597	Client Project ID: #1009; Mike's Arco	Date Sampled: 05/31/12
		Date Received: 05/31/12
	Client Contact: Tim Cook	Date Extracted: 06/01/12-06/05/12
	Client P.O.:	Date Analyzed: 06/01/12-06/05/12

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 1205903

Lab ID	1205903-005B	1205903-006B			Reporting Limit for DF =1	
Client ID	MW-8	VEW				
Matrix	W	W				
DF	1	1			S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND			NA	0.5
t-Butyl alcohol (TBA)	ND	3.8			NA	2.0
1,2-Dibromoethane (EDB)	ND	ND			NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND			NA	0.5
Diisopropyl ether (DIPE)	ND	ND			NA	0.5
Ethanol	ND	ND			NA	50
Ethyl tert-butyl ether (ETBE)	ND	ND			NA	0.5
Methanol	ND	ND			NA	500
Methyl-t-butyl ether (MTBE)	ND	ND			NA	0.5
Surrogate Recoveries (%)						
%SS1:	123	117				
%SS2:	91	91				
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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Cook Environmental Services, Inc.	Client Project ID: #1009; Mike's Arco	Date Sampled: 05/31/12
1485 Treat Blvd, Ste. 203A		Date Received: 05/31/12
	Client Contact: Tim Cook	Date Extracted: 06/02/12-06/04/12
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 06/02/12-06/04/12

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1205903

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-4	W	130	ND<10	ND	0.87	ND	0.83	1	103	d1
002A	MW-5	W	2600	ND	4.6	1.7	4.0	7.0	1	123	d1
003A	MW-6	W	ND	ND	1.3	ND	ND	ND	1	92	
004A	MW-7	W	ND	ND	ND	ND	ND	ND	1	94	
005A	MW-8	W	ND	ND	ND	ND	ND	ND	1	95	
006A	VEW	W	2800	ND<50	180	5.3	8.5	12	10	118	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 68025 | WorkOrder: 1205903

EPA Method: SW8260B **Extraction: SW5030B** **Spiked Sample ID: 1205863-015A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	10	107	109	1.63	98.3	70 - 130	20	70 - 130
t-Butyl alcohol (TBA)	ND	40	102	107	3.90	89.3	70 - 130	20	70 - 130
1,2-Dibromoethane (EDB)	ND	10	110	111	0.867	99.9	70 - 130	20	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	102	102	0	92	70 - 130	20	70 - 130
Diisopropyl ether (DIPE)	ND	10	103	102	0.929	96.9	70 - 130	20	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	106	105	0.891	96.8	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	105	105	0	94.4	70 - 130	20	70 - 130
%SS1:	124	25	124	124	0	119	70 - 130	20	70 - 130
%SS2:	93	25	92	90	1.62	93	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 68025 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205903-001B	05/31/12	06/01/12	06/01/12 2:43 PM	1205903-002B	05/31/12	06/02/12	06/02/12 5:16 AM
1205903-003B	05/31/12	06/02/12	06/02/12 5:56 AM	1205903-004B	05/31/12	06/02/12	06/02/12 6:36 AM
1205903-005B	05/31/12	06/02/12	06/02/12 7:15 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

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QA/QC Officer

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 68066 | WorkOrder: 1205903

EPA Method: SW8260B **Extraction: SW5030B** **Spiked Sample ID: 1206001-005A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	10	115	113	2.24	95.8	70 - 130	20	70 - 130
t-Butyl alcohol (TBA)	ND	40	110	114	2.74	84.9	70 - 130	20	70 - 130
1,2-Dibromoethane (EDB)	ND	10	116	119	2.27	95.6	70 - 130	20	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	112	106	6.11	93.2	70 - 130	20	70 - 130
Diisopropyl ether (DIPE)	ND	10	108	105	3.17	91.7	70 - 130	20	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	112	108	3.59	91.6	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	112	109	2.15	90.1	70 - 130	20	70 - 130
%SS1:	120	25	123	121	0.913	119	70 - 130	20	70 - 130
%SS2:	93	25	92	92	0	93	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 68066 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205903-006B	05/31/12	06/05/12	06/05/12 5:19 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 68019 | WorkOrder: 1205903

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1206014-001A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	91	90.7	0.315	94.6	70 - 130	20	70 - 130
MTBE	ND	10	97.7	94.7	3.09	106	70 - 130	20	70 - 130
Benzene	ND	10	91.6	90.9	0.780	88.5	70 - 130	20	70 - 130
Toluene	ND	10	89.9	91.7	1.92	90.7	70 - 130	20	70 - 130
Ethylbenzene	ND	10	91.5	91	0.585	90.8	70 - 130	20	70 - 130
Xylenes	ND	30	95	93.7	1.32	93.5	70 - 130	20	70 - 130
%SS:	92	10	96	97	0.759	90	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 68019 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1205903-001A	05/31/12	06/02/12	06/02/12 1:02 AM	1205903-002A	05/31/12	06/04/12	06/04/12 4:53 PM
1205903-003A	05/31/12	06/02/12	06/02/12 3:28 AM	1205903-004A	05/31/12	06/02/12	06/02/12 3:57 AM
1205903-005A	05/31/12	06/02/12	06/02/12 4:26 AM	1205903-006A	05/31/12	06/02/12	06/02/12 2:59 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

DHS ELAP Certification 1644

QA/QC Officer

APPENDIX D

Gish Well Analytical Results

McCampbell Analytical, Inc.
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Cook Environmental Services, Inc. 271 Las Juntas Way Walnut Creek, CA 94596	Client Project ID: #1009; Mike's Arco	Date Sampled: 11/14/06
		Date Received: 11/14/06
	Client Contact: Tim Cook	Date Reported: 11/20/06
	Client P.O.:	Date Completed: 11/20/06

WorkOrder: 0611309

November 20, 2006

Dear Tim:

Enclosed are:

1). the results of **1** analyzed sample from your **#1009; Mike's Arco project,**

2). a QC report for the above sample

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

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110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? Excel (Normal) No Write On (DW) No

Report To: Tim Cook Bill To: Same

Company: Cook Environmental Services
271 Las Juntas Way
Walnut Creek, CA 94597 E-Mail: cookenvironmental@att.net

Tele: (925) 937-1759 Fax: (925) 937-1759

Project #:1009 Project Name: Mike's Arco

Project Location: American Canyon

Sampler Signature: Tim Cook

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260 (9 oxys only)	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)	Other	Comments
(+) Gish Well	AmCyn	11/14/06	1:10p	3	VOA	X					X	X			X										X							Filter Samples for Metals analysis: Yes / No

Relinquished By:	Date:	Time:	Received By:
Tim Cook	11/14	2:00p	Envirotech T.L.
Envirotech BB	11/14/06	215	
	11/14/06	3:15	Mike Vall

ICE/t° 4.7°c
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

COMMENTS:

PRESERVATION	VOAS	O&G	METALS	OTHER
			pH<2	

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0611309 **ClientID: CESW**

☑ EDF ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

Report to:
Tim Cook
Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 94596
Email: tcook@cookenvironmental.com
TEL: 925-937-1759 FAX: 925-937-1759
ProjectNo: #1009; Mike's Arco
PO:

Bill to:
Tim Cook
Cook Environmental Services, Inc.
271 Las Juntas Way
Walnut Creek, CA 94596

Requested TAT: 5 days
Date Received: 11/14/2006
Date Printed: 11/14/2006

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0611309-001	Gish Well	Water	11/14/06 1:10:00	☐	B	A	A									

Test Legend:

1	9-OXYS_W	2	G-MBTEX_W	3	PREDF REPORT	4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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Cook Environmental Services, Inc.	Client Project ID: #1009; Mike's Arco	Date Sampled: 11/14/06
271 Las Juntas Way		Date Received: 11/14/06
Walnut Creek, CA 94596	Client Contact: Tim Cook	Date Extracted: 11/17/06
	Client P.O.:	Date Analyzed 11/17/06

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0611309

					Reporting Limit for DF =1	
Lab ID	0611309-001B					
Client ID	Gish Well					
Matrix	W					
DF	1				S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND				NA	0.5
t-Butyl alcohol (TBA)	ND				NA	5.0
1,2-Dibromoethane (EDB)	ND				NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND				NA	0.5
Diisopropyl ether (DIPE)	ND				NA	0.5
Ethanol	ND				NA	50
Ethyl tert-butyl ether (ETBE)	ND				NA	0.5
Methanol	ND				NA	500
Methyl-t-butyl ether (MTBE)	ND				NA	0.5
Surrogate Recoveries (%)						
%SS1:	112					
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

Cook Environmental Services, Inc.	Client Project ID: #1009; Mike's Arco	Date Sampled: 11/14/06
271 Las Juntas Way		Date Received: 11/14/06
Walnut Creek, CA 94596	Client Contact: Tim Cook	Date Extracted: 11/17/06
	Client P.O.:	Date Analyzed 11/17/06

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0611309

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	Gish Well	W	ND	ND	ND	ND	ND	ND	1	92

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0611309

EPA Method SW8260B **Extraction SW5030B** **BatchID: 24779** **Spiked Sample ID: 0611321-008c**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME	ND	10	91.4	97.5	6.45	85	86.2	1.41	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	89.7	87.9	2.10	84.6	84.7	0.119	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	107	111	3.64	99.2	101	1.82	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	84.9	89.4	5.14	80.8	80.8	0	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	114	120	4.93	106	108	2.69	70 - 130	30	70 - 130	30
Ethanol	ND	500	96.1	92.2	4.07	87.5	93.5	6.64	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	92.1	97.9	6.01	86.5	87	0.611	70 - 130	30	70 - 130	30
Methanol	ND	2500	103	111	6.93	99.3	90.5	9.19	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	87.5	93.6	6.79	82.3	82.2	0.137	70 - 130	30	70 - 130	30
%SS1:	109	10	99	101	2.61	96	96	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 24779 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0611309-001	11/14/06 1:10 PM	11/17/06	11/17/06 8:28 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

DHS ELAP Certification N° 1644 QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0611309

EPA Method SW8021B/8015Cm Extraction SW5030B BatchID: 24781 Spiked Sample ID: 0611321-007A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	102	107	4.24	106	101	4.89	70 - 130	30	70 - 130	30
MTBE	ND	10	101	99.8	1.53	93.1	99.7	6.84	70 - 130	30	70 - 130	30
Benzene	ND	10	101	96.8	3.79	94.5	99.9	5.62	70 - 130	30	70 - 130	30
Toluene	1	10	82.7	79	4.05	92.1	94.5	2.54	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	95.8	98.9	3.25	93.7	99.5	5.99	70 - 130	30	70 - 130	30
Xylenes	ND	30	100	96	4.08	90.3	90.7	0.368	70 - 130	30	70 - 130	30
%SS:	118	10	96	95	0.397	99	106	6.53	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 24781 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0611309-001	11/14/06 1:10 PM	11/17/06	1/17/06 12:51 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

APPENDIX E

Water Supply Well Driller's Logs

MID-CITY NURSERY

ORIGINAL (1)

File with DWR

AMERICAN CANYON P|Q

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

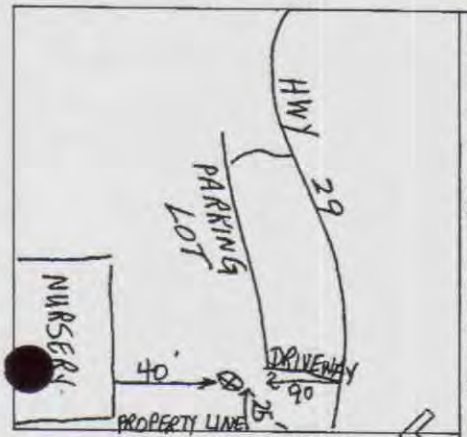
Do not fill in
No. 120032

Notice of Intent No.
Permit No. or Date

State Well No.
Other Well No. 04N04W24AQ

(1) OWNER: Name MID-CITY NURSERY
Address 3635 Broadway
City Vallejo, CA Zip 94590

(2) LOCATION OF WELL (See instructions): 058-311-015
County Napa Owner's Well Number
Well address if different from above
Township 04N Range 04W Section 24
Distance from cities, roads, railroads, fences, etc.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☒
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☑ Size Peb
Diameter of bore 12¼
Packed from 190 to 24 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	38	6	200
100	120		
140	160		

(8) PERFORATIONS: .032
Type of perforation or size of screen

From ft.	To ft.	Slot size
38	100	032
120	140	
160	180	

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 24 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing Bentonite, Pellets, Concrete

(10) WATER LEVELS:
Depth of first water, if known 40 ft.
Standing level after well completion 12 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? Jorge Perez
Type of test Pump ☒ Bailer ☐ Air lift ☐
Depth to water at start of test 12 ft. At end of test 180 ft
Discharge 30 gal/min after 3 hours Water temperature
Chemical analysis made? Yes ☒ No ☐ If yes, by whom? CAL-TEST
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 190 ft. Depth of completed well 190 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	2	Topsoil
2	25	Brown Clay
25	70	Brown Sandstone
70	85	Grey Shale Hard Stringer Gray Rock
85	100	Grey Rock Fract Med Hard
100	180	Hard Grey Shale Stringer Grey Rock
180	190	Hard Grey Shale Stringers
		Grey Rock & Soft Grey Stone

Work started 3-19 19 91 Completed 3-21 19 91

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED Daniel Gregson (Well Driller)
NAME Doshier-Gregson, Inc. (Person, firm, or corporation) (Typed or printed)
Address 5365 Napa-Vallejo Highway
City Vallejo, CA Zip 94589-9679
License No. 258826 Date of this report 3-26-91

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

NOT FOR PUBLIC USE
WATER CODE SEC. 13752

(6)

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

(2) 04N/04W-25C11 (WM) E

Do Not Fill In

Nº 94420

State Well No.
Other Well No. ~~4N/4W-24~~

(1) OWNER:

Name MR. V. W. WHITE
Address 170 James Road
Vallejo, Ca. 94590

(2) LOCATION OF WELL:

County Napa Owner's number, if any 170
Township, Range, and Section 58-205-13
Distance from cities, roads, railroads, etc.

(3) TYPE OF WORK (check):

New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Other ☐

(6) CASING INSTALLED:

STEEL: OTHER: plastic If gravel packed
SINGLE ☐ DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	35	6"	1/4	10"	0	20
				8 3/4"	20	105

Size of shoe or well ring:
Size of gravel pea
Describe joint

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
35	105	20	3	1/8 x 3

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth 20 ft.
Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata
From ft. to ft.
From ft. to ft.
Method of sealing

(9) WATER LEVELS:

Depth at which water was first found, if known 88 ft.
Standing level before perforating, if known 30 ft.
Standing level after perforating and developing 30 ft.

(10) WELL TESTS:

Was pump test made? Yes ☒ No ☐ If yes, by whom? Driller
Yield: 15 gal./min. with 50 ft. drawdown after 3 hrs.
Temperature of water Was a chemical analysis made? Yes ☐ No ☐
Was electric log made of well? Yes ☐ No ☒ If yes, attach copy

(11) WELL LOG:

Total depth 105 ft. Depth of completed well 105 ft.
Formation: *Describe by color, character, size of material, and structure*

ft. to	ft.	
0	12	Brown Adobe
12	26	Brown Clay (Gr. Imb.)
26	84	Brown Clay
84	88	Gravel & Sand
88	105	Brown Clay (Gr. Ymb.)

Work started May 23 1974 Completed May 24 1974

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Doshier and Gregson Drilling, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 5365 Napa-Vallejo Highway
Vallejo, Ca. 94590

[SIGNED] J. N. Doshier
(Well Driller)

License No. 294001 Dated May 28, 1974

SKETCH LOCATION OF WELL ON REVERSE SIDE

CONFIDENTIAL LOG
Water Code Sec. 13752

DWR 188 (REV. 9-68)

25179-950 8-68 50M TRIP △D GSP

CONFIDENTIAL LOG
Water Code Sec. 13752

(8)

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

(P) 04N/04W-25B1 (WM) E

Do Not Fill In
No 72998

State Well No.
Other Well No. 4N/4W-25

(1) OWNER:
Name Estigoy Rest Home
Address 3434 Broadway
Vallejo, California

(2) LOCATION OF WELL:
County Napa Owner's number, if any 3434
Township, Range, and Section Broadway, Vallejo
Distance from cities, roads, railroads, etc. P #59-080-09
059-080-009

(3) TYPE OF WORK (check):
New Well [X] Deepening [ ] Reconditioning [ ] Destroying [ ]
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic [X] Industrial [ ] Municipal [ ]
Irrigation [ ] Test Well [ ] Other [ ]

(5) EQUIPMENT:
Rotary [X]
Cable [ ]
Other [ ]

(6) CASING INSTALLED:
~~STEEL~~ Plastic OTHER:
SINGLE [X] DOUBLE [ ]

From ft.	To ft.	Diam.	Gage or Wall
0	115'	6"	1/4"

If gravel packed

Diameter of Bore	From ft.	To ft.

Size of shoe or well ring: None
Size of gravel:
Describe joint Couplings, Glue & Set Screws

(7) PERFORATIONS OR SCREEN:
Type of perforation or name of screen Machine

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
35'	115'	20	3	1/8 X 3"

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes [X] No [ ] To what depth 24' ft.
Were any strata sealed against pollution? Yes [ ] No [X] If yes, note depth of strata
From ft. to ft.
From ft. to ft.
Method of sealing Neat Cement

(9) WATER LEVELS:
Depth at which water was first found, if known 35' ft.
Standing level before perforating, if known 6' ft.
Standing level after perforating and developing 6' ft.

(10) WELL TESTS: Tested by bailing.
Was pump test made? Yes [ ] No [ ] If yes, by whom? Drillers
Yield: 10 gal./min. with 24' ft. drawdown after 3 hrs.
Temperature of water Was a chemical analysis made? Yes [ ] No [X]
Was electric log made of well? Yes [ ] No [X] If yes, attach copy

(11) WELL LOG:
Total depth 120' ft. Depth of completed well 115' ft.
Formation: Describe by color, character, size of material, and structure

ft. to	ft.	
0	4	Dark Brown Clay
4	15	Light Brown Sand & Clay
15	17	Sand
17	57	Light Brown Clay w/Sand & Gravel Stringers
57	60	Mudrock
60	104	Light Brown Clay w/Sand & Gravel Stringers
104	115	Soft Blue Shale

Work started Jan. 22 19 74 Completed Jan. 23 19 74

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Doshier & Gregson Drilling, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 5365 Napa-Vallejo Highway
Vallejo, Ca. 94590
[SIGNED] (Well Driller)
License No. 258826 Dated January 31, 1974

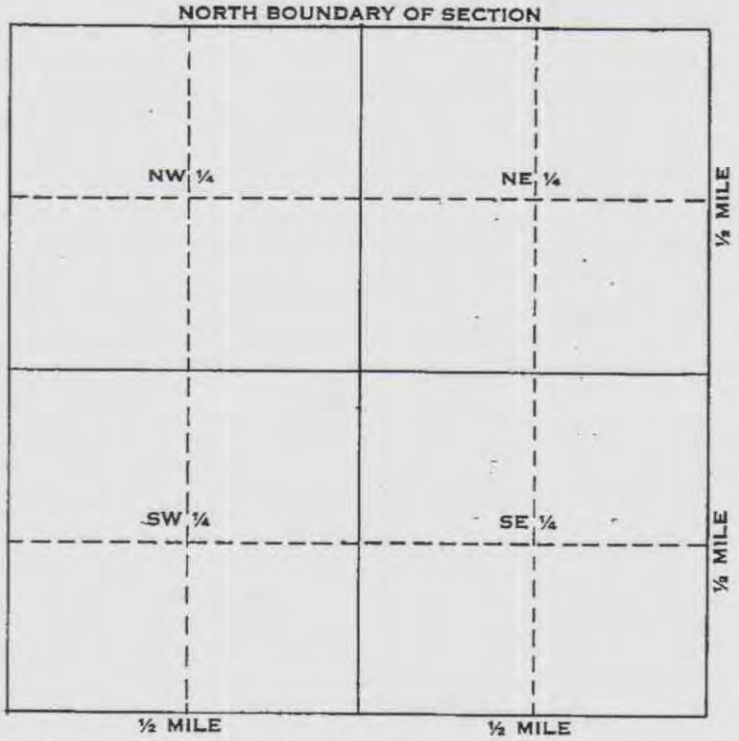
SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-68)

28179-960 9-68 50M THIP ΔD OSP

WELL LOCATION SKETCH

72998

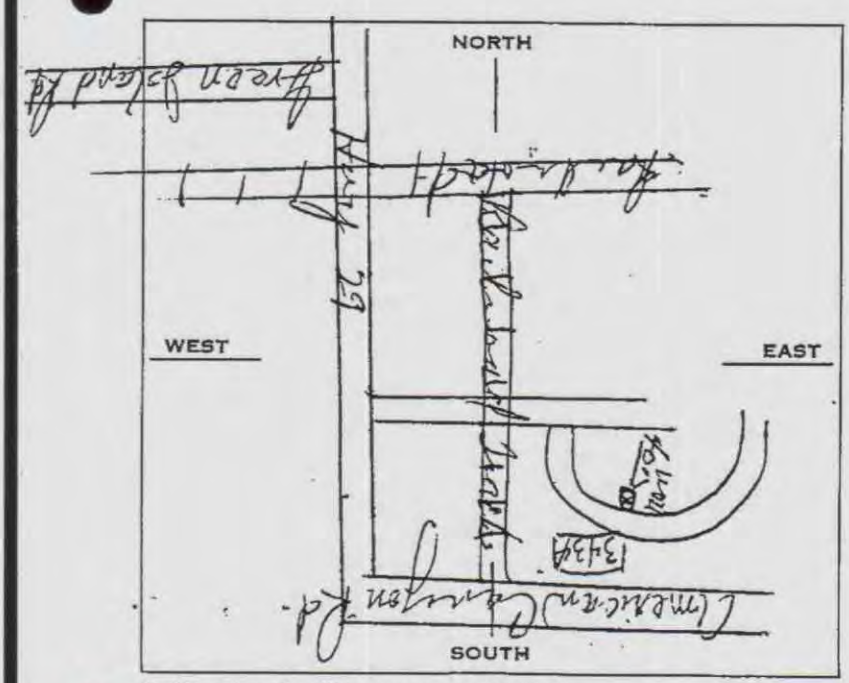


Township 4 N/S

Range ✓ E/W

Section No. 25

A. Location of well in sectionized areas.
Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.
Sketch roads, railroads, streams, or other features as necessary.
Indicate distances.

OF WATER
RESOURCES
RECEIVED
1981 FEB 23 AM 11 20

(14)

ORIGINAL
File with DWR

CONFIDENTIAL LOG
Water Code Sec. 13752

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

(P) 04N/04W-25 B L2 (WM) E 6

Do Not Fill In

No 20027

State Well No.

Other Well No.

(1) OWNER:
Name Audrey V. McDaniels
Address 1805 Sacramento St.
Vallejo, Calif.

(2) LOCATION OF WELL:
County Napa Owner's number, if any
Township, Range, and Section (See Diagram)
Distance from cities, roads, railroads, etc.

(3) TYPE OF WORK (*check*):
New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):
Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:
Rotary ☒
Cable ☐
Other ☐

(6) CASING INSTALLED:
~~STEEL~~ Plastic ~~OTHER~~:
SINGLE ☒ DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	130	6 5/8"	1/4"	8 3/4	20	130

If gravel packed

Size of shoe or well ring: Size of gravel:
Describe joint Couplings, Glue & Set Screws

(7) PERFORATIONS OR SCREEN:
Type of perforation or name of screen Power Saw

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
40	130	20	3	1/4 x 3"

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth 20' ft.
Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata
From ft. to ft.
From ft. to ft.
Method of sealing Neat Cement

(9) WATER LEVELS:
Depth at which water was first found, if known 40' ft.
Standing level before perforating, if known 7' ft.
Standing level after perforating and developing 7' ft.

(10) WELL TESTS: Tested by bailing.
Pump test made? Yes ☐ No ☐ If yes, by whom? Drillers
20 gal./min. with 28' ft. drawdown after 3 hrs.
Temperature of water Was a chemical analysis made? Yes ☐ No ☒
Was electric log made of well? Yes ☐ No ☒ If yes, attach copy

(11) WELL LOG:
Total depth 130' ft. Depth of completed well 130' ft.
Formation: *Describe by color, character, size of material, and structure*

ft. to	ft.	
0	2	Soil
2	6	Gumbo
6	11	White Clay
11	41	Brown Clay
41	42	Sand
42	71	Brown Clay
71	75	Sand
75	101	Clay w/Imbedded Gravel
101	103	Sand
103	130	Clay w/Sand Stringers

CONFIDENTIAL LOG
Water Code Sec. 13752

Work started Apr. 17 19 70 . Completed Apr. 17 19 70

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Doshier-Gregson, Inc.
(Person, firm, or corporation) (*Typed or printed*)
Address 5365 Napa-Vallejo Highway
Vallejo, Calif. 94590
[SIGNED] J. M. Doshier
(Well Driller)
License No. 258826 Dated Aug. 4, 1969

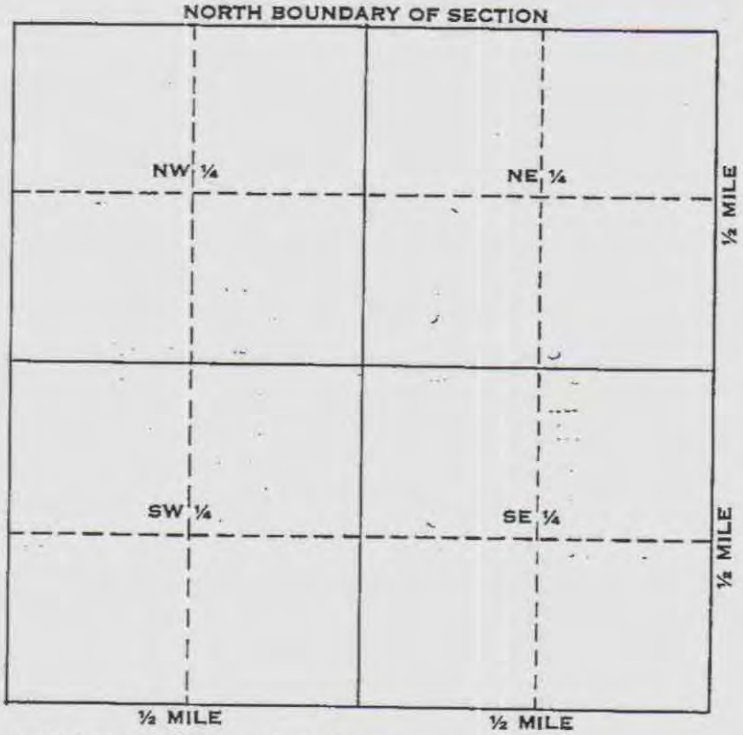
SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-65)

56381-950 10-65 50M TRIP ① △ OSP

WELL LOCATION SKETCH

20027

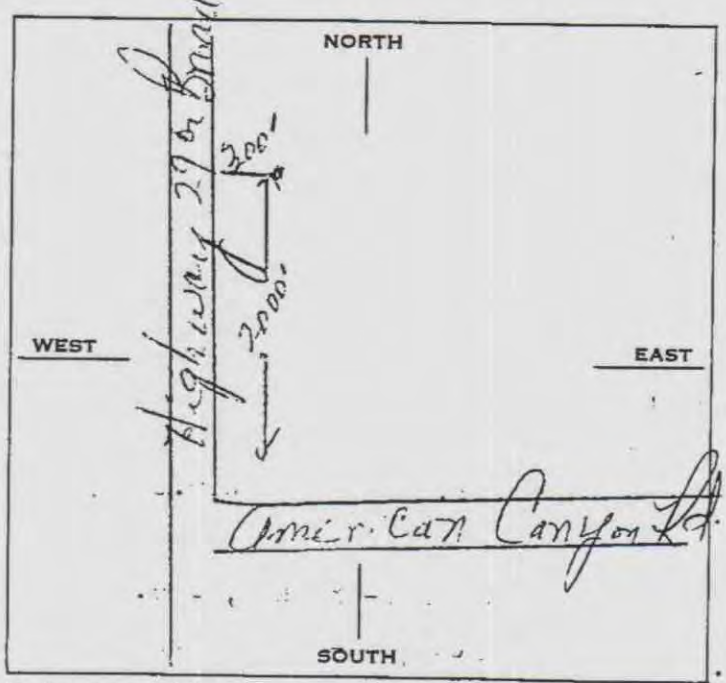


Township 1 N/S

Range 1 E/W

Section No.

A. Location of well in sectionized areas.
Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.
Sketch roads, railroads, streams, or other features as necessary.
Indicate distances.

1970 MAY 11 PM 4 13

DEPT. OF WATER RESOURCES

(15)

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

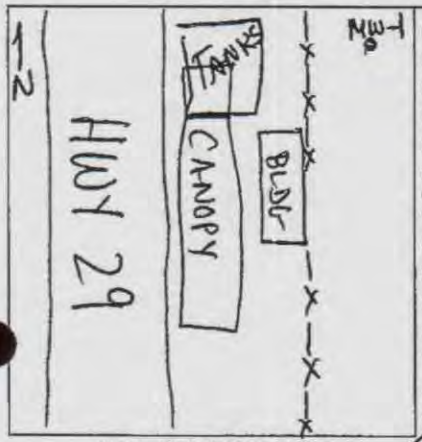
Do not fill in
No. 303336

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. 04N04W25

(1) OWNER: Name CONOCO INC
Address 600 N. DAIRY ASHFORD
City HOUSTON, TX ZIP 77079

(2) LOCATION OF WELL (See instructions):
County 28 Nap Owner's Well Number MW-1
Well address if different from above 3435 Broadway Vallejo
Township 4N Range 4W Section 25
Distance from cities, roads, railroads, fences, etc. _____



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☑ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ~~Remedial~~ ☒
(Describe) Monitor

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☒ Bucket ☐
Hollow Stem

(6) GRAVEL PACK:
Yes ☐ No ☑ Size 2-12
Diameter of bore 8"
Packed from 19 ft. to 4 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☑ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
4.5	0	2	sch 40

(8) PERFORATIONS:
Type of perforation or size of screen 0.01

From ft.	To ft.	Slot size
19	4.5	0.01

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☑ No ☐ If yes, to depth 3 ft.
Were strata sealed against pollution? Yes ☑ No ☐ Interval 4-3 ft.
Method of sealing cement/~~bentonite~~ bentonite

(10) WATER LEVELS:
Depth of first water, if known 10' ft.
Standing level after well completion 10' ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☑ If yes, by whom? _____
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☑ No ☐ If yes, by whom? Trace Anal
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 19 ft. Completed depth 19 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
–	–	See attached log.

Work started 11/2 19 89 Completed 11/2 19 89

WELL ~~DRILLER'S~~ Loggers STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed Mark Vetter DES (Well Driller) Logger
~~NAME~~ Driller West Hazmat (Person, firm, or corporation) (Typed or printed)
Address 3323 Ranchero Cordova
City Rancho Cordova ZIP 95742
License No 55999 Date of this report 12/13/89

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355

CONFIDENTIAL
NOT FOR PUBLIC USE
WATER CODE SEC. 13752

WELL LOG MW-1

303336

JOB NUMBER: 1089-71-59
JOB NAME: BROADWAY - VALLEJO
DRILL RIG: CME-75

DATE DRILLED: 11-2-89
SURFACE ELEVATION:
DATUM:

SAMPLER TYPE: 5' CONTINUOUS
DRIVE WEIGHT-LB:
HEIGHT OF FALL-IN:

* Laboratory Analysis: S-Soil Properties C-Chemical Properties

Depth feet	Well Construction	Lab * Analysis	Blows Per Foot	Sample Depth	Sample Type	USCS Symbol	Description
2	Watertight utility box Locking PVC cap Bentonite Cement Grout Bentonite Seal			2			GRAVELLY, SILTY SAND - (Fill).
4		C		4		CL	SILTY CLAY - Black, moist, high plasticity, iron nodules, no hydrocarbon odor.
6				6			SILT with clay and sand - Dark brown, moist, low plasticity, sand is fine to medium-grained.
8	No. 2/12 Monterey Sand	C		8		ML	SILT with clay and sand - Light brown, slight green and white mottling, very moist, low plasticity, no hydrocarbon odor.
10				10		SM	SILTY SAND with clay - Light brown, very moist, sand is fine to medium-grained, increasing clay.
12	2" SCH 40 PVC 0.01" Slots	S		12		SC	CLAYEY SAND - Light brown, very moist.
14				14		SP	POORLY GRADED SAND - Light brown, saturated, sand is fine to medium-grained, no hydrocarbon odor.
16				16		ML	CLAYEY SILT with minor sand - Light brown, saturated, sand is fine-grained, low plasticity, caliche, no hydrocarbon odor.
18				18			
20	Threaded PVC Bottom Cap			20			Boring terminated at 19 feet. Ground water encountered at approximately 10 feet.
22				22			
24				24			
26				26			
28				28			
30				30			

Du Pont Environmental Services

Logged by:

Approved by:

(15)

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

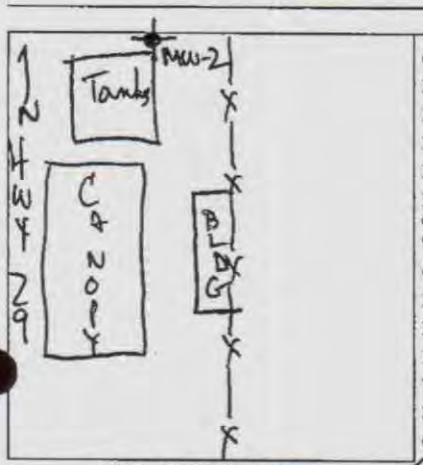
No. 303337

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. 04N04W25

(1) OWNER: Name Conoco Inc
Address 600 N. Dairy Ashford
City Houston, Tx ZIP 77079

(2) LOCATION OF WELL (See instructions):
County Napa Owner's Well Number MW-2
Well address if different from above 3438 Broadway Vallejo
Township 4N Range 4W Section 25
Distance from cities, roads, railroads, fences, etc. _____



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☑ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐
(Describe) Monitor

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☑ Hollow Stem Bucket ☐

(6) GRAVEL PACK:
Yes ☑ No ☐ Size 2-12
Diameter of bore 8"
Packed from 19 ft. to 5 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☑ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
5	20	sch40	

(8) PERFORATIONS:
Type of perforation or size of screen 0.01

From ft.	To ft.	Slot size
19	5	0.01

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☑ No ☐ If yes, to depth 3 ft.
Were strata sealed against pollution? Yes ☑ No ☐ Interval 5-3 ft.
Method of sealing cement/Bentonite

(10) WATER LEVELS:
Depth of first water, if known 10 ft.
Standing level after well completion 10 ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☑ If yes, by whom? _____
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☑ No ☐ If yes, by whom? Trace Analysis
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 19 ft. Completed depth 19 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
		see attached log.

Work started 11/2 19 89 Completed 11/2 19 89

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed Mark Wetter (DES)
(Well Driller)
Driller Name West Hazmat
(Person, firm, or corporation) (Typed or printed)
Address 3423 Fitzgerald
City Rancho Cordova ZIP 95742
License No. 554979 Date of this report 12/13/89

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355

INITIAL
NOT FOR PUBLIC USE
WATER CODE SEC. 13752
NOT OFFICIAL

WELL LOG MW-2

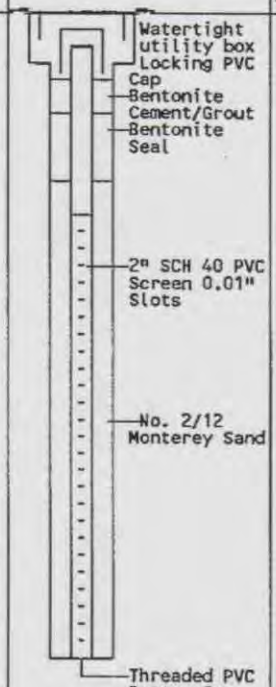
303337

JOB NUMBER: 1089-71-59
JOB NAME: BROADWAY - VALLEJO
DRILL RIG: CME-75

DATE DRILLED: 11-2-89
SURFACE ELEVATION:
DATUM:

SAMPLER TYPE: 5' CONTINUOUS
DRIVE WEIGHT-LB:
HEIGHT OF FALL-IN:

* Laboratory Analysis: S-Soil Properties C-Chemical Properties



Depth feet	Lab * Analysis	Blows Per Foot	Sample Depth	Sample Type	USCS Symbol	Description
					------	Asphalt
					SM	SAND - Brown Fill
2			2		ML	CLAYEY SILT - Black, moist, medium plasticity, no hydrocarbon odor.
4	C		4			
6			6		ML	CLAYEY SILT with sand - Light brown, moist, sabd is fine-grained, medium plasticity, iron nodules, caliche, no hydrocarbon odor.
8	C		8			
10			10		ML	As above, no hydrocarbon odor.
12			12		SM	SILTY SAND - Light brown, moist, sand is fine to medium-grained, iron staining no hydrocarbon odor.
					ML	SILT with clay and minor sand - Light brown, moist, iron staining, no hydrocarbon odor.
14			14		SM	SILTY SAND - Light brown, moist, sand is fine-grained, no hydrocarbon odor.
16			16		ML	SILT with clay and minor sand - Light brown to grey, moist, sand is fine-grained, brownish-orange mottling, no hydrocarbon odor.
18			18			
20			20			Boring terminated at 19 feet. Ground water encountered at approximately 11 feet.
22			22			
24			24			
26			26			
28			28			
30			30			

Du Pont Environmental Services

Logged by:

Approved by:

ORIGINAL
File with DWR

(15)

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

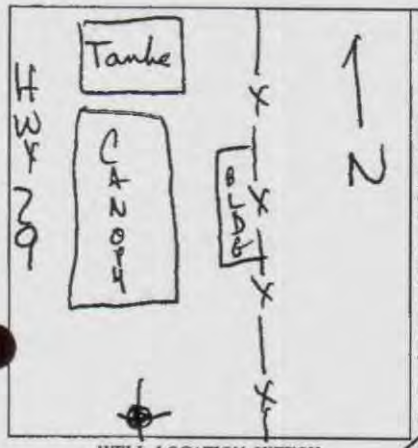
No. 303338

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. 04N04W25

(1) OWNER: Name Conoco Inc
Address 1600 N. DAIRY ASHFORD
City Houston, Tx ZIP 77079

(2) LOCATION OF WELL (See instructions):
County Napa Owner's Well Number MW-3
Well address if different from above 3438 Broadway Vallejo
Township 4N Range 4W Section 25
Distance from cities, roads, railroads, fences, etc. _____



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☑ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐
(Describe) Monitor

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☑ Bucket ☐
Hollow stem

(6) GRAVEL PACK:
Yes ☐ No ☑ Size 2/12
Diameter of bore _____ in.
Packed from 19 ft. to 5 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☑ Concrete ☐

(8) PERFORATIONS:
Type of perforation or size of screen 0.01

From ft.	To ft.	Dia in.	Gage or Wall	From ft.	To ft.	Slot size
6	0	2	sch 40	19	0	0.01

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☑ No ☐ If yes, to depth 3 ft.
Were strata sealed against pollution? Yes ☑ No ☐ Interval 5-3 ft.
Method of sealing cement / bentonite

(10) WATER LEVELS:
Depth of first water, if known _____ ft.
Standing level after well completion _____ ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☑ If yes, by whom? _____
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☑ No ☐ If yes, by whom? Trace Analysis
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 19 ft. Completed depth 19 ft.
from ft. to ft. Formation (Describe by color, character, size or material)
see attached log

Work started 11/2 19 89 Completed 11/2 19 89

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief
Signed Mark Vetter (DES)
Driller ~~Name~~ West Hazmat Driller (Well Driller)
(Person, firm, or corporation) (Typed or printed)
Address 3423 Fitzgerald
City Rancho Cordova ZIP 95742
License No. 554979 Date of this report 12/13/89

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355

CONFIDENTIAL
NOT FOR PUBLIC USE
WATER CODE SEC. 13752

WELL LOG MW-3

202338

JOB NUMBER: 1089-71-59
JOB NAME: BROADWAY - VALLEJO
DRILL RIG: CME-75

DATE DRILLED: 11-2-89
SURFACE ELEVATION:
DATUM:

SAMPLER TYPE: 5' CONTINUOUS
DRIVE WEIGHT-LB:
HEIGHT OF FALL-IN:

* Laboratory Analysis: S-Soil Properties C-Chemical Properties

Depth feet	Well Construction	Lab * Analysis	Blows Per Foot	Sample Depth	Sample Type	USCS Symbol	Description
	Watertight utility box Locking PVC Cap					------	Asphalt, Cement, cobbles, sand, (Fill).
2	Bentonite Cement/Grout			2		ML	CLAYEY SILT - Black, moist, organics, no hydrocarbon odor.
4	Bentonite Seal	C		4	■		
6				6		ML	CLAYEY SANDY SILT - Light brown, moist, sand is fine to medium-grained, orange and grey mottling, increasing sand with depth, moderate hydrocarbon odor.
8	2" SCH 40 PVC Screen 0.01" Slots	C		8	■		
10				10			
12	No. 2/12 Monterey Sand			12		SC	CLAYEY SAND - Light brown, orange and grey mottling, moist, sand is fine-grained, slight hydrocarbon odor.
						ML	CLAYEY SANDY SILT - Light brown, moist, sand is fine to medium-grained, orange and grey mottling, increasing sand with depth, no hydrocarbon odor.
14				14	■		
16				16		SC	CLAYEY SAND - Light brown, orange and grey mottling, moist, sand is fine-grained, slight hydrocarbon odor.
						ML	CLAYEY SANDY SILT - Very light brown, (almost white), sand is fine to medium-grained, caliche or weathered bedrock, saturated, no hydrocarbon odor.
18				18	■		
20	Threaded PVC Bottom Cap			20			Boring terminated at 19 feet. Ground water encountered at approximately 10.5 feet.
22				22			
24				24			
26				26			
28				28			
30				30			

Du Pont Environmental Services

Logged by:

Approved by:

ORIGINAL
File with DWR

(15)

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

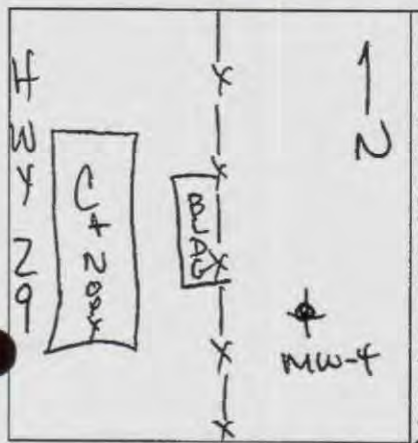
No. 303339

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. 04N04W25

(1) OWNER: Name Conoco Inc
Address 600 N. Dairy Ashford
City Houston, Tx ZIP 77079

(2) LOCATION OF WELL (See instructions):
County Napa Owner's Well Number MW-4
Well address if different from above 3438 Broadway Vallejo
Township 4N Range 4W Section 25
Distance from cities, roads, railroads, fences, etc. _____



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☑ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐
(Describe) Monitor

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☑ Bucket ☐
Hollow stem

(6) GRAVEL PACK:
Yes ☑ No ☐ Size 2-12
Diameter of bore 8"
Packed from 19 ft. to 5 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☑ Concrete ☐

(8) PERFORATIONS:
Type of perforation or size of screen 0.01

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
6	0	2	sch40	19	6	0.01

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☑ No ☐ If yes, to depth 3 ft.
Were strata sealed against pollution? Yes ☑ No ☐ Interval 5-3 ft.
Method of sealing cement/bentonite

(10) WATER LEVELS:
Depth of first water, if known 10' ft.
Standing level after well completion 10' ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☑ If yes, by whom? _____
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☑ No ☐ If yes, by whom? Trace Analy
Was electric log made Yes ☐ No ☑ If yes, attach copy to this report

(12) WELL LOG: Total depth 19 ft. Completed depth 19 ft.
from ft. to ft. Formation (Describe by color, character, size or material)
See attached log.

Work started 11/2 19 89 Completed 11/2 19 89

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed Mark Utter DES
(Well Driller)
Driller
NAME West Hazmat
(Person, firm, or corporation) (Typed or printed)
Address 3423 Fitzgerald
City Rancho Cordova ZIP 95742
License No. 554979 Date of this report 12/13/89

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355

CONFIDENTIAL
NOT FOR PUBLIC USE
WATER CODE SEC. 13752

WELL LOG MW-4

303339

JOB NUMBER: 1089-71-59
JOB NAME: BROADWAY - VALLEJO
DRILL RIG: CME-75

DATE DRILLED: 11-2-89
SURFACE ELEVATION:
DATUM:

SAMPLER TYPE: 5' CONTINUOUS
DRIVE WEIGHT-LB:
HEIGHT OF FALL-IN:

* Laboratory Analysis: S-Soil Properties C-Chemical Properties

Depth feet	Well Construction	Lab * Analysis	Blows Per Foot	Sample Depth	Sample Type	USCS Symbol	Description
	Watertight utility box						Asphalt
2	Locking PVC Cap; Bentonite Cement/Grout			2		ML	CLAYEY SILT with minor sand - Black, moist, low plasticity, roots, sand is medium-grained, no hydrocarbon odor.
4	Bentonite Seal	C		4			
6				6		SM	SILTY SAND with clay - Mottled greenish-grey and orange-brown, moist, no plasticity, sand is fine to medium-grained, strong hydrocarbon odor.
8		C		8		ML	CLAYEY SILT with minor sand - Black, moist, low plasticity, roots, sand is medium-grained, no hydrocarbon odor.
10	2" SCH 40 PVC Screen 0.01" Slots			10			
12				12		SM	SILTY SAND with minor clay - Mottled greenish-grey and orange-brown, moist, no plasticity, sand is fine to medium-grained, strong hydrocarbon odor.
14		S		14		ML	CLAYEY SILT with minor sand - Light grey and mottled orange, wet, sand is medium-grained, no hydrocarbon odor.
16	No. 2/12 Monterey Sand			16			
18				18			
20	Threaded PVC Bottom Cap			20			Boring terminated at 19 feet. Ground water encountered at approximately 10.5 feet.
22				22			
24				24			
26				26			
28				28			
30				30			

Du Pont Environmental Services

Logged by:

Approved by:

ORIGINAL
File with DWR

(15)

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Page ___ of ___
Owner's Well No. MW-1, MW-2, MW-3 MW-4, RW-1 No. 526971, A, B, C, D
Date Work Began 10/10/97 Ended 10/11/97
Local Permit Agency Napa County
Permit No. LOP 057 Permit Date 9/30/97

DWR USE ONLY — DO NOT FILL IN
04N04W25B M
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
	Well Destruction
	Each ground water monitoring well was destroyed by overdrilling each casing to it's total depth
	Recovery well RW-1 was destroyed by pressure grouting the casing with neat cement bentonite slurry. Approx 60 pounds per sack was applied during the pumping of the grout
	All Well boxes and first 2.0 feet of RW-1 were removed

TOTAL DEPTH OF BORING ___ (Feet)
TOTAL DEPTH OF COMPLETED WELL ___ (Feet)

WELL OWNER

Name Ultramar Inc.
Mailing Address 525 West Third Street
Hanford, CA 93230
CITY STATE ZIP

WELL LOCATION

Address 3438 Broadway
City American Canyon
County NAPA
APN Book 059 Page 084 Parcel 001
or Township ___ Range ___ Section ___
or Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH
WEST
EAST
SOUTH

SEE ATTACHED

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc.
PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
X DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD ___ FLUID ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___
ESTIMATED YIELD* ___ (GPM) & TEST TYPE ___
TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)
* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log
X Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
X Other Site map

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Mitchell Drilling Environmental
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 3237 Fitzgerald Road CITY Rancho Cordova STATE CA ZIP 95742

Signed [signature] As agent for Mitchell Drilling
WELL DRILLER/AUTHORIZED REPRESENTATIVE

DATE SIGNED 10/23/97

C-57 LICENSE NUMBER 672617

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

1781

880

(15)

WELL LOG MW-1

#526971

JOB NUMBER: 1089-71-59
JOB NAME: BROADWAY - VALLEJO
DRILL RIG: CME-75

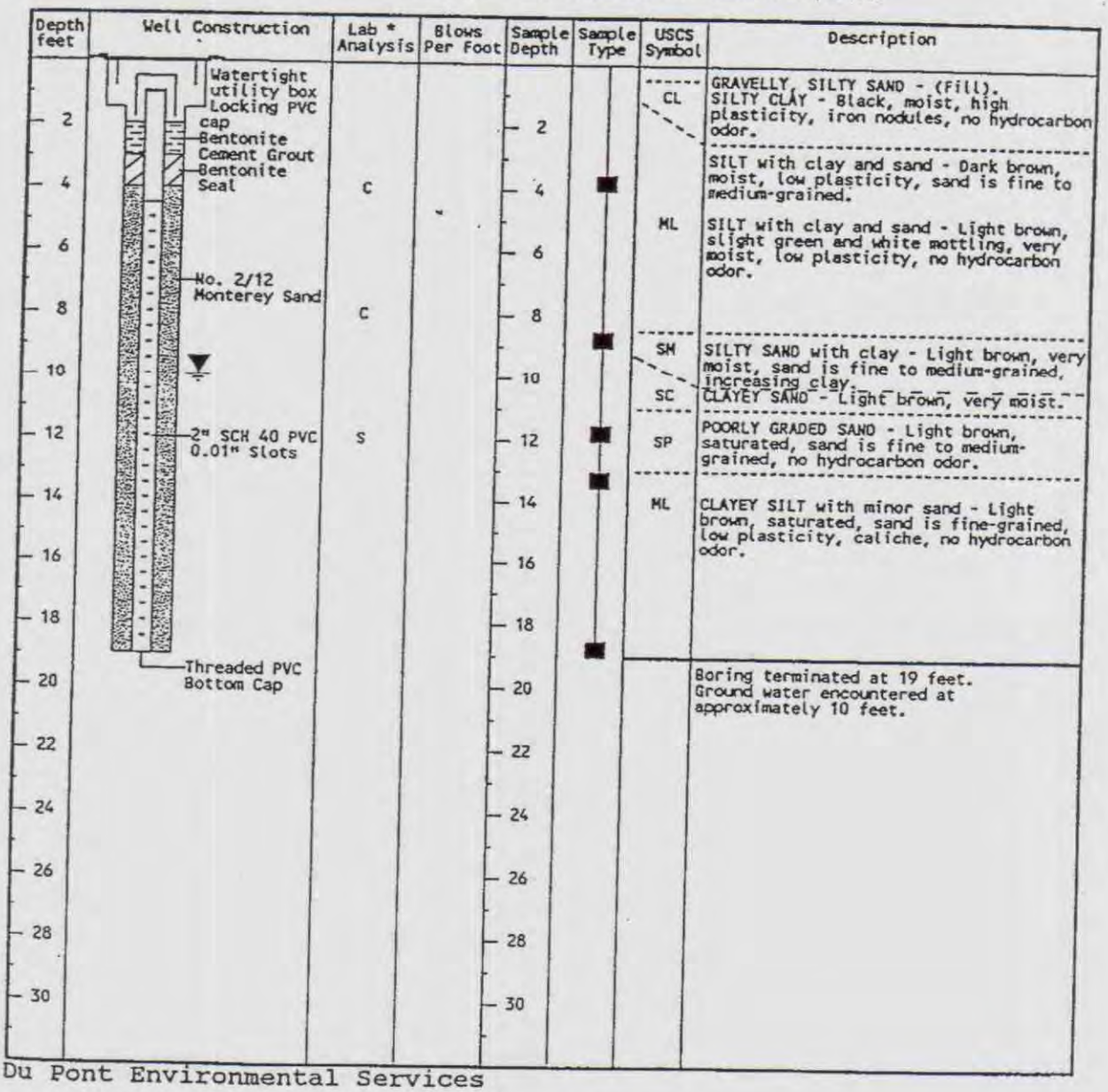
DATE DRILLED: 11-2-89
SURFACE ELEVATION:
DATUM:

SAMPLER TYPE:
5' CONTINUOUS

DRIVE WEIGHT-LB:

HEIGHT OF FALL-IN:

* Laboratory Analysis: S-Soil Properties C-Chemical Properties



Du Pont Environmental Services

Logged by: Mark Hatton

Approved by: G Reid

A-1

#526971

(15)

WELL LOG MW-2

A)

JOB NUMBER: 1089-71-59
JOB NAME: BROADWAY - VALLEJO
DRILL RIG: CME-75

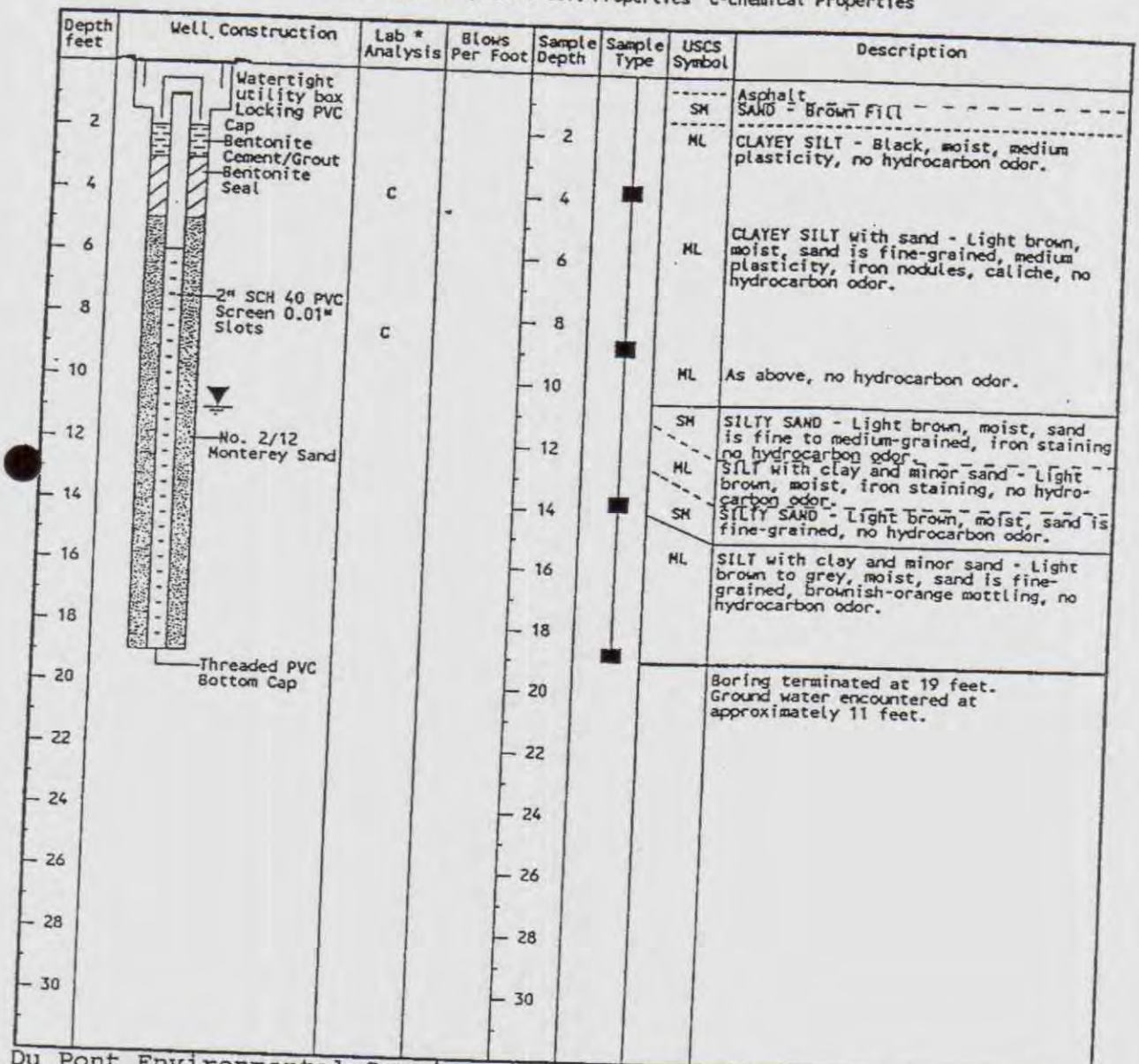
DATE DRILLED: 11-2-89
SURFACE ELEVATION:
DATUM:

SAMPLER TYPE:
5' CONTINUOUS

DRIVE WEIGHT-LB:

HEIGHT OF FALL-IN:

* Laboratory Analysis: S-Soil Properties C-Chemical Properties



Du Pont Environmental Services

Logged by: Mark Vetter

Approved by: G Reid

#526971

(15)

WELL LOG MW-3

B

JOB NUMBER: 1089-71-59
JOB NAME: BROADWAY - VALLEJO
DRILL RIG: CME-75

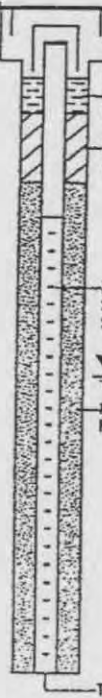
DATE DRILLED: 11-2-89
SURFACE ELEVATION:
DATUM:

SAMPLER TYPE: 5' CONTINUOUS

DRIVE WEIGHT-LB:

HEIGHT OF FALL-IN:

* Laboratory Analysis: S-Soil Properties C-Chemical Properties



Depth feet	Lab * Analysis	Blows Per Foot	Sample Depth	Sample Type	USCS Symbol	Description
					------	Asphalt, Cement, cobbles, sand, (Fill).
2			2		ML	CLAYEY SILT - Black, moist, organics, no hydrocarbon odor.
4	C		4			
6			6		ML	CLAYEY SANDY SILT - Light brown, moist, sand is fine to medium-grained, orange and grey mottling, increasing sand with depth, moderate hydrocarbon odor.
8			8			
10	C		10			
12			12		SC	CLAYEY SAND - Light brown, orange and grey mottling, moist, sand is fine-grained, slight hydrocarbon odor.
14			14		ML	CLAYEY SANDY SILT - Light brown, moist, sand is fine to medium-grained, orange and grey mottling, increasing sand with depth, no hydrocarbon odor.
16			16		SC	CLAYEY SAND - Light brown, orange and grey mottling, moist, sand is fine-grained, slight hydrocarbon odor.
18			18		ML	CLAYEY SANDY SILT - Very light brown, (almost white), sand is fine to medium-grained, caliche or weathered bedrock, saturated, no hydrocarbon odor.
20			20			Boring terminated at 19 feet. Ground water encountered at approximately 10.5 feet.
22			22			
24			24			
26			26			
28			28			
30			30			

Du Pont Environmental Services

Logged by: Mark Utter

Approved by: G Reed

526971

(15)

WELL LOG MW-4 C

JOB NUMBER: 1089-71-59
JOB NAME: BROADWAY - VALLEJO
DRILL RIG: CME-75

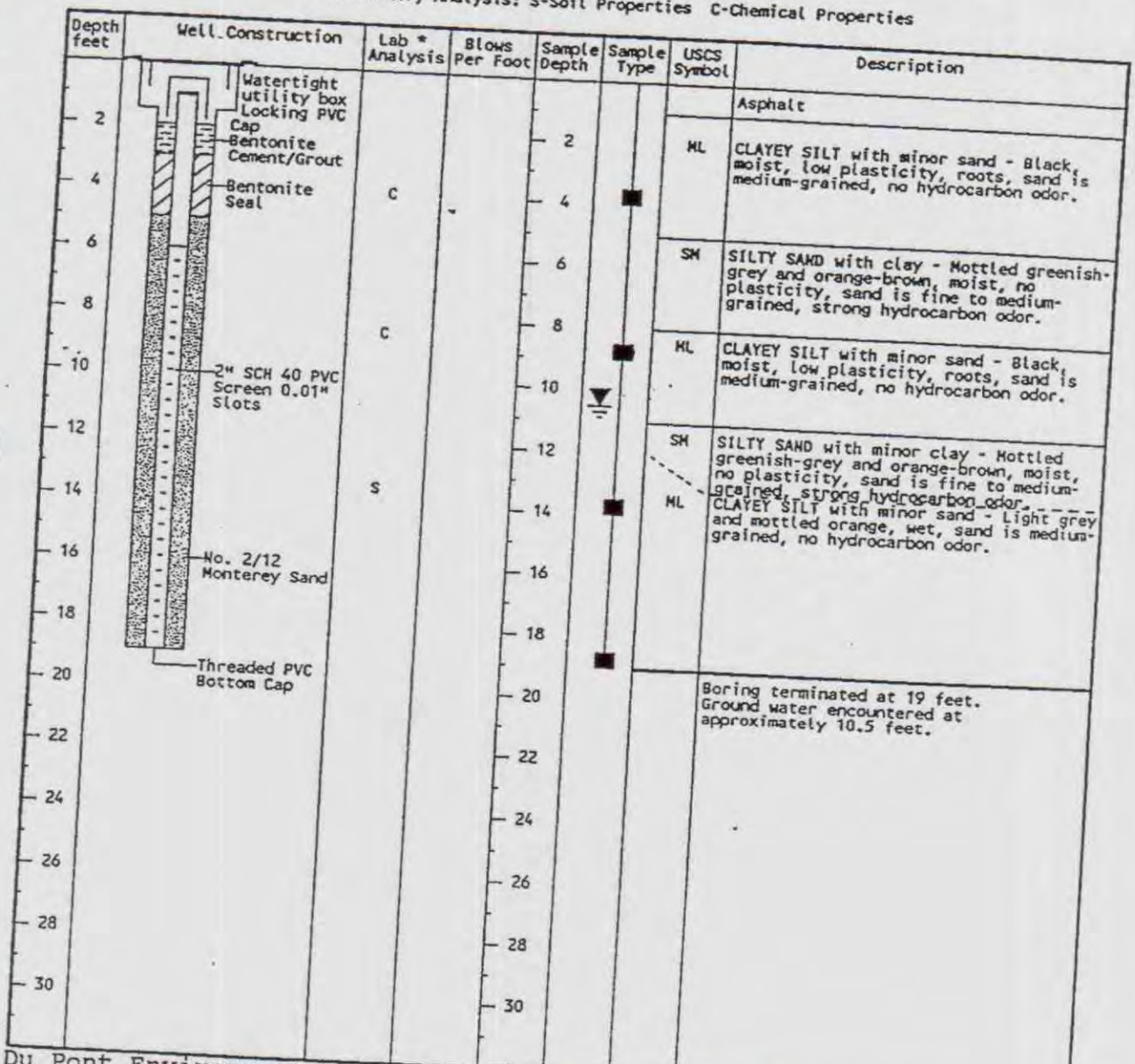
DATE DRILLED: 11-2-89
SURFACE ELEVATION:
DATUM:

SAMPLER TYPE:
5' CONTINUOUS

DRIVE WEIGHT-LB:

HEIGHT OF FALL-IN:

* Laboratory Analysis: S-Soil Properties C-Chemical Properties



Du Pont Environmental Services

Logged by: Mark Utter

Approved by: G Reid

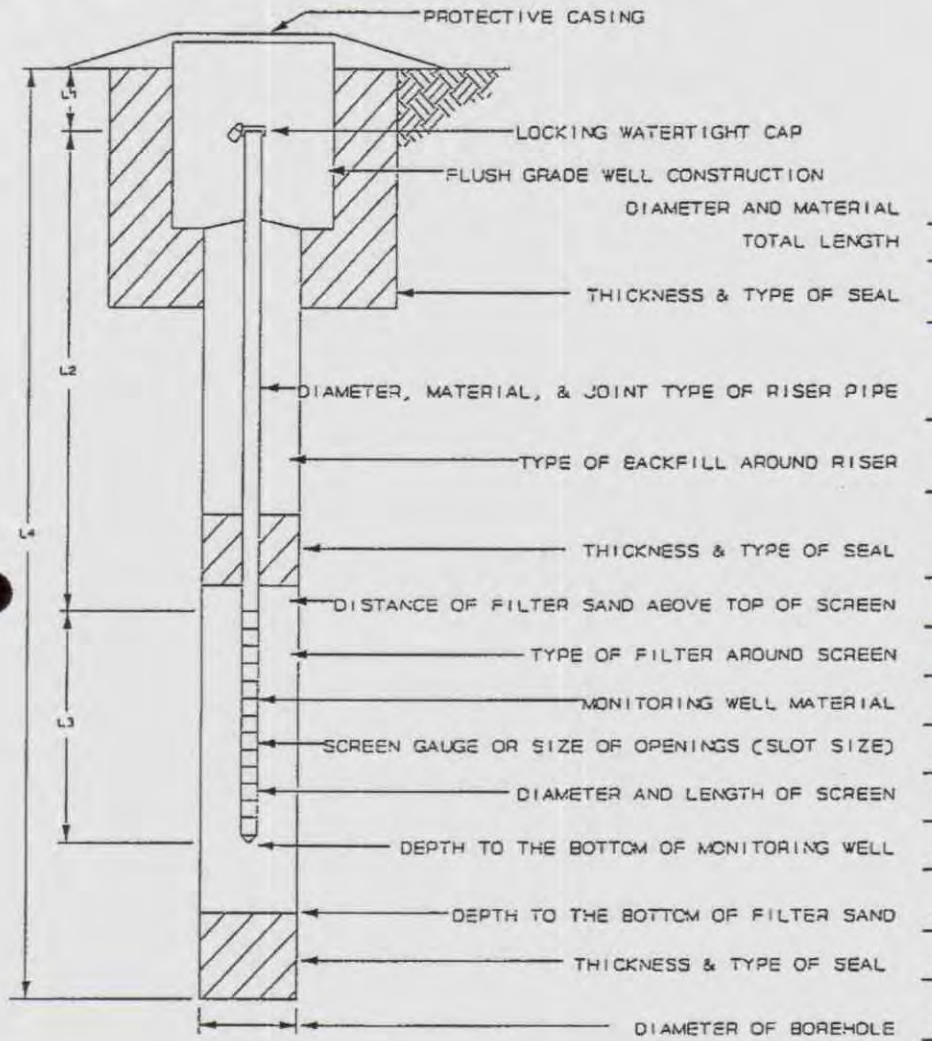
(15) PROPOSED MONITORING WELL CONSTRUCTION DETAILS

526971

Project: Beacon Station No. 710
3438 Broadway
Vallejo, California

Delta No. 40-90-842

Monitoring Well No. RW-1



DIAMETER AND MATERIAL	18-inch steel
TOTAL LENGTH	12 inches
THICKNESS & TYPE OF SEAL	12 inches concrete
DIAMETER, MATERIAL, & JOINT TYPE OF RISER PIPE	6-inch Schedule 40 flush threaded
TYPE OF BACKFILL AROUND RISER	Cement grout with 5% bentonite
THICKNESS & TYPE OF SEAL	.5 feet bentonite
DISTANCE OF FILTER SAND ABOVE TOP OF SCREEN	.5 feet
TYPE OF FILTER AROUND SCREEN	#3 Lonestar
MONITORING WELL MATERIAL	Schedule 40 PVC
SCREEN GAUGE OR SIZE OF OPENINGS (SLOT SIZE)	0.020 inch
DIAMETER AND LENGTH OF SCREEN	6 inches x 20 feet
DEPTH TO THE BOTTOM OF MONITORING WELL	25.9 feet
DEPTH TO THE BOTTOM OF FILTER SAND	26 feet
THICKNESS & TYPE OF SEAL	NA
DIAMETER OF BOREHOLE	12 inches

L1 = 0.5 FT
L2 = 5.4 FT
L3 = 20.0 FT
L4 = 25.9 FT

Delta Environmental Consultants, Inc.

ORIGINAL
File with DWR

(15)

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Page ___ of ___
Owner's Well No. MW-5, MW-6, MW-7, MW-8, RW-2 Rec. 526972
Date Work Began 10/10/97 Ended 10/11/97
Local Permit Agency NAPA County A, B, C, D
Permit No. LOP 057 Permit Date 9/30/97

DWR USE ONLY — DO NOT FILL IN
04N/04W/25B M
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
	Well Destruction
	Each groundwater monitoring well and recovery well RW-2 was destroyed by overdrilling each casing to its total depth. All well boxes were removed

TOTAL DEPTH OF BORING ___ (Feet)
TOTAL DEPTH OF COMPLETED WELL ___ (Feet)

WELL OWNER

Name Ultramar Inc.
Mailing Address 525 West Third Street
City Hanford, State CA, ZIP 93230

WELL LOCATION

Address 3436 Broadway
City American Canyon
County NAPA
APN Book 059 Page 080 Parcel 051
or Township ___ Range ___ Section ___
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH
WEST
EAST
SOUTH

SEE ATTACHED

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc.
PLEASE BE ACCURATE & COMPLETE

ACTIVITY (✓)

___ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
X DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD ___ FLUID ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___
ESTIMATED YIELD* ___ (GPM) & TEST TYPE ___
TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)
* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log
X Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
X Other SITE MAP

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Mitchell Drilling Environmental
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 3237 Fitzgerald Road, CITY Rancho Cordova, STATE CA, ZIP 95742
Signed Bryan Mitchell for Agent for Mitchell Drilling
WELL DRILLER/AUTHORIZED REPRESENTATIVE
DATE SIGNED 10/23/97 C-57 LICENSE NUMBER 672617

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

1781

526972

(15)

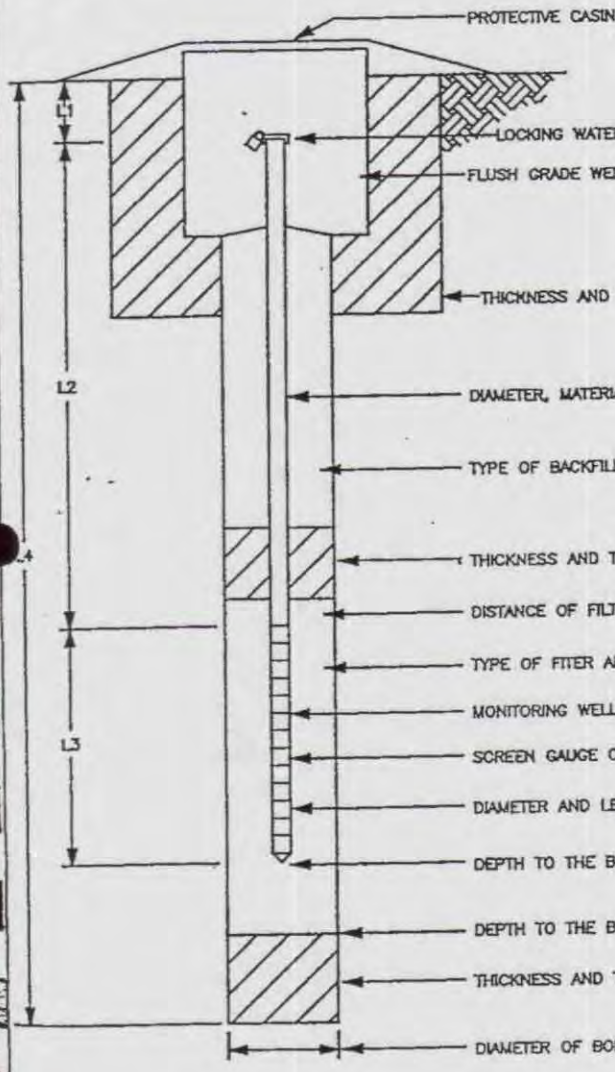
INSTALLATION OF FLUSH GRADE MONITORING WELL

PROJECT: Beacon Station #710
3438 Broadway, Vallejo, CA

DELTA NO. 40-90-842

MONITORING WELL NO. MW-5

ELEVATIONS:
TOP OF RISER 49.60
GROUND LEVEL



DIAMETER AND MATERIAL	8-inch steel
TOTAL LENGTH	12 inches
THICKNESS AND TYPE OF SEAL	12-inch neat cement
DIAMETER, MATERIAL, AND JOINT TYPE OF RISER PIPE	2-inch PVC Flush Threaded
TYPE OF BACKFILL AROUND RISER	Neat cement
THICKNESS AND TYPE OF SEAL	1-foot Bentonite chips
DISTANCE OF FILTER SAND ABOVE TOP OF SCREEN	1 foot
TYPE OF FITER AROUND SCREEN	#3 sand
MONITORING WELL MATERIAL	PVC
SCREEN GAUGE OR SIZE OF OPENINGS (SLOT SIZE)	0.020 inch
DIAMETER AND LENGTH OF SCREEN	2 inch x 15 feet
DEPTH TO THE BOTTOM OF MONITORING WELL	20 feet
DEPTH TO THE BOTTOM OF FILTER SAND	20 feet
THICKNESS AND TYPE OF SEAL	NA
DIAMETER OF BOREHOLE	8½ inches

L1 = 0.3 FT
L2 = 4.7 FT
L3 = 15 FT
L4 = 20 FT

MONITORING WELL WATER LEVEL MEASUREMENTS

DATE	TIME	WATER LEVEL *
6-27-91	5:16 pm	12.96

INSTALLATION COMPLETED:
DATE: 6-26-91
TIME: 4:30 pm

Delta Environmental Consultants, Inc.

* MEASURE POINT: Top of casing

#526972

15

INSTALLATION OF FLUSH GRADE MONITORING WELL

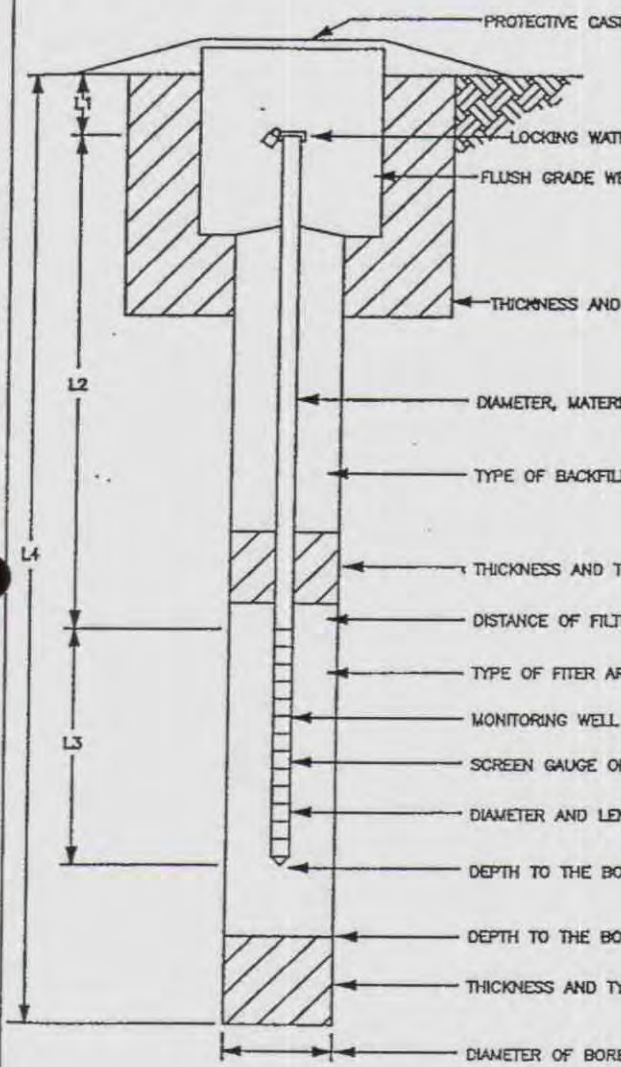
A

PROJECT Beacon Station #710
3438 Broadway, Vallejo, CA

DELTA NO. 40-90-842

MONITORING WELL NO. MW-6

ELEVATIONS:
TOP OF RISER 49.77
GROUND LEVEL



DIAMETER AND MATERIAL: 8-inch steel
TOTAL LENGTH: 12 inches
THICKNESS AND TYPE OF SEAL: 12-inch neat cement
DIAMETER, MATERIAL, AND JOINT TYPE OF RISER PIPE: 2-inch PVC Flush Threaded
TYPE OF BACKFILL AROUND RISER: Neat cement
THICKNESS AND TYPE OF SEAL: 1-foot Bentonite chips
DISTANCE OF FILTER SAND ABOVE TOP OF SCREEN: 1 foot
TYPE OF FITER AROUND SCREEN: #3 sand
MONITORING WELL MATERIAL: PVC
SCREEN GAUGE OR SIZE OF OPENINGS (SLOT SIZE): 0.020 inch
DIAMETER AND LENGTH OF SCREEN: 2 inch x 15 feet
DEPTH TO THE BOTTOM OF MONITORING WELL: 20 feet
DEPTH TO THE BOTTOM OF FILTER SAND: 20 feet
THICKNESS AND TYPE OF SEAL: NA
DIAMETER OF BOREHOLE: 8½ inches

L1 = 0.3 FT
L2 = 4.7 FT
L3 = 15 FT
L4 = 20 FT

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *
6-27-91	5:19 pm	13.85

INSTALLATION COMPLETED:
DATE: 6-27-91
TIME: 5:00 pm

Delta Environmental Consultants, Inc.

* MEASURE POINT: Top of casing

#526972

15

INSTALLATION OF FLUSH GRADE MONITORING WELL

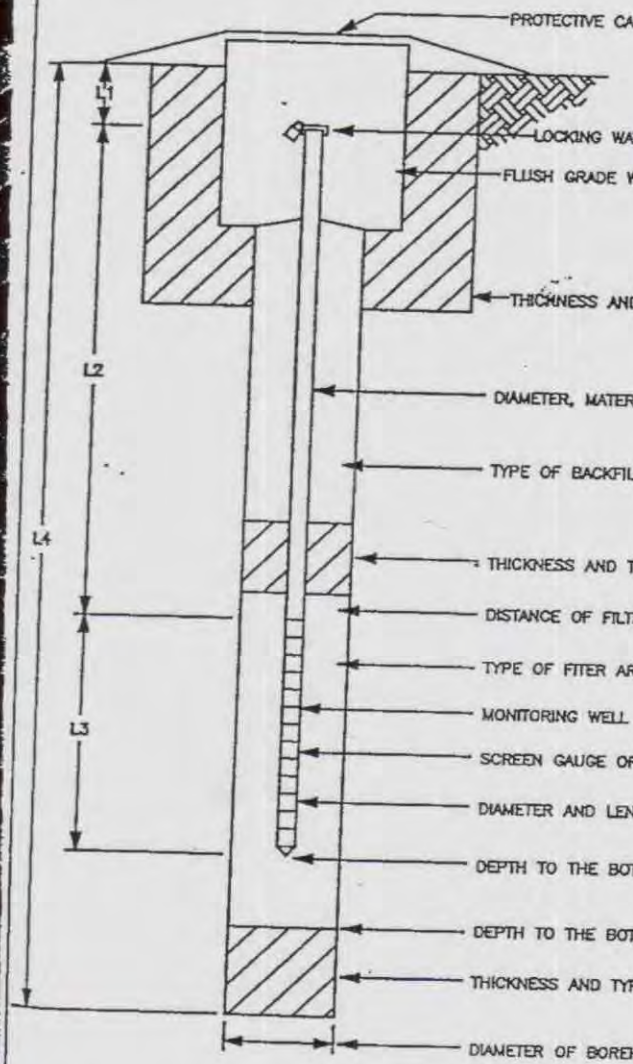
B

PROJECT Beacon Station #710
3438 Broadway, Vallejo, CA

DELTA NO. 40-90-842

MONITORING WELL NO. MW-7

ELEVATIONS:
TOP OF RISER 48.04
GROUND LEVEL



DIAMETER AND MATERIAL	8-inch steel
TOTAL LENGTH	12 inches
THICKNESS AND TYPE OF SEAL	8-inch neat cement
DIAMETER, MATERIAL, AND JOINT TYPE OF RISER PIPE	2-inch PVC Flush Threaded
TYPE OF BACKFILL AROUND RISER	Neat cement
THICKNESS AND TYPE OF SEAL	1-foot Bentonite chips
DISTANCE OF FILTER SAND ABOVE TOP OF SCREEN	1 foot
TYPE OF FITER AROUND SCREEN	#3 sand
MONITORING WELL MATERIAL	PVC
SCREEN GAUGE OR SIZE OF OPENINGS (SLOT SIZE)	0.020 inch
DIAMETER AND LENGTH OF SCREEN	2 inch x 15 feet
DEPTH TO THE BOTTOM OF MONITORING WELL	20 feet
DEPTH TO THE BOTTOM OF FILTER SAND	20 feet
THICKNESS AND TYPE OF SEAL	NA
DIAMETER OF BOREHOLE	8½ inches

L1 = 0.3 FT
L2 = 4.7 FT
L3 = 15 FT
L4 = 20 FT

INSTALLATION COMPLETED:
DATE: 6-27-91
TIME: 5:30 pm

Delta Environmental Consultants, Inc.

MONITORING WELL WATER LEVEL MEASUREMENTS

DATE	TIME	WATER LEVEL *
6-27-91	5:13 pm	11.61

* MEASURE POINT: Top of casing

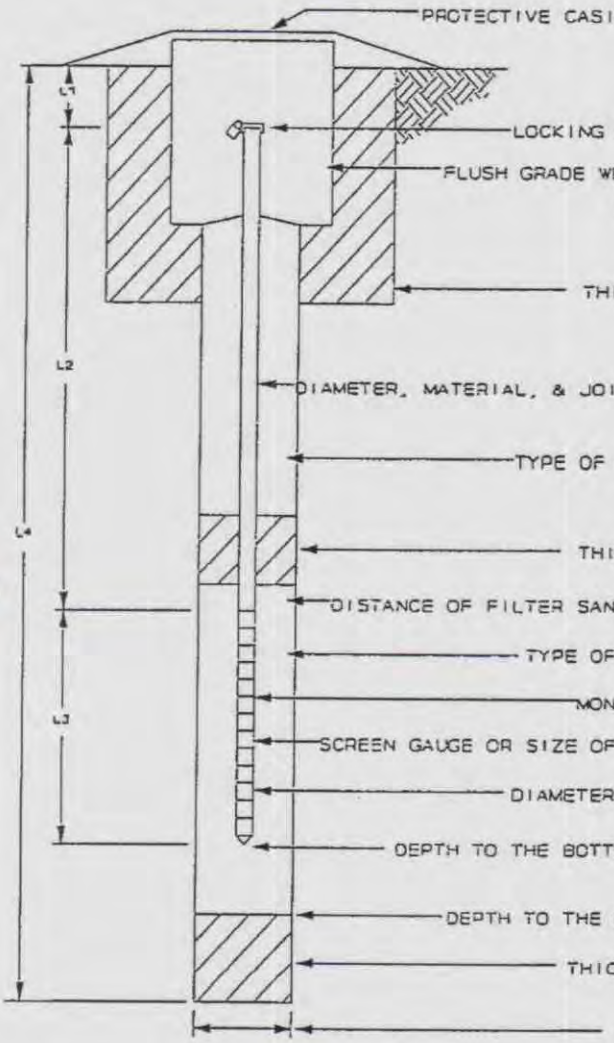
#5 2 6 9 7 2

(15) PROPOSED MONITORING WELL CONSTRUCTION DETAILS

Project: Beacon Station No. 710
3438 Broadway
Vallejo, California

Delta No. 40-90-842

Monitoring Well No. MW-8
C



DIAMETER AND MATERIAL	12-inch steel
TOTAL LENGTH	8 inches
THICKNESS & TYPE OF SEAL	12 inches concrete
DIAMETER, MATERIAL, & JOINT TYPE OF RISER PIPE	2-inch Schedule 40 flush threaded
TYPE OF BACKFILL AROUND RISER	Cement grout with 5% bentonite
THICKNESS & TYPE OF SEAL	.5 feet bentonite
DISTANCE OF FILTER SAND ABOVE TOP OF SCREEN	.5 feet
TYPE OF FILTER AROUND SCREEN	#3 Lonestar
MONITORING WELL MATERIAL	Schedule 40 PVC
SCREEN GAUGE OR SIZE OF OPENINGS (SLOT SIZE)	0.020 inch
DIAMETER AND LENGTH OF SCREEN	2 inches x 20 feet
DEPTH TO THE BOTTOM OF MONITORING WELL	25 feet
DEPTH TO THE BOTTOM OF FILTER SAND	25 feet
THICKNESS & TYPE OF SEAL	NA
DIAMETER OF BOREHOLE	8 inches

L1 = 0.5 FT
L2 = 5.0 FT
L3 = 20.0 FT
L4 = 25.5 FT

Delta Environmental Consultants, Inc.

(15) #526972

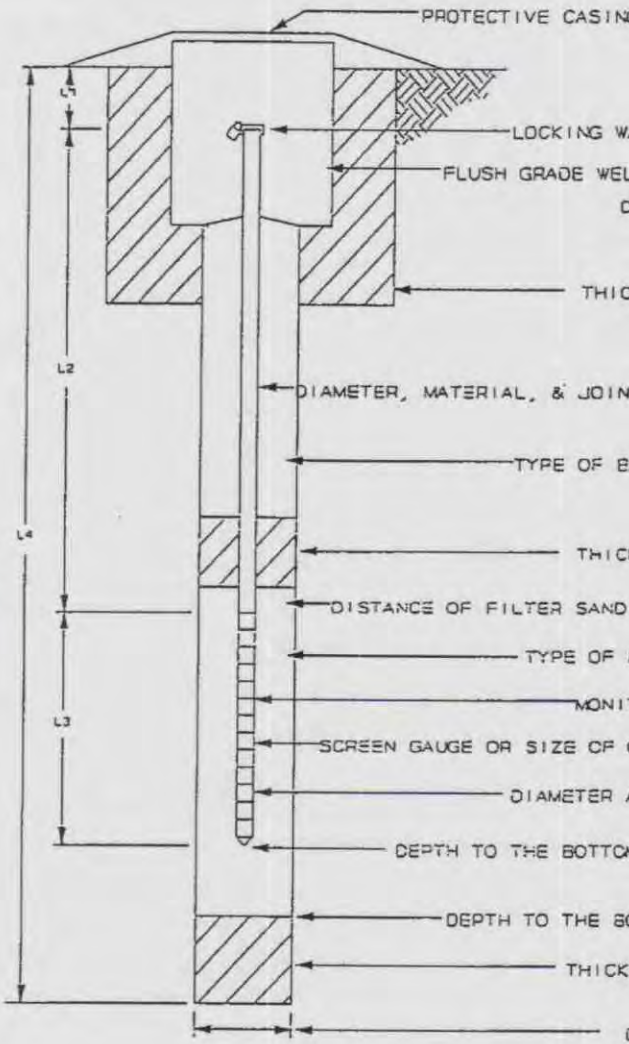
PROPOSED MONITORING WELL CONSTRUCTION DETAILS

Project: Beacon Station No. 710
3438 Broadway
Vallejo, California

Monitoring Well No. RW-2

D

Delta No. 40-90-842



DIAMETER AND MATERIAL	18-inch steel
TOTAL LENGTH	12 inches
THICKNESS & TYPE OF SEAL	12 inches concrete
DIAMETER, MATERIAL, & JOINT TYPE OF RISER PIPE	6-inch Schedule 40 flush threaded
TYPE OF BACKFILL AROUND RISER	Cement grout with 5% bentonite
THICKNESS & TYPE OF SEAL	.5 feet bentonite
DISTANCE OF FILTER SAND ABOVE TOP OF SCREEN	.5 feet
TYPE OF FILTER AROUND SCREEN	#3 Lonestar
MONITORING WELL MATERIAL	Schedule 40 PVC
SCREEN GAUGE OR SIZE OF OPENINGS (SLOT SIZE)	0.020 inch
DIAMETER AND LENGTH OF SCREEN	6 inches x 20 feet
DEPTH TO THE BOTTOM OF MONITORING WELL	26 feet
DEPTH TO THE BOTTOM OF FILTER SAND	26 feet
THICKNESS & TYPE OF SEAL	NA
DIAMETER OF BOREHOLE	12 inches

L1 = 0.5 FT
L2 = 5.5 FT
L3 = 20.0 FT
L4 = 26.0 FT

Delta Environmental Consultants, Inc.

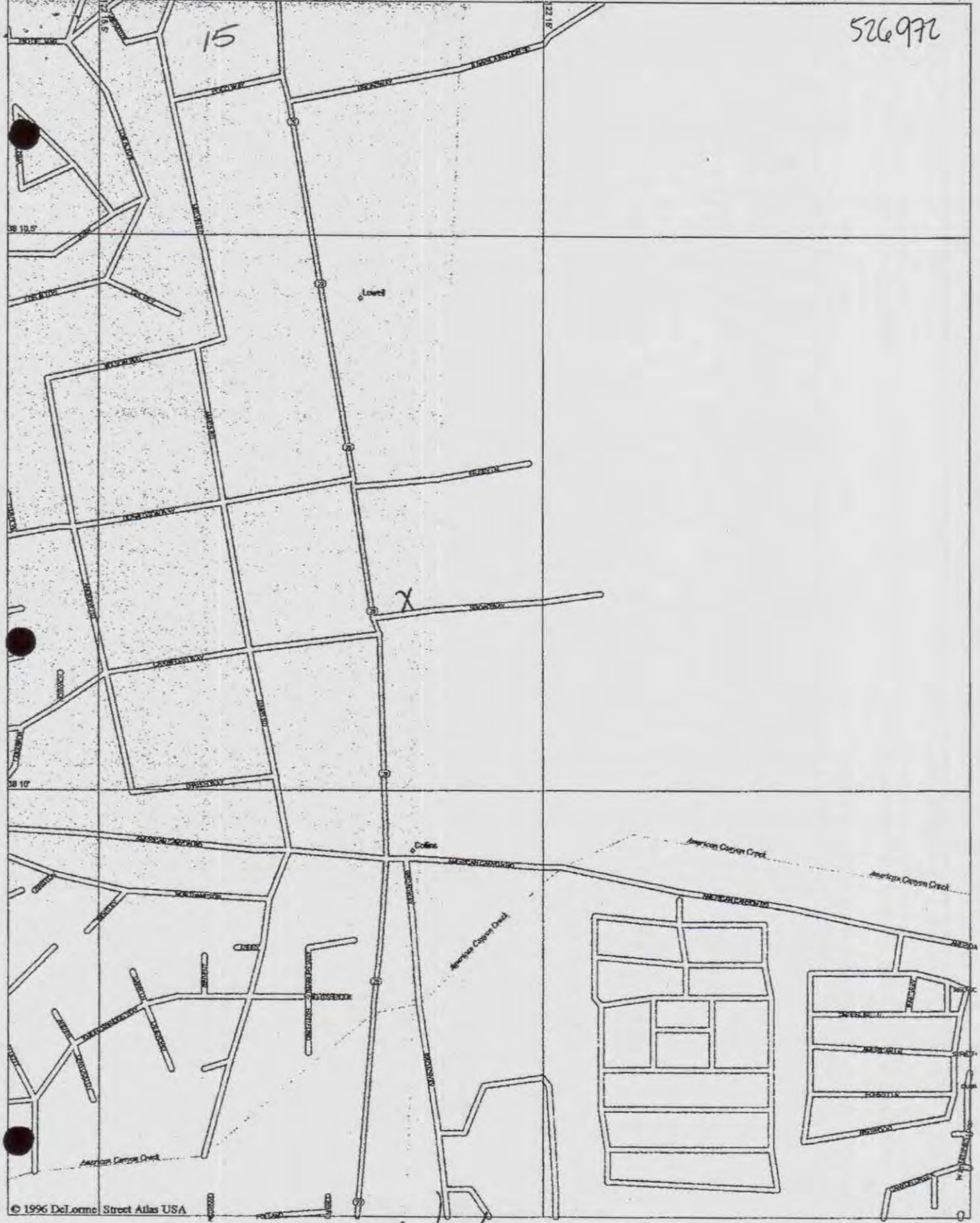
#526972

FIGURE 2
SITE VICINITY MAP

BEACON STATION NO. 710
3438 BROADWAY
AMERICAN CANYON, CA.

PROJECT NO. D093-034	DRAWN BY M.L. 10/20/97
FILE NO. 93-934-1	PREPARED BY BH
REVISION NO. 7	REVIEWED BY

Delta Environmental Consultants, Inc.


15
526972
X
Lowell
Collins
American Canyon Creed
American Canyon Creek
American Canyon Creek
American Canyon Creek
© 1996 DeLorme Street Atlas USA

4N/4W 25B

ORIGINAL
File with DWR

(17)

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

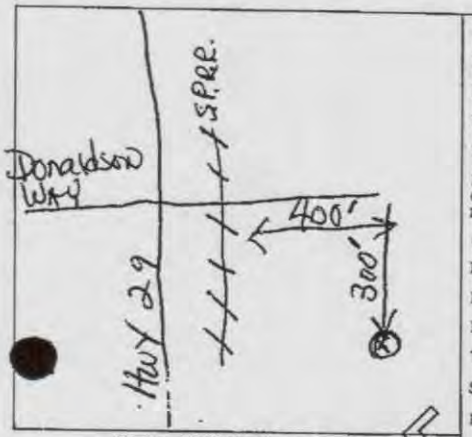
Do not fill in
No. 095257

[redacted] of Intent No.
Local Permit No. or Date

State Well No.
Other Well No. 04N04W24

(1) OWNER: Name Victor Smith
Address Hwy 29
City Vallejo, Ca Zip 94590

(2) LOCATION OF WELL (See instructions):
County Napa Owner's Well Number 59-040-06
Well address if different from above same
Township 04N Range 04W Section 24
Distance from cities, roads, railroads, fences, etc.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [X]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [X] Reverse [ ]
Cable [ ] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [X] No [ ] Size 3/4
Diameter of bore 12½
Packed from 20 to 80 ft.

(7) CASING INSTALLED:
Steel [ ] Plastic [X] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall
0	25	6	.250

(8) PERFORATIONS: power saw
Type of perforation or size of screen

From ft.	To ft.	Slot size
25	80	1/8 x 3

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 20 ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval ft.
Method of sealing grout

(10) WATER LEVELS:
Depth of first water, if known 62 ft.
Standing level after well completion 10 ft.

(11) WELL TESTS:
Was well test made? Yes [X] No [ ] If yes, by whom? driller
Type of test Pump [ ] Bailer [X] Air lift [ ]
Depth to water at start of test 10 ft. At end of test ft.
[redacted]harge 15 gal/min after hours Water temperature
[redacted]ical analysis made? Yes [ ] No [X] If yes, by whom?
Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 80 ft. Depth of completed well 80 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	12	Adobe
12	41	Brown sandy clay
41	43	Brown sandstone
43	62	Brown tuffa
62	65	Hard gray & brown fractured rock
65	68	Brown clay gravel imb
68	75	Brown mud rock
75	80	Blue shale

Work started 8/7 1980 Completed 8/8 1980

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED (Well Driller)
NAME Doshier-Gregson Drilling, Inc
(Person, firm, or corporation) (Typed or printed)
Address 5365 Napa-Vallejo Hwy
City Vallejo, Ca Zip 94590
License No. 294001 Date of this report 8/11/80

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

NOT A VALID PUBLIC USE WATER CODE SEC. 13752

APPENDIX B-2

AERIAL PHOTOGRAPHS

APPENDIX B-3

TOPOGRAPHIC MAPS

APPENDIX B-4

FIRE INSURANCE MAPS

APPENDIX B-5

CITY DIRECTORIES

APPENDIX B-6

ENVIROSITE GOVERNMENT RECORDS REPORT

APPENDIX C

USER SUPPLIED INFORMATION
INTERVIEW RECORDS/ENVIRONMENTAL QUESTIONNAIRE

Phase I Environmental Site Assessment User Questionnaire

1) Environmental cleanup liens that are filed or recorded against this site (40CFR 312.25).

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law? ___Yes ✓ No

2) Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).

Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law? ___Yes ✓ No

3) Specialized knowledge or experience of the person seeking to qualify for the LLP.

As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? ___Yes ✓ No

4) Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.30).

Does the purchase price being paid for this property reasonable reflect the fair market value of the property? ✓ Yes ___No

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? ___Yes ___No

5) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? ___Yes X No

For example, as user,

(a) Do you know the past uses of the property? ✓Yes ___No

(b) Do you know of specific chemicals that are present or once were present at the property? ___Yes ✓No

(c) Do you know of spills or other chemical releases that have taken place at the property? ___Yes ✓No

(d) Do you know of any environmental cleanups that have taken place at the property? ___Yes ✓No

6) The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the user of this ESA, based upon your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property? ___Yes ✓No

Property address:
3439 - 3443 Broadway St, American Canyon Ca

Property owner or representative

3/31/2016
Date

Company

Reviewed By:

Date

APPENDIX D

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Ben Wells, Principal Geologist & ERG President. Mr. Wells is the Senior Client Contact and responsible for overall program implementation, and project quality assurance. His expertise includes management and removal of underground tank systems, collection and interpretation of air, soil and water quality data, coordination with regulatory agencies, and management of remedial investigations and activities.

François A. Bush, California Professional Geologist (#7711). Mr. Bush has over twenty-five years of experience in the environmental industry performing various environmental investigation and remediation activities, including: Phase I Environmental Site Assessments, Phase II Site Investigations, Brownfields redevelopments, petroleum hydrocarbon investigations and remediations, and landfill investigations. He has conducted field and office work for the procurement and performance of ESA's, as well as prepared numerous remedial investigation reports and work plans for site characterization. He has conducted soil and groundwater quality investigations to characterize releases of a wide range of organic and inorganic contaminants including fuel spills, solvent releases, plating and metal wastes, and PCBs. He has designed, permitted, installed and overseen operation of soil and groundwater remediation systems at a variety of private and municipal hazardous waste sites. He has assisted clients with the disposal of hazardous and non-hazardous wastes in compliance with RCRA, CERCLA, and local discharge requirements.

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Appendix F:
Hydrology-Hydraulic Study

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ON-SITE
HYDROLOGY / HYDRAULIC STUDY

for

HILTON HAMPTON INN
3443 BROADWAY
(STATE HIGHWAY 29)
AMERICAN CANYON, CA 94503

by

ams associates, inc.
801 Ygnacio Valley Road, Suite 220
Walnut Creek, CA 94596
(925) 943-2777
ams Project No. 20-2498

Prepared:
March 11th, 2021

Prepared By:

Farhad Iranitalab
R.C.E. 33142

TABLE OF CONTENTS

I. NARRATIVE

- Introduction
- Vicinity Map
- Existing Conditions
- Proposed Conditions
- Proposed Storm Drain System
- Hydromodification
- Modeling
- Unit Hydrograph Method
- Runoff Calculations
- Conclusion

II. PRECIPITATION FREQUENCY

- IDF Curve for the City of American Canyon – NOAA Atlas 14, Volume 6, Version 2

III. CALCULATIONS

- Routing Diagram – Pre-Construction
- HydroCAD Report for the Pre-Development Runoff (10-Year)
- HydroCAD Report for the Pre-Development Runoff (100-Year)
- Routing Diagram – Post-Construction
- HydroCAD Report for the Post-Development Runoff (10-Year)
- HydroCAD Report for the Post-Development Runoff (100-Year)

IV. EXHIBITS

- Exhibit 'A' – Hydrology Map
- Exhibit 'B' – Horizontal Control Plan
- Exhibit 'C' – Utility Plan
- Exhibit 'D' – Grading Plan

I. NARRATIVE

Introduction

This project is located at 3443 Broadway in the City of American Canyon, Napa County, State of California. The Site is rectangular in shape which encompasses approximately 2.516 ± Acres. The Site is bound to the East by Broadway, to the North by Residential and Commercial Property, to the West by Residential Property and to the South is Canyon Plaza Shopping Center.

The entire Site is located within FEMA Flood Insurance Map, Community Panel No. 06055C0617F, dated August 3rd, 2016 and is located in Flood Zone 'X'. These areas are determined to be minimal flood hazard.

Vicinity Map

Existing Conditions

The existing Site consists of three Buildings, two of which are vacant and the third is a furniture repair store. A small portion of the Site is covered with Asphalt and the majority of the site is covered with native soil. The Site topography slopes from East to West with an approximate elevation difference of approximately 7 feet.

The existing Site's Run-Off currently drains to the Southwest corner of the site which drains to an existing Ditch on the Southern Property. The Ditch continues through Canyon Plaza Shopping Center's Westerly Property Line and drains into the existing Storm Drain Inlet which is connected to the Storm System on James Road.

Proposed Conditions

The new Project consists of the construction of a 58,643 SF, 3-story Hotel with an associated Parking Lot, Landscaping. As requested by the City and County, we will construction Bio-Retention Areas that will be used for treatment of the Run-off from the Impervious Areas, such as Roof and Pavement. Please see Exhibit 'B', the Horizontal Control Plan.

A new Storm System will be constructed as part of this Project. This will also require the construction of a new Storm System through the Northwest property and constructing a 12" Storm Drain Pipe on Donaldson Way. This Pipe will be connected to the existing City's Storm Drain System located at the intersection of Donaldson Way and James Road. Please see Exhibit 'C', the Utility Plan.

Proposed Storm Drain System

The Site has been divided into five contributing areas. Please reference Exhibit 'A' – Hydrology Map and below:

Area 'A'

This area totals 1.06 ± Acres and drains half of the Hotel's roof, Parking Lot and Landscaping. This area will discharge into the Bio-Retention Basin located on the North side of the Project Site.

Area 'B'

This area totals 0.49 ± Acres and drains a portion of the Hotel Roof, Parking Lot and Landscaping. This area will discharge into the Bio-Retention Basin located on the Southwest side of the Project Site.

Area 'C'

This area totals 0.55 ± Acres and drains a portion of the Hotel's roof, Parking Lot and Landscaping. This area will discharge into the Bio-Retention Basin located on the Southwest side of the Project Site.

Area 'D'

This area totals 0.13 ± Acres and drains half of the Entry Canopy, Sidewalk, Parking Lot and Landscaping. This area will discharge into the Bio-Retention Basin located on the East side of the Project Site.

Area 'E'

This area totals 0.29 ± Acres and drains half of the Entry Canopy, Sidewalk, Parking Lot and Landscaping. This area will discharge into the Bio-Retention Basin located on the Northeast corner of the Project Site.

The Five Bio-Retention Facilities are sized to detain Run-off and reduce the peak flow rate from the developed Site. These Basins will connect the On-Site Storm System to the existing Storm System located on Donaldson Way and James Road. Please refer to Exhibit 'C', the Utility Plan.

Hydromodification

Based on the City's Code Requirements, the Post-Developed Storm Water Flows must be limited to 90% of Pre-Developed Flows.

Modeling

The two primary methods are used in the Napa County to determine design discharges, these are the Rational Method and the Unit Hydrograph Method. For the purpose of this Report, we will be using the Unit Hydrograph Method for the 10 and 100-Year, 24-Hour Storm Events.

Unit Hydrograph Method

The Unit Hydrograph Method is used to determine peak discharge from small and large drainage areas. Factors that are considered in calculating runoff using the Unit Hydrograph method are:

CN = runoff coefficient, based on land cover (no units)
NOAA Point Rainfall = See appendix for rainfall data
Runoff Method = SCS TR-20 method for runoff
Storm Type = Type II 24-hr
Tc minimum = 10 minutes

Runoff Calculations

Using HydroCAD software, the existing and proposed Runoff for the Project was calculated for the 10-Year and 100-Year, 24-hr Storm Events. A model was created based on the Drainage Areas and the Post-Developed Runoff was limited to 90% of the Pre-Developed rate. The Runoff Calculations are shown in the Appendix.

Conclusion

The results of the Peak Runoff Rates for the 100-Year Storm Event are:

	Outlet (cfs)
Existing Conditions	7.88
Proposed Conditions	3.94
Difference	-3.94 (-50%)

Since Post-Developed Subarea Runoff Flow Rates are reduced due to five Onsite Bioretention Basins, totaling approximately 7,744 cubic feet in volume, no additional mitigation is required.

II. PRECIPITATION FREQUENCY

NOAA Atlas 14, Volume 6, Version 2
Location name: American Canyon, California, USA*
Latitude: 38.1612°, Longitude: -122.2743°
Elevation: 7.19 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.115** (0.103-0.131)	**0.144** (0.128-0.164)	**0.183** (0.163-0.209)	**0.217** (0.190-0.249)	**0.264** (0.223-0.316)	**0.302** (0.249-0.370)	**0.342** (0.274-0.431)	**0.384** (0.298-0.500)	**0.444** (0.329-0.607)	**0.493** (0.351-0.701)
10-min	**0.165** (0.147-0.187)	**0.206** (0.184-0.234)	**0.263** (0.233-0.299)	**0.311** (0.273-0.357)	**0.378** (0.319-0.452)	**0.432** (0.356-0.530)	**0.490** (0.392-0.617)	**0.551** (0.427-0.717)	**0.637** (0.471-0.871)	**0.707** (0.502-1.00)
15-min	**0.200** (0.178-0.226)	**0.250** (0.222-0.283)	**0.318** (0.282-0.362)	**0.376** (0.330-0.432)	**0.457** (0.386-0.547)	**0.523** (0.431-0.641)	**0.592** (0.474-0.747)	**0.666** (0.516-0.867)	**0.770** (0.570-1.05)	**0.855** (0.608-1.22)
30-min	**0.277** (0.247-0.314)	**0.347** (0.308-0.394)	**0.441** (0.391-0.503)	**0.521** (0.458-0.600)	**0.635** (0.536-0.759)	**0.726** (0.598-0.890)	**0.822** (0.658-1.04)	**0.924** (0.717-1.20)	**1.07** (0.791-1.46)	**1.19** (0.844-1.69)
60-min	**0.394** (0.351-0.446)	**0.492** (0.438-0.559)	**0.627** (0.556-0.714)	**0.740** (0.650-0.852)	**0.902** (0.761-1.08)	**1.03** (0.850-1.26)	**1.17** (0.935-1.47)	**1.31** (1.02-1.71)	**1.52** (1.12-2.08)	**1.69** (1.20-2.40)
2-hr	**0.583** (0.519-0.661)	**0.725** (0.645-0.823)	**0.916** (0.813-1.04)	**1.08** (0.945-1.24)	**1.30** (1.10-1.56)	**1.48** (1.22-1.81)	**1.66** (1.33-2.09)	**1.86** (1.44-2.42)	**2.13** (1.57-2.90)	**2.34** (1.66-3.33)
3-hr	**0.736** (0.656-0.834)	**0.915** (0.814-1.04)	**1.16** (1.02-1.32)	**1.36** (1.19-1.56)	**1.63** (1.38-1.95)	**1.85** (1.53-2.27)	**2.08** (1.66-2.62)	**2.31** (1.80-3.01)	**2.64** (1.95-3.61)	**2.90** (2.06-4.13)
6-hr	**1.06** (0.943-1.20)	**1.32** (1.18-1.50)	**1.67** (1.48-1.91)	**1.96** (1.72-2.26)	**2.36** (1.99-2.82)	**2.67** (2.20-3.27)	**2.99** (2.40-3.77)	**3.32** (2.58-4.33)	**3.78** (2.80-5.17)	**4.14** (2.94-5.89)
12-hr	**1.41** (1.25-1.60)	**1.79** (1.59-2.03)	**2.29** (2.03-2.60)	**2.70** (2.37-3.10)	**3.26** (2.76-3.90)	**3.70** (3.05-4.54)	**4.15** (3.33-5.24)	**4.62** (3.58-6.02)	**5.26** (3.89-7.19)	**5.77** (4.10-8.20)
24-hr	**1.89** (1.70-2.14)	**2.44** (2.19-2.77)	**3.17** (2.84-3.60)	**3.76** (3.35-4.30)	**4.57** (3.96-5.38)	**5.20** (4.43-6.23)	**5.84** (4.88-7.14)	**6.51** (5.31-8.15)	**7.43** (5.85-9.63)	**8.15** (6.23-10.9)
2-day	**2.39** (2.15-2.71)	**3.09** (2.78-3.51)	**4.01** (3.60-4.56)	**4.76** (4.25-5.46)	**5.79** (5.02-6.81)	**6.58** (5.61-7.88)	**7.38** (6.16-9.02)	**8.21** (6.70-10.3)	**9.35** (7.36-12.1)	**10.2** (7.83-13.6)
3-day	**2.76** (2.49-3.13)	**3.58** (3.22-4.06)	**4.64** (4.17-5.28)	**5.51** (4.91-6.30)	**6.68** (5.79-7.86)	**7.57** (6.45-9.07)	**8.48** (7.08-10.4)	**9.42** (7.69-11.8)	**10.7** (8.42-13.9)	**11.7** (8.94-15.6)
4-day	**3.07** (2.76-3.48)	**3.98** (3.58-4.51)	**5.16** (4.63-5.87)	**6.12** (5.45-7.00)	**7.40** (6.42-8.71)	**8.38** (7.14-10.0)	**9.37** (7.82-11.5)	**10.4** (8.47-13.0)	**11.7** (9.25-15.2)	**12.8** (9.79-17.1)
7-day	**3.80** (3.42-4.30)	**4.96** (4.46-5.63)	**6.45** (5.78-7.33)	**7.62** (6.79-8.73)	**9.18** (7.96-10.8)	**10.3** (8.81-12.4)	**11.5** (9.60-14.1)	**12.7** (10.3-15.8)	**14.2** (11.2-18.4)	**15.4** (11.8-20.5)
10-day	**4.29** (3.86-4.86)	**5.63** (5.06-6.38)	**7.31** (6.56-8.31)	**8.63** (7.70-9.88)	**10.4** (8.98-12.2)	**11.6** (9.91-13.9)	**12.9** (10.8-15.8)	**14.1** (11.5-17.7)	**15.8** (12.4-20.4)	**17.0** (13.0-22.7)
20-day	**5.56** (5.01-6.30)	**7.32** (6.58-8.31)	**9.49** (8.51-10.8)	**11.2** (9.95-12.8)	**13.3** (11.5-15.6)	**14.8** (12.6-17.8)	**16.3** (13.6-20.0)	**17.8** (14.5-22.3)	**19.7** (15.5-25.5)	**21.0** (16.1-28.0)
30-day	**6.70** (6.03-7.60)	**8.79** (7.90-9.97)	**11.3** (10.2-12.9)	**13.3** (11.8-15.2)	**15.7** (13.6-18.5)	**17.5** (14.9-20.9)	**19.2** (16.0-23.4)	**20.8** (17.0-26.0)	**22.8** (18.0-29.6)	**24.3** (18.6-32.4)
45-day	**8.24** (7.41-9.34)	**10.7** (9.62-12.1)	**13.7** (12.3-15.5)	**15.9** (14.2-18.2)	**18.7** (16.2-22.0)	**20.7** (17.7-24.8)	**22.6** (18.9-27.6)	**24.4** (19.9-30.6)	**26.7** (21.0-34.6)	**28.3** (21.6-37.7)
60-day	**9.87** (8.89-11.2)	**12.7** (11.4-14.4)	**16.0** (14.4-18.2)	**18.6** (16.5-21.3)	**21.7** (18.8-25.5)	**23.9** (20.4-28.7)	**26.0** (21.7-31.8)	**28.0** (22.8-35.0)	**30.5** (24.0-39.5)	**32.2** (24.6-43.0)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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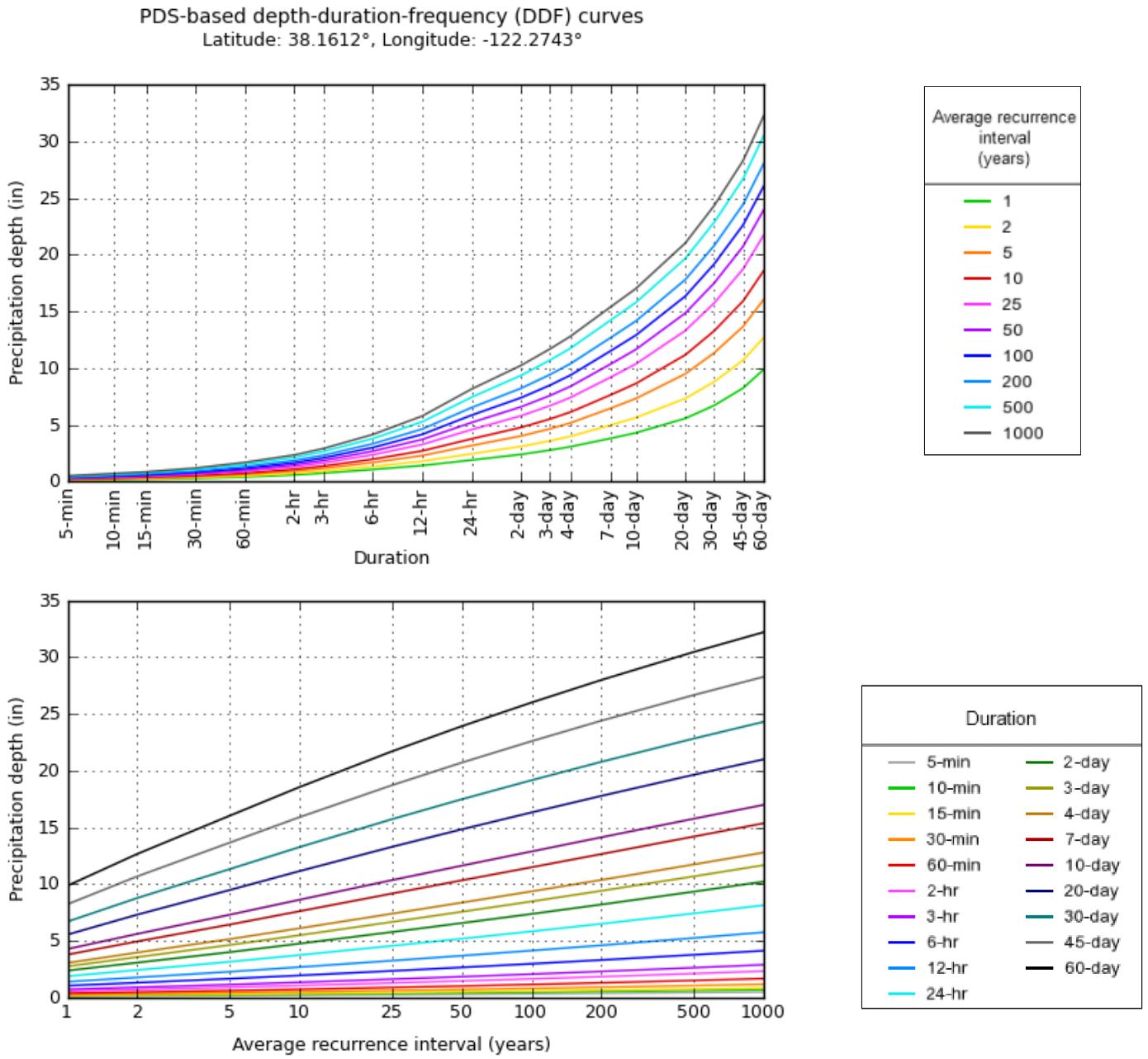
PF graphical



NOAA Atlas 14, Volume 6, Version 2

Created (GMT): Wed May 20 16:56:26 2020

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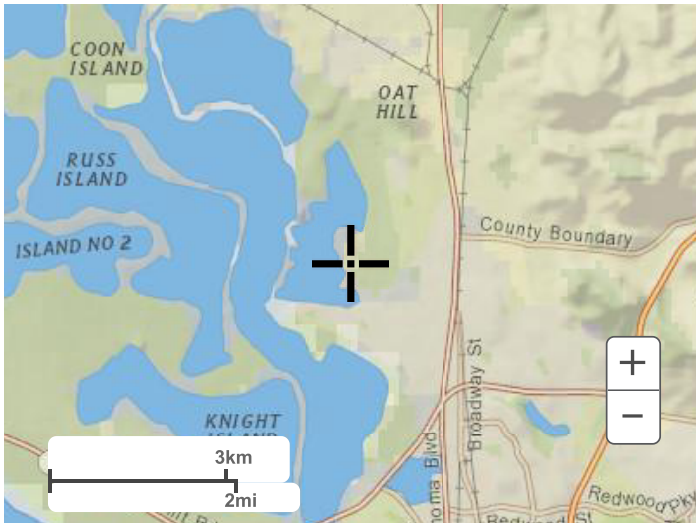
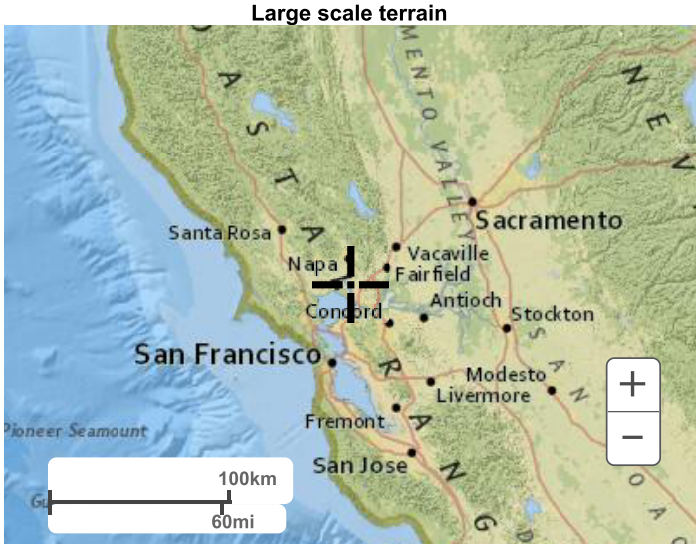
Maps & aerials

Small scale terrain



Large scale terrain



Large scale map

Large scale aerial

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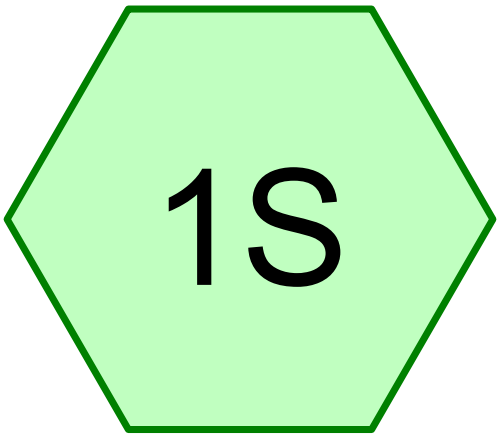
US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

III. CALCULATIONS



PRE-DEVELOPMENT

Subcat Reach Pond Link

Routing Diagram for 2498 Existing
Prepared by ams associates, inc, Printed 3/11/2021
HydroCAD® 10.10-5a s/n 11794 © 2020 HydroCAD Software Solutions LLC

Project Notes

Copied 6 events from CA-AC 24-hr S1 storm

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	10-Year	CA-AC 24-hr S1	10-Year	Default	24.00	1	4.32	2
2	100-Year	CA-AC 24-hr S1	100-Year	Default	24.00	1	7.20	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.620	84	50-75% Grass cover, Fair, HSG D (1S)
0.900	98	Paved parking, HSG D (1S)
2.520	**89**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
2.520	HSG D	1S
0.000	Other	
2.520		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	1.620	0.000	1.620	50-75% Grass cover, Fair	1S
0.000	0.000	0.000	0.900	0.000	0.900	Paved parking	1S
0.000	**0.000**	**0.000**	**2.520**	**0.000**	**2.520**	**TOTAL AREA**	

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: PRE-DEVELOPMENT Runoff Area=2.520 ac 35.71% Impervious Runoff Depth=3.12"
Flow Length=577' Slope=0.0130 '/' Tc=12.0 min CN=89 Runoff=3.90 cfs 0.656 af

Total Runoff Area = 2.520 ac Runoff Volume = 0.656 af Average Runoff Depth = 3.12"
64.29% Pervious = 1.620 ac 35.71% Impervious = 0.900 ac

Summary for Subcatchment 1S: PRE-DEVELOPMENT

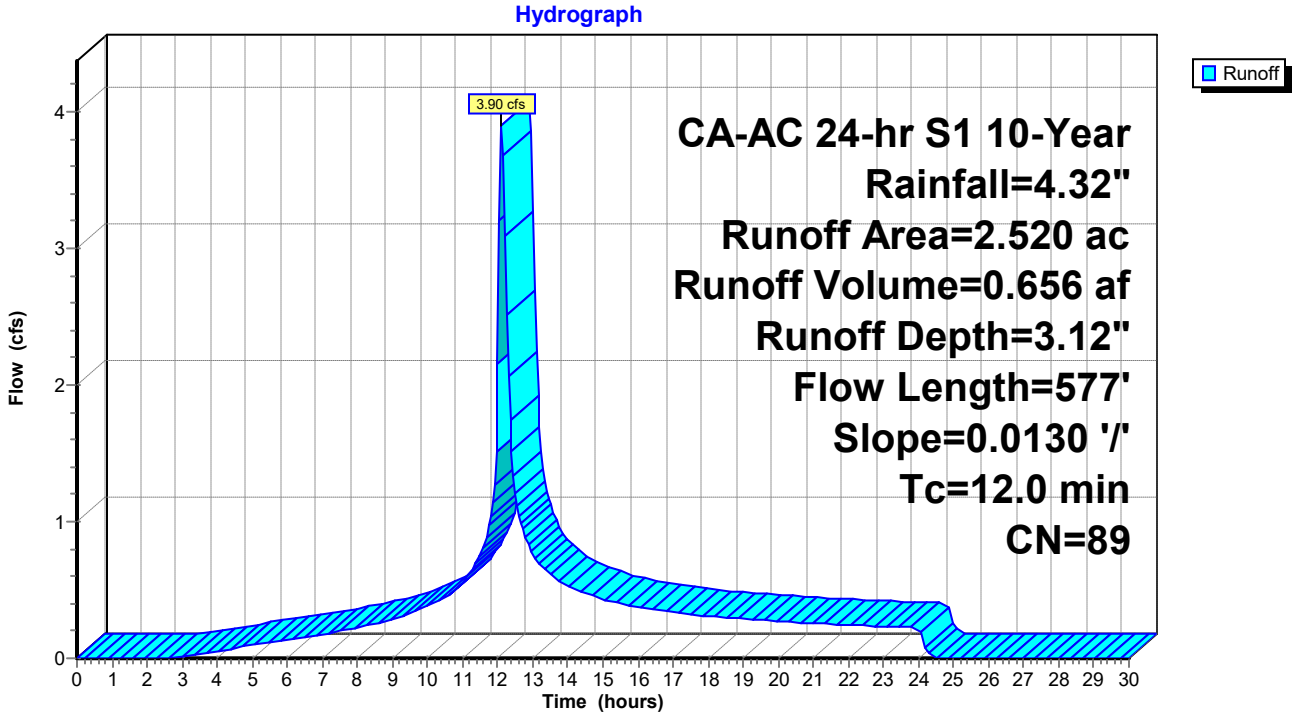
Runoff = 3.90 cfs @ 12.11 hrs, Volume= 0.656 af, Depth= 3.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
CA-AC 24-hr S1 10-Year Rainfall=4.32"

Area (ac)	CN	Description
0.900	98	Paved parking, HSG D
1.620	84	50-75% Grass cover, Fair, HSG D
2.520	89	Weighted Average
1.620		64.29% Pervious Area
0.900		35.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	577	0.0130	0.80		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps

Subcatchment 1S: PRE-DEVELOPMENT



Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: PRE-DEVELOPMENT Runoff Area=2.520 ac 35.71% Impervious Runoff Depth=5.90"
Flow Length=577' Slope=0.0130 '/' Tc=12.0 min CN=89 Runoff=7.41 cfs 1.240 af

Total Runoff Area = 2.520 ac Runoff Volume = 1.240 af Average Runoff Depth = 5.90"
64.29% Pervious = 1.620 ac 35.71% Impervious = 0.900 ac

Summary for Subcatchment 1S: PRE-DEVELOPMENT

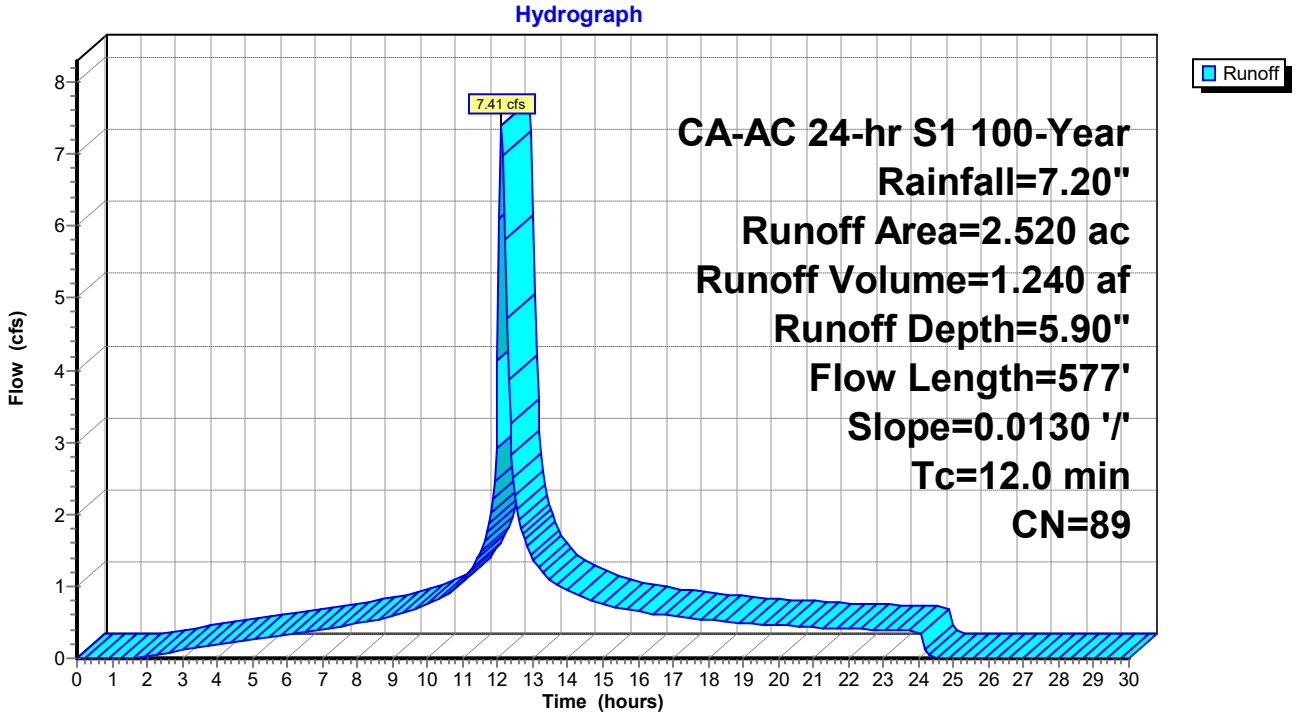
Runoff = 7.41 cfs @ 12.11 hrs, Volume= 1.240 af, Depth= 5.90"

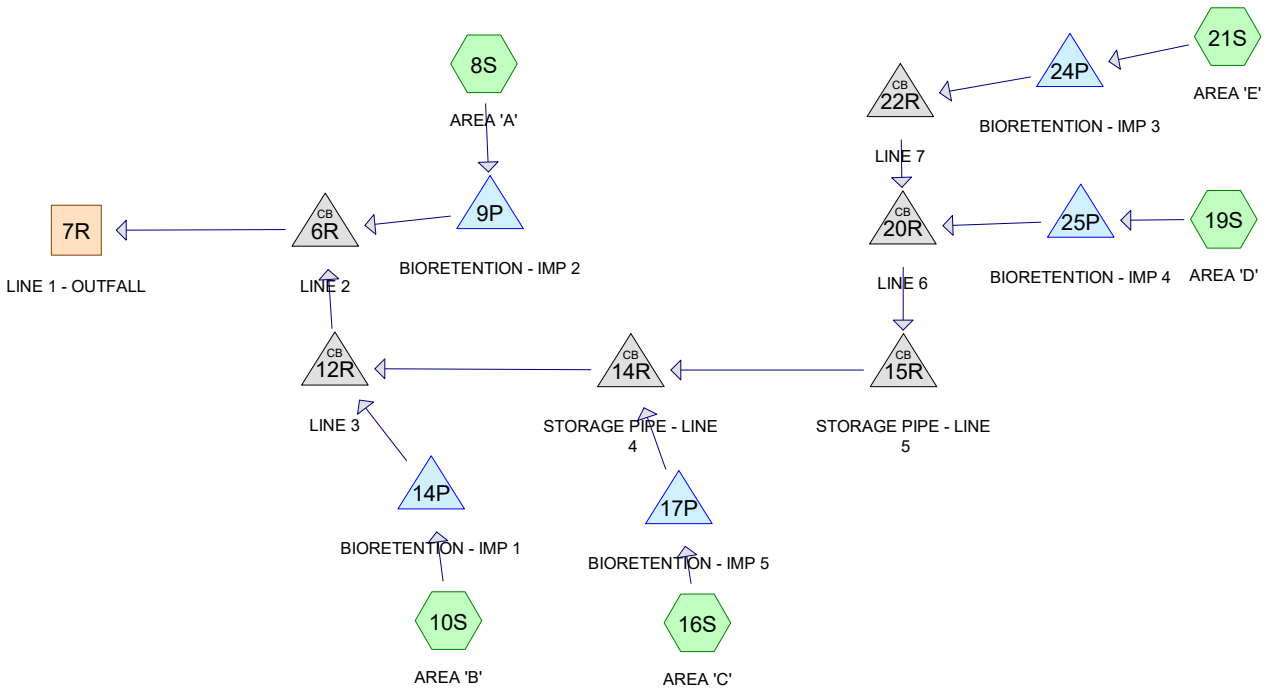
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
CA-AC 24-hr S1 100-Year Rainfall=7.20"

Area (ac)	CN	Description
0.900	98	Paved parking, HSG D
1.620	84	50-75% Grass cover, Fair, HSG D
2.520	89	Weighted Average
1.620		64.29% Pervious Area
0.900		35.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	577	0.0130	0.80		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps

Subcatchment 1S: PRE-DEVELOPMENT





Subcat Reach Pond Link

Routing Diagram for 2498 Proposed
Prepared by ams associates, inc, Printed 3/11/2021
HydroCAD® 10.10-5a s/n 11794 © 2020 HydroCAD Software Solutions LLC

Project Notes

Copied 6 events from CA-AC 24-hr S1 storm

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	10-Year	CA-AC 24-hr S1	10-Year	Default	24.00	1	4.32	2
2	100-Year	CA-AC 24-hr S1	100-Year	Default	24.00	1	7.20	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
20,441	80	>75% Grass cover, Good, HSG D (8S, 10S, 16S, 19S, 21S)
65,215	98	Paved parking, HSG D (8S, 10S, 16S, 19S, 21S)
19,680	98	Roofs, HSG D (8S, 10S, 16S)
105,336	**95**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
0	HSG C	
105,336	HSG D	8S, 10S, 16S, 19S, 21S
0	Other	
105,336		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
0	0	0	20,441	0	20,441	>75% Grass cover, Good	
0	0	0	65,215	0	65,215	Paved parking	
0	0	0	19,680	0	19,680	Roofs	
0	**0**	**0**	**105,336**	**0**	**105,336**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)
1	7R	50.79	49.63	231.0	0.0050	0.010	0.0	18.0	0.0
2	6R	51.28	50.79	97.0	0.0051	0.013	0.0	18.0	0.0
3	9P	54.24	52.28	24.0	0.0817	0.013	0.0	12.0	0.0
4	12R	52.10	51.28	163.0	0.0050	0.013	0.0	24.0	0.0
5	14P	54.30	53.10	28.0	0.0429	0.013	0.0	12.0	0.0
6	14R	53.23	52.10	225.0	0.0050	0.013	0.0	24.0	0.0
7	15R	54.50	53.23	254.0	0.0050	0.013	0.0	24.0	0.0
8	17P	55.20	54.23	28.0	0.0346	0.013	0.0	12.0	0.0
9	20R	54.85	54.66	38.0	0.0050	0.013	0.0	24.0	0.0
10	22R	55.00	54.85	30.0	0.0050	0.013	0.0	24.0	0.0
11	24P	55.40	55.00	20.0	0.0200	0.013	0.0	12.0	0.0
12	25P	54.95	54.85	20.0	0.0050	0.013	0.0	12.0	0.0

Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 8S: AREA 'A' Runoff Area=1.015 ac 82.66% Impervious Runoff Depth=3.75"
Tc=10.0 min CN=95 Runoff=1.93 cfs 13,805 cf

Subcatchment 10S: AREA 'B' Runoff Area=0.439 ac 78.59% Impervious Runoff Depth=3.64"
Tc=10.0 min CN=94 Runoff=0.82 cfs 5,798 cf

Subcatchment 16S: AREA 'C' Runoff Area=24,328 sf 87.16% Impervious Runoff Depth=3.86"
Tc=10.0 min CN=96 Runoff=1.08 cfs 7,820 cf

Subcatchment 19S: AREA 'D' Runoff Area=4,949 sf 70.05% Impervious Runoff Depth=3.53"
Tc=10.0 min CN=93 Runoff=0.21 cfs 1,457 cf

Subcatchment 21S: AREA 'E' Runoff Area=12,723 sf 67.97% Impervious Runoff Depth=3.43"
Tc=10.0 min CN=92 Runoff=0.53 cfs 3,634 cf

Reach 7R: LINE 1 - OUTFALL Avg. Flow Depth=0.53' Max Vel=4.64 fps Inflow=2.60 cfs 21,023 cf
18.0" Round Pipe n=0.010 L=231.0' S=0.0050 '/' Capacity=9.68 cfs Outflow=2.60 cfs 21,023 cf

Pond 6R: LINE 2 Peak Elev=52.14' Inflow=2.60 cfs 21,023 cf
18.0" Round Culvert n=0.013 L=97.0' S=0.0051 '/' Outflow=2.60 cfs 21,023 cf

Pond 9P: BIORETENTION - IMP 2 Peak Elev=56.56' Storage=1,952 cf Inflow=1.93 cfs 13,805 cf
Discarded=0.04 cfs 3,000 cf Primary=0.98 cfs 10,486 cf Outflow=1.02 cfs 13,486 cf

Pond 12R: LINE 3 Peak Elev=52.77' Inflow=1.66 cfs 10,537 cf
24.0" Round Culvert n=0.013 L=163.0' S=0.0050 '/' Outflow=1.66 cfs 10,537 cf

Pond 14P: BIORETENTION - IMP 1 Peak Elev=55.31' Storage=1,274 cf Inflow=0.82 cfs 5,798 cf
Discarded=0.03 cfs 2,836 cf Primary=0.48 cfs 2,691 cf Outflow=0.52 cfs 5,527 cf

Pond 14R: STORAGE PIPE - LINE 4 Peak Elev=53.76' Inflow=1.19 cfs 7,846 cf
24.0" Round Culvert n=0.013 L=225.0' S=0.0050 '/' Outflow=1.19 cfs 7,846 cf

Pond 15R: STORAGE PIPE - LINE 5 Peak Elev=54.88' Inflow=0.64 cfs 3,680 cf
24.0" Round Culvert n=0.013 L=254.0' S=0.0050 '/' Outflow=0.64 cfs 3,680 cf

Pond 17P: BIORETENTION - IMP 5 Peak Elev=56.34' Storage=1,611 cf Inflow=1.08 cfs 7,820 cf
Discarded=0.04 cfs 3,303 cf Primary=0.59 cfs 4,166 cf Outflow=0.63 cfs 7,469 cf

Pond 20R: LINE 6 Peak Elev=55.23' Inflow=0.64 cfs 3,680 cf
24.0" Round Culvert n=0.013 L=38.0' S=0.0050 '/' Outflow=0.64 cfs 3,680 cf

Pond 22R: LINE 7 Peak Elev=55.37' Inflow=0.45 cfs 2,466 cf
24.0" Round Culvert n=0.013 L=30.0' S=0.0050 '/' Outflow=0.45 cfs 2,466 cf

Pond 24P: BIORETENTION - IMP 3 Peak Elev=56.17' Storage=507 cf Inflow=0.53 cfs 3,634 cf
Discarded=0.01 cfs 990 cf Primary=0.45 cfs 2,466 cf Outflow=0.46 cfs 3,457 cf

Pond 25P: BIORETENTION - IMP 4 Peak Elev=55.78' Storage=83 cf Inflow=0.21 cfs 1,457 cf
Discarded=0.00 cfs 222 cf Primary=0.20 cfs 1,214 cf Outflow=0.21 cfs 1,435 cf

Total Runoff Area = 105,336 sf Runoff Volume = 32,514 cf Average Runoff Depth = 3.70"
19.41% Pervious = 20,441 sf 80.59% Impervious = 84,895 sf

Summary for Subcatchment 8S: AREA 'A'

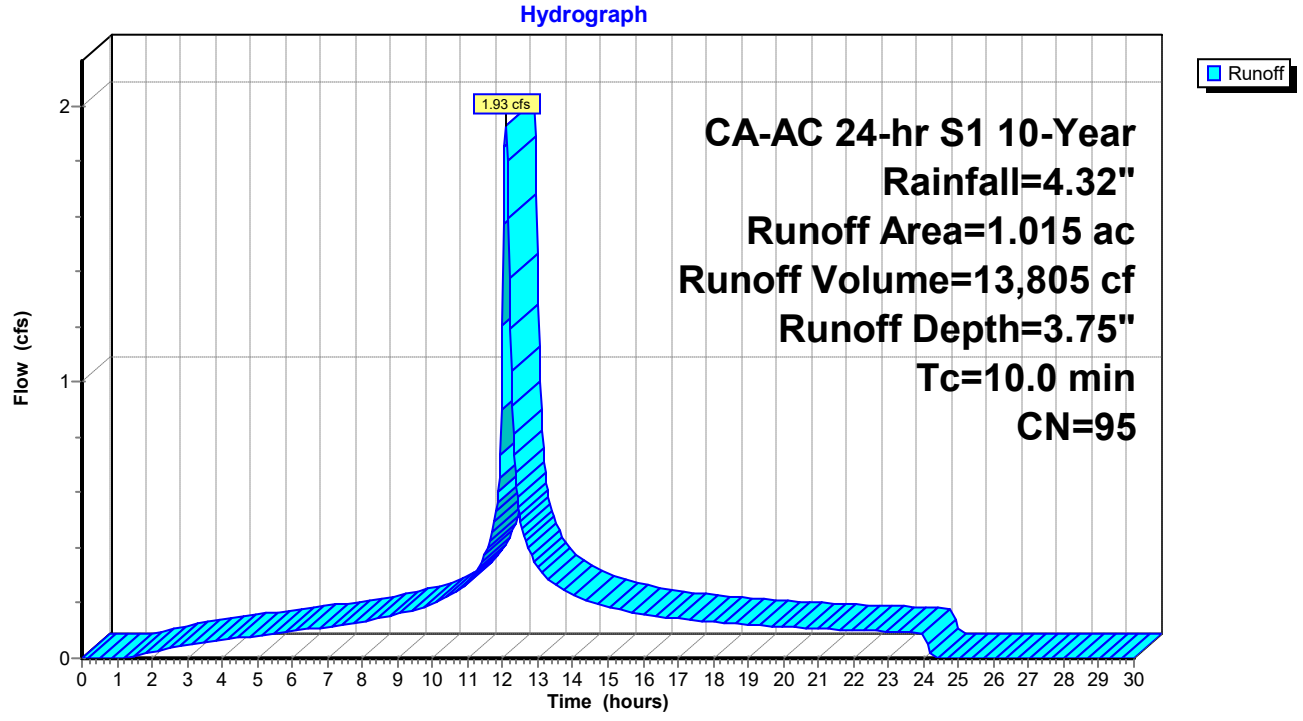
Runoff = 1.93 cfs @ 12.09 hrs, Volume= 13,805 cf, Depth= 3.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 10-Year Rainfall=4.32"

Area (ac)	CN	Description
0.176	80	>75% Grass cover, Good, HSG D
0.617	98	Paved parking, HSG D
0.222	98	Roofs, HSG D
1.015	95	Weighted Average
0.176		17.34% Pervious Area
0.839		82.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8S: AREA 'A'



Summary for Subcatchment 10S: AREA 'B'

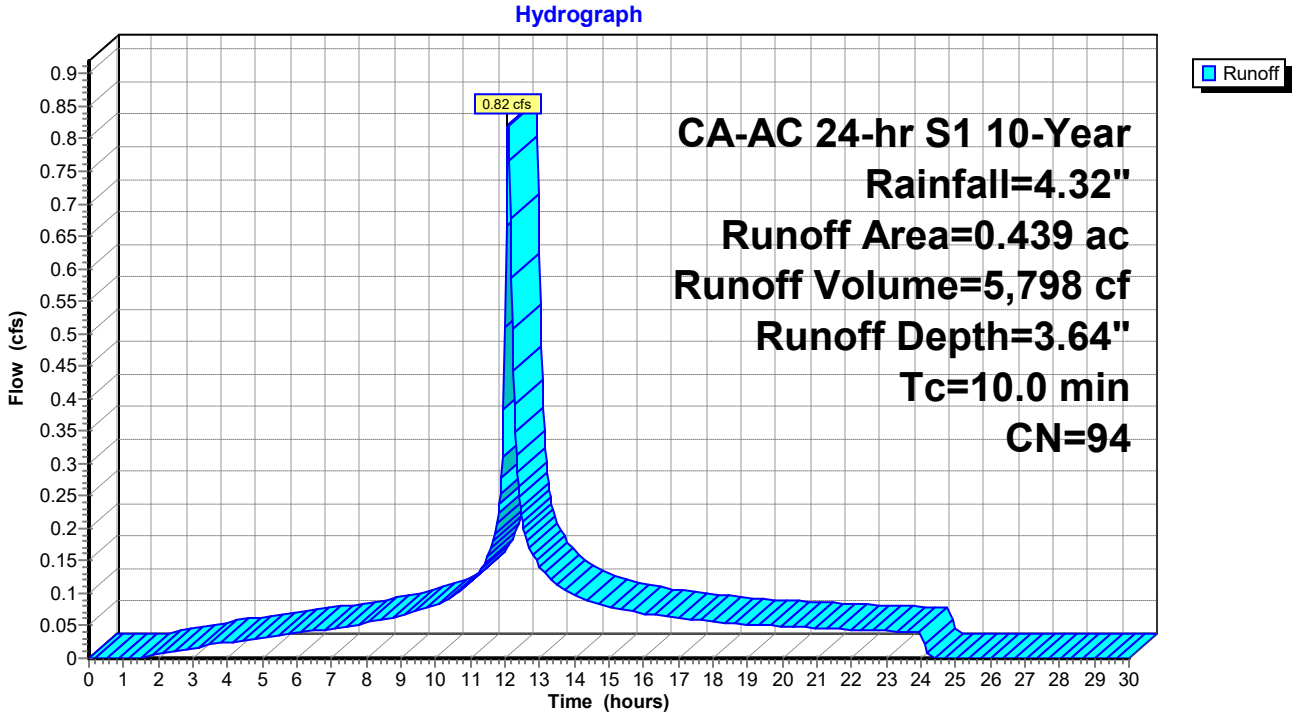
Runoff = 0.82 cfs @ 12.09 hrs, Volume= 5,798 cf, Depth= 3.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 10-Year Rainfall=4.32"

Area (ac)	CN	Description
0.094	80	>75% Grass cover, Good, HSG D
0.248	98	Paved parking, HSG D
0.097	98	Roofs, HSG D
0.439	94	Weighted Average
0.094		21.41% Pervious Area
0.345		78.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10S: AREA 'B'



Summary for Subcatchment 16S: AREA 'C'

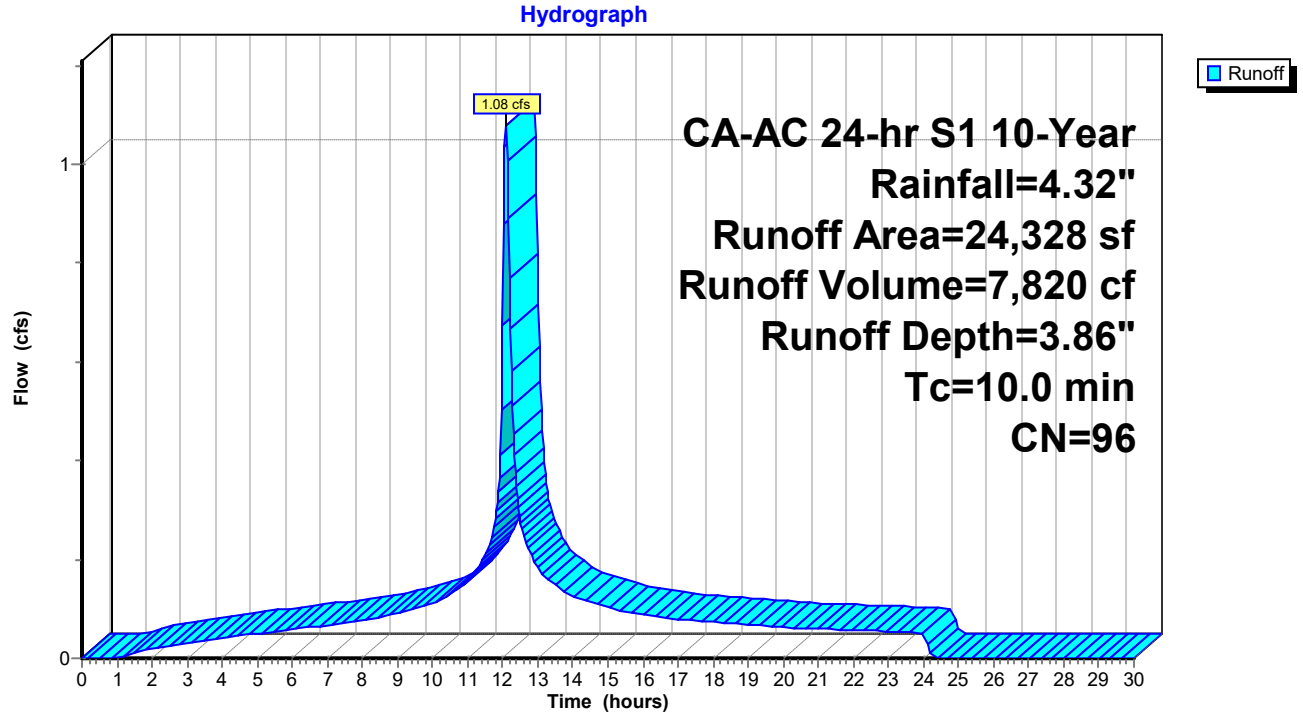
Runoff = 1.08 cfs @ 12.09 hrs, Volume= 7,820 cf, Depth= 3.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 10-Year Rainfall=4.32"

Area (sf)	CN	Description
3,123	80	>75% Grass cover, Good, HSG D
15,421	98	Paved parking, HSG D
5,784	98	Roofs, HSG D
24,328	96	Weighted Average
3,123		12.84% Pervious Area
21,205		87.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16S: AREA 'C'



Summary for Subcatchment 19S: AREA 'D'

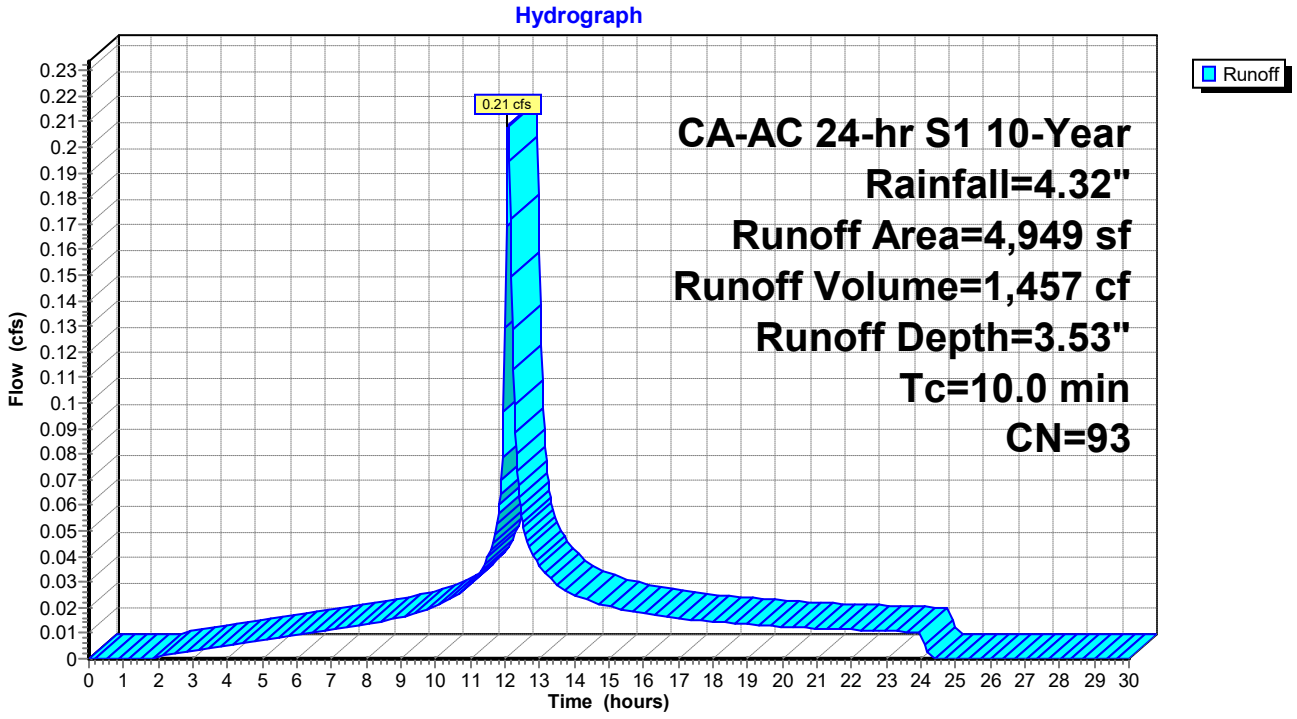
Runoff = 0.21 cfs @ 12.09 hrs, Volume= 1,457 cf, Depth= 3.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 10-Year Rainfall=4.32"

Area (sf)	CN	Description
1,482	80	>75% Grass cover, Good, HSG D
3,467	98	Paved parking, HSG D
4,949	93	Weighted Average
1,482		29.95% Pervious Area
3,467		70.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19S: AREA 'D'



Summary for Subcatchment 21S: AREA 'E'

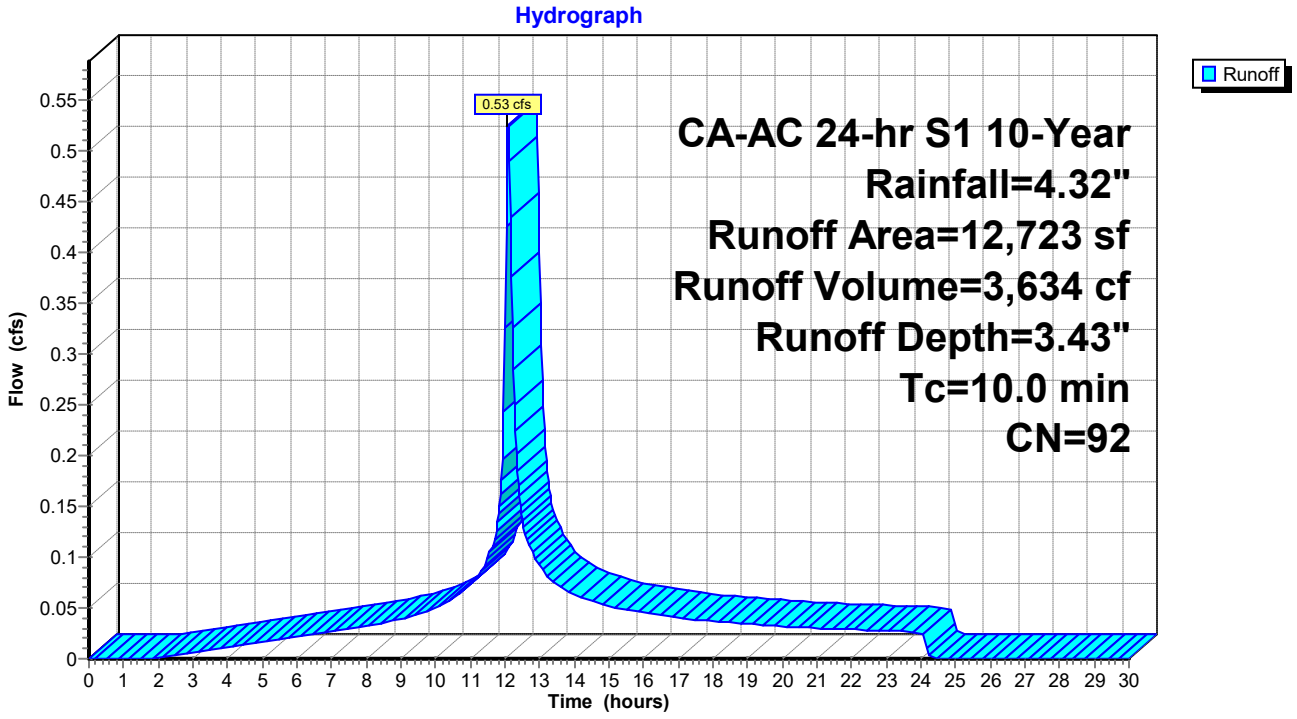
Runoff = 0.53 cfs @ 12.09 hrs, Volume= 3,634 cf, Depth= 3.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 10-Year Rainfall=4.32"

Area (sf)	CN	Description
4,075	80	>75% Grass cover, Good, HSG D
8,648	98	Paved parking, HSG D
12,723	92	Weighted Average
4,075		32.03% Pervious Area
8,648		67.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21S: AREA 'E'



Summary for Reach 7R: LINE 1 - OUTFALL

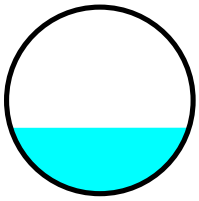
[52] Hint: Inlet/Outlet conditions not evaluated

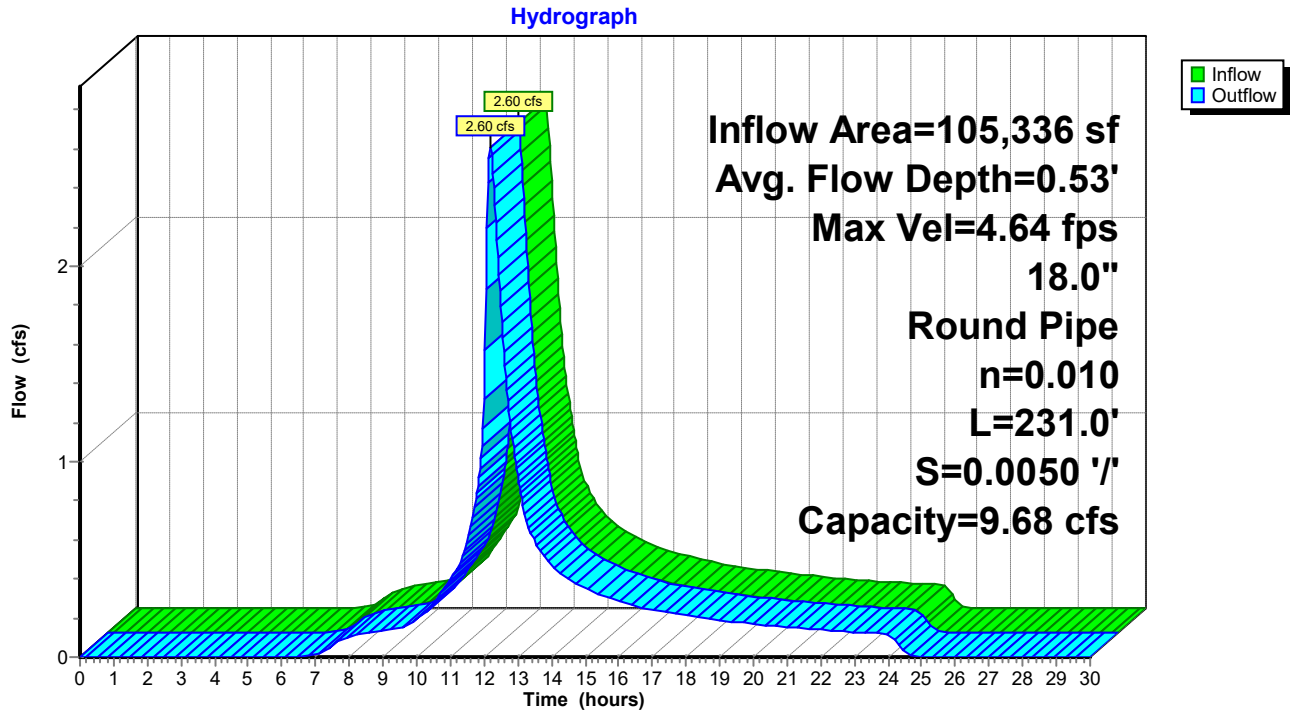
Inflow Area = 105,336 sf, 80.59% Impervious, Inflow Depth = 2.39" for 10-Year event
Inflow = 2.60 cfs @ 12.18 hrs, Volume= 21,023 cf
Outflow = 2.60 cfs @ 12.19 hrs, Volume= 21,023 cf, Atten= 0%, Lag= 0.6 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Max. Velocity= 4.64 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 2.23 fps, Avg. Travel Time= 1.7 min

Peak Storage= 129 cf @ 12.19 hrs
Average Depth at Peak Storage= 0.53' , Surface Width= 1.43'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 9.68 cfs

18.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 231.0' Slope= 0.0050 '/'
Inlet Invert= 50.79', Outlet Invert= 49.63'





Summary for Pond 6R: LINE 2

[57] Hint: Peaked at 52.14' (Flood elevation advised)

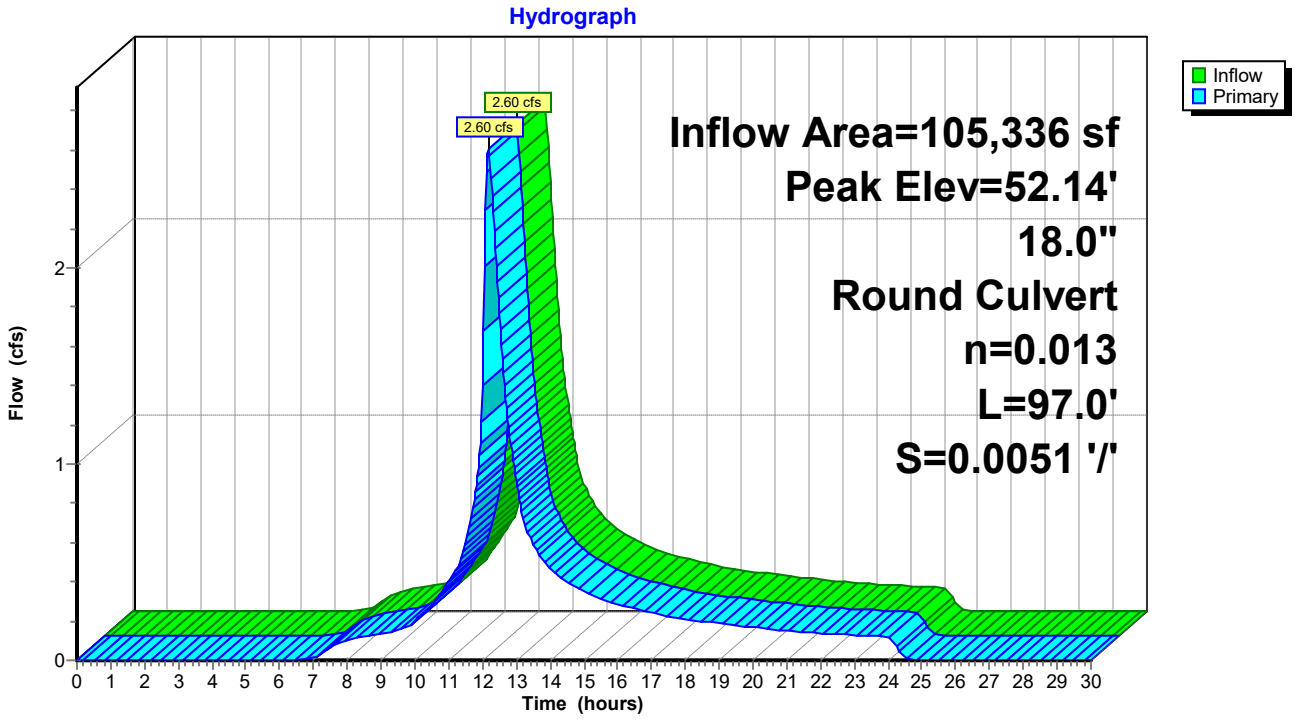
Inflow Area = 105,336 sf, 80.59% Impervious, Inflow Depth = 2.39" for 10-Year event
Inflow = 2.60 cfs @ 12.18 hrs, Volume= 21,023 cf
Outflow = 2.60 cfs @ 12.18 hrs, Volume= 21,023 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.60 cfs @ 12.18 hrs, Volume= 21,023 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 52.14' @ 12.18 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.28'	**18.0" Round Culvert** L= 97.0' Ke= 0.500 Inlet / Outlet Invert= 51.28' / 50.79' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.60 cfs @ 12.18 hrs HW=52.14' TW=51.32' (Dynamic Tailwater)
1=Culvert (Barrel Controls 2.60 cfs @ 3.58 fps)

Pond 6R: LINE 2



Summary for Pond 9P: BIORETENTION - IMP 2

Inflow Area = 44,213 sf, 82.66% Impervious, Inflow Depth = 3.75" for 10-Year event
Inflow = 1.93 cfs @ 12.09 hrs, Volume= 13,805 cf
Outflow = 1.02 cfs @ 12.25 hrs, Volume= 13,486 cf, Atten= 47%, Lag= 9.7 min
Discarded = 0.04 cfs @ 12.25 hrs, Volume= 3,000 cf
Primary = 0.98 cfs @ 12.25 hrs, Volume= 10,486 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 56.56' @ 12.25 hrs Surf.Area= 2,063 sf Storage= 1,952 cf
Flood Elev= 57.24' Surf.Area= 2,063 sf Storage= 3,131 cf

Plug-Flow detention time= 93.6 min calculated for 13,486 cf (98% of inflow)
Center-of-Mass det. time= 78.6 min (869.3 - 790.6)

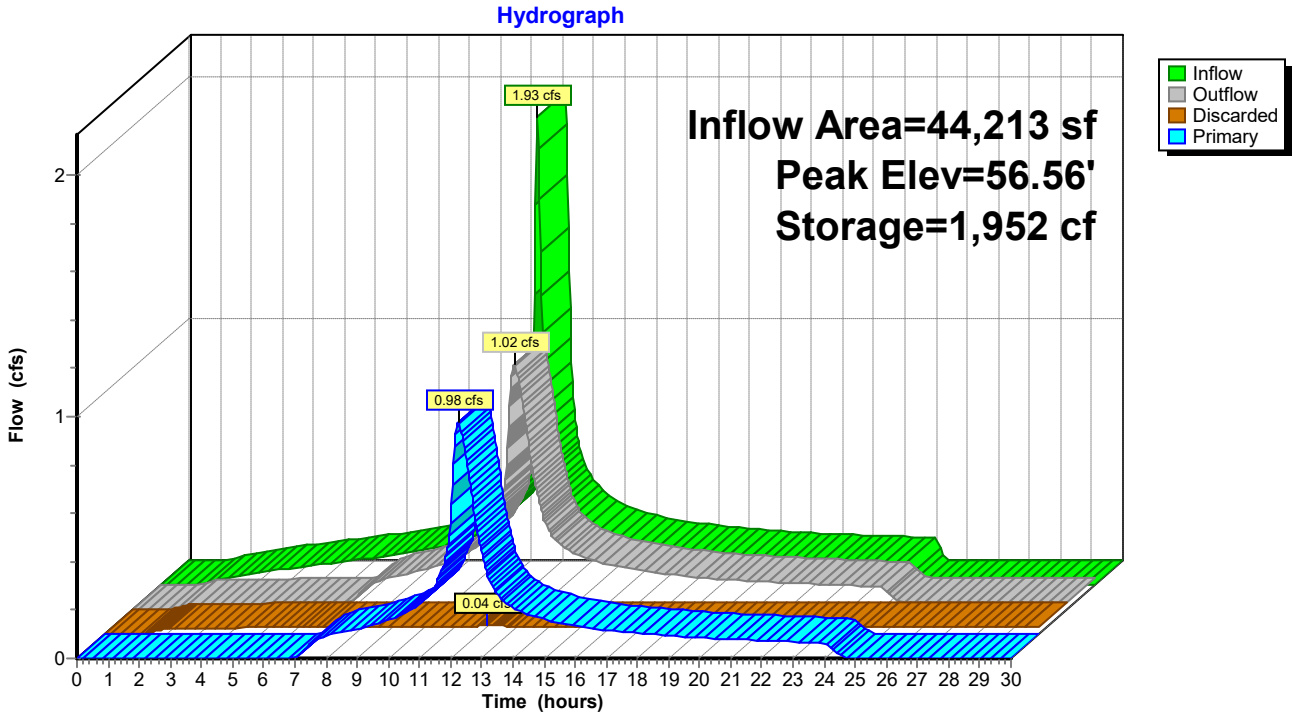
Volume	Invert	Avail.Storage	Storage Description
#1	56.74'	1,567 cf	**7.50'W x 275.00'L x 0.76'H Ponding** -Impervious
#2	55.24'	62 cf	**Perf @ 257.00' L** Inside #3 Inside= 6.0"W x 6.0"H => 0.24 sf x 257.00'L = 62.3 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 257.00'L = 62.3 cf
#3	54.24'	2,038 cf	**7.50'W x 275.00'L x 2.50'H Soil + Gravel** 5,156 cf Overall - 62 cf Embedded = 5,094 cf x 40.0% Voids
		3,667 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	57.24'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	54.24'	**12.0" Round RCP_Round 12"** L= 24.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 54.24' / 52.28' S= 0.0817 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	55.24'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	54.24'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.04 cfs @ 12.25 hrs HW=56.56' (Free Discharge)
└**4=Exfiltration** (Controls 0.04 cfs)

Primary OutFlow Max=0.98 cfs @ 12.25 hrs HW=56.56' TW=52.12' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.98 cfs of 6.38 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.98 cfs @ 4.98 fps)

Pond 9P: BIORETENTION - IMP 2



Summary for Pond 12R: LINE 3

[57] Hint: Peaked at 52.77' (Flood elevation advised)

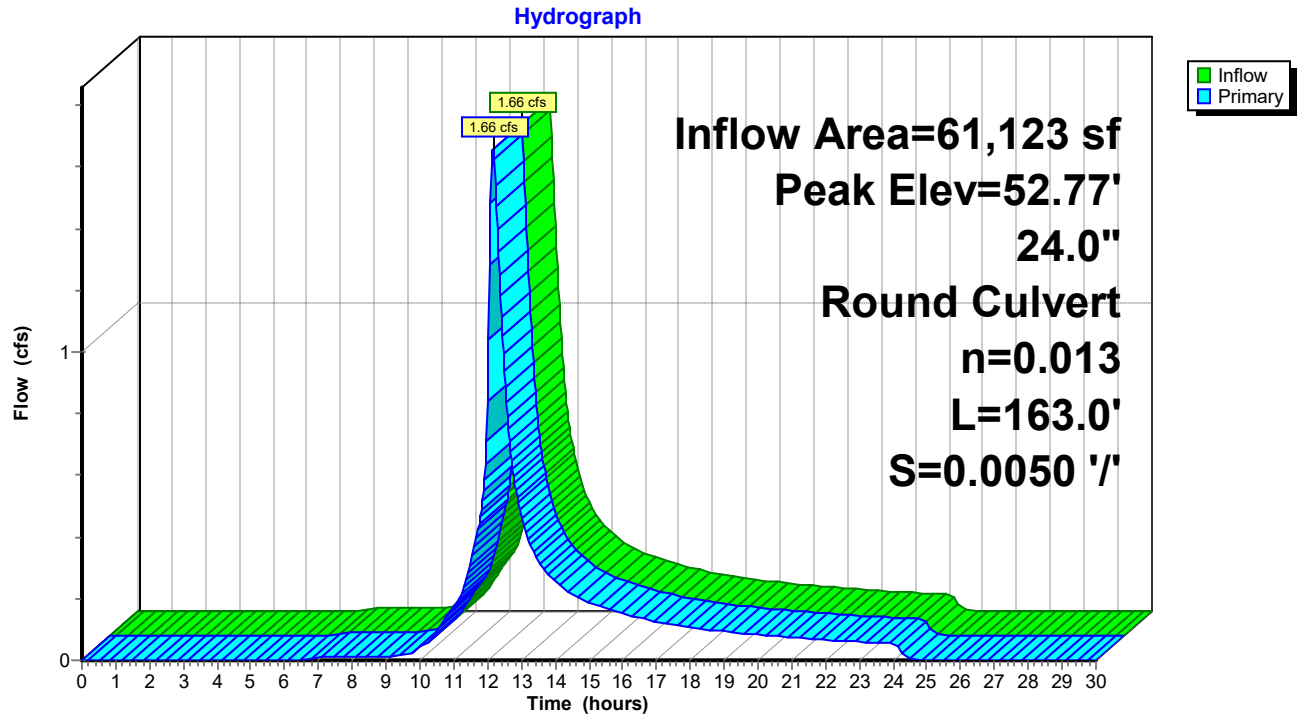
Inflow Area = 61,123 sf, 79.10% Impervious, Inflow Depth = 2.07" for 10-Year event
Inflow = 1.66 cfs @ 12.16 hrs, Volume= 10,537 cf
Outflow = 1.66 cfs @ 12.16 hrs, Volume= 10,537 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.66 cfs @ 12.16 hrs, Volume= 10,537 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 52.77' @ 12.17 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.10'	**24.0" Round Culvert** L= 163.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 52.10' / 51.28' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=1.64 cfs @ 12.16 hrs HW=52.77' TW=52.14' (Dynamic Tailwater)
1=Culvert (Outlet Controls 1.64 cfs @ 2.68 fps)

Pond 12R: LINE 3



Summary for Pond 14P: BIORETENTION - IMP 1

Inflow Area = 19,123 sf, 78.59% Impervious, Inflow Depth = 3.64" for 10-Year event
Inflow = 0.82 cfs @ 12.09 hrs, Volume= 5,798 cf
Outflow = 0.52 cfs @ 12.21 hrs, Volume= 5,527 cf, Atten= 37%, Lag= 7.3 min
Discarded = 0.03 cfs @ 12.21 hrs, Volume= 2,836 cf
Primary = 0.48 cfs @ 12.21 hrs, Volume= 2,691 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.31' @ 12.21 hrs Surf.Area= 2,110 sf Storage= 1,274 cf
Flood Elev= 56.80' Surf.Area= 2,033 sf Storage= 3,098 cf

Plug-Flow detention time= 163.9 min calculated for 5,521 cf (95% of inflow)
Center-of-Mass det. time= 135.0 min (934.5 - 799.4)

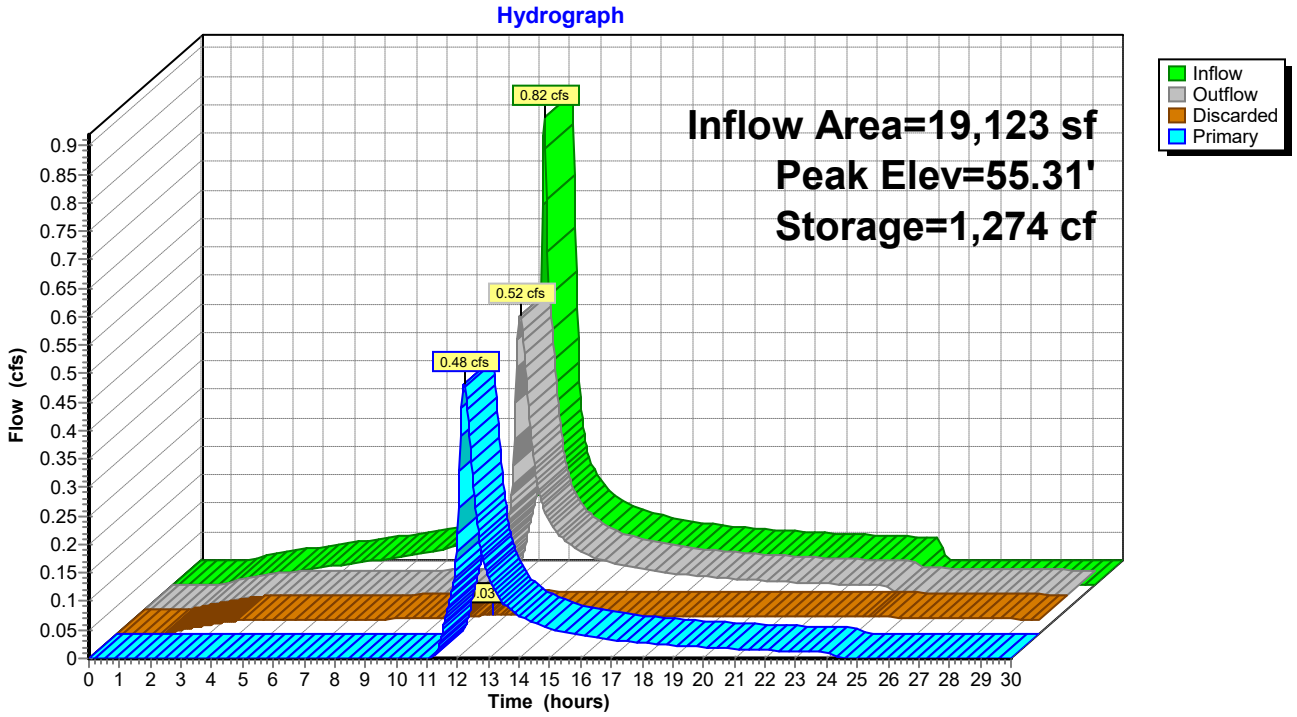
Volume	Invert	Avail.Storage	Storage Description
#1	56.30'	2,236 cf	**9.50'W x 214.00'L x 1.10'H Ponding** -Impervious
#2	54.80'	48 cf	**Perf @ 200.00' L** Inside= 6.0"W x 6.0"H => 0.24 sf x 200.00'L = 48.5 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 200.00'L = 48.5 cf
#3	53.80'	2,033 cf	**9.50'W x 214.00'L x 2.50'H Soil + Gravel** 5,083 cf Overall x 40.0% Voids
		4,318 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	56.80'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	54.30'	**12.0" Round RCP_Round 12"** L= 28.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 54.30' / 53.10' S= 0.0429 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	54.80'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	53.80'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.03 cfs @ 12.21 hrs HW=55.31' (Free Discharge)
└**4=Exfiltration** (Controls 0.03 cfs)

Primary OutFlow Max=0.48 cfs @ 12.21 hrs HW=55.31' TW=52.76' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.48 cfs of 3.38 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.48 cfs @ 2.46 fps)

Pond 14P: BIORETENTION - IMP 1



Summary for Pond 14R: STORAGE PIPE - LINE 4

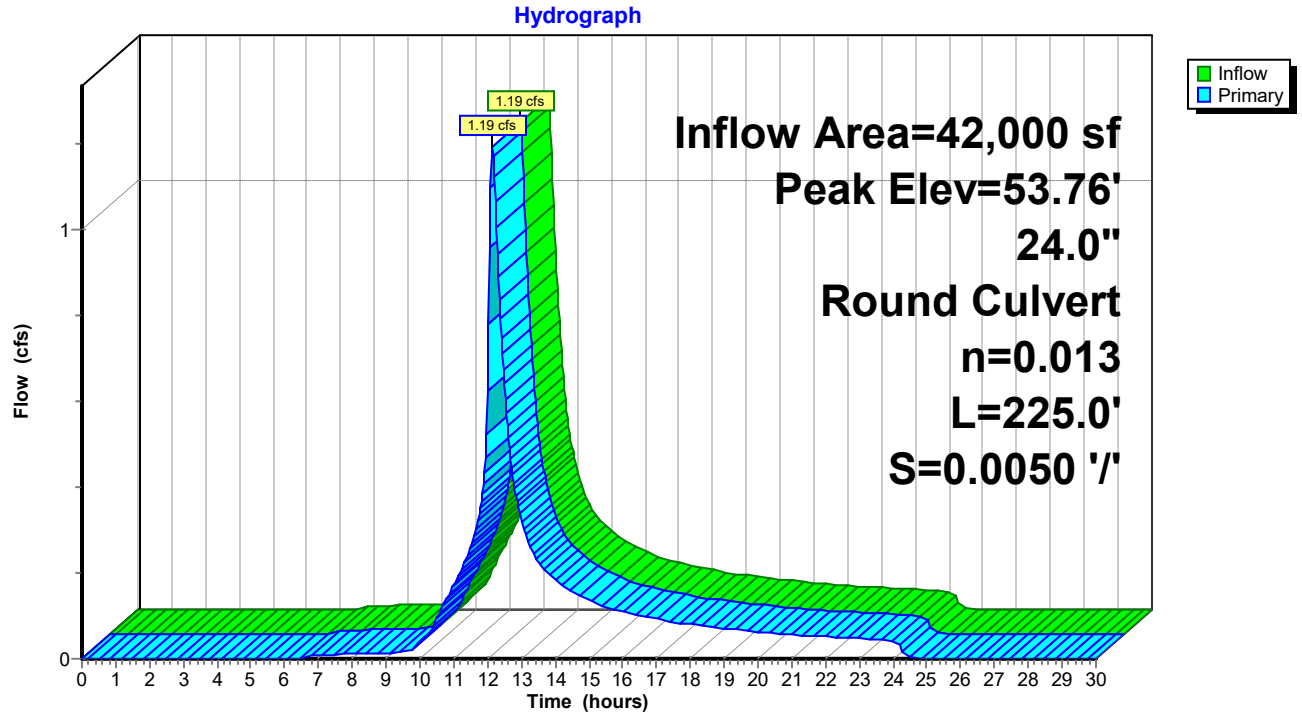
Inflow Area = 42,000 sf, 79.33% Impervious, Inflow Depth = 2.24" for 10-Year event
Inflow = 1.19 cfs @ 12.15 hrs, Volume= 7,846 cf
Outflow = 1.19 cfs @ 12.15 hrs, Volume= 7,846 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.19 cfs @ 12.15 hrs, Volume= 7,846 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 53.76' @ 12.16 hrs
Flood Elev= 55.23'

Device	Routing	Invert	Outlet Devices
#1	Primary	53.23'	**24.0" Round Culvert** L= 225.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 53.23' / 52.10' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=1.18 cfs @ 12.15 hrs HW=53.76' TW=52.76' (Dynamic Tailwater)
1=Culvert (Outlet Controls 1.18 cfs @ 2.67 fps)

Pond 14R: STORAGE PIPE - LINE 4



Summary for Pond 15R: STORAGE PIPE - LINE 5

[57] Hint: Peaked at 54.88' (Flood elevation advised)

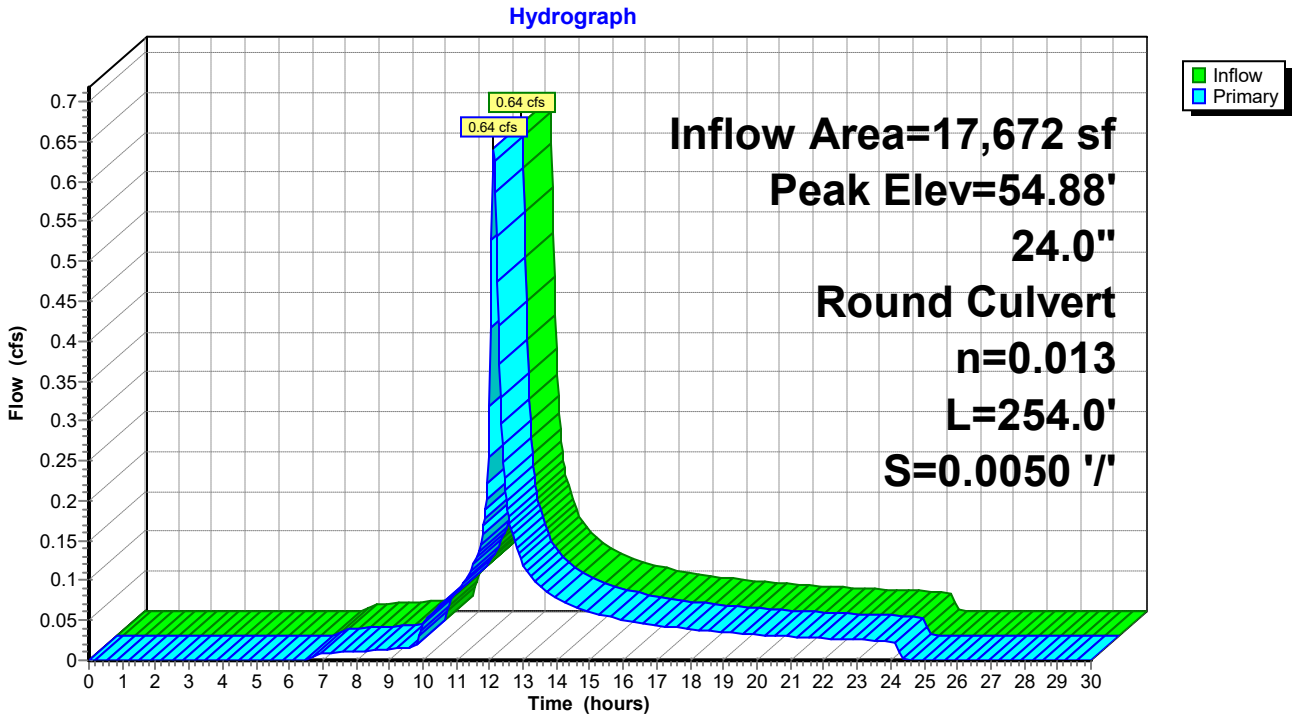
Inflow Area = 17,672 sf, 68.55% Impervious, Inflow Depth = 2.50" for 10-Year event
Inflow = 0.64 cfs @ 12.13 hrs, Volume= 3,680 cf
Outflow = 0.64 cfs @ 12.13 hrs, Volume= 3,680 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.64 cfs @ 12.13 hrs, Volume= 3,680 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 54.88' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.50'	**24.0" Round Culvert** L= 254.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 54.50' / 53.23' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=0.63 cfs @ 12.13 hrs HW=54.88' TW=53.75' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.63 cfs @ 2.28 fps)

Pond 15R: STORAGE PIPE - LINE 5



Summary for Pond 17P: BIORETENTION - IMP 5

Inflow Area = 24,328 sf, 87.16% Impervious, Inflow Depth = 3.86" for 10-Year event
Inflow = 1.08 cfs @ 12.09 hrs, Volume= 7,820 cf
Outflow = 0.63 cfs @ 12.22 hrs, Volume= 7,469 cf, Atten= 42%, Lag= 8.2 min
Discarded = 0.04 cfs @ 12.22 hrs, Volume= 3,303 cf
Primary = 0.59 cfs @ 12.22 hrs, Volume= 4,166 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 56.34' @ 12.22 hrs Surf.Area= 2,394 sf Storage= 1,611 cf
Flood Elev= 57.70' Surf.Area= 2,394 sf Storage= 3,628 cf

Plug-Flow detention time= 156.9 min calculated for 7,469 cf (96% of inflow)
Center-of-Mass det. time= 128.1 min (909.2 - 781.1)

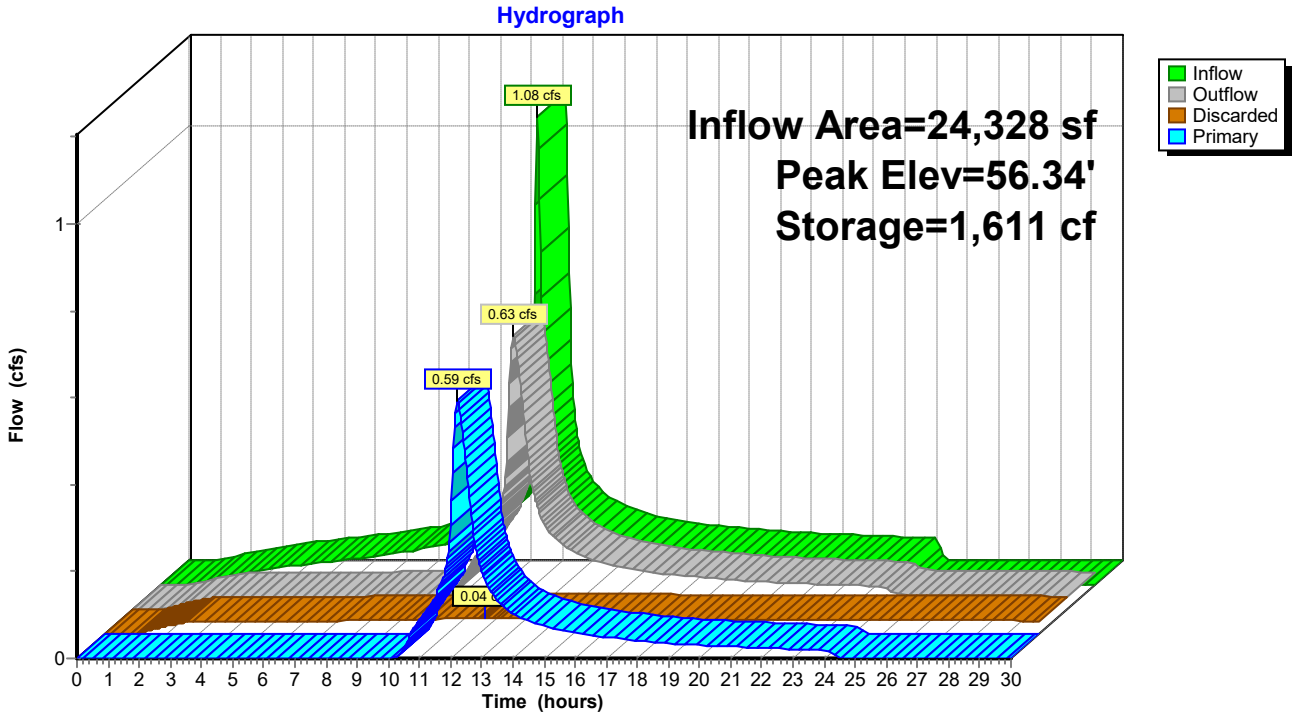
Volume	Invert	Avail.Storage	Storage Description
#1	57.20'	1,652 cf	**9.50'W x 252.00'L x 0.69'H Ponding** -Impervious
#2	55.70'	62 cf	**Perf @ 254.00' L** Inside #3 Inside= 6.0"W x 6.0"H => 0.24 sf x 254.00'L = 61.6 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 254.00'L = 61.6 cf
#3	54.70'	2,369 cf	**9.50'W x 252.00'L x 2.50'H Soil + Gravel** 5,985 cf Overall - 62 cf Embedded = 5,923 cf x 40.0% Voids
		4,083 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	57.70'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	55.20'	**12.0" Round RCP_Round 12"** L= 28.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 55.20' / 54.23' S= 0.0346 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	55.70'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	54.70'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.04 cfs @ 12.22 hrs HW=56.34' (Free Discharge)
└**4=Exfiltration** (Controls 0.04 cfs)

Primary OutFlow Max=0.59 cfs @ 12.22 hrs HW=56.34' TW=53.74' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.59 cfs of 3.79 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.59 cfs @ 3.02 fps)

Pond 17P: BIORETENTION - IMP 5



Summary for Pond 20R: LINE 6

[57] Hint: Peaked at 55.23' (Flood elevation advised)

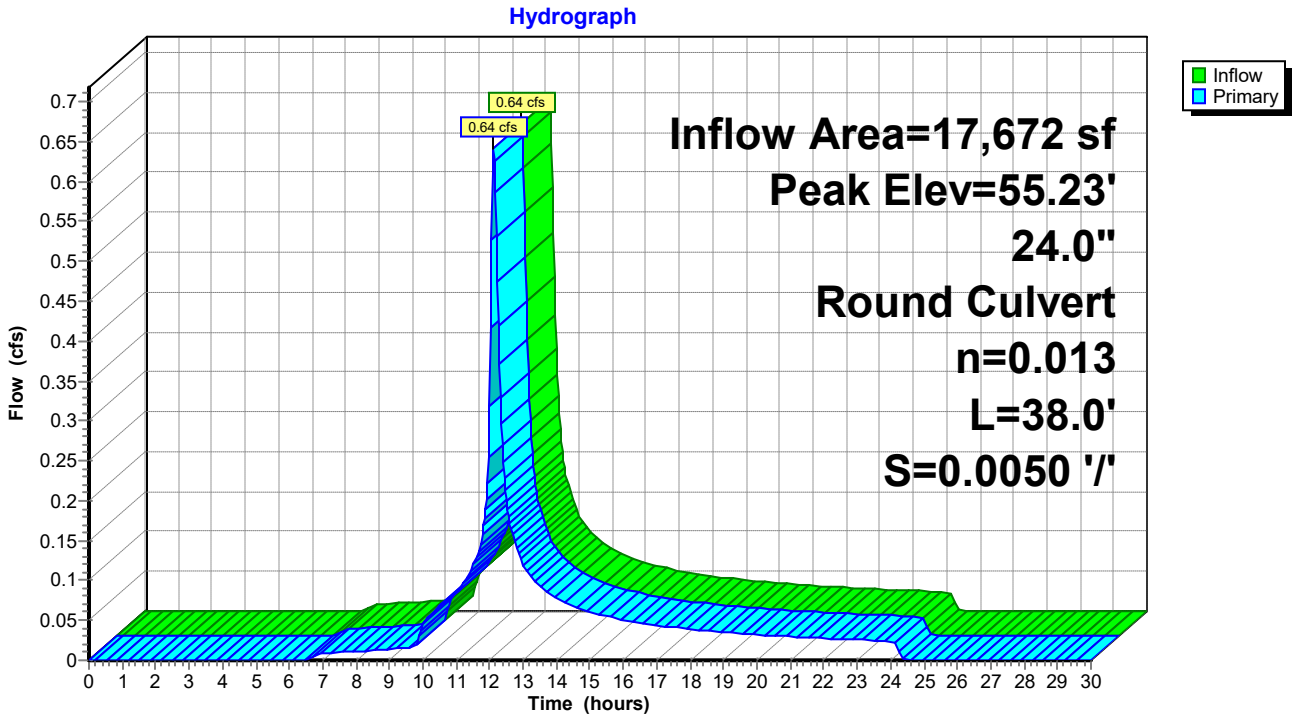
Inflow Area = 17,672 sf, 68.55% Impervious, Inflow Depth = 2.50" for 10-Year event
Inflow = 0.64 cfs @ 12.13 hrs, Volume= 3,680 cf
Outflow = 0.64 cfs @ 12.13 hrs, Volume= 3,680 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.64 cfs @ 12.13 hrs, Volume= 3,680 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.23' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.85'	**24.0" Round Culvert** L= 38.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 54.85' / 54.66' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=0.64 cfs @ 12.13 hrs HW=55.23' TW=54.88' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.64 cfs @ 2.33 fps)

Pond 20R: LINE 6



Summary for Pond 22R: LINE 7

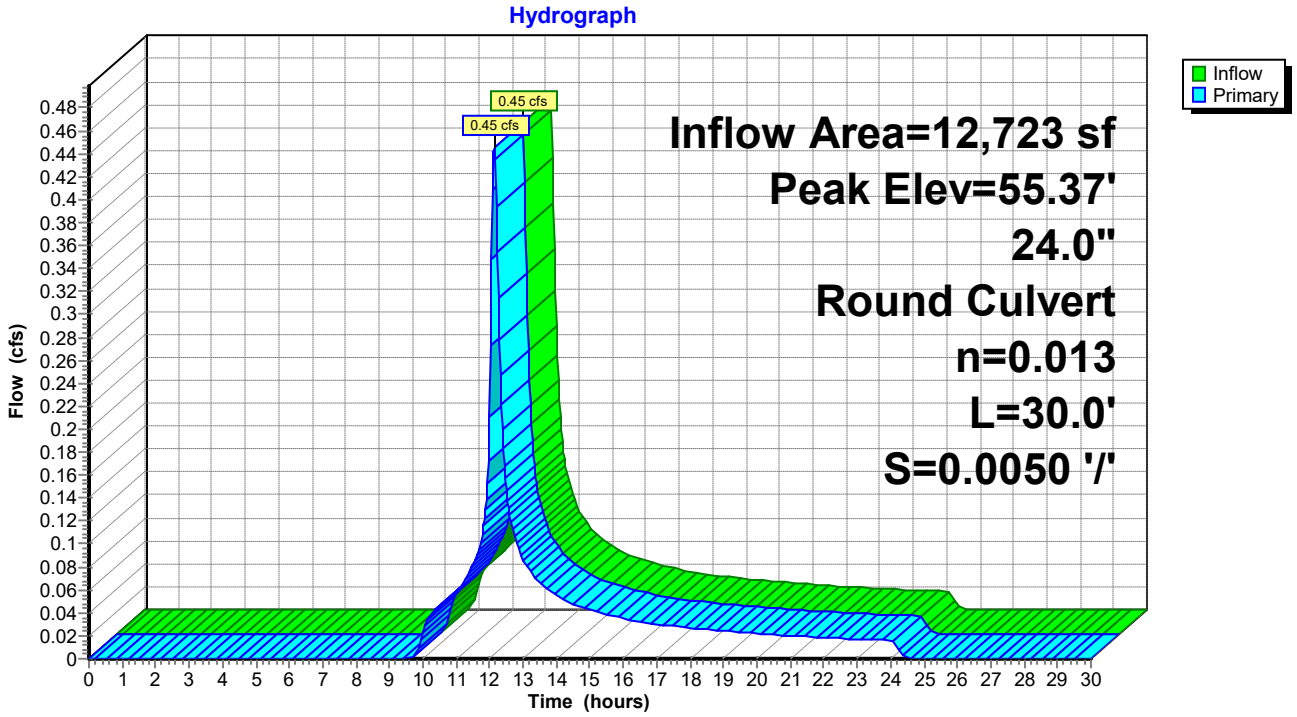
Inflow Area = 12,723 sf, 67.97% Impervious, Inflow Depth = 2.33" for 10-Year event
Inflow = 0.45 cfs @ 12.14 hrs, Volume= 2,466 cf
Outflow = 0.45 cfs @ 12.14 hrs, Volume= 2,466 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.45 cfs @ 12.14 hrs, Volume= 2,466 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.37' @ 12.15 hrs
Flood Elev= 56.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	55.00'	**24.0" Round Culvert** L= 30.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 55.00' / 54.85' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=0.44 cfs @ 12.14 hrs HW=55.37' TW=55.23' (Dynamic Tailwater)
↳**1=Culvert** (Outlet Controls 0.44 cfs @ 1.71 fps)

Pond 22R: LINE 7



Summary for Pond 24P: BIORETENTION - IMP 3

Inflow Area = 12,723 sf, 67.97% Impervious, Inflow Depth = 3.43" for 10-Year event
Inflow = 0.53 cfs @ 12.09 hrs, Volume= 3,634 cf
Outflow = 0.46 cfs @ 12.14 hrs, Volume= 3,457 cf, Atten= 13%, Lag= 3.2 min
Discarded = 0.01 cfs @ 12.14 hrs, Volume= 990 cf
Primary = 0.45 cfs @ 12.14 hrs, Volume= 2,466 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 56.17' @ 12.14 hrs Surf.Area= 699 sf Storage= 507 cf
Flood Elev= 57.40' Surf.Area= 699 sf Storage= 1,061 cf

Plug-Flow detention time= 122.3 min calculated for 3,453 cf (95% of inflow)
Center-of-Mass det. time= 93.0 min (908.3 - 815.4)

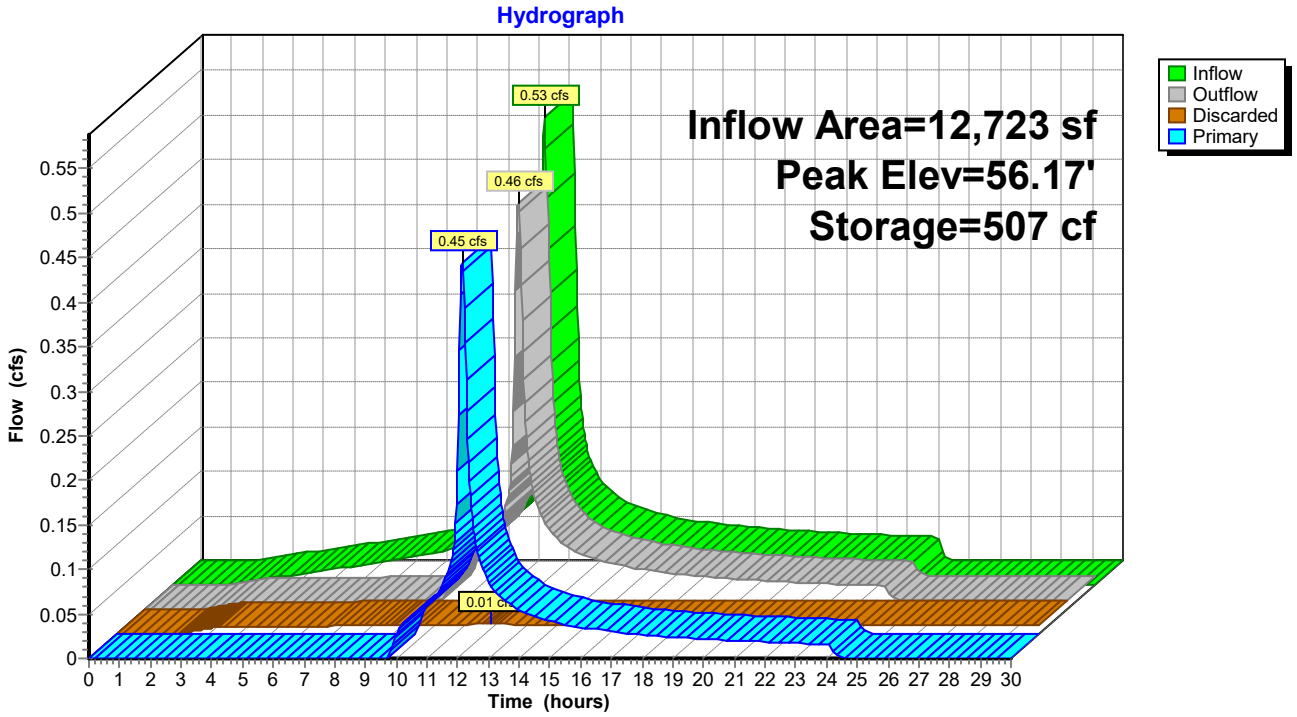
Volume	Invert	Avail.Storage	Storage Description
#1	56.90'	503 cf	**7.60'W x 92.00'L x 0.72'H Ponding** -Impervious
#2	55.40'	20 cf	**CPP single-wall 6" @ 84.00' L** Inside #3 Inside= 6.0"W x 6.0"H => 0.24 sf x 84.00'L = 20.4 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 84.00'L = 20.4 cf
#3	54.40'	691 cf	**7.60'W x 92.00'L x 2.50'H Soil + Gravel** 1,748 cf Overall - 20 cf Embedded = 1,728 cf x 40.0% Voids
		1,215 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	57.40'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	55.40'	**12.0" Round RCP_Round 12"** L= 20.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 55.40' / 55.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	55.70'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	54.40'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.01 cfs @ 12.14 hrs HW=56.17' (Free Discharge)
└**4=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=0.44 cfs @ 12.14 hrs HW=56.17' TW=55.37' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.44 cfs of 2.17 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.44 cfs @ 2.32 fps)

Pond 24P: BIORETENTION - IMP 3



Summary for Pond 25P: BIORETENTION - IMP 4

Inflow Area = 4,949 sf, 70.05% Impervious, Inflow Depth = 3.53" for 10-Year event
Inflow = 0.21 cfs @ 12.09 hrs, Volume= 1,457 cf
Outflow = 0.21 cfs @ 12.10 hrs, Volume= 1,435 cf, Atten= 1%, Lag= 0.9 min
Discarded = 0.00 cfs @ 12.10 hrs, Volume= 222 cf
Primary = 0.20 cfs @ 12.10 hrs, Volume= 1,214 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.78' @ 12.10 hrs Surf.Area= 160 sf Storage= 83 cf
Flood Elev= 57.50' Surf.Area= 160 sf Storage= 242 cf

Plug-Flow detention time= 59.2 min calculated for 1,434 cf (98% of inflow)
Center-of-Mass det. time= 50.2 min (857.9 - 807.7)

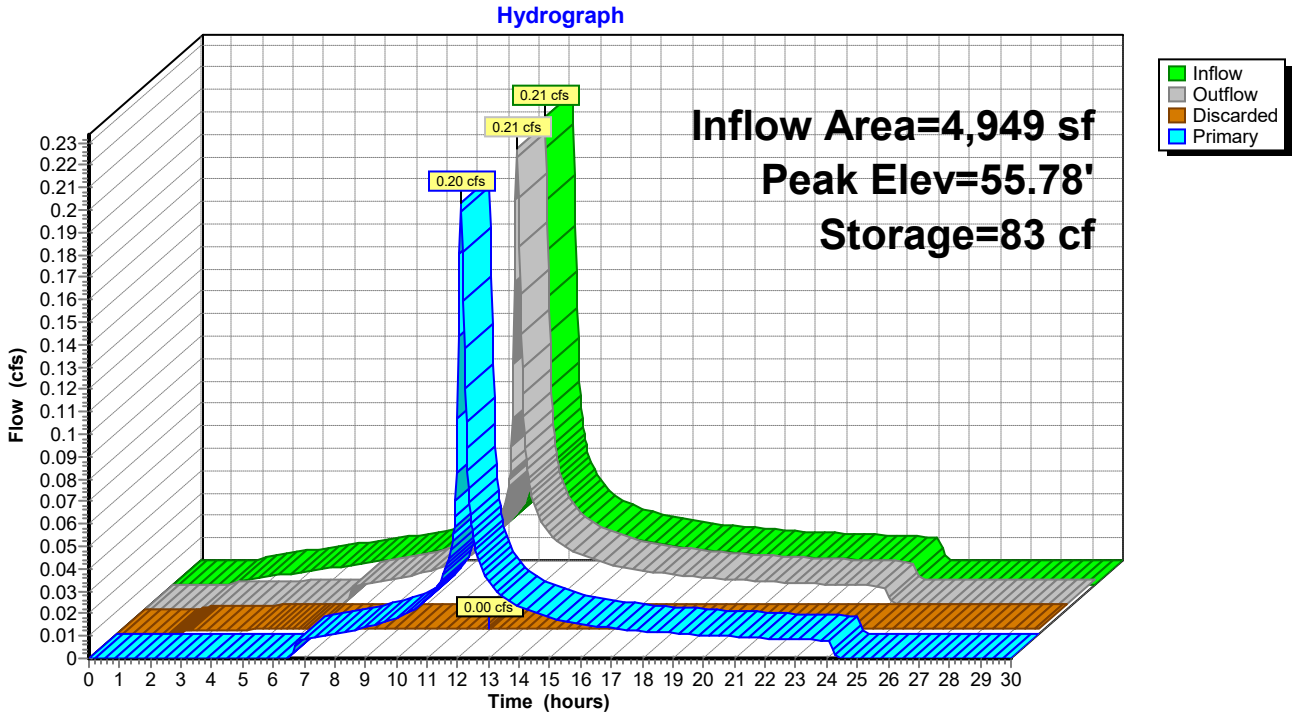
Volume	Invert	Avail.Storage	Storage Description
#1	57.00'	115 cf	**7.60'W x 21.00'L x 0.72'H Ponding** -Impervious
#2	55.50'	4 cf	**Perf @ 16.00' L** Inside #3 Inside= 6.0"W x 6.0"H => 0.24 sf x 16.00'L = 3.9 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 16.00'L = 3.9 cf
#3	54.50'	158 cf	**7.60'W x 21.00'L x 2.50'H Soil + Gravel** 399 cf Overall - 4 cf Embedded = 395 cf x 40.0% Voids
		277 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	57.50'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	54.95'	**12.0" Round RCP_Round 12"** L= 20.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 54.95' / 54.85' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	55.50'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	54.50'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.00 cfs @ 12.10 hrs HW=55.78' (Free Discharge)
└**4=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.20 cfs @ 12.10 hrs HW=55.78' TW=55.23' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.20 cfs of 1.73 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.20 cfs @ 1.79 fps)

Pond 25P: BIORETENTION - IMP 4



Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 8S: AREA 'A' Runoff Area=1.015 ac 82.66% Impervious Runoff Depth=6.60"
Tc=10.0 min CN=95 Runoff=3.43 cfs 24,335 cf

Subcatchment 10S: AREA 'B' Runoff Area=0.439 ac 78.59% Impervious Runoff Depth=6.49"
Tc=10.0 min CN=94 Runoff=1.47 cfs 10,337 cf

Subcatchment 16S: AREA 'C' Runoff Area=24,328 sf 87.16% Impervious Runoff Depth=6.72"
Tc=10.0 min CN=96 Runoff=1.90 cfs 13,630 cf

Subcatchment 19S: AREA 'D' Runoff Area=4,949 sf 70.05% Impervious Runoff Depth=6.37"
Tc=10.0 min CN=93 Runoff=0.38 cfs 2,627 cf

Subcatchment 21S: AREA 'E' Runoff Area=12,723 sf 67.97% Impervious Runoff Depth=6.25"
Tc=10.0 min CN=92 Runoff=0.96 cfs 6,629 cf

Reach 7R: LINE 1 - OUTFALL Avg. Flow Depth=0.67' Max Vel=5.19 fps Inflow=3.94 cfs 45,328 cf
18.0" Round Pipe n=0.010 L=231.0' S=0.0050 '/' Capacity=9.68 cfs Outflow=3.94 cfs 45,328 cf

Pond 6R: LINE 2 Peak Elev=52.38' Inflow=3.94 cfs 45,328 cf
18.0" Round Culvert n=0.013 L=97.0' S=0.0051 '/' Outflow=3.94 cfs 45,328 cf

Pond 9P: BIORETENTION - IMP 2 Peak Elev=57.29' Storage=3,242 cf Inflow=3.43 cfs 24,335 cf
Discarded=0.04 cfs 3,170 cf Primary=1.31 cfs 20,833 cf Outflow=1.35 cfs 24,003 cf

Pond 12R: LINE 3 Peak Elev=52.99' Inflow=2.71 cfs 24,495 cf
24.0" Round Culvert n=0.013 L=163.0' S=0.0050 '/' Outflow=2.71 cfs 24,495 cf

Pond 14P: BIORETENTION - IMP 1 Peak Elev=55.76' Storage=1,643 cf Inflow=1.47 cfs 10,337 cf
Discarded=0.04 cfs 3,076 cf Primary=0.80 cfs 6,967 cf Outflow=0.83 cfs 10,043 cf

Pond 14R: STORAGE PIPE - LINE 4 Peak Elev=53.93' Inflow=1.94 cfs 17,527 cf
24.0" Round Culvert n=0.013 L=225.0' S=0.0050 '/' Outflow=1.94 cfs 17,527 cf

Pond 15R: STORAGE PIPE - LINE 5 Peak Elev=55.01' Inflow=1.09 cfs 7,769 cf
24.0" Round Culvert n=0.013 L=254.0' S=0.0050 '/' Outflow=1.09 cfs 7,769 cf

Pond 17P: BIORETENTION - IMP 5 Peak Elev=56.90' Storage=2,146 cf Inflow=1.90 cfs 13,630 cf
Discarded=0.04 cfs 3,495 cf Primary=0.92 cfs 9,759 cf Outflow=0.96 cfs 13,254 cf

Pond 20R: LINE 6 Peak Elev=55.35' Inflow=1.09 cfs 7,769 cf
24.0" Round Culvert n=0.013 L=38.0' S=0.0050 '/' Outflow=1.09 cfs 7,769 cf

Pond 22R: LINE 7 Peak Elev=55.49' Inflow=0.75 cfs 5,394 cf
24.0" Round Culvert n=0.013 L=30.0' S=0.0050 '/' Outflow=0.75 cfs 5,394 cf

Pond 24P: BIORETENTION - IMP 3 Peak Elev=56.58' Storage=621 cf Inflow=0.96 cfs 6,629 cf
Discarded=0.01 cfs 1,055 cf Primary=0.75 cfs 5,394 cf Outflow=0.76 cfs 6,449 cf

Pond 25P: BIORETENTION - IMP 4 Peak Elev=55.91' Storage=92 cf Inflow=0.38 cfs 2,627 cf
Discarded=0.00 cfs 231 cf Primary=0.37 cfs 2,374 cf Outflow=0.37 cfs 2,605 cf

Total Runoff Area = 105,336 sf Runoff Volume = 57,558 cf Average Runoff Depth = 6.56"
19.41% Pervious = 20,441 sf 80.59% Impervious = 84,895 sf

Summary for Subcatchment 8S: AREA 'A'

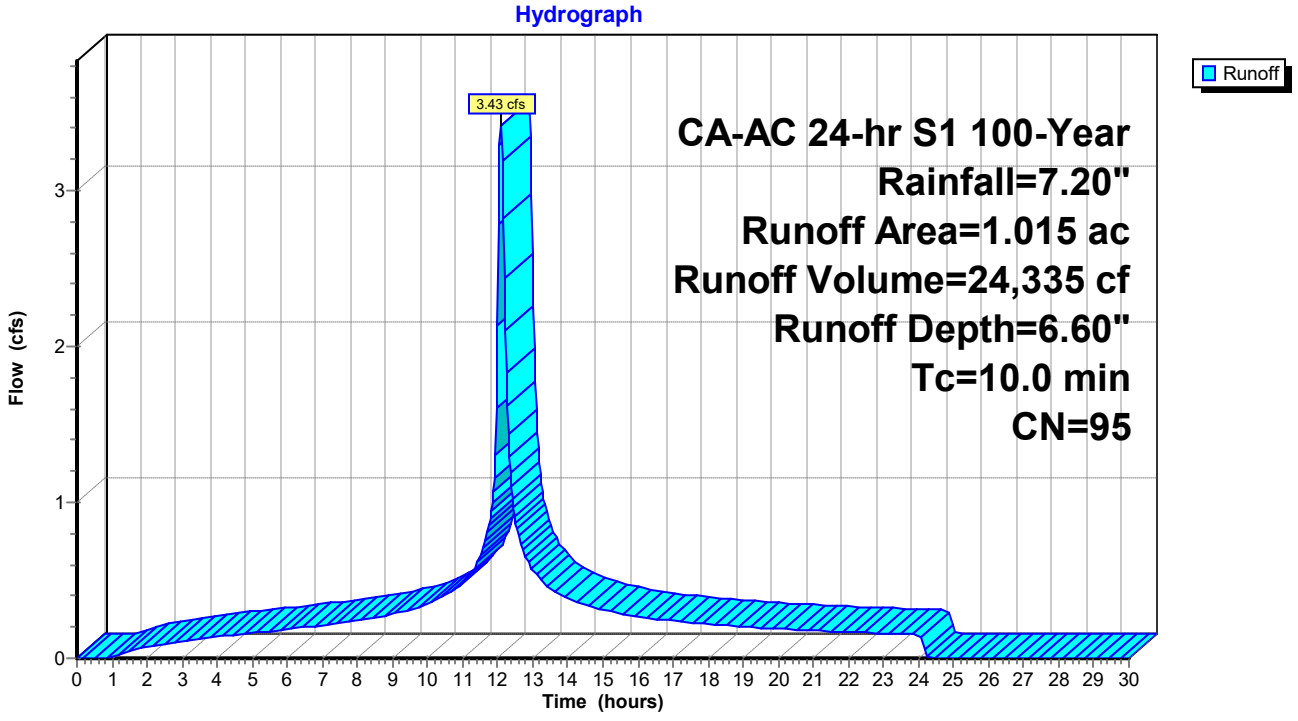
Runoff = 3.43 cfs @ 12.09 hrs, Volume= 24,335 cf, Depth= 6.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 100-Year Rainfall=7.20"

Area (ac)	CN	Description
0.176	80	>75% Grass cover, Good, HSG D
0.617	98	Paved parking, HSG D
0.222	98	Roofs, HSG D
1.015	95	Weighted Average
0.176		17.34% Pervious Area
0.839		82.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8S: AREA 'A'



Summary for Subcatchment 10S: AREA 'B'

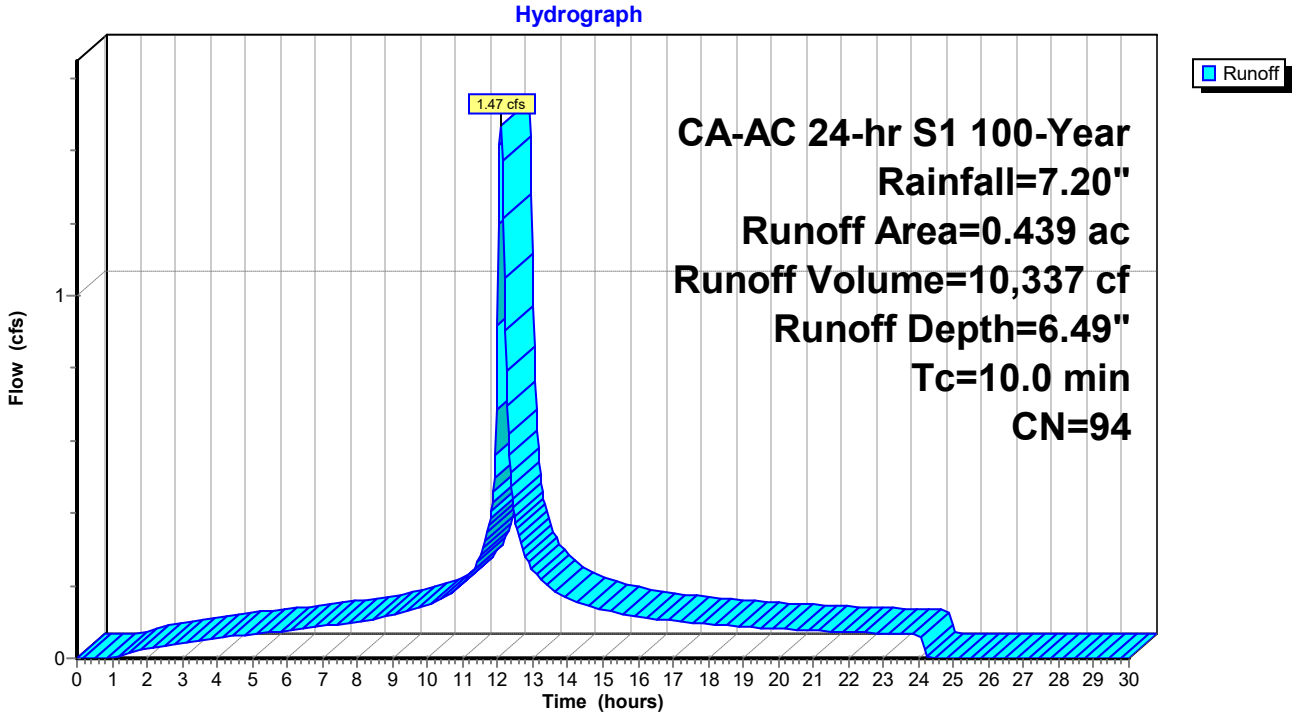
Runoff = 1.47 cfs @ 12.09 hrs, Volume= 10,337 cf, Depth= 6.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 100-Year Rainfall=7.20"

Area (ac)	CN	Description
0.094	80	>75% Grass cover, Good, HSG D
0.248	98	Paved parking, HSG D
0.097	98	Roofs, HSG D
0.439	94	Weighted Average
0.094		21.41% Pervious Area
0.345		78.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10S: AREA 'B'



Summary for Subcatchment 16S: AREA 'C'

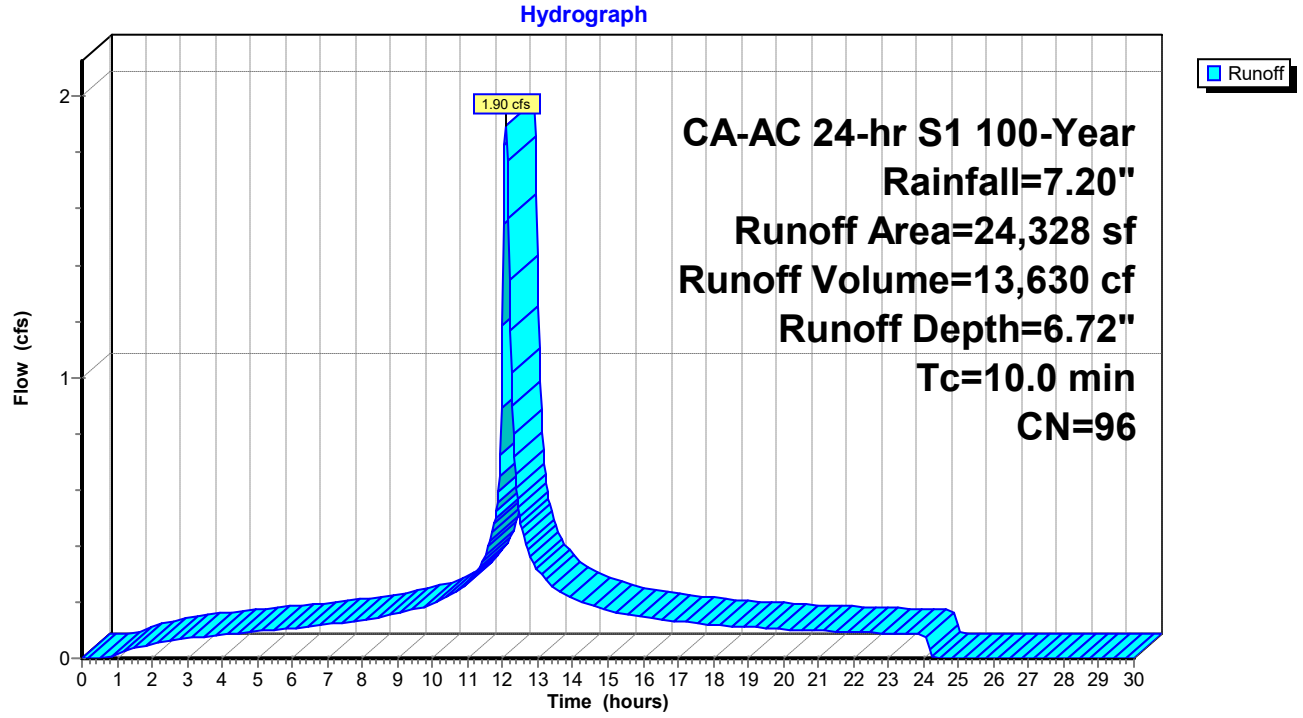
Runoff = 1.90 cfs @ 12.09 hrs, Volume= 13,630 cf, Depth= 6.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 100-Year Rainfall=7.20"

Area (sf)	CN	Description
3,123	80	>75% Grass cover, Good, HSG D
15,421	98	Paved parking, HSG D
5,784	98	Roofs, HSG D
24,328	96	Weighted Average
3,123		12.84% Pervious Area
21,205		87.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16S: AREA 'C'



Summary for Subcatchment 19S: AREA 'D'

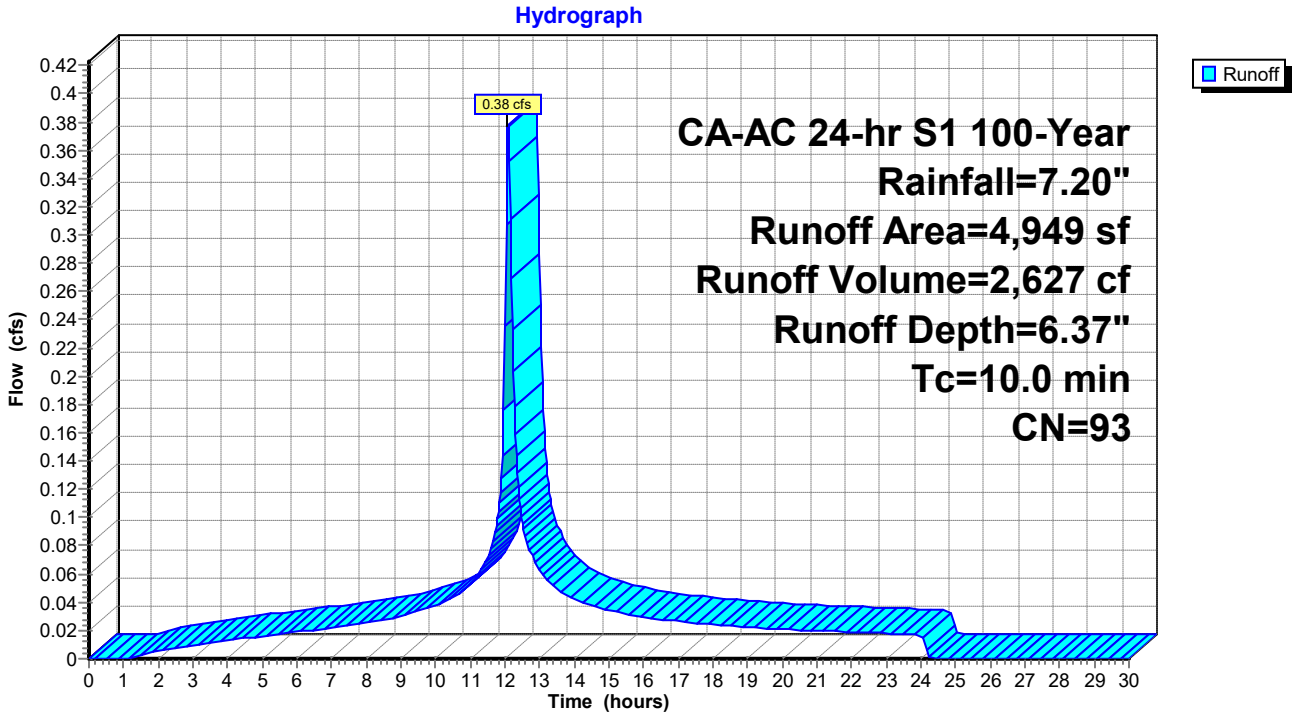
Runoff = 0.38 cfs @ 12.09 hrs, Volume= 2,627 cf, Depth= 6.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 100-Year Rainfall=7.20"

Area (sf)	CN	Description
1,482	80	>75% Grass cover, Good, HSG D
3,467	98	Paved parking, HSG D
4,949	93	Weighted Average
1,482		29.95% Pervious Area
3,467		70.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19S: AREA 'D'



Summary for Subcatchment 21S: AREA 'E'

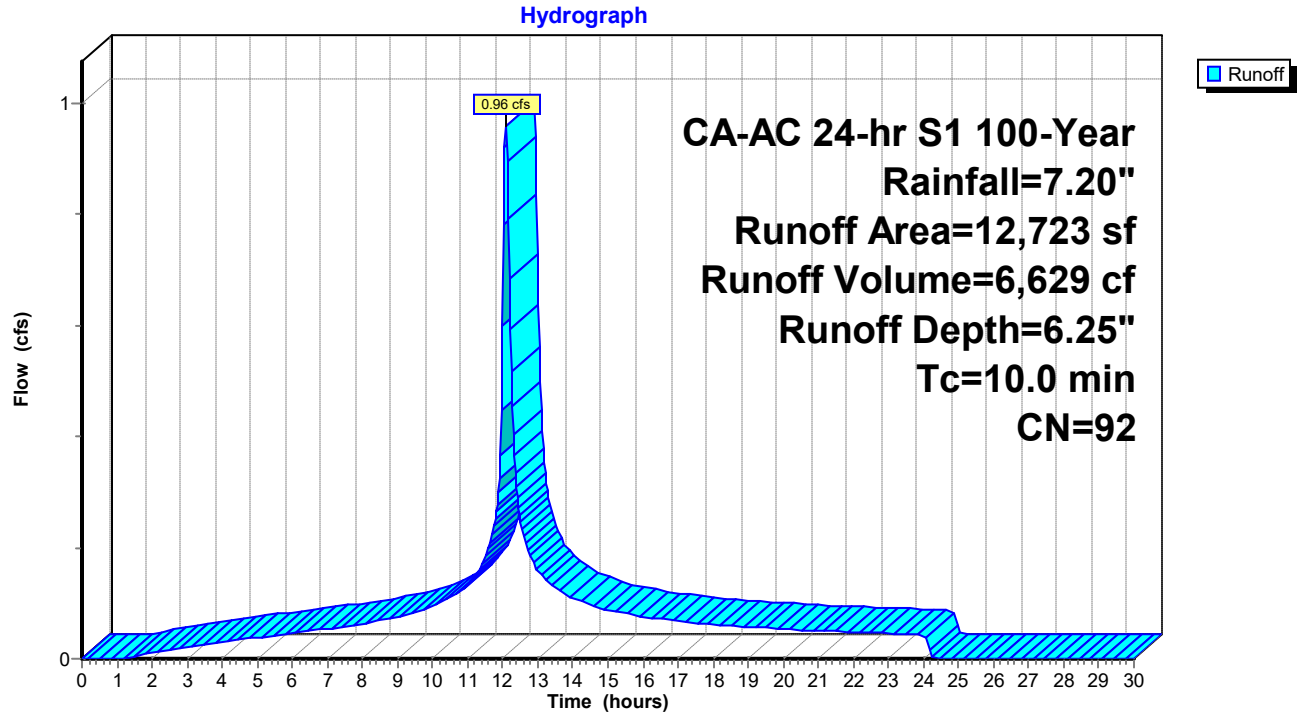
Runoff = 0.96 cfs @ 12.09 hrs, Volume= 6,629 cf, Depth= 6.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
CA-AC 24-hr S1 100-Year Rainfall=7.20"

Area (sf)	CN	Description
4,075	80	>75% Grass cover, Good, HSG D
8,648	98	Paved parking, HSG D
12,723	92	Weighted Average
4,075		32.03% Pervious Area
8,648		67.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21S: AREA 'E'



Summary for Reach 7R: LINE 1 - OUTFALL

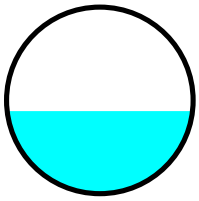
[52] Hint: Inlet/Outlet conditions not evaluated

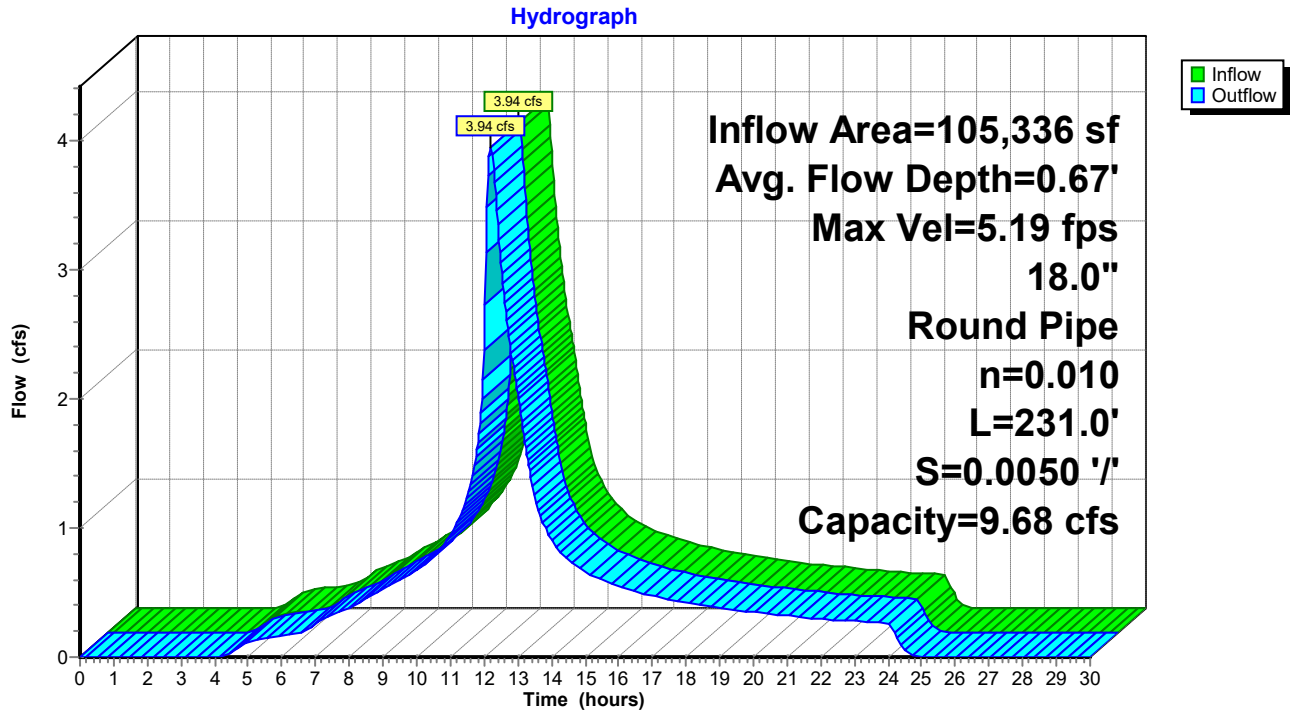
Inflow Area = 105,336 sf, 80.59% Impervious, Inflow Depth = 5.16" for 100-Year event
Inflow = 3.94 cfs @ 12.19 hrs, Volume= 45,328 cf
Outflow = 3.94 cfs @ 12.19 hrs, Volume= 45,328 cf, Atten= 0%, Lag= 0.5 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Max. Velocity= 5.19 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 2.74 fps, Avg. Travel Time= 1.4 min

Peak Storage= 175 cf @ 12.19 hrs
Average Depth at Peak Storage= 0.67' , Surface Width= 1.49'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 9.68 cfs

18.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 231.0' Slope= 0.0050 '/'
Inlet Invert= 50.79', Outlet Invert= 49.63'





Summary for Pond 6R: LINE 2

[57] Hint: Peaked at 52.38' (Flood elevation advised)

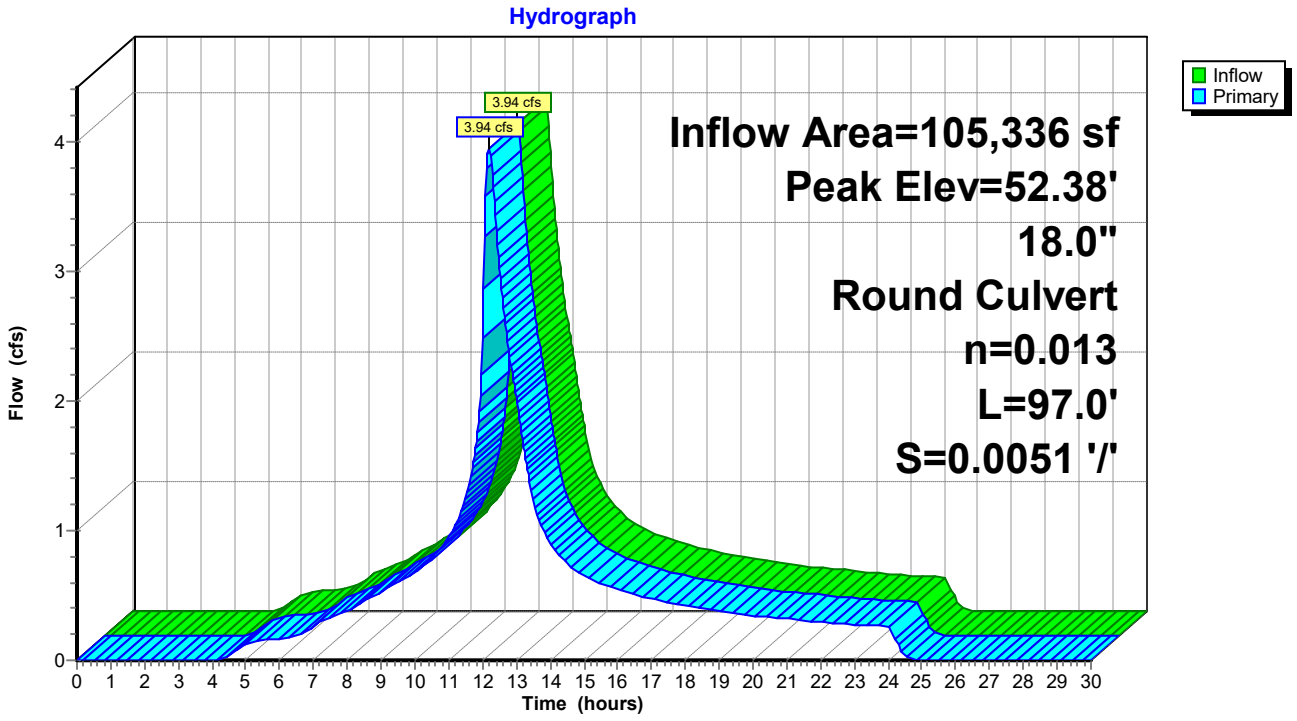
Inflow Area = 105,336 sf, 80.59% Impervious, Inflow Depth = 5.16" for 100-Year event
Inflow = 3.94 cfs @ 12.19 hrs, Volume= 45,328 cf
Outflow = 3.94 cfs @ 12.19 hrs, Volume= 45,328 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.94 cfs @ 12.19 hrs, Volume= 45,328 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 52.38' @ 12.19 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.28'	**18.0" Round Culvert** L= 97.0' Ke= 0.500 Inlet / Outlet Invert= 51.28' / 50.79' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.93 cfs @ 12.19 hrs HW=52.38' TW=51.46' (Dynamic Tailwater)
1=Culvert (Barrel Controls 3.93 cfs @ 3.96 fps)

Pond 6R: LINE 2



Summary for Pond 9P: BIORETENTION - IMP 2

[58] Hint: Peaked 0.05' above defined flood level

Inflow Area = 44,213 sf, 82.66% Impervious, Inflow Depth = 6.60" for 100-Year event
Inflow = 3.43 cfs @ 12.09 hrs, Volume= 24,335 cf
Outflow = 1.35 cfs @ 12.32 hrs, Volume= 24,003 cf, Atten= 61%, Lag= 14.1 min
Discarded = 0.04 cfs @ 12.32 hrs, Volume= 3,170 cf
Primary = 1.31 cfs @ 12.32 hrs, Volume= 20,833 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 57.29' @ 12.32 hrs Surf.Area= 2,063 sf Storage= 3,242 cf
Flood Elev= 57.24' Surf.Area= 2,063 sf Storage= 3,131 cf

Plug-Flow detention time= 65.2 min calculated for 23,979 cf (99% of inflow)
Center-of-Mass det. time= 56.4 min (827.4 - 771.0)

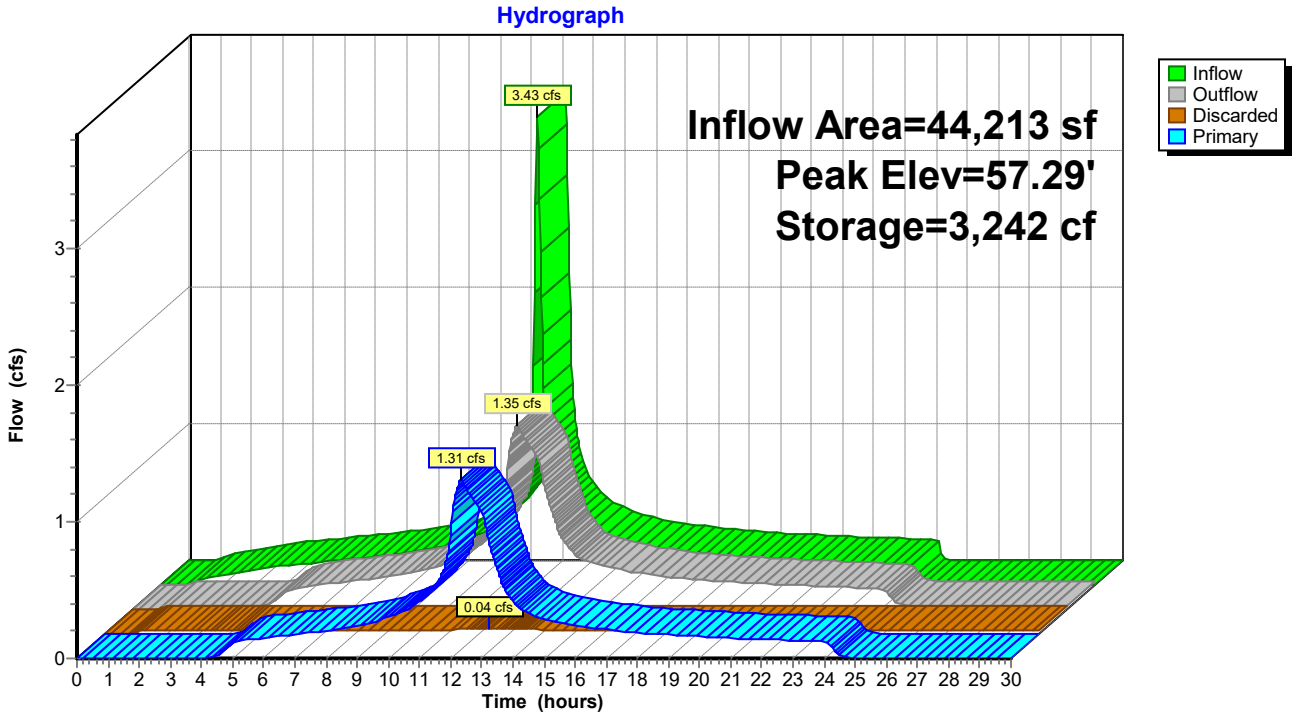
Volume	Invert	Avail.Storage	Storage Description
#1	56.74'	1,567 cf	**7.50'W x 275.00'L x 0.76'H Ponding** -Impervious
#2	55.24'	62 cf	**Perf @ 257.00' L** Inside #3 Inside= 6.0"W x 6.0"H => 0.24 sf x 257.00'L = 62.3 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 257.00'L = 62.3 cf
#3	54.24'	2,038 cf	**7.50'W x 275.00'L x 2.50'H Soil + Gravel** 5,156 cf Overall - 62 cf Embedded = 5,094 cf x 40.0% Voids
		3,667 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	57.24'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	54.24'	**12.0" Round RCP_Round 12"** L= 24.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 54.24' / 52.28' S= 0.0817 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	55.24'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	54.24'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.04 cfs @ 12.32 hrs HW=57.29' (Free Discharge)
└**4=Exfiltration** (Controls 0.04 cfs)

Primary OutFlow Max=1.30 cfs @ 12.32 hrs HW=57.29' TW=52.33' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 1.30 cfs of 7.55 cfs potential flow)
  ├**1=Grate** (Weir Controls 0.03 cfs @ 0.75 fps)
  └**3=Perf** (Orifice Controls 1.27 cfs @ 6.47 fps)

Pond 9P: BIORETENTION - IMP 2



Summary for Pond 12R: LINE 3

[57] Hint: Peaked at 52.99' (Flood elevation advised)

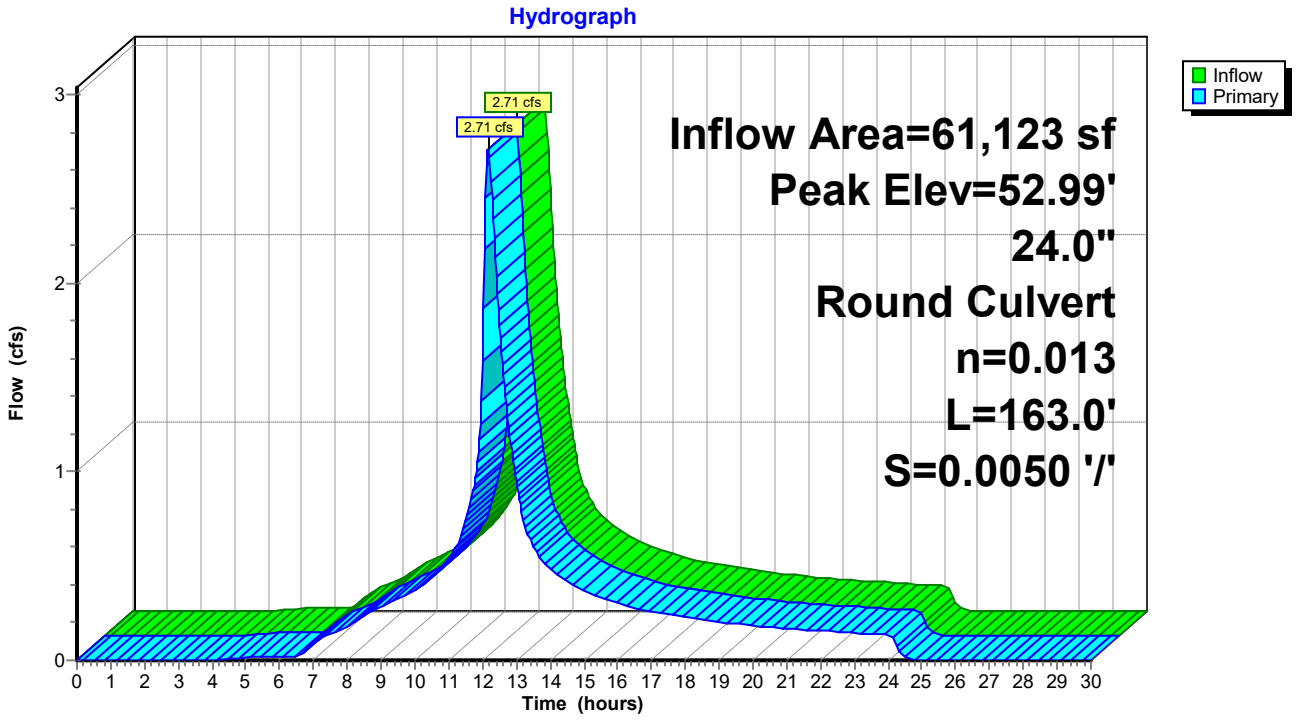
Inflow Area = 61,123 sf, 79.10% Impervious, Inflow Depth = 4.81" for 100-Year event
Inflow = 2.71 cfs @ 12.17 hrs, Volume= 24,495 cf
Outflow = 2.71 cfs @ 12.17 hrs, Volume= 24,495 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.71 cfs @ 12.17 hrs, Volume= 24,495 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 52.99' @ 12.19 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.10'	**24.0" Round Culvert** L= 163.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 52.10' / 51.28' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=2.69 cfs @ 12.17 hrs HW=52.99' TW=52.38' (Dynamic Tailwater)
1=Culvert (Outlet Controls 2.69 cfs @ 2.94 fps)

Pond 12R: LINE 3



Summary for Pond 14P: BIORETENTION - IMP 1

Inflow Area = 19,123 sf, 78.59% Impervious, Inflow Depth = 6.49" for 100-Year event
Inflow = 1.47 cfs @ 12.09 hrs, Volume= 10,337 cf
Outflow = 0.83 cfs @ 12.23 hrs, Volume= 10,043 cf, Atten= 43%, Lag= 8.6 min
Discarded = 0.04 cfs @ 12.23 hrs, Volume= 3,076 cf
Primary = 0.80 cfs @ 12.23 hrs, Volume= 6,967 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.76' @ 12.23 hrs Surf.Area= 2,033 sf Storage= 1,643 cf
Flood Elev= 56.80' Surf.Area= 2,033 sf Storage= 3,098 cf

Plug-Flow detention time= 115.5 min calculated for 10,033 cf (97% of inflow)
Center-of-Mass det. time= 97.2 min (874.8 - 777.6)

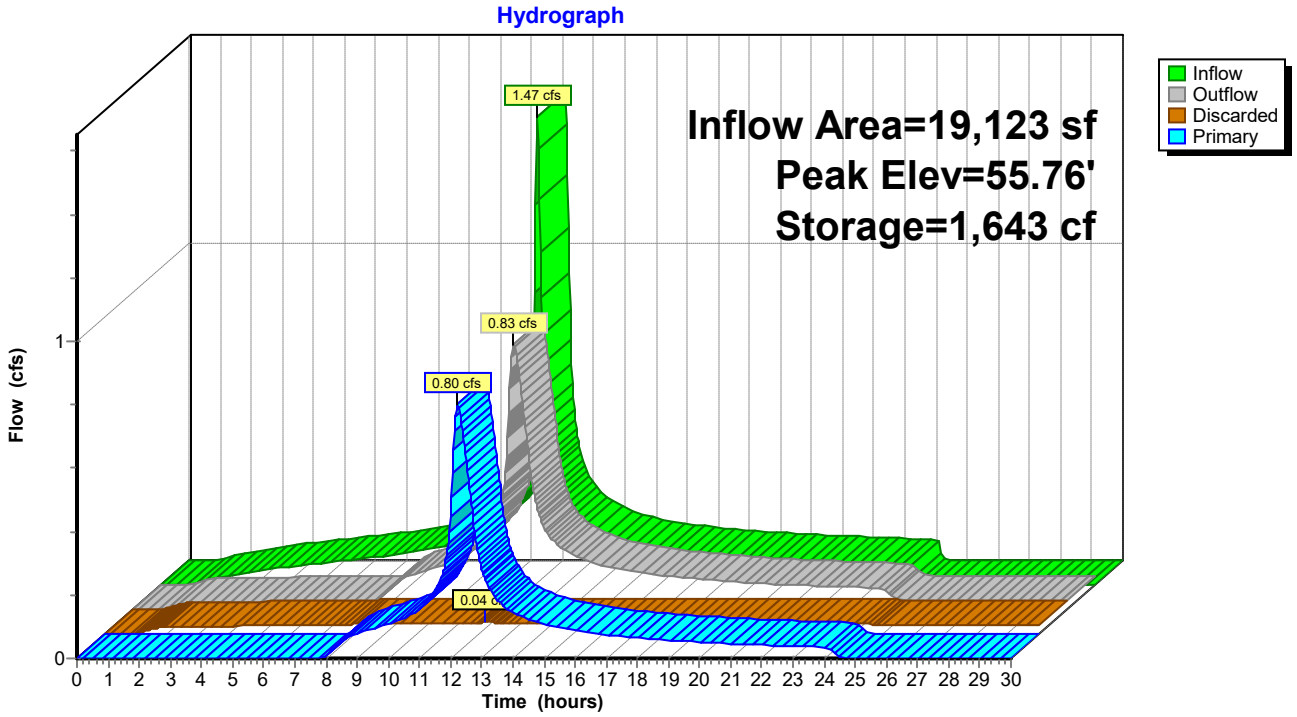
Volume	Invert	Avail.Storage	Storage Description
#1	56.30'	2,236 cf	**9.50'W x 214.00'L x 1.10'H Ponding** -Impervious
#2	54.80'	48 cf	**Perf @ 200.00' L** Inside= 6.0"W x 6.0"H => 0.24 sf x 200.00'L = 48.5 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 200.00'L = 48.5 cf
#3	53.80'	2,033 cf	**9.50'W x 214.00'L x 2.50'H Soil + Gravel** 5,083 cf Overall x 40.0% Voids
		4,318 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	56.80'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	54.30'	**12.0" Round RCP_Round 12"** L= 28.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 54.30' / 53.10' S= 0.0429 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	54.80'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	53.80'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.04 cfs @ 12.23 hrs HW=55.76' (Free Discharge)
└**4=Exfiltration** (Controls 0.04 cfs)

Primary OutFlow Max=0.80 cfs @ 12.23 hrs HW=55.76' TW=52.98' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.80 cfs of 4.63 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.80 cfs @ 4.05 fps)

Pond 14P: BIORETENTION - IMP 1



Summary for Pond 14R: STORAGE PIPE - LINE 4

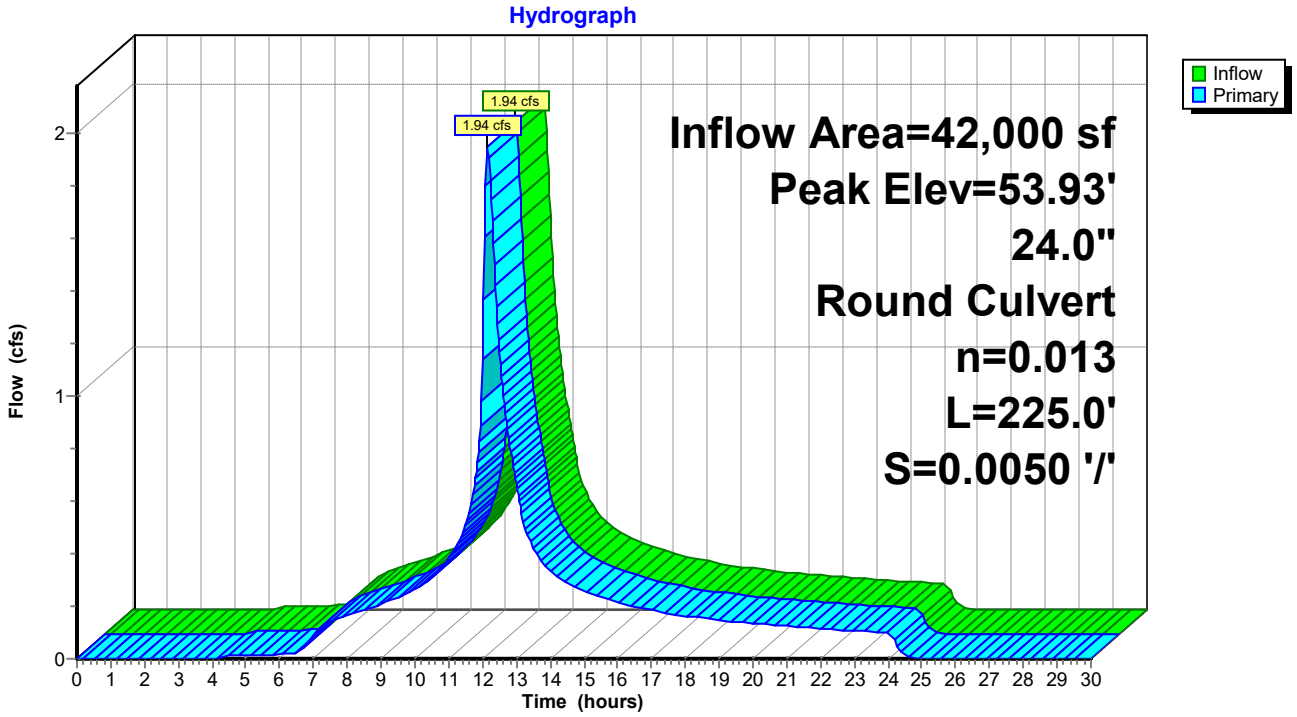
Inflow Area = 42,000 sf, 79.33% Impervious, Inflow Depth = 5.01" for 100-Year event
Inflow = 1.94 cfs @ 12.16 hrs, Volume= 17,527 cf
Outflow = 1.94 cfs @ 12.16 hrs, Volume= 17,527 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.94 cfs @ 12.16 hrs, Volume= 17,527 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 53.93' @ 12.17 hrs
Flood Elev= 55.23'

Device	Routing	Invert	Outlet Devices
#1	Primary	53.23'	**24.0" Round Culvert** L= 225.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 53.23' / 52.10' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=1.92 cfs @ 12.16 hrs HW=53.92' TW=52.98' (Dynamic Tailwater)
1=Culvert (Outlet Controls 1.92 cfs @ 2.95 fps)

Pond 14R: STORAGE PIPE - LINE 4



Summary for Pond 15R: STORAGE PIPE - LINE 5

[57] Hint: Peaked at 55.01' (Flood elevation advised)

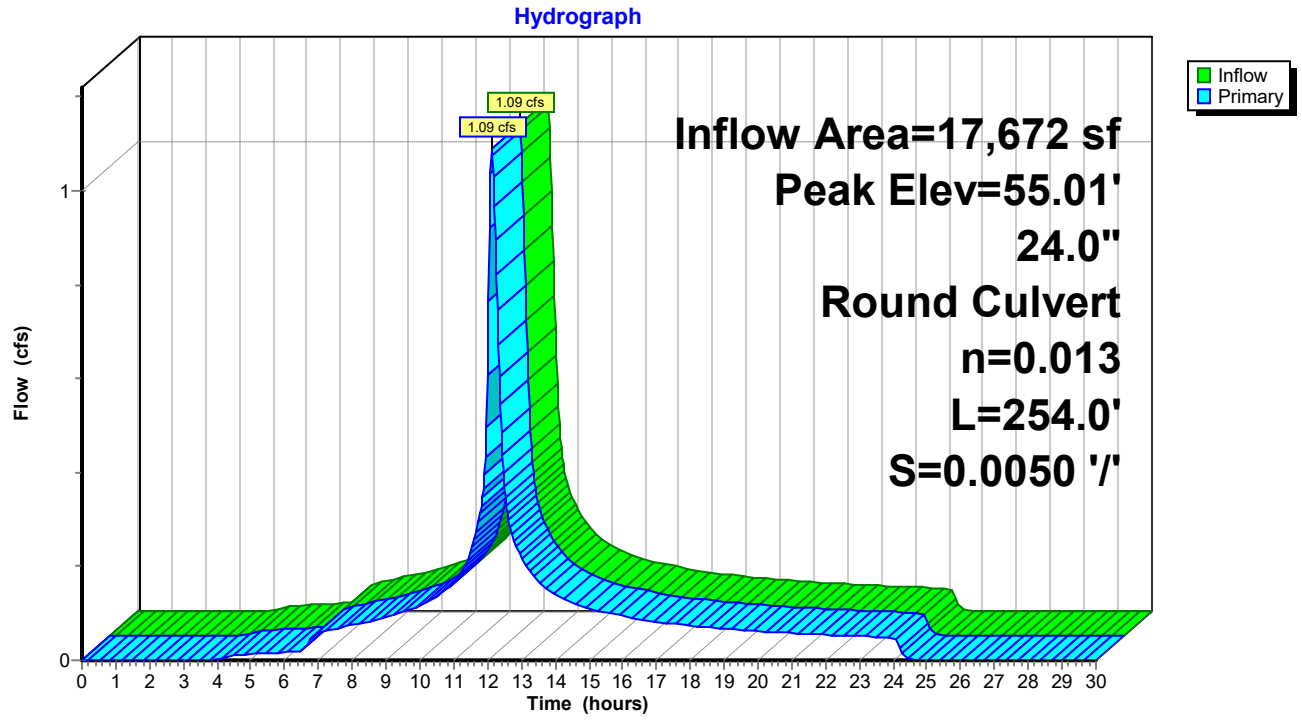
Inflow Area = 17,672 sf, 68.55% Impervious, Inflow Depth = 5.28" for 100-Year event
Inflow = 1.09 cfs @ 12.13 hrs, Volume= 7,769 cf
Outflow = 1.09 cfs @ 12.13 hrs, Volume= 7,769 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.09 cfs @ 12.13 hrs, Volume= 7,769 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.01' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.50'	**24.0" Round Culvert** L= 254.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 54.50' / 53.23' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=1.07 cfs @ 12.13 hrs HW=55.01' TW=53.92' (Dynamic Tailwater)
1=Culvert (Outlet Controls 1.07 cfs @ 2.59 fps)

Pond 15R: STORAGE PIPE - LINE 5



Summary for Pond 17P: BIORETENTION - IMP 5

Inflow Area = 24,328 sf, 87.16% Impervious, Inflow Depth = 6.72" for 100-Year event
Inflow = 1.90 cfs @ 12.09 hrs, Volume= 13,630 cf
Outflow = 0.96 cfs @ 12.25 hrs, Volume= 13,254 cf, Atten= 49%, Lag= 10.1 min
Discarded = 0.04 cfs @ 12.25 hrs, Volume= 3,495 cf
Primary = 0.92 cfs @ 12.25 hrs, Volume= 9,759 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 56.90' @ 12.25 hrs Surf.Area= 2,394 sf Storage= 2,146 cf
Flood Elev= 57.70' Surf.Area= 2,394 sf Storage= 3,628 cf

Plug-Flow detention time= 111.7 min calculated for 13,254 cf (97% of inflow)
Center-of-Mass det. time= 93.3 min (857.3 - 764.0)

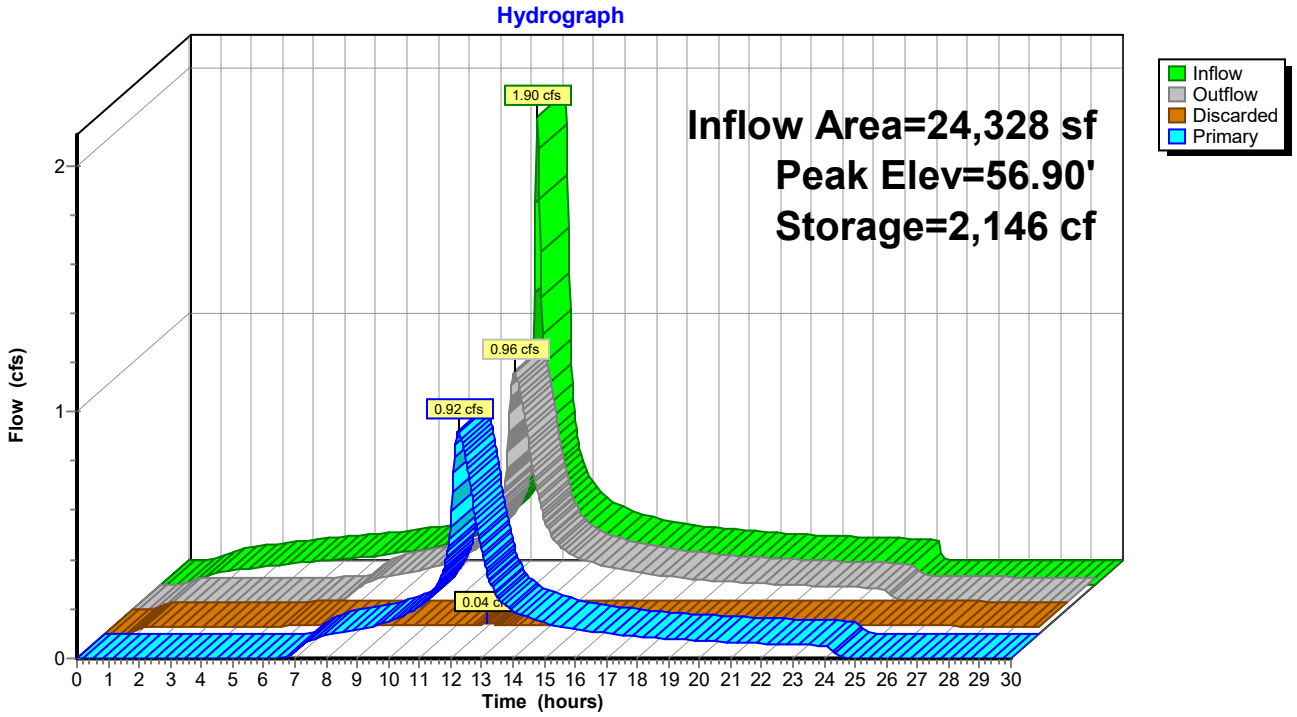
Volume	Invert	Avail.Storage	Storage Description
#1	57.20'	1,652 cf	**9.50'W x 252.00'L x 0.69'H Ponding** -Impervious
#2	55.70'	62 cf	**Perf @ 254.00' L** Inside #3 Inside= 6.0"W x 6.0"H => 0.24 sf x 254.00'L = 61.6 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 254.00'L = 61.6 cf
#3	54.70'	2,369 cf	**9.50'W x 252.00'L x 2.50'H Soil + Gravel** 5,985 cf Overall - 62 cf Embedded = 5,923 cf x 40.0% Voids
		4,083 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	57.70'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	55.20'	**12.0" Round RCP_Round 12"** L= 28.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 55.20' / 54.23' S= 0.0346 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	55.70'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	54.70'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.04 cfs @ 12.25 hrs HW=56.90' (Free Discharge)
└**4=Exfiltration** (Controls 0.04 cfs)

Primary OutFlow Max=0.92 cfs @ 12.25 hrs HW=56.90' TW=53.90' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.92 cfs of 5.18 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.92 cfs @ 4.69 fps)

Pond 17P: BIORETENTION - IMP 5



Summary for Pond 20R: LINE 6

[57] Hint: Peaked at 55.35' (Flood elevation advised)

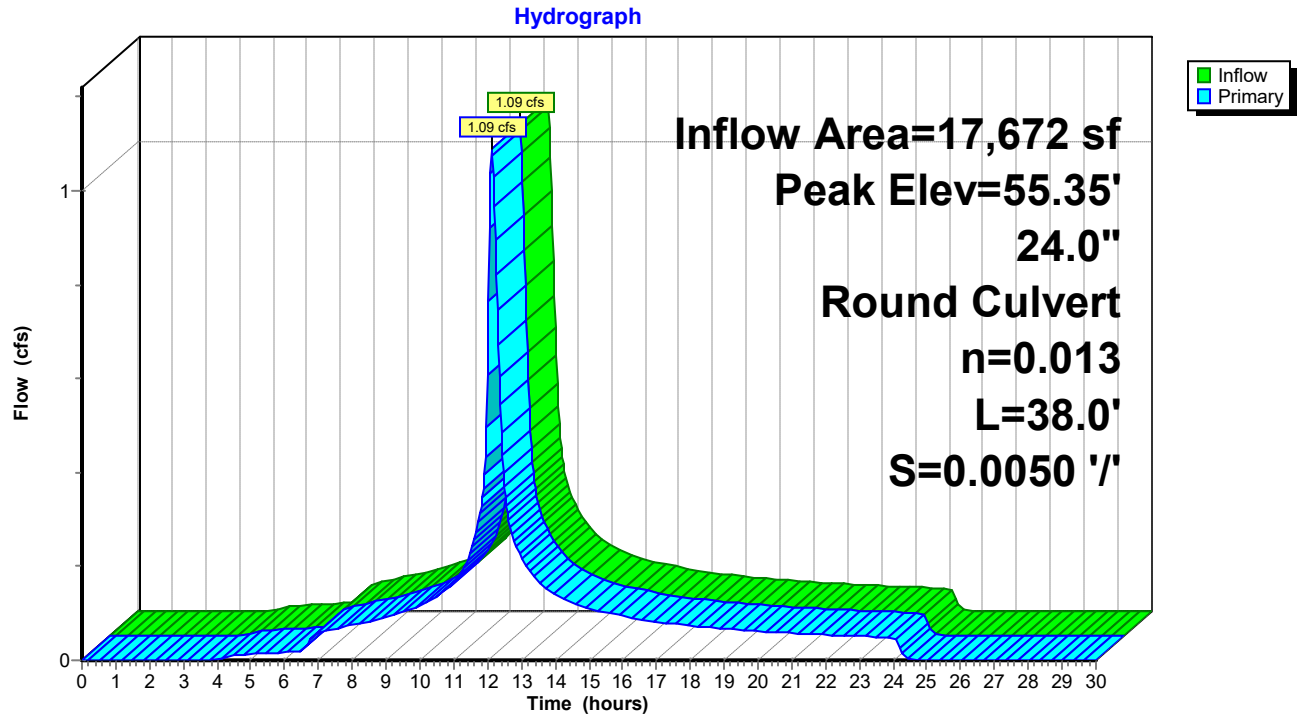
Inflow Area = 17,672 sf, 68.55% Impervious, Inflow Depth = 5.28" for 100-Year event
Inflow = 1.09 cfs @ 12.13 hrs, Volume= 7,769 cf
Outflow = 1.09 cfs @ 12.13 hrs, Volume= 7,769 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.09 cfs @ 12.13 hrs, Volume= 7,769 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.35' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.85'	**24.0" Round Culvert** L= 38.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 54.85' / 54.66' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=1.08 cfs @ 12.13 hrs HW=55.35' TW=55.01' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.08 cfs @ 2.66 fps)

Pond 20R: LINE 6



Summary for Pond 22R: LINE 7

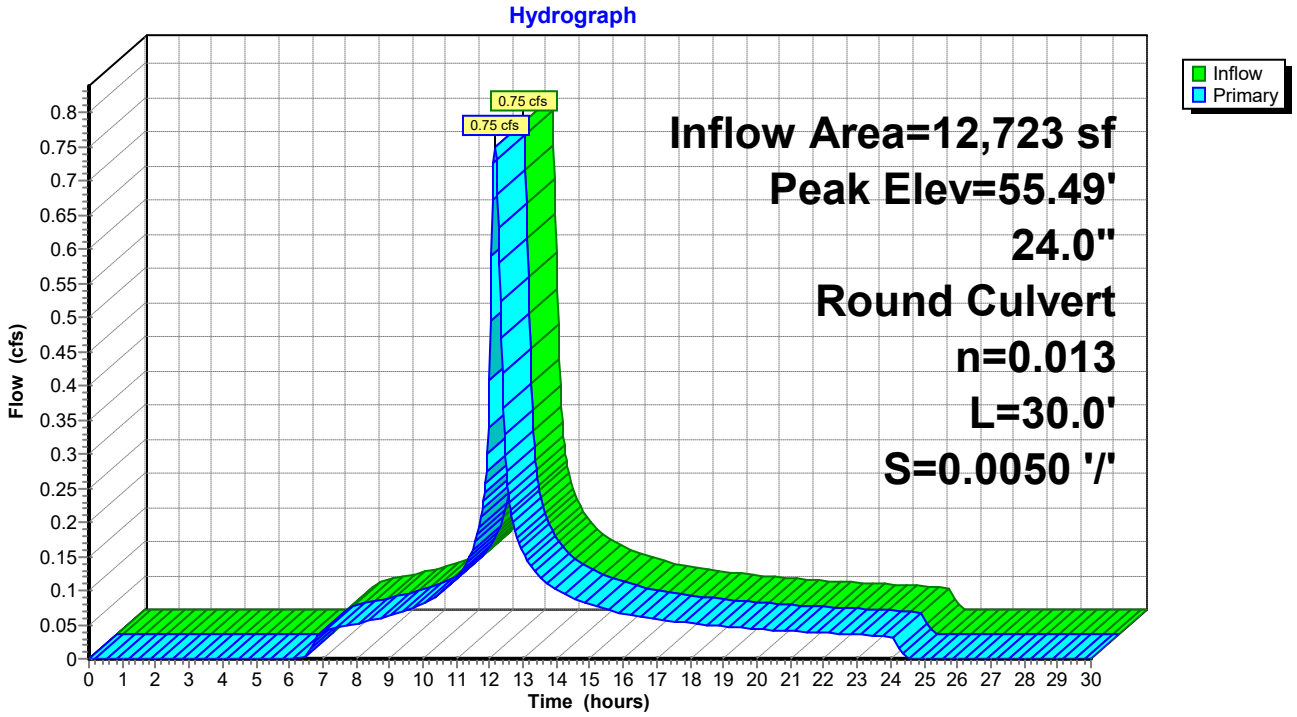
Inflow Area = 12,723 sf, 67.97% Impervious, Inflow Depth = 5.09" for 100-Year event
Inflow = 0.75 cfs @ 12.16 hrs, Volume= 5,394 cf
Outflow = 0.75 cfs @ 12.16 hrs, Volume= 5,394 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.75 cfs @ 12.16 hrs, Volume= 5,394 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.49' @ 12.16 hrs
Flood Elev= 56.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	55.00'	**24.0" Round Culvert** L= 30.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 55.00' / 54.85' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=0.76 cfs @ 12.16 hrs HW=55.49' TW=55.34' (Dynamic Tailwater)
└**1=Culvert** (Outlet Controls 0.76 cfs @ 1.92 fps)

Pond 22R: LINE 7



Summary for Pond 24P: BIORETENTION - IMP 3

Inflow Area = 12,723 sf, 67.97% Impervious, Inflow Depth = 6.25" for 100-Year event
Inflow = 0.96 cfs @ 12.09 hrs, Volume= 6,629 cf
Outflow = 0.76 cfs @ 12.16 hrs, Volume= 6,449 cf, Atten= 21%, Lag= 4.4 min
Discarded = 0.01 cfs @ 12.16 hrs, Volume= 1,055 cf
Primary = 0.75 cfs @ 12.16 hrs, Volume= 5,394 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 56.58' @ 12.16 hrs Surf.Area= 699 sf Storage= 621 cf
Flood Elev= 57.40' Surf.Area= 699 sf Storage= 1,061 cf

Plug-Flow detention time= 79.4 min calculated for 6,449 cf (97% of inflow)
Center-of-Mass det. time= 62.0 min (851.8 - 789.8)

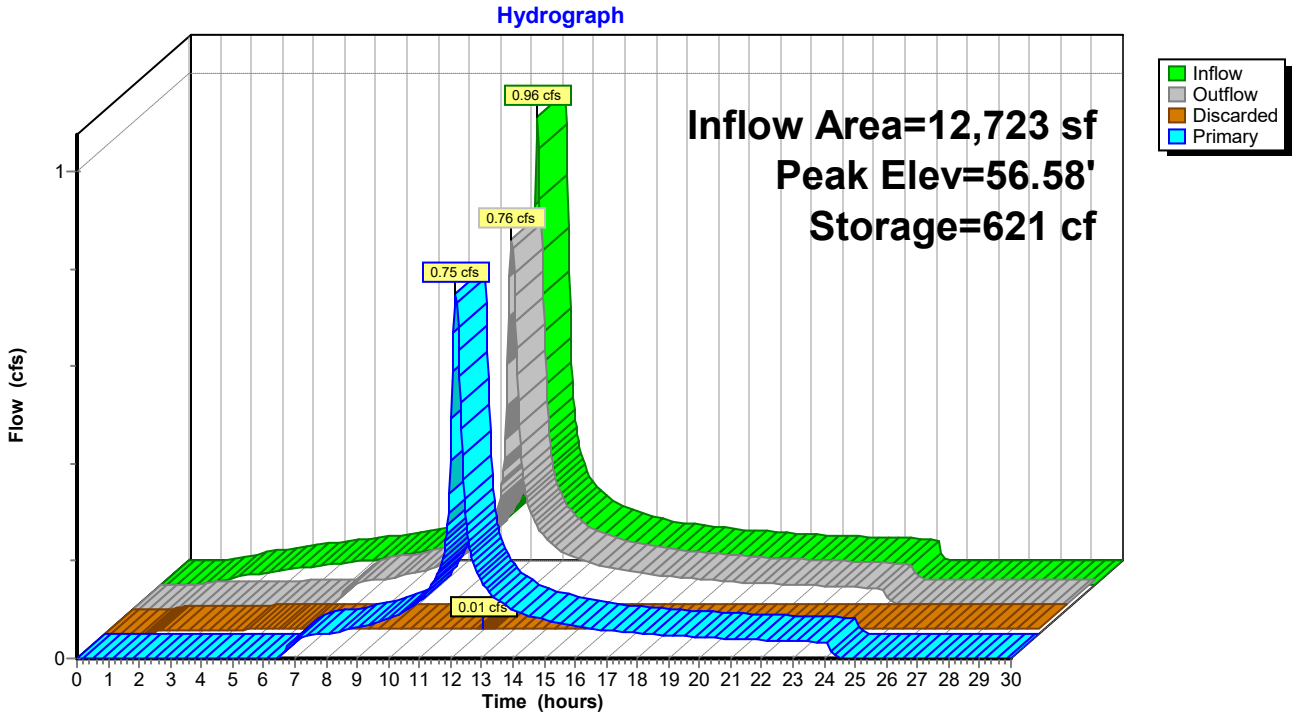
Volume	Invert	Avail.Storage	Storage Description
#1	56.90'	503 cf	**7.60'W x 92.00'L x 0.72'H Ponding** -Impervious
#2	55.40'	20 cf	**CPP single-wall 6" @ 84.00' L** Inside #3 Inside= 6.0"W x 6.0"H => 0.24 sf x 84.00'L = 20.4 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 84.00'L = 20.4 cf
#3	54.40'	691 cf	**7.60'W x 92.00'L x 2.50'H Soil + Gravel** 1,748 cf Overall - 20 cf Embedded = 1,728 cf x 40.0% Voids
		1,215 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	57.40'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	55.40'	**12.0" Round RCP_Round 12"** L= 20.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 55.40' / 55.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	55.70'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	54.40'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.01 cfs @ 12.16 hrs HW=56.57' (Free Discharge)
└**4=Exfiltration** (Controls 0.01 cfs)

Primary OutFlow Max=0.75 cfs @ 12.16 hrs HW=56.57' TW=55.49' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.75 cfs of 3.76 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.75 cfs @ 3.80 fps)

Pond 24P: BIORETENTION - IMP 3



Summary for Pond 25P: BIORETENTION - IMP 4

Inflow Area = 4,949 sf, 70.05% Impervious, Inflow Depth = 6.37" for 100-Year event
Inflow = 0.38 cfs @ 12.09 hrs, Volume= 2,627 cf
Outflow = 0.37 cfs @ 12.10 hrs, Volume= 2,605 cf, Atten= 1%, Lag= 0.9 min
Discarded = 0.00 cfs @ 12.10 hrs, Volume= 231 cf
Primary = 0.37 cfs @ 12.10 hrs, Volume= 2,374 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 55.91' @ 12.10 hrs Surf.Area= 160 sf Storage= 92 cf
Flood Elev= 57.50' Surf.Area= 160 sf Storage= 242 cf

Plug-Flow detention time= 36.7 min calculated for 2,605 cf (99% of inflow)
Center-of-Mass det. time= 31.3 min (815.2 - 783.9)

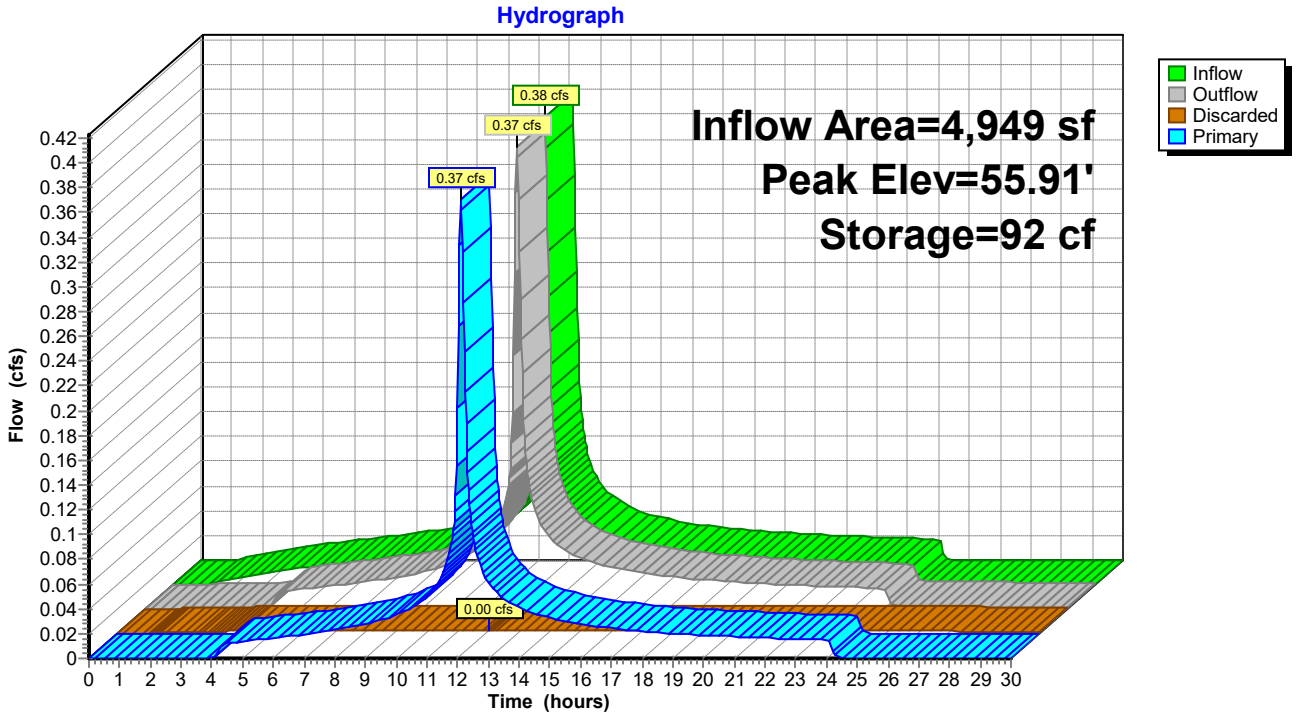
Volume	Invert	Avail.Storage	Storage Description
#1	57.00'	115 cf	**7.60'W x 21.00'L x 0.72'H Ponding** -Impervious
#2	55.50'	4 cf	**Perf @ 16.00' L** Inside #3 Inside= 6.0"W x 6.0"H => 0.24 sf x 16.00'L = 3.9 cf Outside= 7.0"W x 7.0"H => 0.24 sf x 16.00'L = 3.9 cf
#3	54.50'	158 cf	**7.60'W x 21.00'L x 2.50'H Soil + Gravel** 399 cf Overall - 4 cf Embedded = 395 cf x 40.0% Voids
		277 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Device 2	57.50'	**2.6" x 2.6" Horiz. Grate** C= 0.600 in 3.0" x 3.0" Grate (75% open area) Limited to weir flow at low heads
#2	Primary	54.95'	**12.0" Round RCP_Round 12"** L= 20.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 54.95' / 54.85' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	55.50'	**6.0" Vert. Perf** C= 0.600 Limited to weir flow at low heads
#4	Discarded	54.50'	**0.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 50.00'

Discarded OutFlow Max=0.00 cfs @ 12.10 hrs HW=55.90' (Free Discharge)
└**4=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.37 cfs @ 12.10 hrs HW=55.90' TW=55.34' (Dynamic Tailwater)
└**2=RCP_Round 12"** (Passes 0.37 cfs of 2.15 cfs potential flow)
  ├**1=Grate** (Controls 0.00 cfs)
  └**3=Perf** (Orifice Controls 0.37 cfs @ 2.16 fps)

Pond 25P: BIORETENTION - IMP 4



IV. EXHIBITS

LEGEND:

BIO-RETENTION AREA

GRAPHIC SCALE
0 30
1"=30'

DONALDSON WAY

231LF 12" SD PIPE S=0.005
LINE 1

SDMH#1
RIM 52.38±
EX .INV 49.63(VERIFY)
12"INV 49.63
OUTFALL

SDMH#2
RIM 55.00±
12"INV 50.79
24"INV 50.79

LINE 2

10' PROPOSED STORM DRAIN EASEMENT

24LF 12"SD PIPE (SDR35)
S=0.081T

SD INLET #5
GR 57.24
BIO-FL 56.74
6"INV 55.24 IN
12"INV 54.24 OUT

SDMH#3
RIM 57.50
12"INV 52.28
24"INV 51.28
3"INV 56.74

97LF 18" SD PIPE S=0.005

257LF 6" PERF. PIPE S=0.00

SDCO#5
6"INV 55.24

SDCO#4
RIM 57.57
BIO-FL 56.40
6"INV 55.40

APPROXIMATE LOCATION OF WEST NAPA FAULT

50LF 3"SD PIPE
S=0.005

GR 57.50
3"INV 56.99

AREA 'A'
1.06 AC

AREA 'E'
0.29 AC

NEW WINDMILL

84LF 6" PERF. PIPE S=0.00

20LF 12"SD S=0.02

SDMH#6
RIM 59.70
12"INV 55.00

SD INLET#4
GR 57.40
BIO-FL 56.90
12"INV OUT 54.94
6" PERF. INV 55.40

20.00' S.S.E.
[724 O.R. 300]

LINE 3

165LF 24" SD PIPE S=0.005

FF 60.00

20LF 12"SD S=0.005

16LF 6" PERF. PIPE S=0.00

SDCO#3
RIM 57.67
BIO-FL 57.00
6"INV 55.50

LINE 7

AREA 'D'
0.13 AC

12"INV @WYE 54.85

SD INLET#3
GR 57.50
BIO-FL 57.00
6"INV 55.50
12"INV 54.95

BROADWAY
STATE ROUTE 29
(WIDTH VARIES)

20LF 12"SD S=0.005

68LF 12"SD S=0.005

LINE 6

AREA 'B'
0.49 AC
225LF 24"SD S=0.005

AREA 'C'
0.55 AC
254LF 24"SD S=0.005

LINE 4

LINE 5

SDMH#4
RIM
24"INV 52.10
12"INV 53.10

28LF 12"SD PIPE
S=0.0429

APPROXIMATE LOCATION OF WEST NAPA FAULT

SD INLET#1
GR 56.80
BIO-FL 56.30
6"INV 54.80
12"INV 54.30

SDCO #1
BIO-FL 56.30
6"INV. 54.80

27LF 6"SD
S=0.0346

SD INLET#2
GR 57.70
BIO-FL 57.20
12"INV 55.20
6"INV 55.70

SDMH#5
RIM 58.45
12"INV 54.23
24"INV 53.23 THRU

246LF 6" PERF. PIPE S=0.00

SDCO#2
RIM 57.87
BIO-FL 57.20
6"INV 55.70

SDMH#6
RIM 57.85
12"INV 54.66
24"INV 54.50

8.73'

MATCH LINE

JAMES ROAD

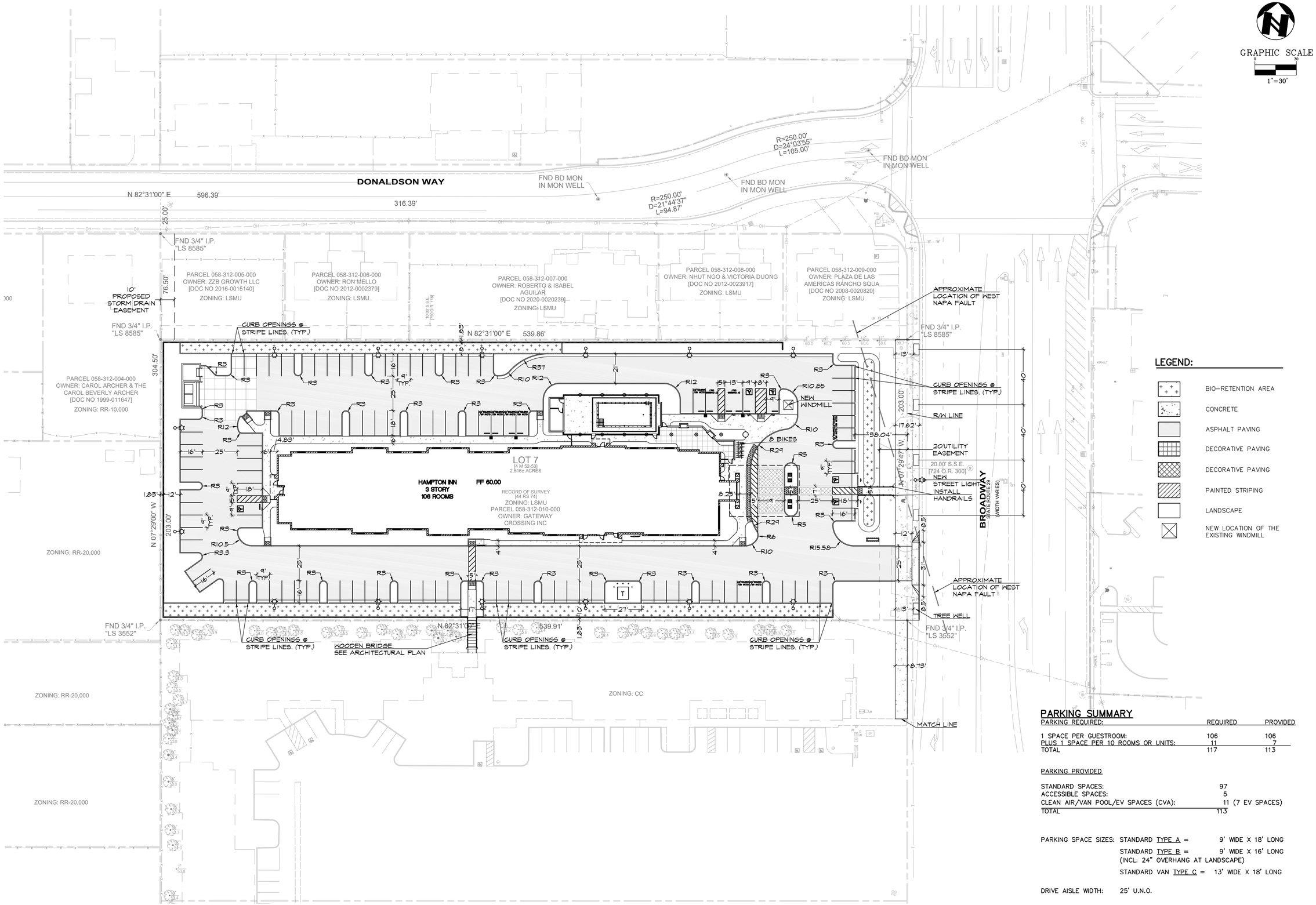
DATE:	03-11-21
SCALE:	1" = 30'
DESIGNED:	RB
DRAWN:	TY
CHECKED:	AS
PROJ. MGR:	AS
FILE PATH:	

REV #	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			

ams associates, inc. PLANNING ENGINEERING SURVEYING
801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

HYDROLOGY MAP
HILTON HAMPTON INN
3443 BROADWAY
AMERICAN CANYON NAPA COUNTY CALIFORNIA

SHEET EXHIBIT A OF
PROJECT 20-2498



LEGEND:

- BIO-RETENTION AREA
- CONCRETE
- ASPHALT PAVING
- DECORATIVE PAVING
- DECORATIVE PAVING
- PAINTED STRIPING
- LANDSCAPE
- NEW LOCATION OF THE EXISTING WINDMILL

PARKING SUMMARY

PARKING REQUIRED:	REQUIRED	PROVIDED
1 SPACE PER GUESTROOM:	106	106
PLUS 1 SPACE PER 10 ROOMS OR UNITS:	11	7
TOTAL	117	113

PARKING PROVIDED

STANDARD SPACES:	97
ACCESSIBLE SPACES:	5
CLEAN AIR/VAN POOL/EV SPACES (CVA):	11 (7 EV SPACES)
TOTAL	113

PARKING SPACE SIZES: STANDARD TYPE A = 9' WIDE X 18' LONG
STANDARD TYPE B = 9' WIDE X 16' LONG (INCL. 24" OVERHANG AT LANDSCAPE)
STANDARD VAN TYPE C = 13' WIDE X 18' LONG

DRIVE AISLE WIDTH: 25' U.N.O.

BICYCLE PARKING REQUIRED

1 SPACE PER 20 CAR SPACES — 6 REQUIRED — 8 PROVIDED

DATE:	03-11-21	REV #	BY
SCALE:	1" = 30'		
DESIGNED:	AS		
DRAWN:	TY		
CHECKED:	AS		
PROJ. MGR:	AS		
FILE PATH:	2498SITE.DWG		

DESCRIPTION | DATE

ams associates, inc. PLANNING ENGINEERING SURVEYING
801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

HORIZONTAL CONTROL PLAN
HILTON HAMPTON INN
3443 BROADWAY
AMERICAN CANYON NAPA COUNTY CALIFORNIA

SHEET EXHIBIT B OF PROJECT 20-2498

LEGEND:

BIO-RETENTION AREA

GRAPHIC SCALE
0 30
1"=30'

DONALDSON WAY

231LF 12" SD PIPE S=0.005

SDMH#1
RIM 52.38±
EX .INV 49.63(VERIFY)
12"INV 49.63
OUTFALL

SDMH#2
RIM 55.00±
12"INV 50.79
24"INV 50.79

10' PROPOSED STORM DRAIN EASEMENT

24LF 12"SD PIPE (SDR35) S=0.081T

SD INLET #5
GR 57.24
BIO-FL 56.74
6"INV 55.24 IN
12"INV 54.24 OUT

SDMH#3
RIM 57.50
12"INV 52.28
24"INV 51.28
3"INV 56.74

47LF 18" SD PIPE S=0.005

257LF 6" PERF. PIPE S=0.00

SDCO#5
6"INV 55.24

SSCO
6"INV 51.98

6"INV 51.44

6"INV 51.19

APPROXIMATE LOCATION OF WEST NAPA FAULT

SDCO#4
RIM 57.57
BIO-FL 56.40
6"INV 55.40

SSCO
6"INV 49.98

8LF 6"SS S=0.01

67LF 6" SS S=0.01

100LF 6" SS S=0.01

100LF 6" SS S=0.01

22LF 6" SS S=0.01

100LF 6" SS S=0.01

100LF 6" SS S=0.01

AD
GR 57.85
6"INV 55.01
52LF 3"SD PIPE S=0.005

AD
GR 57.67
6"INV 55.20

GR 57.50
3"INV 56.99

SSCO
6"INV 54.65

SSCO
6"INV 53.98

SSCO
6"INV 52.98

SSCO
6"INV 50.98

6"INV 52.32

54LF 6"SS S=0.02

NEW WINDMILL

84LF 6" PERF. PIPE S=0.00

6"INV 52.35

20LF 12"SD S=0.02

SDMH#6
RIM 58.70
12"INV 55.00

Z-Z
C-5.1

SD INLET#4
GR 57.40
BIO-FL 56.90
12"INV OUT 54.94
6" PERF. INV 55.40

20.00' S.S.E.
[724 O.R. 300]

SDCO#3
RIM 57.67
BIO-FL 57.00
6"INV 55.50

SD INLET#3
GR 57.50
BIO-FL 57.00
6"INV 55.50
12"INV 54.95

20LF 12"SD S=0.005

16LF 6" PERF. PIPE S=0.00

12"INV @KYE 54.85

20LF 12"SD S=0.005

68LF 12"SD S=0.005

BROADWAY
(STATE ROUTE 29)
(WIDTH VARIES)

SITE ACCESS

APPROXIMATE LOCATION OF WEST NAPA FAULT

MATCH LINE

LOT 7
[4 M 52-53]
2.516± ACRES

FF 60.00

RECORD OF SURVEY
[44 RS 74]

3441 BROADWAY
EXISTING ONE STORY

225LF 24"SD S=0.005

254LF 24"SD S=0.005

28LF 12"SD PIPE S=0.0429

SD INLET#1
GR 56.80
BIO-FL 56.30
6"INV 54.80
12"INV 54.30

X-X
C-4.1

SDCO #1
BIO-FL 56.30
6"INV. 54.80

27LF 6"SD S=0.0346

SD INLET#2
GR 57.10
BIO-FL 57.20
12"INV 55.20
6"INV 55.70

SDMH#5
RIM 58.45
12"INV 54.23
24"INV 53.23 THRU

246LF 6" PERF. PIPE S=0.00

Y-Y
C-5.1

SDCO#2
RIM 57.81
BIO-FL 57.20
6"INV 55.70

SDMH#6
RIM 57.85
12"INV 54.66
24"INV 54.50

8.73'

SDMH#4
RIM
24"INV 52.10
12"INV 53.10

NOTES:

1. INSTALL POST INDICATOR VALUE (PIV).
2. INSTALL 8" DDCV.
3. INSTALL FIRE DEPARTMENT CONNECTION.
4. INSTALL CHECK VALVE.
5. INSTALL FIRE HYDRANT.
6. INSTALL 2" WATER METER W/ 3" WATER SERVICE.
7. INSTALL 2" IRRIGATION METER.
8. INSTALL BACKFLOW PREVENTER.
9. INSTALL STORMDRAIN INLET.
10. INSTALL STORMDRAIN CLEANOUT.
11. THE EXISTING POWER POLE TO REMAIN. THE NEW SERVICE FROM THIS POLE TO TRANSFORMER SHALL BE UNDERGROUND.
12. REMOVE THE EXISTING GAS LINE (SEE DRY UTILITY PLANS).
13. INSTALL GREASE TRAP
14. INSTALL SANITARY SEWER CLEANOUT.
15. INSTALL AREA DRAIN.
16. INSTALL SHALLOW STORM DRAIN INLET.
17. INSTALL STORM DRAIN MANHOLE PER CITY'S STD. & SPEC.
18. REMOVE THE EXISTING FIRE HYDRANT.

PITS, VAULTS & CATCH BASINS

CATCH BASINS

See Knock Out Sizing on Next Page

Catch Basin

Grooved
Grooved joint spans torque of grade rings

Framed
Cast-in galvanized frame with 2" x 2" x 1/4" angle iron with anchor bolts

- "U" Series Catch Basins are specifically designed as a "heavy duty" standard for drainage installations. They provide greater labor savings, quality, and simplicity that standardization of pre-cast units make possible in the construction industry.
- Knock-Outs available in grate rings and catch basins.
- No knock-outs on 8" and 12" grate rings.
- Units are available in three H-20 load specifications.
- With or without bottoms.
- Grooved or framed joints provide a maximum flexibility, permitting pipe of any size to be vertic and quickly grouted in at jobsite.
- Units are available in heights in 6" increments up to 6' high. Customer specified top edge choices (see XXL Catch Basin on page 59).
- "U" Series Catch Basins are available in special heights upon request.
- Approximate dimensions and weights shown.

PRODUCT NO.	DIMENSIONS A	B	C	D	Approx Wt.
101 CATCH BASIN	24"	24"	24"	4" DEEP	44" DEEP	1675 lbs.
202 CATCH BASIN	24"	24"	24"	4" DEEP	44" DEEP	2825 lbs.
1202 CATCH BASIN	24"	24"	24"	4" DEEP	48" DEEP	3350 lbs.
1206 CATCH BASIN	24"	24"	24"	4" DEEP	48" DEEP	3320 lbs.
1243 CATCH BASIN	24"	24"	24"	4" DEEP	48" DEEP	4320 lbs.
1252 CATCH BASIN	24"	24"	24"	4" DEEP	48" DEEP	4430 lbs.

Oldcastle Infrastructure

U SERIES

Std Insert: U-SERIES-CATCH-BASIN1
Insert Refit: January, 2011
Www.oldcastleinfrastructure.com

"U" SERIES CATCH BASINS
CHRISTY

58 (888) 965-3227 www.oldcastleinfrastructure.com

PITS, VAULTS & CATCH BASINS

Welded Steel Grates with Cross Bars
77% Open Flow Area

Non-Traffic Loading

H/20 Traffic Loading

- Welded steel grates for "U" series catch basins to meet job specifications.
- Individual slip, clearly called for within requirement information available on request.
- See catch basin page for frame detail.
- ADA availability for all sizes.

Oldcastle Infrastructure Grate No.	Approx. Weight Per Grate	Description
U21-HT	GRATE	35 lbs.	19⅝" x 19⅝" Welded, Galvanized, Non-Traffic. Fits U23 Catch Basin
U23-HT	GRATE	48 lbs.	23⅝" x 23⅝" Welded, Galvanized, Non-Traffic. Fits U24 Catch Basin
U24-HT	GRATE	48 lbs.	23⅝" x 23⅝" Welded, Galvanized, Non-Traffic
U25-HT	GRATE	113 lbs.	23⅝" x 23⅝" Welded, Galvanized, H/20 Traffic
U26-HT	GRATE	67 lbs.	23⅝" x 23⅝" Welded, Galvanized, Non-Traffic
U29-HT	GRATE	155 lbs.	23⅝" x 23⅝" Welded, Galvanized, H/20 Traffic
U42-HT	GRATE	84 lbs.	23⅝" x 47⅜" Welded, Galvanized, Non-Traffic
U43-HT	GRATE	235 lbs.	23⅝" x 47⅜" Welded, Galvanized, H/20 Traffic
U52-HT	GRATE	84 lbs.	47" x 47⅜" Welded, Galvanized, Non-Traffic
U53-HT	GRATE	280 lbs.	47" x 47⅜" Welded, Galvanized, H/20 Traffic

All grates are galvanized, bicycle proof, and bolt down.

Oldcastle Infrastructure

STEEL GRATES

Std Insert: WELDED-STEEL-GRATES_001
Insert Refit: January, 2011

WELDED STEEL GRATES
CHRISTY

62 (888) 965-3227 www.oldcastleinfrastructure.com

6 CHRISTY U23 CATCH BASIN DETAIL
NOT TO SCALE

DESCRIPTION	DATE	BY	REV #

DATE: 03-11-21
SCALE: 1" = 30'
DESIGNED: AS
DRAWN: TY
CHECKED: AS
PROJ. MGR: AS
FILE PATH: 2498UTL.DWG

ams associates, inc. PLANNING ENGINEERING SURVEYING
801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

UTILITY PLAN
HILTON HAMPTON INN
3443 BROADWAY
NAPA COUNTY CALIFORNIA
AMERICAN CANYON

SHEET EXHIBIT C OF
PROJECT 20-2498

GRAPHIC SCALE
0 30
1"=30'

DONALDSON WAY

SDMH#1
RIM 52.38±

SDMH#2
RIM 55.00±

10' PROPOSED STORM DRAIN EASEMENT

SDMH#3
RIM 57.50

SD INLET #5
GR 57.24
BIO-FL 56.74
TW 57.50
BIO-FL 56.74
3"INV 56.74

AD
GR 57.85

AD
GR 57.67
(X.X FNC)

TC 58.00
GR 57.50
3"INV 56.99

SDMH#4
RIM

SD INLET#1
GR 56.80
BIO-FL 56.30

TW 57.00

TW
BIO-FL 56.44

B-B
C-3.2

A-A
C-3.2

FF 60.00

RECORD OF SURVEY
(44 RS 74)

T 7
(0-53)
2.516± ACRES

3439 BROADWAY
EXISTING ONE STORY BUILDING

EXISTING ONE STORY BUILDING

APPROXIMATE LOCATION OF WEST NAPA FAULT

SITE ACCESS

NEW WINDMILL

SDCO#4
RIM 57.57
BIO-FL 56.40

SDCO#3
RIM 57.67
BIO-FL 57.00

SDCO#5
6"INV 55.24

SDCO#2
RIM 57.87
BIO-FL 57.20

SDCO #1
BIO-FL 56.30

SDMH#5
RIM 58.45
12"INV 54.25

SDMH#6
RIM 57.85

SD INLET#2
GR 57.70
BIO-FL 57.20

SD INLET#3
GR 57.50
BIO-FL 57.00

SD INLET#4
GR 57.40
BIO-FL 56.90

20.00' S.S.E.
[724 O.R. 300]

BROADWAY
(STATE ROUTE 29)
(WIDTH VARIES)

17.62'

13'

12'

FL 60.01±

FL 59.96±

APPROXIMATE LOCATION OF WEST NAPA FAULT

8.73'

MATCH LINE

LEGEND:

BIO-RETENTION AREA

NOTE:

1. INSTALL 20LF 12" STORM DRAIN PIPE AT EXISTING DITCH.
2. CONSTRUCT NEW SIDEWALK ALL THE WAY TO EXISTING GRADE.
3. EXTEND THE SIDEWALK AND MATCH THE EXISTING SIDEWALK.
4. RELOCATED THE EXISTING WINDMILL.

DATE:	03-11-21
SCALE:	1" = 30'
DESIGNED:	AS
DRAWN:	TY
CHECKED:	AS
PROJ. MGR:	AS
FILE PATH:	2498GRAD.DWG

REV #	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			

ams associates, inc. PLANNING ENGINEERING SURVEYING
801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

GRADING PLAN
HILTON HAMPTON INN
3443 BROADWAY
NAPA COUNTY CALIFORNIA
AMERICAN CANYON

SHEET EXHIBIT D OF PROJECT 20-2498

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Appendix G:
Public Services Analysis Supporting Information

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From: James Comisky
To: Stephanie Shepard
Subject: RE: [External] Request for info about fire service impacts
Date: Thursday, March 4, 2021 11:24:21 AM
Attachments: image001.png
EIR Response.docx

Stephanie,
My apologies for the delay in responding back to you.
Please see the attached response to your inquiry. Let me know if you need any additional information.

Jim Comisky| Assistant Fire Chief
American Canyon Fire Protection District
911 Donaldson Way East | American Canyon, CA. 94503
☎ 707.551.0650 | 🖷 707.638.3511 | ✉ jcomisky@amcanfire.com
Internet| Facebook

From: Stephanie Shepard <sshepard@fcs-intl.com>
Sent: Tuesday, February 16, 2021 4:12 PM
To: James Comisky <jcomisky@amcanfire.com>
Subject: RE: [External] Request for info about fire service impacts

Thanks for letting me know. I look forward to your response.

Stephanie Shepard
Environmental Services Analyst II

From: James Comisky <jcomisky@amcanfire.com>
Sent: Tuesday, February 16, 2021 9:03 AM
To: Stephanie Shepard <sshepard@fcs-intl.com>
Subject: RE: Request for info about fire service impacts

Good morning Stephanie.
I wanted to let you know I received your email and will be developing a response for you.
Have a great day.

Jim Comisky| Assistant Fire Chief
American Canyon Fire Protection District
911 Donaldson Way East | American Canyon, CA. 94503
☎ 707.551.0650 | 🖷 707.638.3511 | ✉ jcomisky@amcanfire.com

Internet| Facebook

From: Stephanie Shepard <sshepard@fcs-intl.com>
Sent: Thursday, February 11, 2021 11:01 AM
To: James Comisky <jcomisky@amcanfire.com>
Cc: Tsui Li <tli@fcs-intl.com>
Subject: [External] Request for info about fire service impacts

Dear Chief Comisky,

I am contacting you regarding an Initial Study/Addendum being prepared for a proposed development in the City of American Canyon. As part of the environmental review being conducted by FirstCarbon Solutions, we are consulting with service providers to determine the project's impacts on public services. Your feedback regarding fire department services would be valuable to our analysis of the project's impacts.

I have attached a letter containing information about the project and a questionnaire related to the provision of public services. Please respond to the questionnaire in the attached letter, or forward this letter to the appropriate person who can provide the information we need to complete our environmental analysis.

Please let me know if you have any questions. I look forward to hearing from you.

Thank you,

Stephanie Shepard
Environmental Services Analyst II

Cell: +304 692 1697

FirstCarbon Solutions (FCS)
An ADEC Innovation

LinkedIn | Facebook | Twitter

Confidentiality Statement
This message (including any attachments) contains confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message and are hereby notified that any disclosure, copying, or distribution of this message, or the taking of any action based on it, is strictly prohibited. Please consider the environment before printing this e-mail.

Coronavirus (COVID-19) Update – City Offices Closed, Staff Still At Work

As a result of the COVID-19 Pandemic, all American Canyon City offices are closed to the

public. By modifying services, using social distancing, and offering assistance and service over the phone, we can do our part to minimize COVID-19 exposure to City staff and the public. Paperwork can be sent by mail to 4381 Broadway, Suite 201, American Canyon, CA 94503. For more information on COVID-19 and for Virtual City Hall, visit: https://www.cityofamericancanyon.org/

CONFIDENTIALITY NOTICE: This email is sent from an official account administered by the City of American Canyon. The information transmitted by this email is intended only for the person or entity to which it is addressed, and may contain proprietary, confidential and/or privileged material. If you are not the intended recipient of this message or received this in error, please contact the sender and delete the email and attachments from your computer.

1. Which station(s) would provide services to the project site?
   Fire Station 2 at 225 James Rd

2. What are the existing staffing levels, by type (department-wide and at the station(s) that would serve the project site)? What is the current number of firefighters, EMT personnel, engines, hook and ladder trucks, etc.?
   2 Fire Captains, 4 Firefighters, 2 Fire Engines 24/7 Staffing. We also have 1 Ladder Truck, 1 water Tender, 1 reserve Engine, 2 Brush Fire style engines as well, but not staffed.

3. Please provide the current average response times for emergency calls for service as a whole and for the station(s) located nearest to the project site.
   2 minutes

4. Please provide an estimate of the annual number of service calls the proposed project would be expected to generate. If possible, please provide an estimate by type of call (e.g., EMS, fire, etc.)
   Difficult to determine the amount of calls at this time.
   When things slow down I may be able to gather some data from other Hotels. However, the normal for Hotel calls for service are EMS calls and Fire Alarm calls.

5. What is the ability of the fire department to accommodate the demand of the proposed project as part of the existing facilities?
   Should be minimal impact. However, there is a cumulative affect when other projects such as this one begins to impact the department.

6. Are there any existing or planned mutual aid agreements with other agencies?
   For Fire Calls yes there are existing Automatic Aid Agreements with Vallejo Fire Department as well as with Napa County Fire Department.

7. Please provide information about the development fee schedule. What are the current rates? What is the estimate rate for the proposed project?
   I am waiting to hear back from our Fire Prevention people on this. Here is a link to the developer impact fees. https://www.cityofamericancanyon.org/home/showdocument?id=4192

8. Do you foresee any potential challenges that the project may present to the department? This includes concerns related to response times, staffing, apparatus, fire stations, etc. Please describe any measures that you would recommend to reduce potential concerns/challenges.
   You would be conforming to all existing code requirements. Depending on the layout of parking, our Ladder Truck may not be able to reach the roof which may be an issue.

9. Would the development of the proposed project impair the fire department's ability to maintain established response time standards with current staff and equipment levels?
   No, not at this time. However, there is a cumulative affect when other projects such as this one begins to impact the department.

10. Would the fire department need to construct new facilities or expand existing ones in order to serve the proposed project and the fire protection needs of the surrounding community?
    Unknown at this time

11. Do you have any other comments about the potential impacts of this project on the fire department? Please provide any recommendations or special concerns that may assist us in avoiding or reducing the occurrence of potential impacts to fire services associated with the project.

None at this time

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Appendix H:
BDSP EIR Transportation Impact Report Addendum

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June 4, 2021

Ms. Tsui Li
First Carbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Addendum to the EIR for the Broadway District Specific Plan

Dear Ms. Li;

W-Trans has prepared an addendum to the Environmental Impact Report (EIR) for the Broadway District Specific Plan (BDSP) in the City of American Canyon. The purpose of this letter is to evaluate the potential for a change in the transportation impacts associated with the proposed zoning change to allow the development of hotels at sites previously assumed to accommodate retail, and the reduction in the retail square footage in the Specific Plan area compared to what was analyzed in the certified EIR.

Background

Broadway is designated as State Route (SR) 29 and is the primary north-south transportation corridor through the City of American Canyon. The Broadway District extends between the southerly American Canyon limit at the City of Vallejo and American Canyon's northern city limit, which borders on unincorporated Napa County. The District encompasses an area of 292 acres and includes sites along both the east and west sides of Broadway; regional access to the District is via I-80 and SR 29.

The *Broadway District Specific Plan Environmental Impact Report* (BDSP EIR) was certified in 2019 as a program-level document from which subsequent development could tier. The BDSP set forth development regulations for residential, commercial, and mixed uses along with design guidelines for parks, multiuse trails, and related infrastructure. The BDSP is made up of nine subareas, including Local Serving Mixed Use (LSMU), the subarea in which the project is located. The LSMU subarea includes four sites totaling 49.9 acres near the intersection of Broadway/Donaldson Way, as shown on the enclosed map of the planning area. The approved development for the entire BDSP consists of a mix of uses including 1,200 net new residential units and approximately 840,000 net new square feet of non-residential uses. The land uses evaluated and approved for the LSMU subarea were 127,500 square feet for shopping center uses and 86 multifamily residential units.

Project Description

The project as proposed would change the zoning for the LSMU subarea to allow hotel uses, which are not currently among the approved uses. In addition to the zoning change, a Hampton Inn Hotel is proposed at 3443 Broadway, a 2.51-acre parcel within the LSMU subarea that is also identified as Assessor's Parcel Number (APN) 058-312-010. The proposed hotel would include 106 rooms with 59,000 square feet of floor area. The site is currently occupied by a small commercial building, a garage/storage building, vacant land, a dirt parking area and driveway, and a windmill pump; the applicant proposes to demolish the existing buildings on the site to accommodate the project. Specific uses are not proposed for the other LSMU sites at this time.

To estimate the traffic impact of the proposed project and the Hampton Inn Hotel, the trip generation as estimated in the EIR was revised. The hotel and shopping center land uses have different trip generation rates, so the net change to the number of trips resulting from the potential change in land use was determined by subtracting the estimated number of trips generated by the 127,500 square feet of approved shopping center uses from the previous estimate for the LSMU subarea. In its place, the project-related trips for the proposed Hampton Inn as well as potential hotel uses on the remaining three sites were estimated.

Trip Generation

The anticipated trip generation for the BDSP EIR was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 9th Edition, 2012. *Trip Generation Manual,* 10th Edition, 2017 is the most current version and the trip generation rates vary between the two editions. Therefore, trip generation estimates for the LMSU subarea were prepared comparing the approved and proposed uses based on both the 9th and 10th Edition rates to measure the changes using consistent assumptions for each of these scenarios. As the purpose of this letter is to evaluate the proposed change in land use compared with what was approved in the EIR, the existing land uses on the project site were not considered in the trip generation analysis. The project would include the same number of multi-family housing uses as was approved in the EIR for the LSMU sites; the associated trip generation is included in this analysis to reflect the total potential development of the LSMU subarea.

The *Trip Generation Manual,* 9th Edition rates applied to analyze the BDSP in the EIR were for "Shopping Center" (ITE LU 820) and "Apartment" (ITE LU 220). For the proposed project, rates for "Hotel" (ITE LU 310) as well as the apartment land use were applied. The total proposed square footage to be developed would not change; since the Hampton Inn is the only specific use proposed at this time, its ratio of floor area to rooms was used to estimate the number of rooms for potential hotels on the other three LSMU sites. It is noted that Land Use 220 was renamed "Multifamily Housing" in the 10th Edition of the Manual. For the shopping center land use, the EIR applied the fitted curve trip generation rate.

Internal Capture

Since the entirety of the BDSP area as analyzed in the EIR included both residential and retail uses, a portion of the trips generated by the project would involve residents of the multifamily housing patronizing the proposed LSMU shopping uses. It is expected that these trips would be made by walking and would not affect traffic on the adjacent street network; as a result, these trips were deducted from the estimated trip generation. An internal capture rate of 47 percent for multifamily housing and 15 percent for the shopping center use were applied to potential development in the LSMU subarea in the BDSP EIR. However, as the hotel uses would be less likely to generate trips between the new residential units and hotels, no internal capture trips were assumed for the analysis of the hotel uses in the LSMU subarea.

Pass-By

For the land uses as analyzed in the EIR, a portion of the traffic associated with the shopping center use would be drawn from existing traffic on nearby streets. These vehicle trips are not considered "new," but are instead comprised of drivers who are already driving on the adjacent street and choose to make an interim stop. These trips are referred to as "pass-by." For the shopping center use, the EIR assumed a 36 percent pass-by rate, which was also applied in this analysis. It is noted that the pass-by trips were estimated after deductions were already taken for internal capture trips, as the internal trips do not contribute to traffic on the local street network.

Total Trip Generation

Applying *ITE Trip Generation Manual,* 9th Edition trip generation rates, the LSMU subarea with the proposed Hampton Inn Hotel and other potential hotel uses is expected to generate an average of 2,443 trips per day, including 165 trips during the a.m. peak hour and 190 during the p.m. peak hour. This assumes a total of 229 hotel rooms, including 106 rooms for the proposed Hampton Inn Hotel and 123 rooms elsewhere in the LMSU subarea. Compared to the land uses analyzed for the LSMU subarea in the approved EIR, this represents a reduction of 2,778 daily trips, with an increase of 40 trips during the a.m. peak hour and a decrease of 273 trips during the p.m. peak hour.

The expected trip generation for the project as compared to the trip generation as estimated in the BDSP EIR and using 9th Edition rates is summarized in Table 1.

Table 1 – Trip Generation Summary – ITE Trip Generation Manual, 9th Edition Rates

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
BDSP EIR											
Apartments	86 du	6.65	572	0.51	44	9	35	0.62	53	35	18
Internal Capture		*-47%*	*-269*	*-47%*	*-21*	*-4*	*-17*	*-47%*	*-25*	*-16*	*-8*
Shopping center	127.5 ksf	62.37	7952	1.42	181	112	69	5.53	705	338	367
Internal Capture		*N/A*	*-269*	*-15%*	*-21*	*-17*	*-4*	*N/A*	*-25*	*-8*	*-16*
Pass-by		*-36%*	*-2766*	*-36%*	*-58*	*-34*	*-23*	*-36%*	*-245*	*-119*	*-126*
Total			**5220**		**126**	**66**	**60**		**464**	**230**	**234**
Proposed											
Multifamily housing	86 du	6.65	572	0.51	44	9	35	0.62	53	35	18
Hotel	229 rm	8.17	1,871	0.53	121	72	49	0.60	137	70	67
Total			**2443**		**165**	**81**	**84**		**190**	**105**	**85**
Net Change			**-2778**		**40**	**15**	**24**		**-273**	**-125**	**-149**

Note: du = dwelling unit; ksf = 1,000 square feet; rm = room; note: totals may not add up due to rounding

Using the rates from the *ITE Trip Generation Manual,* 10th Edition, the proposed land uses for the LMSU subarea were estimated to generate 2,544 daily trips, including 147 trips during the a.m. peak hour and 186 trips during the p.m. peak hour. In comparison with the land uses evaluated in the EIR, the project is estimated to generate an average of 2,139 fewer trips per day, with same number of trips during the a.m. peak hour and a reduction of 276 trips during the p.m. peak hour. The trip generation based on the 10th Edition rates is summarized in Table 2.

Table 2 – Trip Generation Summary – ITE Trip Generation Manual, 10th Edition Rates

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
BDSP EIR											
Apartment	86 rm	7.32	630	0.46	40	9	31	0.56	48	30	18
Internal Capture		*-47%*	*-296*	*-47%*	*-19*	*-4*	*-15*	*-47%*	*-23*	*-14*	*-9*
Shopping center	127.5 ksf	55.62	7092	1.69	216	134	82	5.10	705	338	367
Internal Capture		*N/A*	*-296*	*N/A*	*-19*	*-15*	*-4*	*N/A*	*-23*	*-9*	*-14*
Pass-by		*-36%*	*-2446*	*-36%*	*-71*	*-43*	*-28*	*-36%*	*-246*	*-118*	*-127*
Total – Certified EIR			**4683**		**147**	**81**	**66**		**462**	**226**	**235**
Proposed											
Multifamily housing	86 rm	7.32	630	0.46	40	9	31	0.56	48	30	18
Hotel	229 rm	8.36	1914	0.47	108	64	44	0.60	137	70	67
Total – Proposed			**2544**		**147**	**73**	**75**		**186**	**100**	**85**
Net Change			**-2139**		**0**	**-8**	**9**		**-276**	**-126**	**-50**

Note: du = dwelling unit; ksf = 1,000 square feet; rm = room; note: totals may not add up due to rounding

The EIR included a Level of Service (LOS) analysis for operation of six study intersections only during the p.m. peak hour as it was determined that intersection volumes were 10 to 20 percent lower during the a.m. peak hour. While using the *ITE Trip Generation Manual,* 9th Edition rates, the a.m. peak hour trips under the proposed project are higher than the estimated number of trips for the LSMU subarea used in the EIR analysis, the increase is nominal and is not expected to have an adverse effect on traffic operations given the lower traffic volumes and anticipated project volumes during the a.m. peak hour. For the p.m. peak hour, when existing traffic volumes are higher, the project is estimated to generate fewer trips than the LSMU subarea as evaluated in the EIR using either edition of *ITE Trip Generation Manual*, with an expected reduction of 273 trips using the 9th Edition rates and 276 trips using the 10th Edition rates.

Conclusions

- Based on rates contained in both the 9th and 10th Editions of ITE's *Trip Generation Manual*, the project would be expected to generate fewer trips on a daily basis and during the p.m. peak hour. An increase of 40 trips during the morning peak hour is projected using the 9th Edition rates, while no change would be anticipated based on 10th Edition Rates.

- Given that the a.m. peak hour volumes are substantially lower than those during the p.m. peak hour and operation is better, it is expected that the even with a modest change in trips generated during the morning peak hour the project would not have an adverse effect on traffic operations in the project area as compared to the land uses assumed in the BDSP EIR and the EIR can therefore be presumed to adequately cover any potential traffic impacts associated with the proposed change in permitted land uses in the LMSU subarea.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

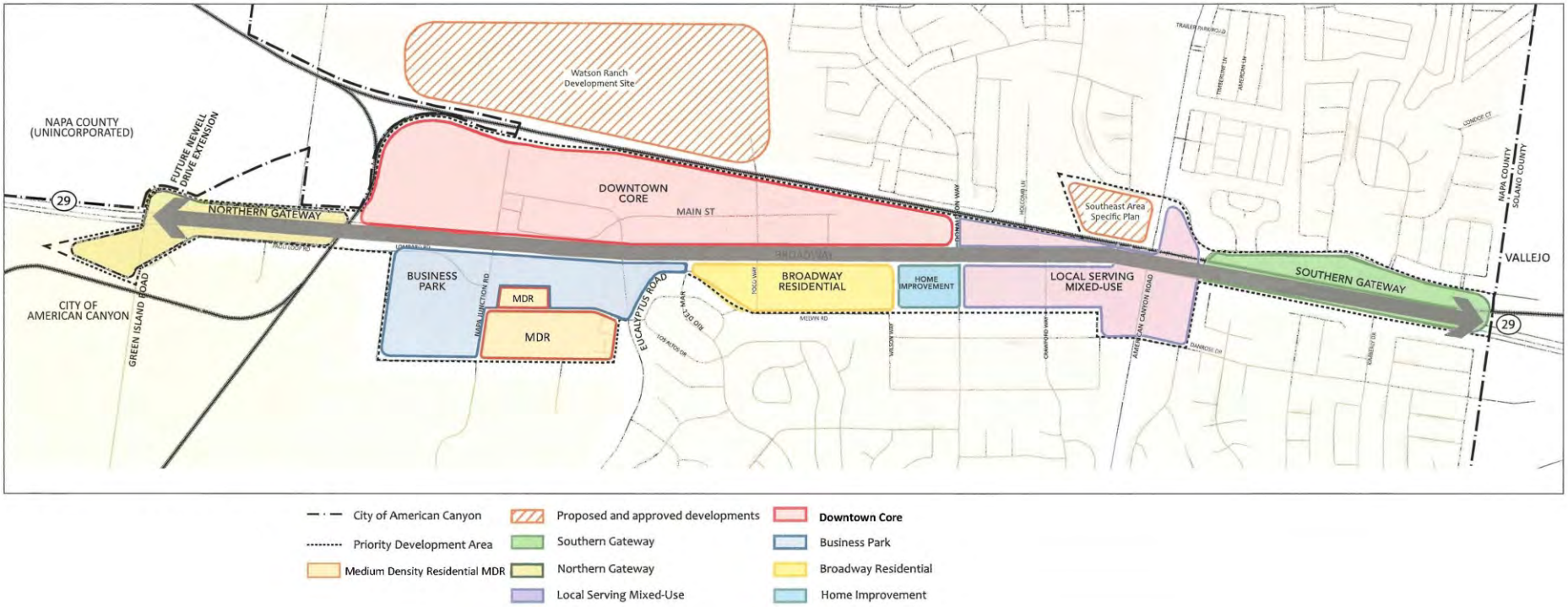
Sincerely,

Barry Bergman, AICP
Senior Planner

Dalene J. Whitlock, PE, PTOE
Senior Principal

DJW/bdb/ACA034.L1

Enclosures: BDSP Map



Source: City of American Canyon,, 2017

FIRSTCARBON SOLUTIONS™

Exhibit 2-3
Specific Plan Subareas

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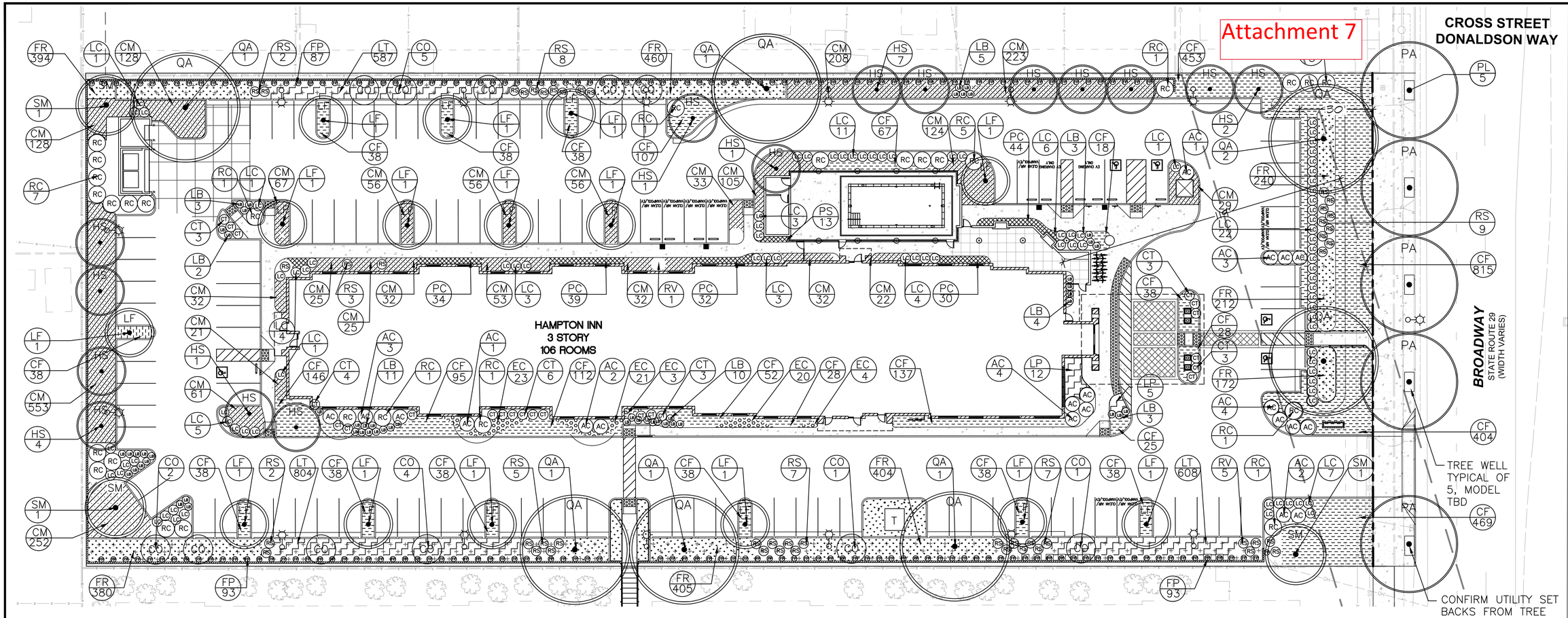
Attachment 7



PLANT SCHEDULE

TREES

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	WATER REQUIREMENT	REFERENCE	HEIGHT X WIDTH	PROJECT SPACING
HS	15	HESPEROCYPARIS SARGENTII	SARGENT CYPRESS	15 GAL.	LOW	WUCOLS	45' X 20'	AS SHOWN
LF	15	LYONOTHAMNUS FLORIBUNDUS SSP. ASPLENIFOLIUS	CATALINA IRONWOOD	15 GAL.	LOW	WUCOLS	40' X 20'	AS SHOWN
PA	5	PLATANUS X ACERIFOLIA 'YARWOOD'	YARWOOD LONDON PLANE TREE	15 GAL.	MODERATE	WUCOLS	60' X 40'	AS SHOWN
QA	8	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL.	VERY LOW	WUCOLS	50' X 50'	AS SHOWN
SM	3	SCHINUS MOLLE	PEPPER TREE	15 GAL.	VERY LOW	WUCOLS	25'–50' / 25'–40'	AS SHOWN

SHRUBS

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	WATER REQUIREMENT	REFERENCE	HEIGHT X WIDTH	PROJECT SPACING
AC	65	ACACIA COGNATA 'COUSIN ITT'	LITTLE RIVER WATTLE	1 GAL	LOW	SAN MARCOS GROWERS	2' X 6'	AS SHOWN
CO	11	CERCIS OCCIDENTALIS	WESTERN REDBUD	5 GAL.	LOW	WUCOLS	12' X 12'	AS SHOWN
CT	62	CNEORUM TRICOCCON	SPURGE OLIVE	1 GAL.	LOW	WUCOLS	2' X 4'	AS SHOWN
LB	134	LEUCOPHYTA BROWNII	CUSHION BUSH	1 GAL.	LOW	WUCOLS	2' X 3'	AS SHOWN
LC	84	LOROPETALUM CHINENSE 'PURPLE DAYDREAM'	PURPLE DAYDREAM LOROPETALUM	1 GAL.	LOW	WUCOLS	3' X 4'	AS SHOWN
RC	28	RHAMNUS CALFORNICA 'LEATHERLEAF'	COFFEE BERRY	5 GAL.	LOW	WUCOLS	7' X 7'	AS SHOWN
RS	48	RIBES SPECIOSUM	FUCHSIA–FLOWERING GOOSEBERRY	1 GAL	LOW	BASMAA	4' X 4'	AS SHOWN

GROUNDCOVERS AND VINE

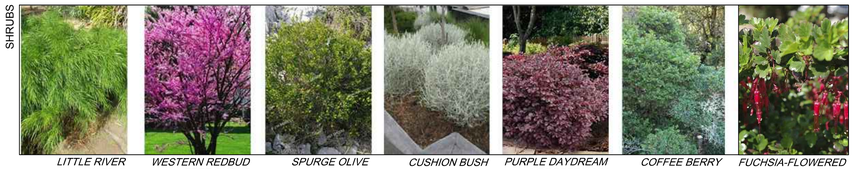
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	WATER REQUIREMENT	REFERENCE	MATURE HEIGHT X WIDTH	PROJECT SPACING
CF	3336	CALAMAGROSTIS FOLIOSA	MENDOCINO REED GRASS	1 GAL.	MODERATE	WUCOLS	1.5' X 1.5'	1.5' O.C.
CM	5318	CAREX MORROWII 'ICE DANCE'	MORROW'S SEDGE	1 GAL.	MDERATE	WUCOLS	1' X 2'	2' O.C.
EC	77	ERIOPHYLLUM CONFERTIFLORUM	GOLDEN YARROW	1 GAL.	LOW	WUCOLS	3' X RUNNING	2' O.C.
FP	180	FICUS PUMILA	CREEPING FIG	5 GAL.	MODERATE	WUCOLS	SPREADING	AS SHOWN
FR	2667	FESTUCA RUBRA 'PT. MOLATE'	CREEPING RED FESCUE	1 GAL.	LOW	WUCOLS	1' X 1'	1' O.C.
LT	1999	LEYMUS TRITICOIDES	CREPING WILD RYE	1 GAL.	LOW	WUCOLS	3' X 1'	3' O.C
PC	192	POLYSTICHUM CALIFORNICUM	CALIFORNIA SWORD FERN	1 GAL.	MODERATE	WUCOLS	3 X 2'	2' O.C.

PLANT PALETTE

TREES

SARGENT CYPRESS | CATALINA IRONWOOD | LONDON PLANE TREE | COAST LIVE OAK | PEPPER TREE

SHRUBS



LITTLE RIVER WATTLE | WESTERN REDBUD TREE SHRUB | SPURGE OLIVE | CUSHION BUSH | PURPLE DAYDREAM LOROPETALUM | COFFEE BERRY | FUCHSIA-FLOWERED GOOSEBERRY

GROUNDCOVER & VINE

MENDOCINO REED GRASS | MORROW'S SEDGE | GOLDEN YARROW | CREEPING FIG | CREEPING RED FESCUE | CREEPING WILDRYE | CALIFORNIA SWORD FERN

GRAPHIC SCALE
0 20
1"=20'

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DESCRIPTION | DATE

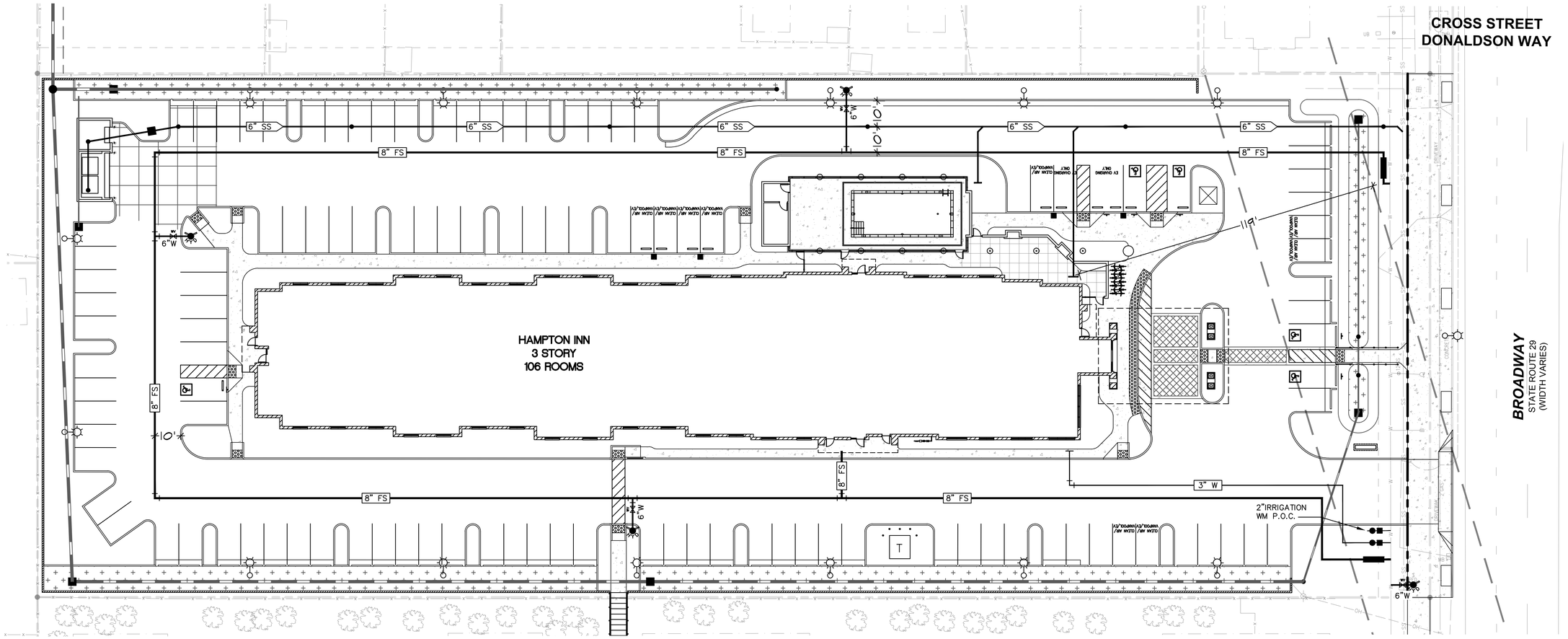
BATHA DESIGN GROUP
LANDSCAPE ARCHITECTURE & URBAN DESIGN
301 FRANK H. OSWALT, SUITE 101 LAFAYETTE, CALIFORNIA 94549

PRELIMINARY PLANTING PLAN

HILTON HAMPTON INN
3443 BROADWAY
AMERICAN CANYON NAPA COUNTY CALIFORNIA

SHEET LP-1 OF
PROJECT 20-2498

1008



WATER EFFICIENT LANDSCAPE WORKSHEET

REFERENCE EVAPOTRANSPIRATION (ETo): 45.8 **Napa County, Carneros area**

HYDROZONE / PLANTING DESCRIPTION	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY (IE)	ETAF (PF / IE)	LANDSCAPE AREA (sq. ft.)	ETAF x AREA	ESTIMATED TOTAL WATER USE (ETWU)
REGULAR LANDSCAPE AREAS:							
LOWWATER USE	0.3	SUB-SURFACE DRIP	0.9	0.33	18630	6210.00	176339.2
LOW-MOD WATER USE	0.4	SUB-SURFACE TREE BUBBLERS	0.81	0.49	1150	567.90	16126.1
LOW-MOD BIOSWALE	0.5	MP ROTORS SPRAY	0.75	0.67	7352	4901.33	139178.3
				TOTALS:	27132	11679	
SPECIAL LANDSCAPE AREAS:							
REC. AREA				0	0	0	0
WATER FEATURE 1				0	0	0	0
WATER FEATURE 2				0	0	0	0
				TOTALS:	0	0	
						ETWU TOTAL:	331,644
						MAXIMUM ALLOWED WATER ALLOWANCE (MAWA)	423,742

ETAF CALCULATIONS:

REGULAR LANDSCAPE AREAS:

TOTAL ETAF x AREA	11,679
TOTAL LANDSCAPE AREA	27,132
AVERAGE ETAF	0.43

ALL LANDSCAPE AREAS:

TOTAL ETAF x AREA	11,679
TOTAL LANDSCAPE AREA	27,132
SITEWIDE ETAF	0.43

NOTE: AVERAGE ETAF FOR REGULAR LANDSCAPE AREAS MUST BE 0.55 OR BELOW FOR RESIDENTIAL AREAS, AND 0.45 OR BELOW FOR NON-RESIDENTIAL AREAS.

LEGEND:

BIO-RETENTION AREA

IRRIGATION LEGEND

SYMBOL	MANUF.	DESCRIPTION	QUANTITY
C	CALSENSE	WATERSENSE-CERTIFIED CS3000-SR-RRe-FL-L-SSE-R -- STATION ENHANCED ET-DRIVEN CALSENSE CONTROLLER, WITH SPREAD SPECTRUM RADIO, ONE LOCAL RADIO-ONE CONTROLLER, WITH ENHANCED INTEGRATED RADIO REMOTE RECEIVER BOARD, WITH FLOW-ON-A-LOOP SOFTWARE, IN HEAVY DUTY STAINLESS STEEL ENCLOSURE WITH FACTORY INSTALLED ---. LOCATION TO BE DETERMINED COORDINATE INSTALLATION WITH REPRESENTATIVE JENNIFER GREGORIS AT 925.325.9368	1
	WATER METER FEBCO-WATTS BFP	DESIGNATED 2" POTABLE WATER METER OFF POINT OF CONNECTION WITH FEBCO-WATTS REDUCED PRESSURE BACKFLOW PREVENTER MODEL LF ---, SIZE SAME AS LINE SIZE.	1 1
M	SUPERIOR	MASTER VALVE, MODEL 3100 BRASS GLOBE VALVE, NORMALLY OPEN, LINE SIZE	1
FS	CALSENSE	MODEL FM-2B FLOW SENSOR, CALSENSE. PROVIDED BY CALSENSE	1
	RAIN BIRD	100-GB-P-HAN BRASS AUTOMATIC CONTROL VALVE. INSTALL IN BOX PER SPECIFICATIONS	8
	RAIN BIRD	PEB-NP-HAN NYLON GLOBE AUTOMATIC CONTROL VALVE. INSTALL IN BOX PER SPECIFICATIONS. RBY-150MX INLINE WYE FILTER. INSTALL UPSTREAM OF VALVE. PSI-M40X INLINE PRESSURE REGULATOR (AS NEEDED)	6
	RAIN BIRD	MODEL 44NP, 1" QUICK COUPLER WITH 2049 KEY (1PER GANG OF VALVES)	
AR	RAIN BIRD	AIR RELIEF VALVE: MODEL ARV050, LOCATE AT THE HIGHEST POINT.	
FP	RAIN BIRD	MANUAL LINE FLUSH POINT, MDCFPCAP/MDCFCOUP. INSTALL AT A LOW POINT IN EXHAUST HEADER OF A GRID LAYOUT, OR AT THE MID-POINT OF LOOP LAYOUT.	
	HAMMOND OR EQUAL	#8201 BRASS BALL VALVE LINE SIZE. INSTALL AS ISOLATION VALVE. INSTALL BALL VALVES AT "T" OFF OF SUBMAIN BEFORE REMOTE CONTROL VALVE GROUPINGS OR WHERE REMOTE CONTROL VALVES ARE SHOWN DIRECTLY OFF MAINLINE, INSTALL IN FRONT OF REMOTE CONTROL BANK AND BETWEEN MAJOR BRANCHES OF MAINLINE ON ALL IRRIGATION SYSTEMS THIS PROJECT.	
		PVC SUPPLY HEADER PVC FLUSH HEADER	
		RAIN BIRD, XFS-00-00 DRIPLINE: 0.6 PH, EMITTER SPACING 18", LATERAL SPACING 18 INCH; INSTALL WITH TIE-DOWN STAKES AT 4-5' O.C., MAXIMUM LATERAL LENGTH OF TUBING = 465 FT.	
		LATERAL LINE: PVC SCH 40, SCH 40 SOLVENT WELD FITTINGS, 12" MIN. COVER, 1" MIN. SIZE	
		IRRIGATION WATER MAIN LINE, PVC CLASS 315, ALL MAIN LINE SIZE 2", SOLVENT WELD FITTINGS, 18" MIN.	
		SLEEVE: PVC SCH 40, 24" MIN. COVER, 30" IN STREET, SIZE SHALL BE A MINIMUM OF 4" AND AT LEAST TWO TIMES THE TOTAL SUM DIAMETER OF ALL PIPES CONTAINED WITHIN SLEEVE.	

CONTRACTOR SHALL PROVIDE A RAIN BIRD XF SERIES SUB-SURFACE IRRIGATION SYSTEM THROUGHOUT PROJECT SITE WITH BUBBLERS INSTALLED AT TREES AND MATCHED PRECIPITATION ROTORS AT BIOSWALES (UNLESS OTHERWISE NOTED).

1 — CONTROLLER A, B, OR C/VALVE SEQUENCE NUMBER
1" — REMOTE CONTROL VALVE SIZE
5 — APPROXIMATE GALLONS PER MINUTE

SYMBOL	MANUF.	DESCRIPTION SPRAY HEADS	NOZZLE	GPM	PSI	RADIUS	QUANTITY
		BUBBLERS					
OO	RAINBIRD	RWS DEEP WATERING ASSEMBLY	1401	.45	30		--
O	RAINBIRD	1401 FULL-CIRCLE BUB. ON FLEX RISER	BUBBLER	.25	30		--
		SIDE/END STRIPS					
	HUNTER	MP LEFT AND RIGHT STRIPS	END-STRIP	.14	30	4'X12'	--
	HUNTER	MP LEFT AND RIGHT STRIPS	END-STRIP	.19	30	5'X15'	--
	HUNTER	MP SIDE STRIPS	SIDE STRIP	.27	30	4'X24'	--
	HUNTER	MP SIDE STRIPS	SIDE STRIP	.38	30	5'X30'	--

NOTE: QUANTITIES ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR IN CASE OF DISCREPANCY THE PLANS SHALL GOVERN.

GRAPHIC SCALE
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1"=20'

DATE: 07-06-21
SCALE: 1"= 20'
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PROJ. MGR: LB

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4			
5			

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1009

BATHA DESIGN GROUP
LANDSCAPE ARCHITECTURE & URBAN DESIGN
300 FRANK H. OGAWA PLAZA, SUITE 351 | OAKLAND, CALIFORNIA 94612

PRELIMINARY IRRIGATION PLAN
HILTON HAMPTON INN
3443 BROADWAY
AMERICAN CANYON NAPA COUNTY CALIFORNIA

SHEET IR-1 OF
PROJECT 20-2498

Attachment 6

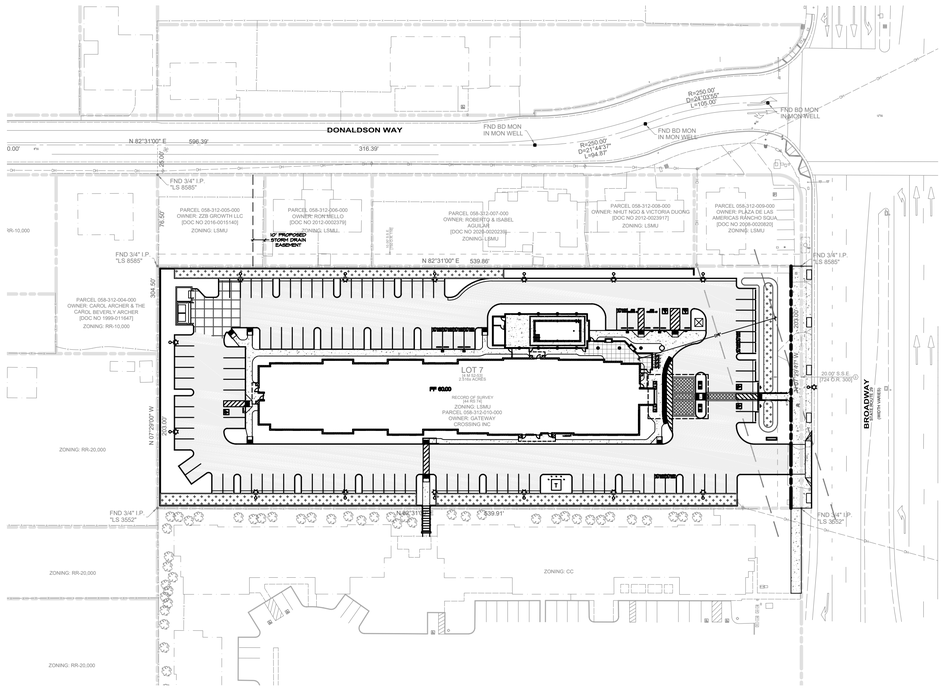
HILTON HAMPTON INN

3443 BROADWAY
AMERICAN CANYON, CALIFORNIA 94503
NAPA COUNTY

GENERAL ABBREVIATIONS AND SYMBOLS

AB	AGGREGATE BASE		CONTROLLER CABINET
AC	ASPHALT CONCRETE		GUY POLE
AD	AREA DRAIN		HANDICAP SPACE
ASB	AGGREGATE SUBBASE	MW	MONITORING WELL
BFP	BACKFLOW PREVENTER		POWER POLE
CB	CATCH BASIN		IRON PIPE
CL	CENTERLINE		RAILROAD SPIKE
DCV	DETECTOR CHECK VALVE		STANDARD CITY MONUMENT
DE	DIRT ELEVATION		SURVEY MONUMENT
DWY	DRIVEWAY		STORM DRAIN MANHOLE
E	ELECTRICAL LINE		STREET SIGN
EB	ELECTRIC BOX		STREET LIGHT
EP	EDGE OF PAVEMENT		WATER VALVE
EX	EXISTING	12"	TREE WITH SIZE
FDC	FIRE DEPARTMENT CONNECTION		TREE REMOVAL
FF	FINISHED FLOOR		TRANSFORMER
FL	FLOWLINE		BARBED WIRE FENCE
FS	FINISHED SURFACE/FIRE SERVICES		CHAIN-LINKED FENCE
G	GAS PIPE		WOOD FENCE
GB	GRADE BREAK		SAWCUT LINE
GM	GAS METER		WALL
GP	GUARD POST	SD	EXISTING STORM DRAIN CATCH BASIN
GR	GRATE	WM	EXISTING WATER METER / GAS METER
HCR	HANDICAP RAMP		EXISTING SANITARY SEWER CLEANOUT
INV	INVERT		EXISTING FIRE HYDRANT
JP	JOINT POLE	S	EXISTING SANITARY SEWER MANHOLE
JT	JOINT TRENCH		STORM DRAIN MANHOLE
LF	LINEAR FEET	WV	EXISTING WATER VALVE
MW	MONITORING WELL	GV	EXISTING GAS VALVE
OHE	OVERHEAD ELECTRIC	51	EXISTING CONTOUR
OHT	OVERHEAD TELEPHONE	XX.XX	EXISTING ELEVATION
PAE	PUBLIC ACCESS EASEMENT	TC XX.XX	TC – TOP OF CURB ELEVATION
PB	PULL BOX	FS XX.XX	FS – FINISHED SURFACE
PCC	PORTLAND CEMENT CONCRETE	GR XX.XX	GR – GRATE ELEVATION
PG&E	PACIFIC GAS & ELECTRIC	FL XX.XX	FL – FLOW LINE
PIV	POST INDICATOR VALVE	HP XX.XX	HP – HIGH POINT
PUE	PUBLIC UTILITY EASEMENT	51	PROPOSED CONTOUR
PVC	POLYVINYL CHLORIDE PIPE	3.0%	SLOPE
R	RIDGE LINE		PROPOSED CURB
RCP	REINFORCED CONCRETE PIPE		PROPOSED BIOSWALE CURB
RPP	REDUCED PRESSURE PRINCIPLE BACKFLOW		PROPOSED CURB AND GUTTER
SD	STORM DRAIN PIPE		PROPOSED FIRE LANE
SDCB	STORM DRAIN CATCH BASIN		HANDICAP RAMP
SDCO	STORM DRAIN CLEANOUT		
SDMH	STORM DRAIN MANHOLE		
SS	SANITARY SEWER PIPE		
SSCO	SANITARY SEWER CLEANOUT		
SSMH	SANITARY SEWER MANHOLE		
SW	SIDEWALK		
T	TELEPHONE LINE		
TC	TOP OF CURB		
TH	TOP OF CONCRETE HEADER		
TP	TELEPHONE POLE		
TS	TRAFFIC SIGNAL		
TSB	TRAFFIC SIGNAL BOX		
TW	TOP OF RETAINING WALL		
VG	VALLEY GUTTER		
W	WATER PIPE		
WM	WATER METER		
TCD	TOP OF CHECK DAM		

6"W	EXISTING WATER LINE
2"G	EXISTING GAS LINE
8"SS	EXISTING SANITARY SEWER LINE
SD	EXISTING STORM DRAIN LINE
E	EXISTING ELECTRICAL LINE
TEL	EXISTING TELEPHONE LINE
	PROPOSED STORM DRAIN CATCH BASIN
WM GM	PROPOSED WATER METER / GAS METER
	PROPOSED SANITARY SEWER CLEANOUT
	PROPOSED FIRE HYDRANT
	PROPOSED SANITARY SEWER MANHOLE
	PROPOSED STORM DRAIN MANHOLE
WV	PROPOSED WATER VALVE
GV	PROPOSED GAS VALVE
6"FS	PROPOSED FIRE SERVICE
W	PROPOSED WATER LINE
2"G	PROPOSED GAS LINE
S	PROPOSED SANITARY SEWER LINE
SD	PROPOSED STORM DRAIN LINE
E	PROPOSED ELECTRICAL LINE
TEL	PROPOSED TELEPHONE LINE
JUT	PROPOSED JOINT UTILITY TRENCH
	OVERLAND RELEASE
R	RIDGE LINE
	PARKING LIGHT
	PERFORATED PIPE



GRAPHIC SCALE
0 60
1"=60'

VICINITY MAP
NOT TO SCALE

SHEET INDEX

CIVIL PLANS

C-1.1	COVER SHEET
C-2.1	HORIZONTAL CONTROL PLAN
C-2.2	TRUCK TURNING PLAN
C-3.1	GRADING PLAN
C-3.2	GRADING PLAN
C-4.1	UTILITY PLAN
C-5.1	STORMWATER CONTROL PLAN
1	ALTA/NSPS LAND TITLE SURVEY
2	ALTA/NSPS LAND TITLE SURVEY

LANDSCAPE PLAN

LP-1	LANDSCAPE PLANTING PLAN
IR-1	IRRIGATION PLAN

ARCHITECTURAL PLAN

DR1.0	SITE PLAN
DR2.0	EXTERIOR ELEVATION AND SIGNAGE
DR2.1	EXTERIOR ELEVATIONS
DR2.2	PHOTO SIMULATION IMAGE
DR3.0	SITE SECTIONS AND STREETSCAPE
DR3.1	SITE PHOTOS
DR4.0	GROUND FLOOR PLAN AND 2ND/ FLOOR PLAN
DR4.1	3RD/ FLOOR PLAN AND ROOF PLAN
DR5.0	SITE LIGHTING FIXTURES

PHOTOMETRIC PLAN

PROJECT CONTACTS

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ASSOCIATE PLANNER
WILLIAM HE
COMMUNITY DEVELOPMENT DEPARTMENT
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PHONE: (707) 647-4337
whe@cityofamericancanyon.org

PROJECT DATA

A.P.N.: 058-312-010-000

BASIS OF BEARING

THE BEARING OF NORTH 07°29'00" WEST TAKEN ON THE CENTERLINE OF JAMES ROAD AS SHOWN ON THAT CERTAIN RECORD OF SURVEY FILED FOR RECORD ON JUNE 03, 2015 IN BOOK 44 OF SURVEYS AT PAGE 74, NAPA COUNTY RECORDS WAS TAKEN AS THE BASIS OF ALL BEARINGS SHOWN HEREON.

FLOOD ZONE NOTE

THE SUBJECT PROPERTY IS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 060755 0617 F, DATED AUGUST 03, 2016, AS BEING LOCATED IN FLOOD ZONE "X";

AREAS OF DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD.

INFORMATION WAS OBTAINED FROM THE FEMA WEBSITE (WWW.FEMA.GOV) ON JULY 12, 2020.

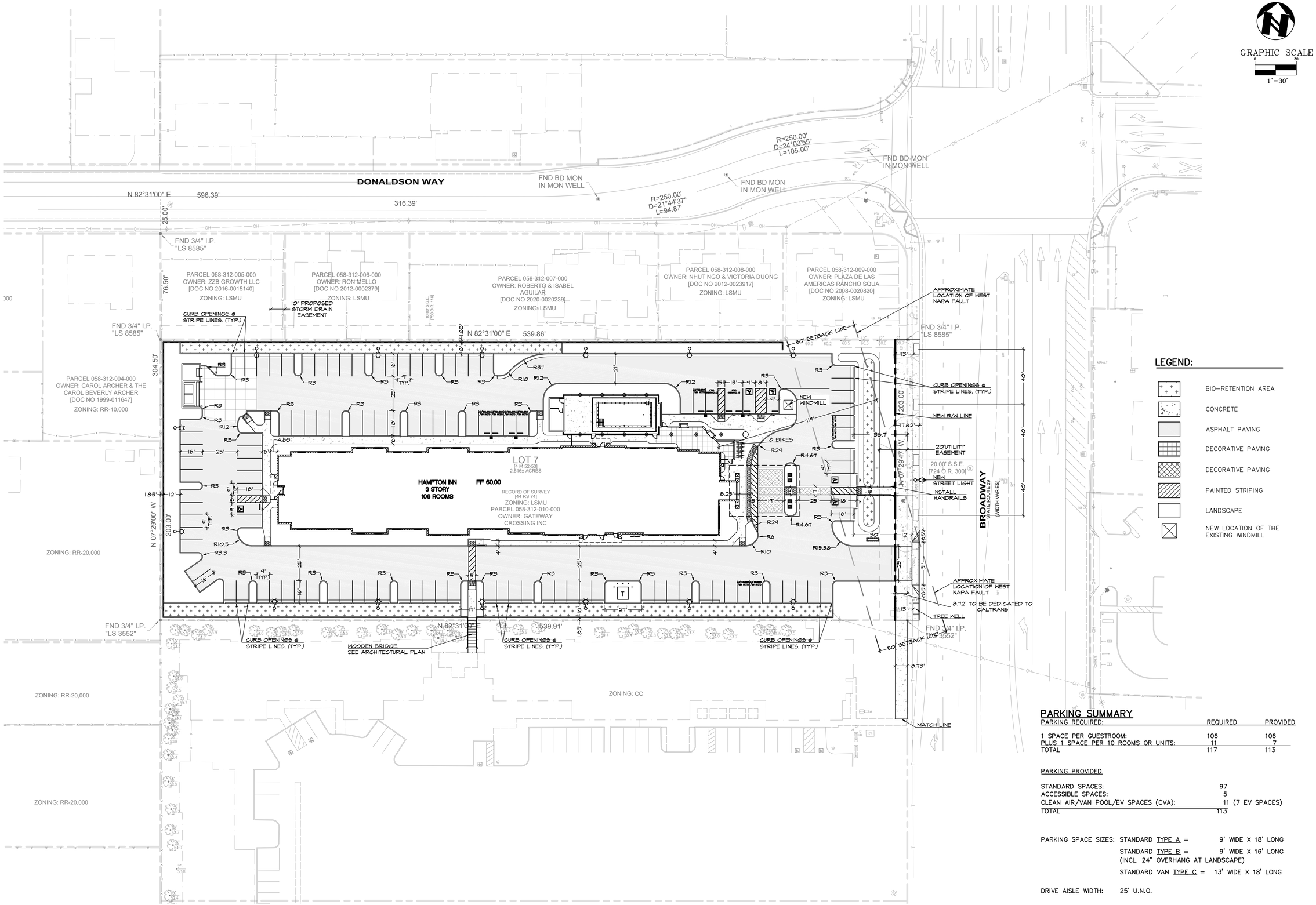
DATE:	07-12-21
SCALE:	1" = 60'
DESIGNED:	AS
DRAWN:	TY
CHECKED:	AS
PROJ. MGR:	AS
FILE PATH:	2498COVER.DWG

REV #	BY	DATE	DESCRIPTION

ams associates, inc. CIVIL ENGINEERING PLANNING SURVEYING
801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

COVER SHEET
HILTON HAMPTON INN
3443 BROADWAY
AMERICAN CANYON NAPA COUNTY CALIFORNIA

SHEET C-1.1 OF
PROJECT 20-2498



GRAPHIC SCALE
0 30
1"=30'

LEGEND:

- BIO-RETENTION AREA
- CONCRETE
- ASPHALT PAVING
- DECORATIVE PAVING
- DECORATIVE PAVING
- PAINTED STRIPING
- LANDSCAPE
- NEW LOCATION OF THE EXISTING WINDMILL

PARKING SUMMARY

PARKING REQUIRED:	REQUIRED	PROVIDED
1 SPACE PER GUESTROOM:	106	106
PLUS 1 SPACE PER 10 ROOMS OR UNITS:	11	7
TOTAL	117	113

PARKING PROVIDED

STANDARD SPACES:	97
ACCESSIBLE SPACES:	5
CLEAN AIR/VAN POOL/EV SPACES (CVA):	11 (7 EV SPACES)
TOTAL	113

PARKING SPACE SIZES: STANDARD TYPE A = 9' WIDE X 18' LONG
STANDARD TYPE B = 9' WIDE X 16' LONG (INCL. 24" OVERHANG AT LANDSCAPE)
STANDARD VAN TYPE C = 13' WIDE X 18' LONG

DRIVE AISLE WIDTH: 25' U.N.O.

BICYCLE PARKING REQUIRED

1 SPACE PER 20 CAR SPACES	6 REQUIRED	8 PROVIDED

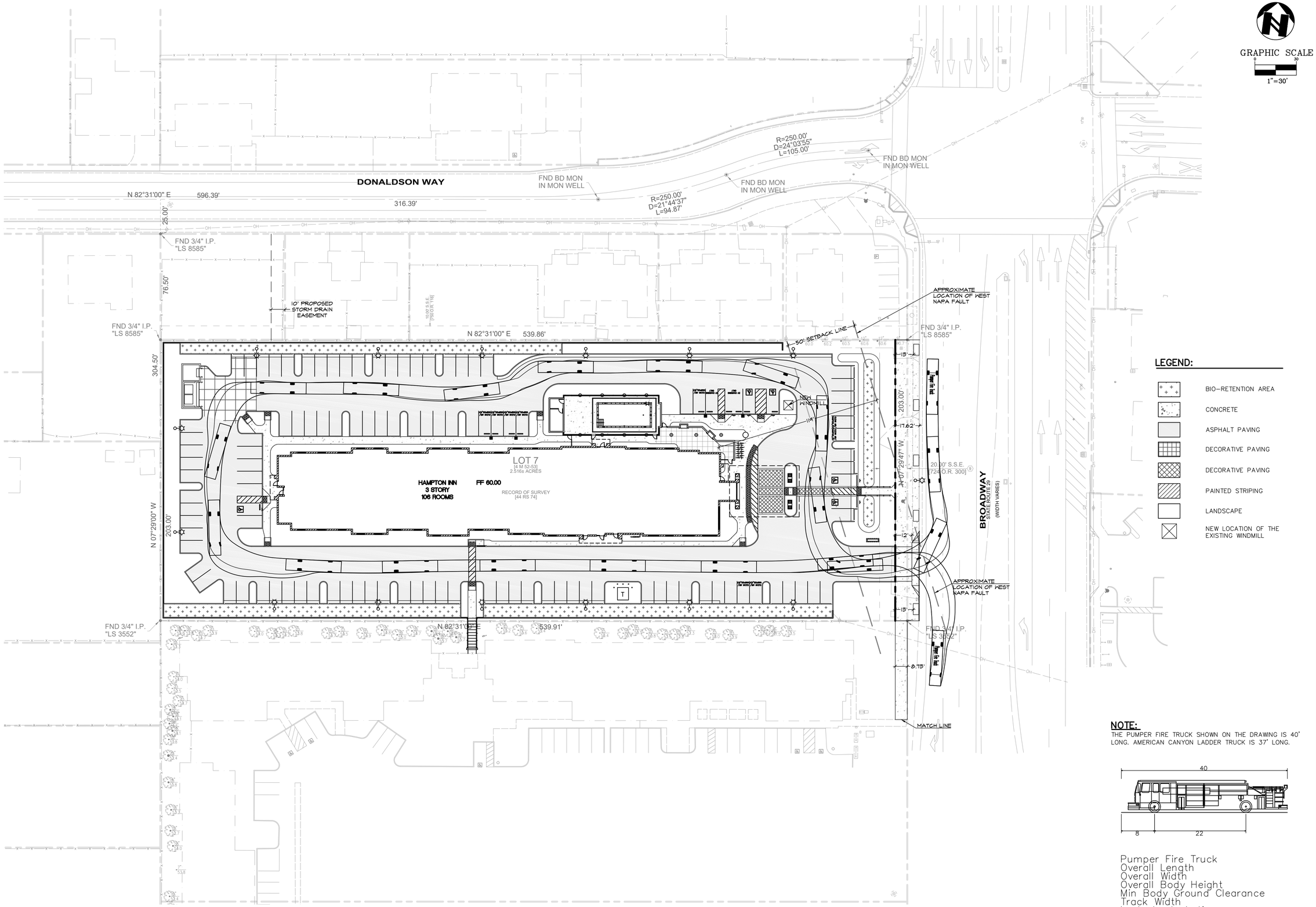
DATE:	07-12-21	REV #	BY	DATE
SCALE:	1" = 30'			
DESIGNED:	AS			
DRAWN:	TY			
CHECKED:	AS			
PROJ. MGR:	AS			
FILE PATH:	2498SITE.DWG			

DESCRIPTION

ams associates, inc. PLANNING ENGINEERING SURVEYING
801 'IGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

HORIZONTAL CONTROL PLAN
HILTON HAMPTON INN
3443 BROADWAY
AMERICAN CANYON NAPA COUNTY CALIFORNIA

SHEET C-2.1 OF
PROJECT 20-2498



NOTE:
THE PUMPER FIRE TRUCK SHOWN ON THE DRAWING IS 40' LONG. AMERICAN CANYON LADDER TRUCK IS 37' LONG.

Pumper Fire Truck
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Max Wheel Angle

DATE:	07-12-21
SCALE:	1" = 30'
DESIGNED:	AS
DRAWN:	TY
CHECKED:	AS
PROJ. MGR:	AS
FILE PATH:	2498TRUCK.DWG

REV #	BY	DATE	DESCRIPTION
1			
2			
3			
4			

ams associates, inc. PLANNING ENGINEERING SURVEYING
801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

TRUCK TURNING PLAN
HILTON HAMPTON INN
3443 BROADWAY
AMERICAN CANYON NAPA COUNTY CALIFORNIA

SHEET C-2.2 OF
PROJECT 20-2498

DONALDSON WAY

GRAPHIC SCALE
0 30
1"=30'

SDMH#1
RIM 52.38±

SDMH#2
RIM 56.20±

10' PROPOSED STORM DRAIN EASEMENT

APPROXIMATE LOCATION OF WEST NAPA FAULT

50' SETBACK LINE

SD INLET #5
GR 57.24
BIO-FL 56.74

SDMH#3
RIM 58.26±

SDMH#4
RIM 57.45±

SDMH#5
RIM 58.45
12"INV 54.23

SDMH#6
RIM 57.85

SDMH#8
RIM 58.06±

SDCO#1
BIO-FL 56.30

SDCO#2
RIM 57.87
BIO-FL 51.20

SDCO#3
RIM 57.67
BIO-FL 57.00

SDCO#4
RIM 57.57
BIO-FL 56.40

SD INLET#1
GR 56.80
BIO-FL 56.30

SD INLET#2
GR 57.70
BIO-FL 57.20

SD INLET#3
GR 57.50
BIO-FL 57.00

SD INLET#4
GR 57.40
BIO-FL 56.90

NEW WINDMILL

SITE ACCESS

BROADWAY
STATE ROUTE 29
(WIDTH VARIES)

3439 BROADWAY
EVERYMD PINE STORY BUILDING

EXISTING ONE STORY BUILDING

T 7
(0-53)
2.516± ACRES

RECORD OF SURVEY
(44 RS 74)

B-B
C-3.2

A-A
C-3.2

MATCH LINE

LEGEND:

BIO-RETENTION AREA

NOTE:

1. INSTALL 20LF 12" STORM DRAIN PIPE AT EXISTING DITCH.
2. CONSTRUCT NEW SIDEWALK ALL THE WAY TO EXISTING GRADE.
3. EXTEND THE SIDEWALK AND MATCH THE EXISTING SIDEWALK.
4. RELOCATED THE EXISTING WINDMILL.

DATE:	07-12-21
SCALE:	1" = 30'
DESIGNED:	AS
DRAWN:	TY
CHECKED:	AS
PROJ. MGR:	AS
FILE PATH:	2498GRAD.DWG

REV #	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			

ams associates, inc.
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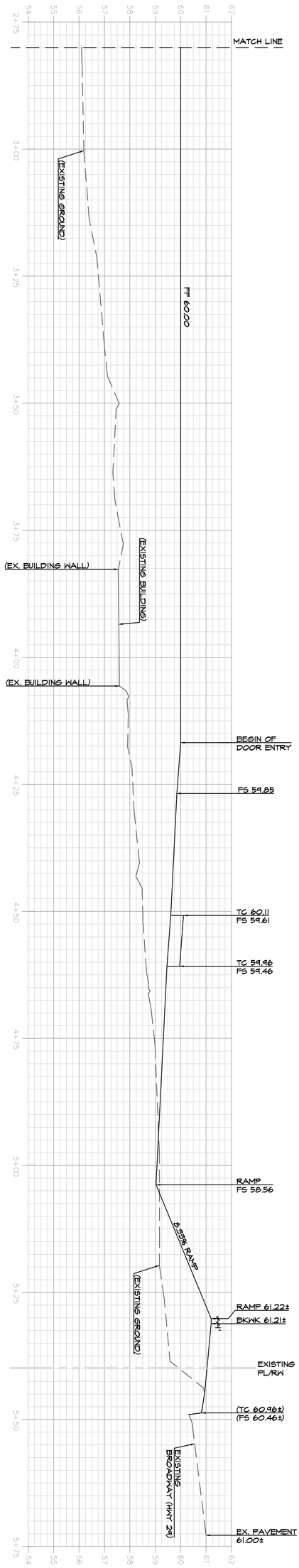
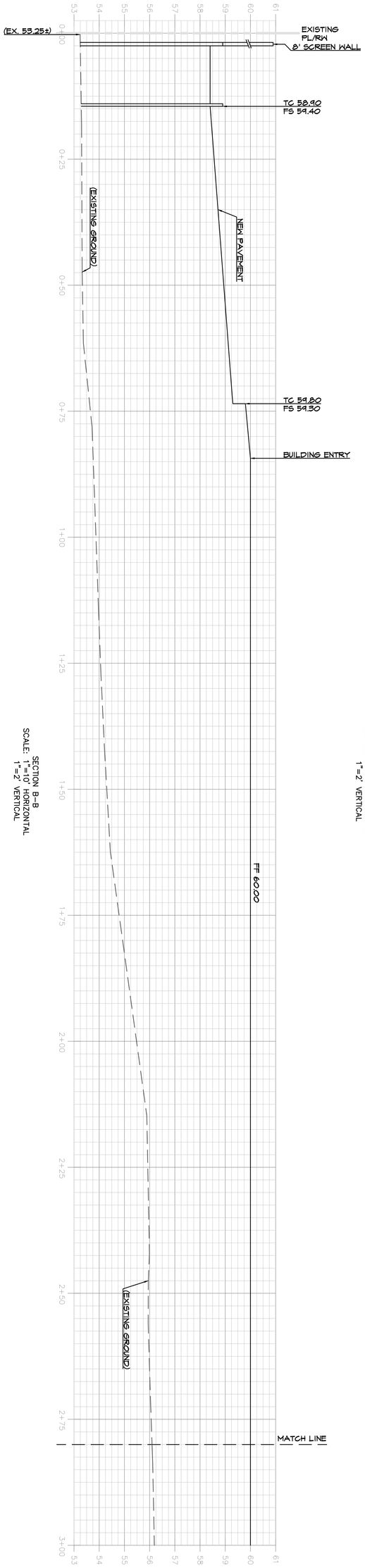
925-943-2777 FAX 925-943-2778
PLANNING ENGINEERING SURVEYING

GRADING PLAN
HILTON HAMPTON INN
3443 BROADWAY
NAPA COUNTY CALIFORNIA
AMERICAN CANYON

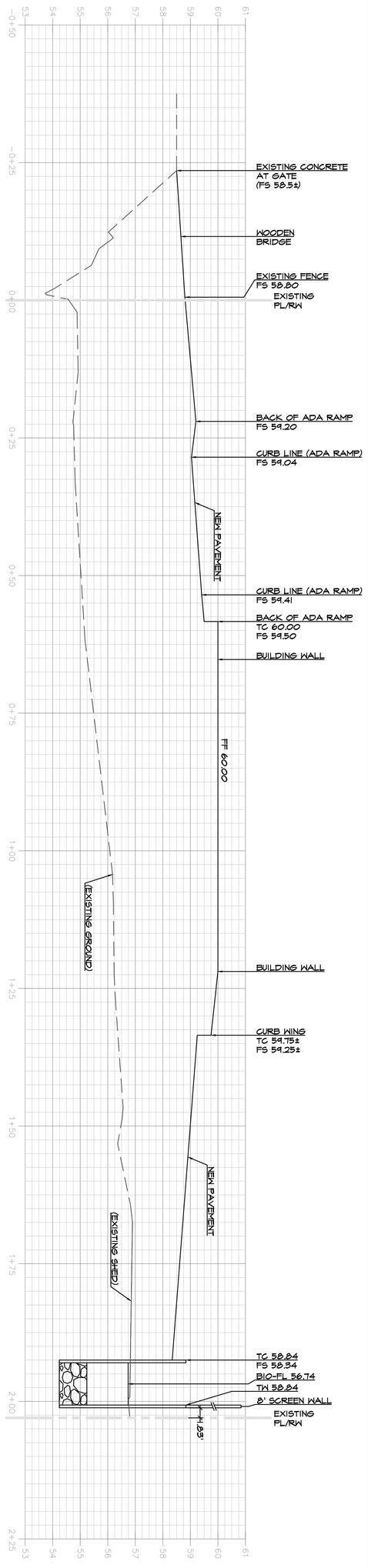
SHEET C-3.1
OF
PROJECT 20-2498



SECTION B-B
SCALE: 1"=10' HORIZONTAL
1"=2' VERTICAL



SECTION B-B
SCALE: 1"=10' HORIZONTAL
1"=2' VERTICAL



SECTION A-A
SCALE: 1"=10' HORIZONTAL
1"=2' VERTICAL

SHEET	C-3.2				
OF					
PROJECT	20-2498				

GRADING PLAN

HILTON HAMPTON INN

3443 BROADWAY

AMERICAN CANYON NAPA COUNTY CALIFORNIA

ams associates, inc. PLANNING ENGINEERING SURVEYING

801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

DATE:	07-12-21	REV #	BY	DATE	DESCRIPTION
SCALE:		△			
DESIGNED:	AS	△			
DRAWN:	TY	△			
CHECKED:	AS	△			
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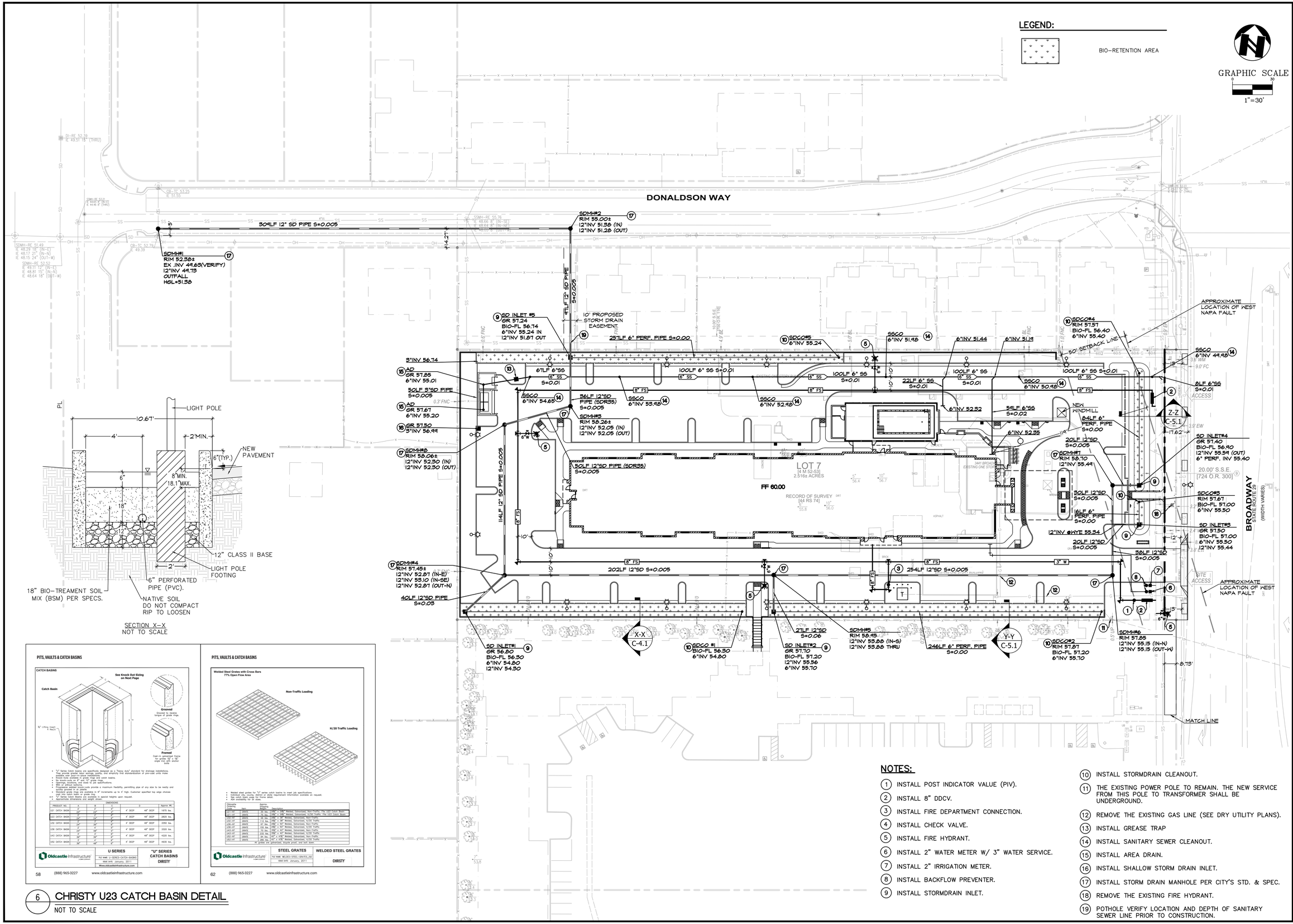

SECTION X–X
NOT TO SCALE

PITS, VAULTS & CATCH BASINS

CATCH BASINS

See Knock Out Sizing on Next Page

Catch Basin

Grooved
Grooved to receive tongue of grade rings.

Framed
Cast-in grooved frame for grates 12" x 12" single inlet with anchor bolts.

- "U" Series Catch basins are specifically designed as a "heavy duty" standard for drainage installations. They provide greater labor savings, quality, and simplicity that standardization of pre-cast units make possible in the construction industry.
- Knock-Outs available in grade rings and catch basins.
- Grooved tongue for grade rings and frames.
- Openings, locations, and sizes to job specifications.
- With or without bottoms.
- Standard grade rings are available to provide a maximum flexibility, permitting pipe of any size to be neatly and quickly grouted in at plants.
- Standard grade rings are available in 6" increments up to 4' high. Customer specified top edge choices are available on special order.
- "U" Series Catch Basins are available to special heights upon request.

Dimensions (Inches) and weight shown are approximate.

PRODUCT NO.	A	B	C	D	Approx. Wt.
U21 CATCH BASIN	24"	24"	4"	4' DEEP	1875 lbs.
U24 CATCH BASIN	24"	24"	6"	4' DEEP	2825 lbs.
U32 CATCH BASIN	24"	24"	8"	4' DEEP	3350 lbs.
U36 CATCH BASIN	24"	24"	8"	4' DEEP	3500 lbs.
U43 CATCH BASIN	24"	24"	8"	4' DEEP	4200 lbs.
U52 CATCH BASIN	24"	24"	8"	4' DEEP	4830 lbs.

Oldcastle Infrastructure

U SERIES	"U" SERIES CATCH BASINS
FILE NAME: U-SERIES-CATCH-BASINS	CHRISTY
ISSUE DATE: January, 2011	
www.oldcastleinfrastructure.com	

58 (888) 965-3227 www.oldcastleinfrastructure.com

PITS, VAULTS & CATCH BASINS

Welded Steel Grates with Cross Bars
77% Open Flow Area

Non-Traffic Loading

H/20 Traffic Loading

- Welded steel grates for "U" series catch basins to meet job specifications.
- Refer to Christy Catch Basin Grate Loading requirement information available on request.
- See catch basin page for frame detail.
- Grate availability for U3 sizes.

Christy Ordering Code	Approx. Net Weight	Description
U21-HT	GR4TS	75 lbs. 21" x 21" Welded, Galvanized, Non-Traffic
U21-HT	GR4TS	75 lbs. 21" x 21" Welded, Galvanized, H/20 Traffic Rated
U32-HT	GR4TS	98 lbs. 32" x 21" Welded, Galvanized, Non-Traffic
U32-HT	GR4TS	113 lbs. 32" x 21" Welded, Galvanized, H/20 Traffic
U36-HT	GR4TS	87 lbs. 36" x 15" Welded, Galvanized, Non-Traffic
U36-HT	GR4TS	101 lbs. 36" x 15" Welded, Galvanized, H/20 Traffic
U43-HT	GR4TS	155 lbs. 43" x 21" Welded, Galvanized, Non-Traffic
U43-HT	GR4TS	233 lbs. 43" x 21" Welded, Galvanized, H/20 Traffic
U52-HT	GR4TS	84 lbs. 52" x 11" Welded, Galvanized, Non-Traffic
U52-HT	GR4TS	280 lbs. 52" x 11" Welded, Galvanized, H/20 Traffic

All grates are galvanized, bicycle proof, and skid resistant.

Oldcastle Infrastructure

STEEL GRATES	WELDED STEEL GRATES
FILE NAME: WELDED-STEEL-GRATES_ISO	CHRISTY
ISSUE DATE: January, 2011	

62 (888) 965-3227 www.oldcastleinfrastructure.com

6 CHRISTY U23 CATCH BASIN DETAIL
NOT TO SCALE

NOTES:

1. INSTALL POST INDICATOR VALUE (PIV).
2. INSTALL 8" DDCV.
3. INSTALL FIRE DEPARTMENT CONNECTION.
4. INSTALL CHECK VALVE.
5. INSTALL FIRE HYDRANT.
6. INSTALL 2" WATER METER W/ 3" WATER SERVICE.
7. INSTALL 2" IRRIGATION METER.
8. INSTALL BACKFLOW PREVENTER.
9. INSTALL STORMDRAIN INLET.
10. INSTALL STORMDRAIN CLEANOUT.
11. THE EXISTING POWER POLE TO REMAIN. THE NEW SERVICE FROM THIS POLE TO TRANSFORMER SHALL BE UNDERGROUND.
12. REMOVE THE EXISTING GAS LINE (SEE DRY UTILITY PLANS).
13. INSTALL GREASE TRAP
14. INSTALL SANITARY SEWER CLEANOUT.
15. INSTALL AREA DRAIN.
16. INSTALL SHALLOW STORM DRAIN INLET.
17. INSTALL STORM DRAIN MANHOLE PER CITY'S STD. & SPEC.
18. REMOVE THE EXISTING FIRE HYDRANT.
19. POTHOLE VERIFY LOCATION AND DEPTH OF SANITARY SEWER LINE PRIOR TO CONSTRUCTION.

DATE:	07-12-21
SCALE:	1" = 30'
DESIGNED:	AS
DRAWN:	TY
CHECKED:	AS
PROJ. MGR:	AS
FILE PATH:	2498UTL.DWG

REV #	BY	DATE	DESCRIPTION
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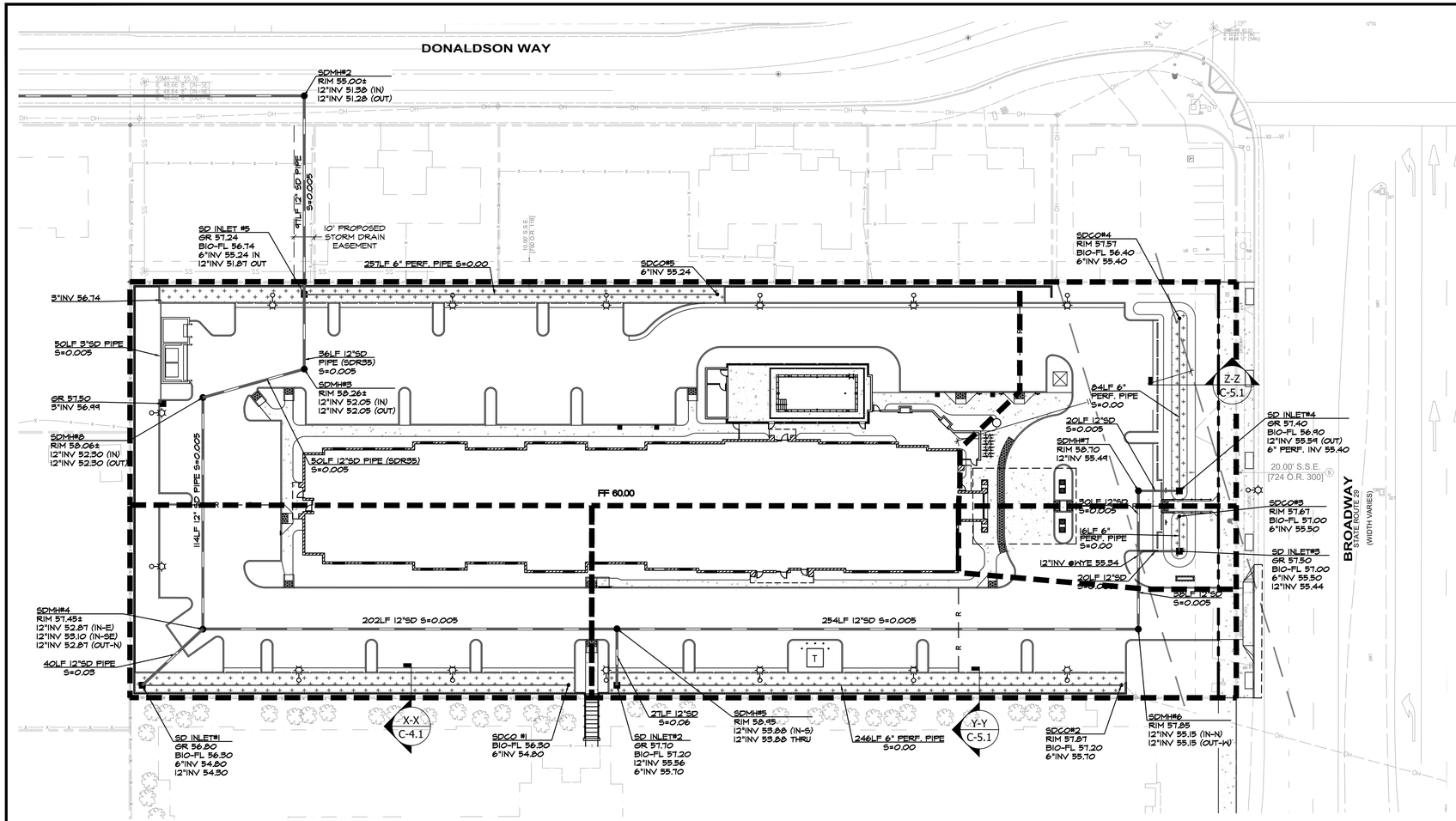
2			
3			

ams associates, inc. PLANNING ENGINEERING SURVEYING
801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

UTILITY PLAN
HILTON HAMPTON INN
3443 BROADWAY
NAPA COUNTY CALIFORNIA
AMERICAN CANYON

SHEET C-4.1 OF
PROJECT 20-2498



LEGEND:

BIO-RETENTION AREA

SIZING CALCULATION:

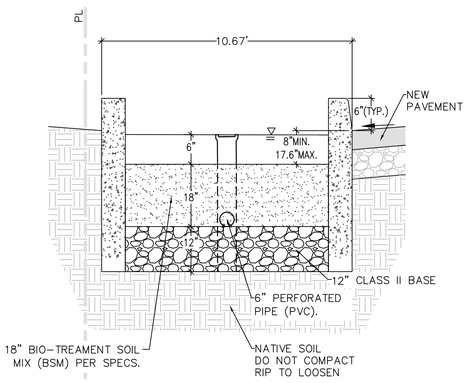
DMA NAME	DMA AREA (SQUARE FEET)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	FACILITY NAME: IMP 1		
DMA 1A	10,797	PAVING	1.0	10,797.0			
DMA 1B	4,220	ROOF	1.0	4,220.0	SIZING FACTOR	MINIMUM FACILITY AREA (SF)	PROPOSED FACILITY AREA (SF)
DMA 1C	4,106	LANDSCAPED AREAS	0.1	410.6			
TOTAL				15,427.6	0.04	617.1	2,036

DMA NAME	DMA AREA (SQUARE FEET)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	FACILITY NAME: IMP 2		
DMA 2A	26,870	PAVING	1.0	26,870.0			
DMA 2B	9,692	ROOF	1.0	9,692.0	SIZING FACTOR	MINIMUM FACILITY AREA (SF)	PROPOSED FACILITY AREA (SF)
DMA 2C	7,670	LANDSCAPED AREAS	0.1	767.0			
TOTAL				37,329.0	0.04	1,493.2	2,066

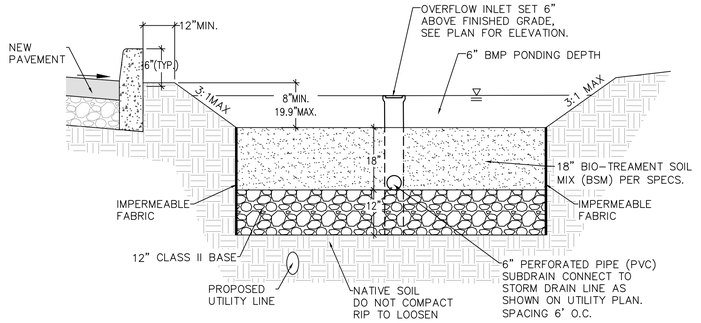
DMA NAME	DMA AREA (SQUARE FEET)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	FACILITY NAME: IMP 3		
DMA 3A	8,648	PAVING	1.0	8,648.0			
DMA 3C	3,476	LANDSCAPED AREAS	0.1	347.6	SIZING FACTOR	MINIMUM FACILITY AREA (SF)	PROPOSED FACILITY AREA (SF)
TOTAL				8,995.6	0.04	359.8	683

DMA NAME	DMA AREA (SQUARE FEET)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	FACILITY NAME: IMP 4		
DMA 4A	3,467	PAVING	1.0	3,467.0			
DMA 4C	1,482	LANDSCAPED AREAS	0.1	148.2	SIZING FACTOR	MINIMUM FACILITY AREA (SF)	PROPOSED FACILITY AREA (SF)
TOTAL				3,615.2	0.04	144.6	160

DMA NAME	DMA AREA (SQUARE FEET)	POST-PROJECT SURFACE TYPE	DMA RUNOFF FACTOR	DMA AREA x RUNOFF FACTOR	FACILITY NAME: IMP 5		
DMA 5A	13,014	PAVING	1.0	13,014.0			
DMA 5B	5,784	ROOF	1.0	5,784.0	SIZING FACTOR	MINIMUM FACILITY AREA (SF)	PROPOSED FACILITY AREA (SF)
DMA 5C	3,123	LANDSCAPED AREAS	0.1	312.3			
TOTAL				19,110.3	0.04	764.4	2,407



SECTION Y-Y
NOT TO SCALE



SECTION Z-Z
NOT TO SCALE

DATE:	07-12-21
SCALE:	1" = 30'
DESIGNED:	AS
DRAWN:	TY
CHECKED:	AS
PROJ. MGR:	AS
FILE PATH:	2498SW.DWG

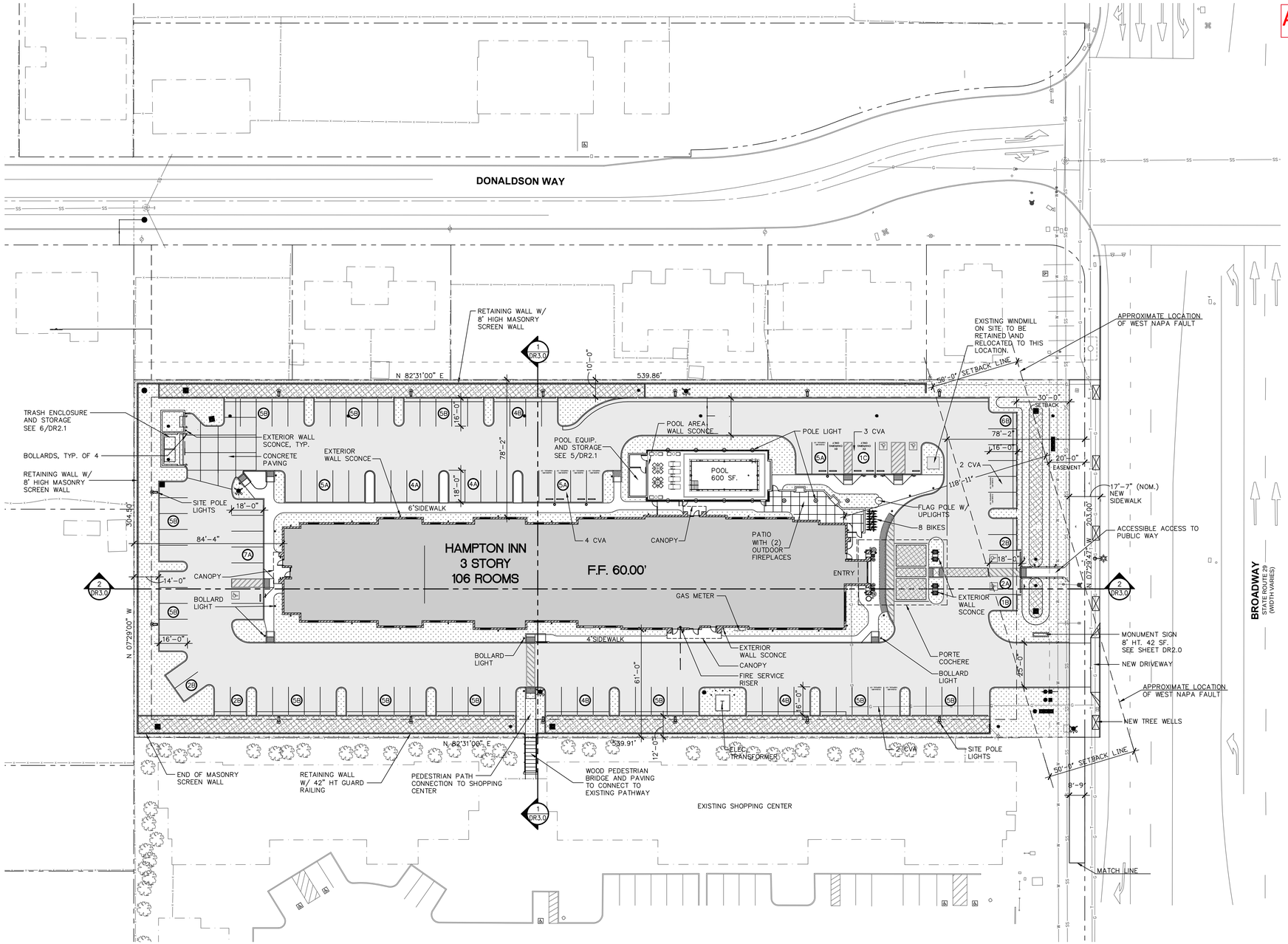
REV #	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			

ams associates, inc. CIVIL ENGINEERING PLANNING SURVEYING
801 YGNACIO VALLEY ROAD
SUITE 220
WALNUT CREEK, CA 94596
925-943-2777 FAX 925-943-2778

STORMWATER CONTROL PLAN
HILTON HAMPTON INN
3443 BROADWAY
AMERICAN CANYON CALIFORNIA
NAPA COUNTY

SHEET C-5.1 OF
PROJECT 20-2498

Attachment 8



SITE PLAN
SCALE: 1" =30'-0"

1 RESPONSE TO CITY COMMENTS 01-25-21
REVISED FRONTAGE SIDEWALK WIDTH, ADDED PEDESTRIAN BRIDGE CONNECTION, REVISED TRASH ENCLOSURE.

2 03-15-2021 - REVISED SITE AREA CALCULATIONS

3 05-12-2021 - CITY CHANGED LANDSCAPE SETBACK TO BE 30' FROM BACK OF SIDEWALK. REVISED PARKING FRONTAGE MOVING PARKING STALLS FACING BROADWAY BACK 2' IN THE WEST DIRECTION. REVISED SITE AREA CALCULATIONS.

PROJECT SUMMARY

GENERAL INFORMATION

SITE AREA:	109,596 SF. (2.51 ACRES)
APN:	058-312-010
ZONING:	LSMU: LOCAL-SERVING MIXED-USE DEVELOPMENT
SPECIFIC PLAN:	BDSP: BROADWAY DISTRICT SPECIFIC PLAN
PROPOSED USE:	HOTEL: 106 ROOMS, 3 STORIES
BUILDING OCCUPANCY:	MIXED: R-1, A-2, B AND F.
BUILDING CONSTRUCTION:	TYPE VA

PARKING SUMMARY

PARKING REQUIRED:	REQUIRED	PROVIDED
1 SPACE PER GUESTROOM:	106	106
PLUS 1 SPACE PER 10 ROOMS OR UNITS:	11	7
TOTAL	117	113

PARKING PROVIDED

STANDARD SPACES:	97
ACCESSIBLE SPACES:	5
CLEAN AIR/VAN POOL/EV SPACES (CVA):	11 (7 EV SPACES)
TOTAL	113

PARKING SPACE SIZES:		PLAN SYMBOL
STANDARD TYPE A =	9' WIDE X 18' LONG	(9A)
STANDARD TYPE B = (INCL. 24" OVERHANG AT LANDSCAPE)	9' WIDE X 16' LONG	(9B)
STANDARD VAN TYPE C =	13' WIDE X 18' LONG	(9C)

DRIVE AISLE WIDTH: 25' U.N.O.

BICYCLE PARKING REQUIRED

1 SPACE PER 20 CAR SPACES	6 REQUIRED	8 PROVIDED

BUILDING AREAS

GROUND FLOOR:	19,691 S.F.	(AREA OF PORTE COCHERE NOT INCLUDED)
2ND FLOOR:	19,476 S.F.	
3RD FLOOR:	19,476 S.F.	
TOTAL:	58,643 S.F.	
TRASH ENCLOSURE:	442 S.F.	
POOL EQUIPMENT:	275 S.F.	
TOTAL:	717 S.F.	

BUILDING HEIGHT

MAXIMUM ALLOWED BUILDING HEIGHT:	42 FEET PER LSCMU ZONING
PROPOSED BUILDING HEIGHT:	47'-5" FEET

SITE AREAS

BUILDING COVERAGE:	20,408 S.F.	18.7%
HARDSCAPE AREA:	11,526 S.F.	10.5% (INCL. POOL)
PAVEMENT AREA:	48,962 S.F.	44.7%
LANDSCAPE AREA:	28,700 S.F.	26.1%
TOTAL	109,596 S.F.	100.0%

F.A.R. .54

GUESTROOM SUMMARY

	GROUND FLOOR	2ND FLOOR	3RD FLOOR	TOTAL	%
KING	14	19	19	52	49%
KING ACCESSIBLE	1	1	1	3	3%
DBL. QUEEN	6	20	20	46	43%
DBL. QUEEN ACCESSIBLE	1	2	2	5	5%
TOTAL	22	42	42	106	

ACCESSIBILITY REQUIREMENTS	REQUIRED	PROVIDED	C.B.C. REF.
MOBILITY FEATURES (SHOWER)	2	3	TABLE 11B-224.2
MOBILITY FEATURES (TUB)	5	5	TABLE 11B-224.2
COMMUNICATION FEATURES	12	19	TABLE 11B-224.4

LEGEND

- POLE MOUNTED SITE LIGHT - 25' HEIGHT
- BOLLARD LIGHT - 42" HEIGHT
- POLE MOUNTED POOL LIGHT - 15' HEIGHT
- WALL MOUNTED BUILDING LIGHT
- FIRE HYDRANT

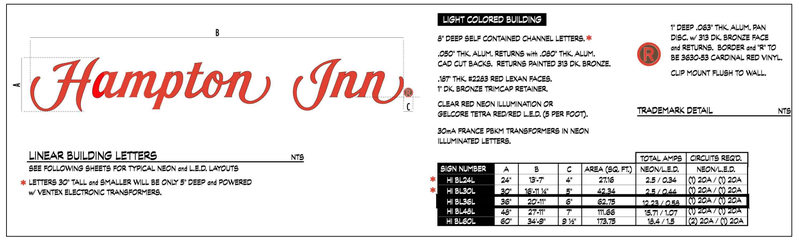
- TRUNCATED DOMES
- PAINTED STRIPING
- DECORATIVE PAVING
- BIO RETENTION
- DECORATIVE PAVING
- LANDSCAPE
- ASPHALT PAVING

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

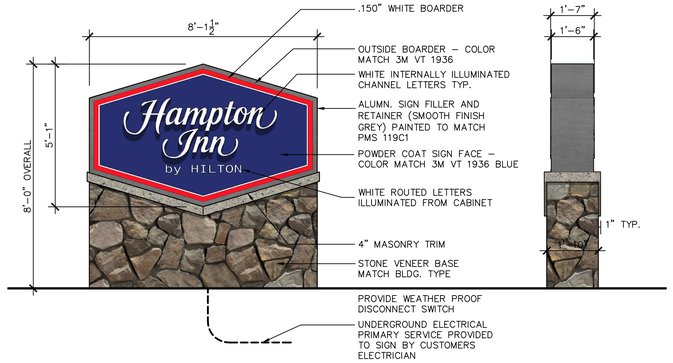
HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 5/12/2021
DRAWING NO. DR1.0



BUILDING SIGN - HI BL36L (62.75 SQ.FT.)

SCALE: N.T.S.



MONUMENT SIGN (42 SQ.FT.)

SCALE: 3/8" = 1'-0"

SHEET NOTES

1. ALUMINUM WINDOW SYSTEM
2. PAINTED METAL GUTTER AND DOWNSPOUT
3. POOL EQUIPMENT BUILDING BEYOND
4. STONE VENEER POOL AND PATIO PRIVACY WALL
5. PORTE COCHERE
6. SIDE ENTRANCE CANOPY BEYOND
7. E.V. CHARGING STATION
8. PAINTED METAL LOUVER
9. BOARD AND BATTEN PATTERN
10. HORIZONTAL SIDING
11. POOL AREA POLE LIGHT BEYOND
12. WALL LIGHT SCONE
13. ALUMINUM STOREFRONT SYSTEM
14. OPEN WEB WOOD TRUSS
15. METAL WALL COPING
16. WINDOW TRIM - TERRANEO
17. BOLLARD LIGHT
18. FLAG POLE
19. RAISED PANEL
20. 6'-0" HIGH METAL FENCE BEYOND
21. ENTRY AREA PLANTER
22. BIKE RACK
23. BUILDING SIGN WITH BACKLIT CHANNEL LETTER
24. WALL COPING - TERRANEO

LEGEND

- WOOD SIDING - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: AGED WHISKEY (DET686)
  MANUF: DUNN EDWARDS
- FASCIA - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: GRAY MATTERS
  MANUF: SHERWIN WILLIAMS (7066)
- PAINTED METAL: GUTTER / DOWNSPOUT / COPING
  COLOR: GEORGIA CLAY (DE5181)
- TERRANEO WINDOW TRIM / WALL COPING
  COLOR: GLAZIER 207
  MANUF.: DRYVIT SYSTEM INC.
- ALUMINUM WINDOW FRAME
  COLOR: DARK BRONZE
  ALUMINUM STOREFRONT
  COLOR: DARK BRONZE
  MANUF: KAWNEER
- GLAZING
  COLOR: SMOKE GREY / OCEAN GREY VANCEVA
  MANUF.: GUARDIAN GLASS SUPERNEUTRAL 68
- STONE VENEER
  COLOR: COGNAC
  MANUF.: EL DORADO
- STANDING SEAM METAL ROOF
  COLOR: A606-4 WEATHERING STEEL
  MANUF.: CORTEN ROOFING

MONUMENT AND BUILDING SIGN DETAILS

SCALE: AS NOTED

GENERAL NOTES

1. COLORS INDICATED ON THIS DRAWING ARE APPROXIMATE AND WILL VARY DEPENDING ON PRINTER/MONITOR DISPLAY SOURCE. REFER TO COLORS AND MATERIALS BOARDS FOR TRUE REPRESENTATION OF ALL PROPOSED FINISHES.
2. ALL LANDSCAPING INDICATED ON THIS DRAWING IS DIAGRAMMATIC AND INTENDED ONLY TO CONVEY A SENSE OF GENERAL LANDSCAPED AREAS. REFER TO ACTUAL LANDSCAPE PLAN FOR ALL PROPOSED LANDSCAPING.

1 EAST EXTERIOR (FRONT) ELEVATION

SCALE: 3/16" = 1'-0"

1 RESPONSE TO CITY COMMENTS 01-25-2021: REVISED MONUMENT SIGN.

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

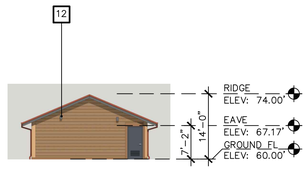
HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 3/11/2021
DRAWING NO. DR2.0

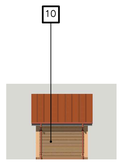
SHEET NOTES

1. ALUMINUM WINDOW SYSTEM
2. PAINTED METAL GUTTER AND DOWNSPOUT
3. POOL EQUIPMENT BUILDING
4. 7FT HIGH STONE VENEER POOL & PATIO PRIVACY WALL
5. PORTE COCHERE
6. SIDE ENTRANCE CANOPY BEYOND
7. E.V. CHARGING STATION
8. PAINTED METAL LOUVER
9. BOARD AND BATTEN PATTERN
10. HORIZONTAL SIDING
11. POOL AREA POLE LIGHT
12. WALL LIGHT SCONE
13. ALUMINUM STOREFRONT SYSTEM
14. WOOD WINDOW TRIM
15. METAL WALL COPING
16. WINDOW TRIM - TERRANEO
17. BOLLARD LIGHT
18. FLAG POLE
19. BOLLARD
20. 72" HIGH METAL FENCE
21. PAINTED METAL ROLL-UP DOOR
22. BIKE RACK
23. WALL COPING - TERRANEO
24. 16" W X 24" H LOUVERED VENT

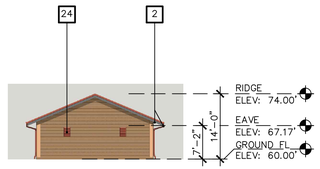
2 WEST EXTERIOR ELEVATION
SCALE: 1/16" = 1'-0"



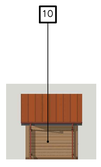
EAST (FRONT)ELEVATION



WEST ELEVATION

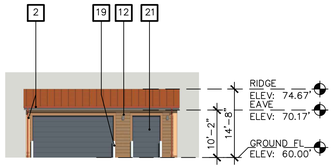


NORTH ELEVATION

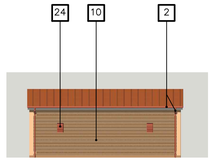


SOUTH ELEVATION

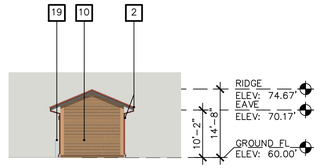
5 POOL EQUIPMENT EXTERIOR ELEVATION
SCALE: 1/16" = 1'-0"



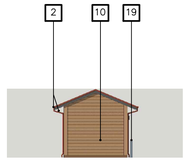
EAST (FRONT) ELEVATION



WEST ELEVATION



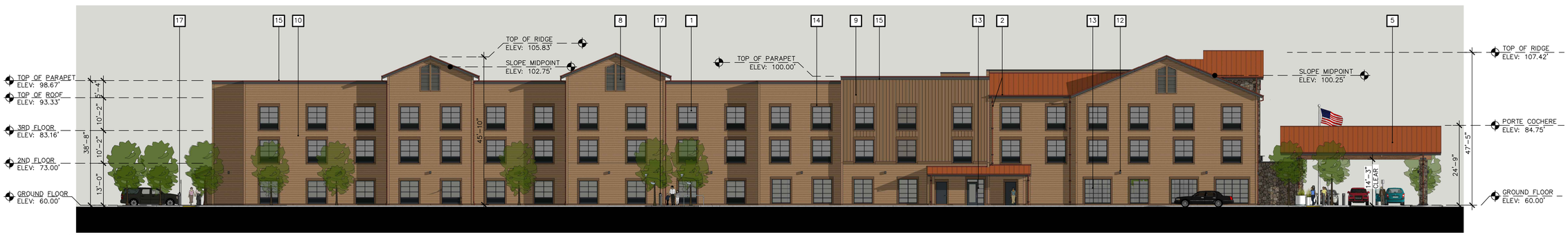
NORTH ELEVATION



SOUTH ELEVATION

6 TRASH ENCLOSURE EXTERIOR ELEVATION
SCALE: 1/16" = 1'-0"

3 NORTH EXTERIOR ELEVATION
SCALE: 1/16" = 1'-0"



4 SOUTH EXTERIOR ELEVATION
SCALE: 1/16" = 1'-0"

LEGEND

- WOOD SIDING - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: AGED WHISKEY (DET686)
  MANUF: DUNN EDWARDS
- FASCIA - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: GRAY MATTERS
  MANUF: SHERWIN WILLIAMS (7066)
- PAINTED METAL: GUTTER / DOWNSPOUT / COPING
  COLOR: GEORGIA CLAY (DE5181)
- TERRANEO WINDOW TRIM / WALL COPING
  COLOR: GLAZIER 207
  MANUF.: DRYVIT SYSTEM INC.
- ALUMINUM STOREFRONT
  COLOR: DARK BRONZE
  ALUMINUM WINDOW FRAME
  COLOR: DARK BRONZE
  MANUF.: KAWNEER
- GLAZING
  COLOR: SMOKE GREY / OCEAN GREY VANCEVA
  MANUF.: GUARDIAN GLASS SUPERNEUTRAL 68
- STONE VENEER
  COLOR: COGNAC
  MANUF.: EL DORADO
- STANDING SEAM METAL ROOF
  COLOR: A606-4 WEATHERING STEEL
  MANUF.: CORTEN ROOFING

GENERAL NOTES

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1 RESPONSE TO CITY COMMENTS 01-25-2021:
REVISED TRASH ENCLOSURE

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 2/02/2021
DRAWING NO. DR2.1

PHOTO SIMULATION IMAGE - NORTHWEST PERSPECTIVE OF HOTEL FROM SR-29

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

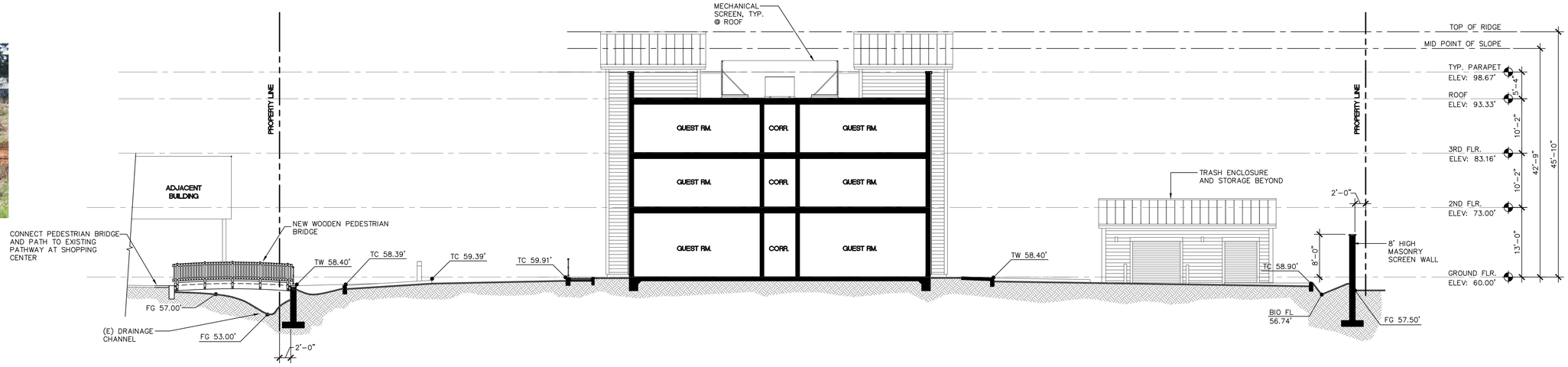
PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 3/11/2021

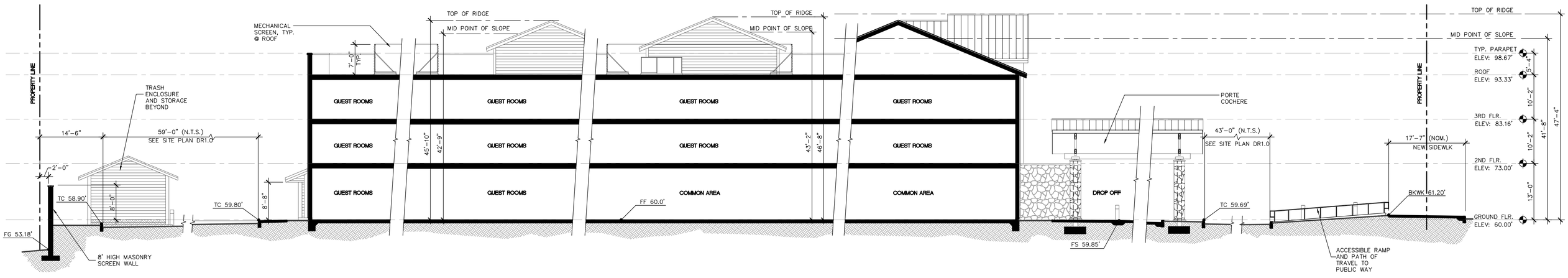
DRAWING NO. DR2.2

PEDESTRIAN BRIDGE



1 SITE / BUILDING SECTION

SCALE: 3/32" = 1'-0"



2 SITE / BUILDING SECTION

SCALE: 3/32" = 1'-0"

3 STREETSCAPE

SCALE: N.T.S.

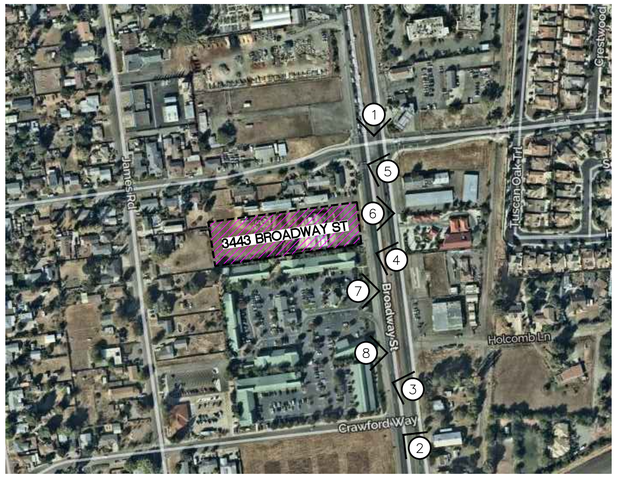
1 RESPONSE TO CITY COMMENTS 01-25-2021: REVISED TRASH ENCLOSURE AND ADDED PEDESTRIAN BRIDGE

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

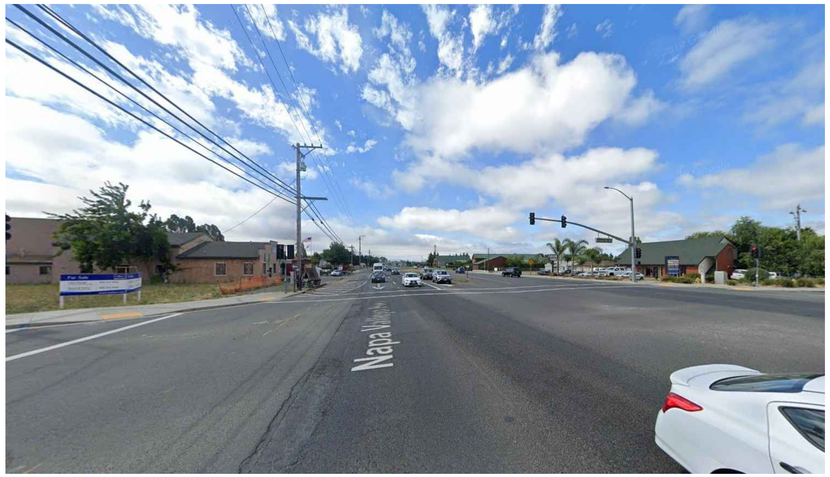
PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 3/11/2021
DRAWING NO. DR3.0



SITE PHOTO LOCATIONS



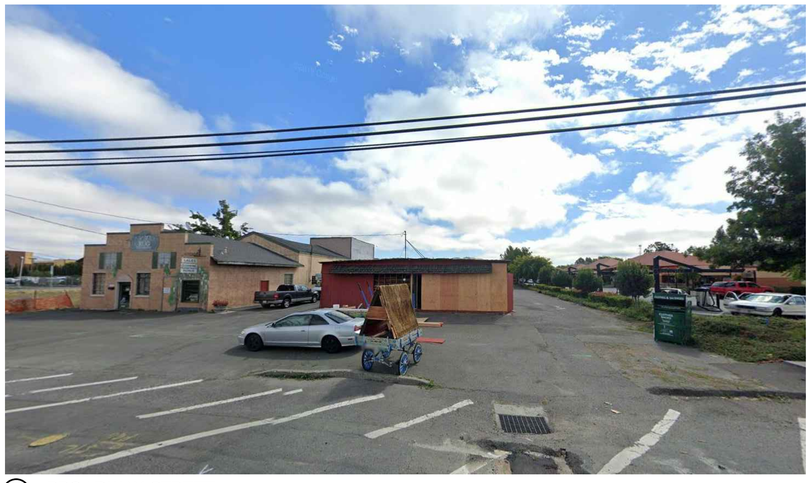
1 **BROADWAY + DONALSON INTERSECTION**
LOOKING SOUTH

2 **BROADWAY + CRAWFORD INTERSECTION**
LOOKING NORTH

3 **BROADWAY STREET**
LOOKING WEST

4 **BROADWAY STREET**
LOOKING WEST

5 **BROADWAY STREET**
LOOKING WEST



6 **BROADWAY STREET**
LOOKING EAST

7 **BROADWAY STREET**
LOOKING EAST

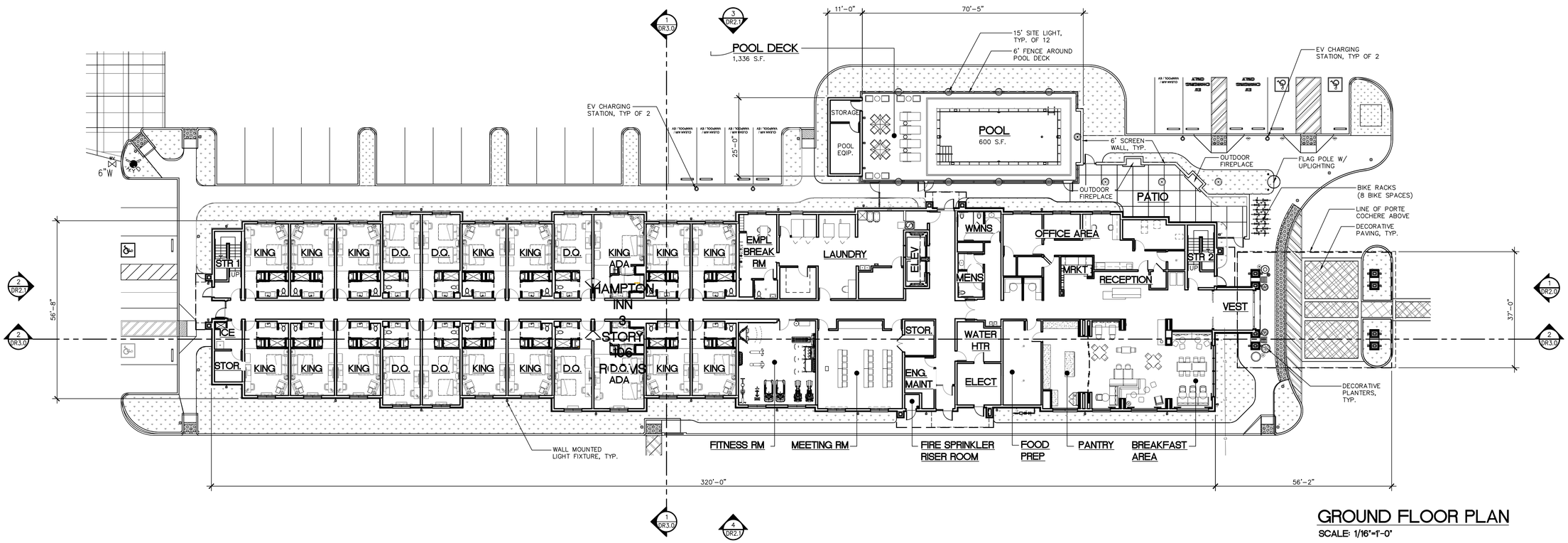
8 **BROADWAY STREET**
LOOKING EAST

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 3/11/2021
DRAWING NO. DR3.1



GROUND FLOOR PLAN

SCALE: 1/16"=1'-0"

SECOND FLOOR PLAN

SCALE: 1/16"=1'-0"

N
PLAN NORTH

ARCHITECTURAL DIMENSIONS

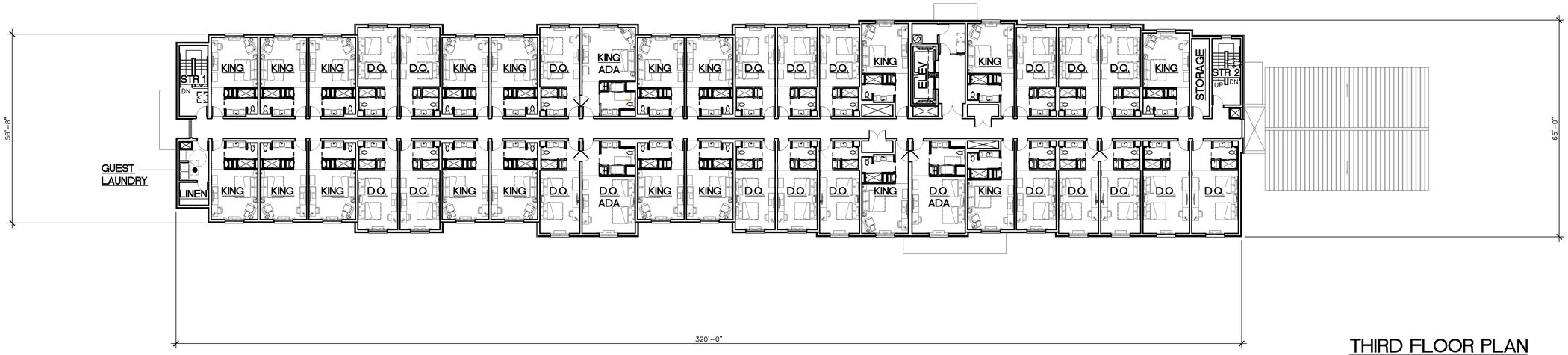
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

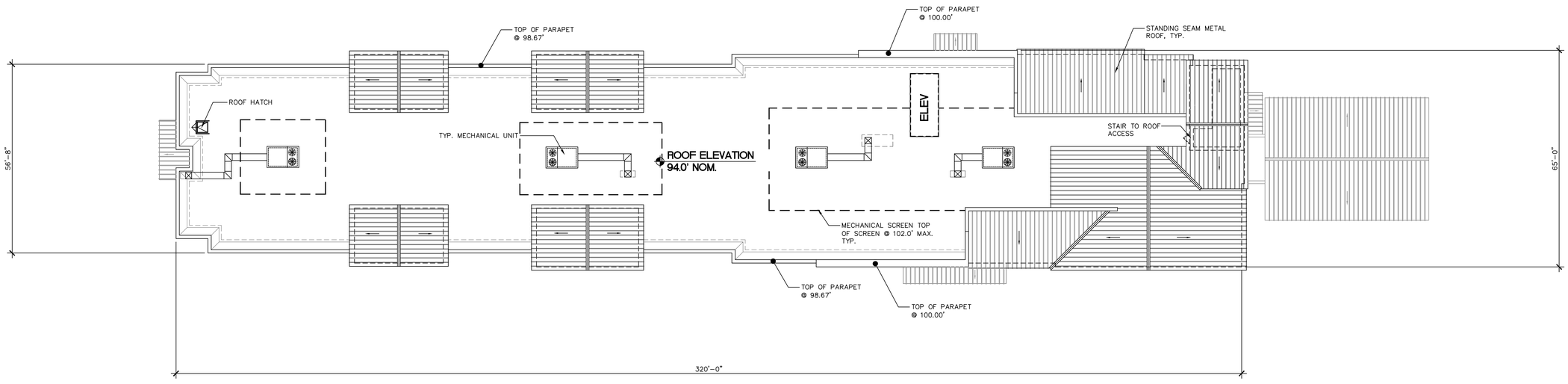
JOB NO. AMS03
DATE. 3/11/2021

DRAWING NO. DR4.0



THIRD FLOOR PLAN

SCALE: 1/16"=1'-0"



ROOF PLAN

SCALE: 1/16"=1'-0"

N
PLAN NORTH

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 3/11/2021

DRAWING NO. DR4.1

System bollard head

Unshielded with safety guard

View all photos

Unshielded with safety guard · 360°

	LED		A	B
99 760	6.0W	204 lm	5½	5½
99 765	16.5W	566 lm	7½	7¼
99 777	29.4W	768 lm	10¾	8¼

Unshielded with safety guard · 180°

	LED		A	B
99 770	6.0W	102 lm	5½	5½
99 776	16.5W	313 lm	7½	7¼
99 778	29.4W	398 lm	10¾	8¼

Technical Specs **Photography** **Extra Info.**

System bollard head

Unshielded with safety guard

1/3

System bollard tube

Integral PIR motion sensor

View all photos

Bollard tube · Integral PIR motion sensor

		A	B
99 658	lm	7½	32
99 659	lm	10¾	34½

Technical Specs **Extra Info.**

System bollard tube

Integral PIR motion sensor

BEGA LED system bollard luminaire tube with passive infrared motion sensor. BEGA LED system bollard tubes are designed for easy attachment to system bollard heads using an interlocking mechanism. An accompanying bollard head must be selected for proper installation, see list of compatible head options.
Passive infrared motion sensor ramps lighting ON to 100% light output when motion is detected. After the motion sensor stops detecting motion for 30 minutes, light output fades to 10% of full output. Consult factory for custom

1/2

Pole-top luminaire

Single and twin

View all photos

Asymmetric wide beam · Single

	LED		A	B	C
77 928	15.8W	2160 lm	11½	4¼	23⅞
77 939	23.6W	3195 lm	11½	4¼	23⅞
77 954	51.6W	4543 lm	13	5⅝	26⅝

Asymmetric wide beam · Twin

	LED		A	B	C
84 123	(2) 15.8W	4320 lm	11½	4¼	47¾

Aluminum gantry pole

Tapered round

View all photos

Square fixed base

Aluminum gantry pole

Tapered round aluminum gantry pole with square fixed base.

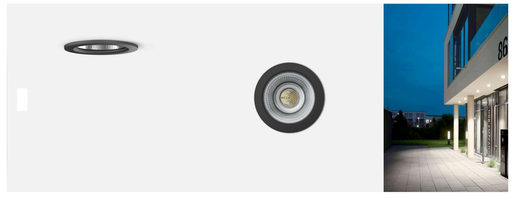
Tapered round 3" outer top diameter with four galvanized steel anchor bolts and nut covers.

1 BOLLARD LIGHT @ 42" HEIGHT
SCALE: N.T.S.

2 POLE MOUNTED SITE LIGHT @ 25' HEIGHT
SCALE: N.T.S.

Downlight

Symmetric



View all photos

Narrow beam

	LED	EXPRESS		β	A	B	C
24 817	8.3W		1234 lm	21°	5⅝	5	18
24 820	16.8W	✓	2310 lm	21°	5⅝	5	18
24 818	11.5W		1629 lm	16°	6¼	5	18
24 821	24.5W	✓	3057 lm	16°	6¼	5	18
24 819	17.3W		2484 lm	20°	8½	5	18
24 822	36.0W	✓	4683 lm	20°	8½	5	18

Wide beam

	LED	EXPRESS		β	A	B	C
24 823	8.3W		1221 lm	38°	5⅝	5	18
24 826	16.8W	✓	2277 lm	38°	5⅝	5	18
24 824	11.5W		1619 lm	29°	6¼	5	18
24 827	24.5W	✓	3039 lm	29°	6¼	5	18
24 825	17.3W		2421 lm	32°	8½	5	18

Pole-top luminaire

Unshielded

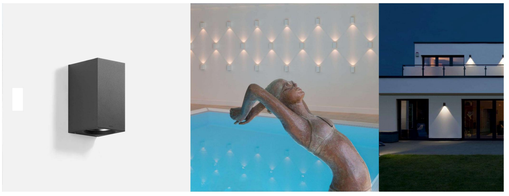
View all photos

Symmetric

	LED		A	B
77 120	23.4W	2654 lm	25⅝	23⅜

Wall luminaire

Directed light



View all photos

Narrow beam downward

	LED	EXPRESS			β	A	B	C
33 579	1.9W	✓	DALI	158 lm	23°	3	5¼	3¼
33 580	4.0W	H&G		318 lm	23°	4⅜	7½	5
33 581	7.9W	✓		747 lm	20°	5¼	9	6
24 582	16.5W			1667 lm	15°	5¼	10⅜	6⅛

Very narrow beam upward · Narrow downward

	LED			β	A	B	C
24 594	3.8W	DALI	276 lm	13/20°	3	5¼	3¼
24 595	8.0W		438 lm	12/17°	4⅜	7½	5
24 596	15.8W		1044 lm	9/20°	5¼	9	6
24 597	33.0W		1888 lm	9/20°	5¼	10⅜	6⅛

3 CANOPY DOWN LIGHT FIXTURE
SCALE: N.T.S.

4 POLE MOUNTED POOL LIGHT @ 15'
SCALE: N.T.S.

5 WALL MOUNTED BUILDING LIGHT
SCALE: N.T.S.

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 3/11/2021
DRAWING NO. DR5.0

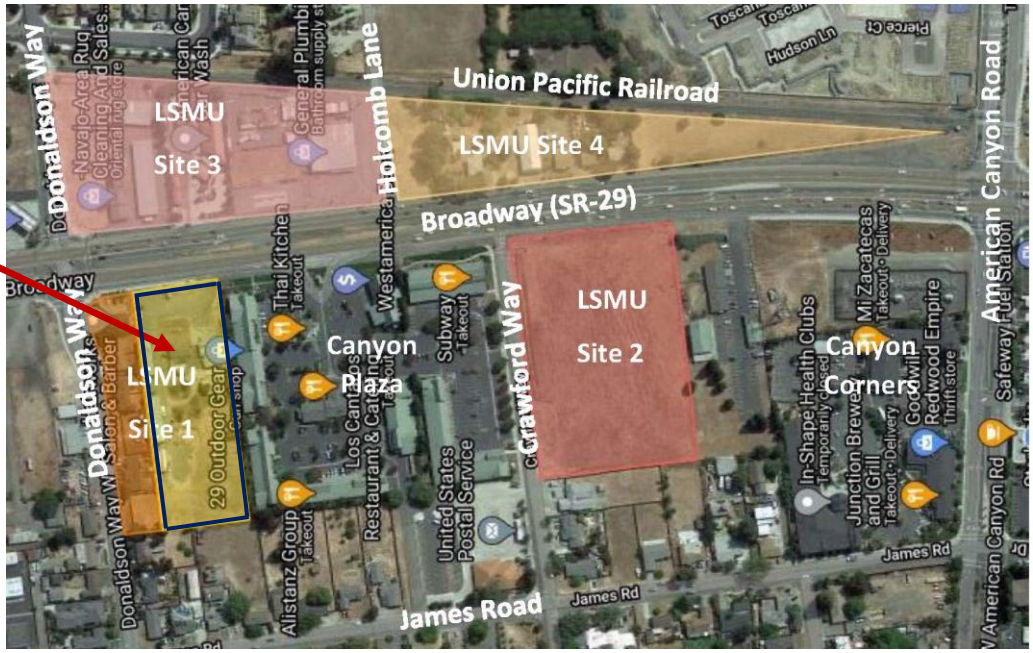
ATTACHMENT 9

Proposed Hampton Inn Site Location

ATTACHMENT 10

LSMU Zoning District Sites

Proposed Hampton Inn Site



ATTACHMENT 11

Aerial Site Conditions

Proposed Hampton Inn Site

Street View from Broadway

ATTACHMENT 12

Existing, Approved, Proposed, and Potential Hotel Sites

ATTACHMENT 13

The allowable uses among the zoning districts established by the Broadway District Specific Plan are presented in Table 2-3.

TABLE 2-3: BROADWAY ZONING DISTRICT PERMITTED USES

Use Classification (Per ACMC Chapter 19.05)	Broadway District Specific Plan Zoning District				
	Broadway Residential	Business Park[1]	Downtown Core	Local Serving Mixed Use	Home Improvement
Commercial					
Lodging services	-	P	P	**C**	-

JUSTIFICATION: *The proposed amendment changes Lodging from "Prohibited" to "Permitted with a Conditional Use Permit."*

Attachment 14

May 20th, 2021

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear Neighboring Resident,

My name is Jay Patel and I represent Anjani Management LLC. We own and operate several Hotels in different states, and we are planning to purchase the property at 3443 Broadway. We are currently in the process of attempting to develop the property into a Hampton Inn Hotel. The following is a brief description of the project:

Our proposed project will demolish the existing structures on the 2.51-acre site at 3443 Broadway and erect a new 3-story Hotel in its place. The proposed Hotel has 106 rooms and includes a 700 square foot (SF) Meeting Room, a 650SF Fitness Center and a Guest Laundry area. The Hotel's multi-functional Lobby Space incorporates Guest Check-in, a Coffee Serving Table, Communal Seating area, Dining Seating, Semi-private Lounge Seating, a Mixed Media Divider Wall, and a Breakfast Serving Area for a complimentary breakfast. Support services for the Hotel include on-site Laundry, Administrative Offices, and an Employee Breakroom.

The Hotel has a floor area of approximately 60,000 square feet and has 113 at-grade parking spaces, including eleven spaces dedicated for electric vehicles. The Hotel also includes a swimming pool, a patio with 2 outdoor fireplaces and bicycle parking spaces. The project will construct a new multi-use sidewalk along the entire Broadway Frontage which will continue along Broadway and connect to the Sidewalk at the Canyon Plaza Shopping Center. In addition, there will also be a new pedestrian connection to the Shopping Center located on the south side of the property. The existing windmill on the site will also be relocated as shown in our Site Plan.

In our opinion, the proposed Hotel will provide a higher and better use of the site than the currently underutilized commercial buildings. The proposed Hotel could also be less impactful than other potential future developments at this site, which under the current zoning, would allow for a larger, and denser project. The Hotel will also generate income to the City in the form of Transient Occupancy Tax (TOT), which will be a net gain for the City, as it will more than off-set the Hotel's impact on public infrastructure and services. This revenue source will be considerable income for the City to pay for services.

We are very excited to be your neighbor and a part of the City of American Canyon. We have recently submitted our application to the City and as part of the process we are reaching out to you for your feedback and support on the proposed development. We have also included drawings and illustrations of the proposed hotel. After reviewing the enclosed information, please feel free to contact me with any questions you may have.

If you are in support of the proposed development, I would appreciate you signing the enclosed Letter of Support and return it in the self-address, stamped envelope provided. I look forward to hearing from you.

Sincerely,

Jay Patel
Anjani Management, LLC
(337) 368-2172
patelji35@gmail.com

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

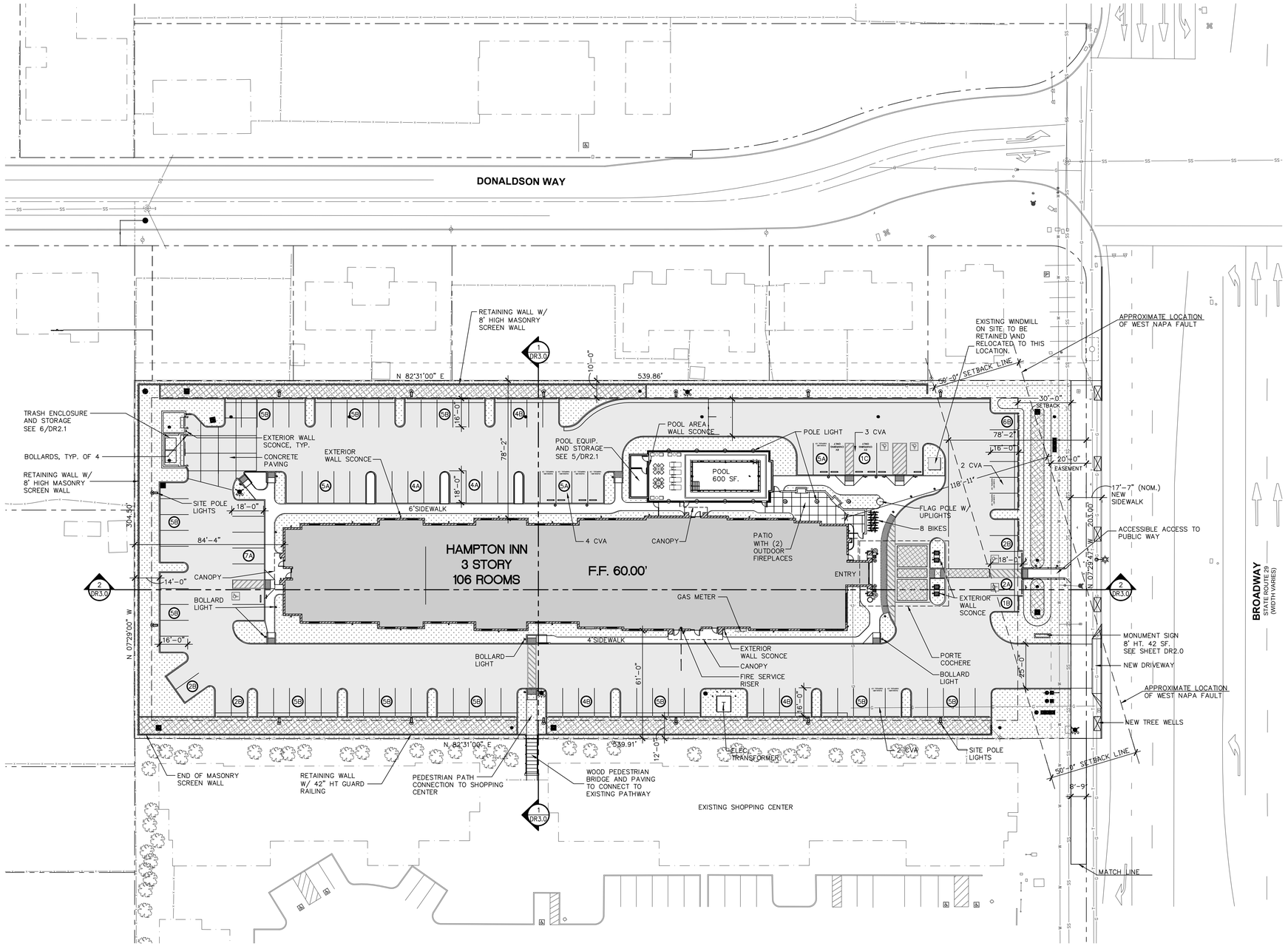
Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-312-010 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

Gateway Crossing Inc
Po Box 527
Burlingame, CA 94011



SITE PLAN
SCALE: 1" =30'-0"

1 RESPONSE TO CITY COMMENTS 01-25-21
REVISED FRONTAGE SIDEWALK WIDTH, ADDED PEDESTRIAN BRIDGE CONNECTION, REVISED TRASH ENCLOSURE.

2 03-15-2021 – REVISED SITE AREA CALCULATIONS

3 05-12-2021 – CITY CHANGED LANDSCAPE SETBACK TO BE 30' FROM BACK OF SIDEWALK. REVISED PARKING FRONTAGE MOVING PARKING STALLS FACING BROADWAY BACK 2' IN THE WEST DIRECTION. REVISED SITE AREA CALCULATIONS.

PROJECT SUMMARY

GENERAL INFORMATION

SITE AREA:	109,596 SF. (2.51 ACRES)
APN:	058-312-010
ZONING:	LSMU: LOCAL-SERVING MIXED-USE DEVELOPMENT
SPECIFIC PLAN:	BDSP: BROADWAY DISTRICT SPECIFIC PLAN
PROPOSED USE:	HOTEL: 106 ROOMS, 3 STORIES
BUILDING OCCUPANCY:	MIXED: R-1, A-2, B AND F.
BUILDING CONSTRUCTION:	TYPE VA

PARKING SUMMARY

PARKING REQUIRED:	REQUIRED	PROVIDED
1 SPACE PER GUESTROOM:	106	106
PLUS 1 SPACE PER 10 ROOMS OR UNITS:	11	7
TOTAL	117	113

PARKING PROVIDED

STANDARD SPACES:	97	
ACCESSIBLE SPACES:	5	
CLEAN AIR/VAN POOL/EV SPACES (CVA):	11 (7 EV SPACES)	
TOTAL	113	

		PLAN SYMBOL
PARKING SPACE SIZES: STANDARD TYPE A =	9' WIDE X 18' LONG	(9A)
STANDARD TYPE B = (INCL. 24" OVERHANG AT LANDSCAPE)	9' WIDE X 16' LONG	(9B)
STANDARD VAN TYPE C =	13' WIDE X 18' LONG	(9C)

DRIVE AISLE WIDTH: 25' U.N.O.

BICYCLE PARKING REQUIRED

1 SPACE PER 20 CAR SPACES	6 REQUIRED	8 PROVIDED

BUILDING AREAS

GROUND FLOOR:	19,691 S.F.	(AREA OF PORTE COCHERE NOT INCLUDED)
2ND FLOOR:	19,476 S.F.	
3RD FLOOR:	19,476 S.F.	
TOTAL:	58,643 S.F.	
TRASH ENCLOSURE:	442 S.F.	
POOL EQUIPMENT:	275 S.F.	
TOTAL:	717 S.F.	

BUILDING HEIGHT

MAXIMUM ALLOWED BUILDING HEIGHT:	42 FEET PER LSCMU ZONING
PROPOSED BUILDING HEIGHT:	47'-5" FEET

SITE AREAS

BUILDING COVERAGE:	20,408 S.F.	18.7%
HARDSCAPE AREA:	11,526 S.F.	10.5% (INCL. POOL)
PAVEMENT AREA:	48,962 S.F.	44.7%
LANDSCAPE AREA:	28,700 S.F.	26.1%
TOTAL	109,596 S.F.	100.0%

F.A.R. .54

GUESTROOM SUMMARY

	GROUND FLOOR	2ND FLOOR	3RD FLOOR	TOTAL	%
KING	14	19	19	52	49%
KING ACCESSIBLE	1	1	1	3	3%
DBL. QUEEN	6	20	20	46	43%
DBL. QUEEN ACCESSIBLE	1	2	2	5	5%
TOTAL	22	42	42	106	

ACCESSIBILITY REQUIREMENTS	REQUIRED	PROVIDED	C.B.C. REF.
MOBILITY FEATURES (SHOWER)	2	3	TABLE 11B-224.2
MOBILITY FEATURES (TUB)	5	5	TABLE 11B-224.2
COMMUNICATION FEATURES	12	19	TABLE 11B-224.4

LEGEND

- POLE MOUNTED SITE LIGHT – 25' HEIGHT
- BOLLARD LIGHT – 42" HEIGHT
- POLE MOUNTED POOL LIGHT – 15' HEIGHT
- WALL MOUNTED BUILDING LIGHT
- FIRE HYDRANT

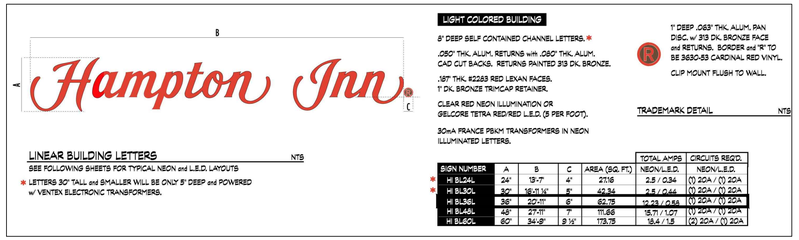
- TRUNCATED DOMES
- PAINTED STRIPING
- DECORATIVE PAVING
- BIO RETENTION
- DECORATIVE PAVING
- LANDSCAPE
- ASPHALT PAVING

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

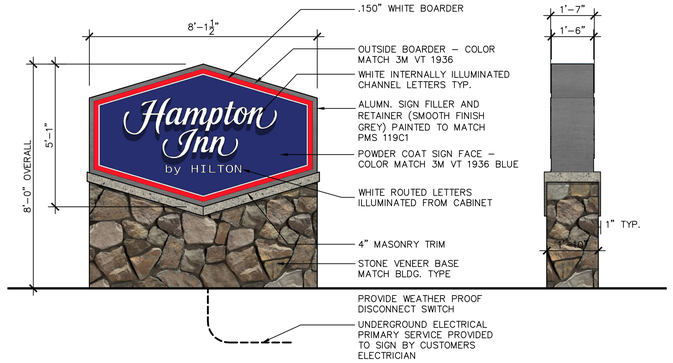
HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 5/12/2021
DRAWING NO. DR1.0



BUILDING SIGN - HI BL36L (62.75 SQ.FT.)

SCALE: N.T.S.



MONUMENT SIGN (42 SQ.FT.)

SCALE: 3/8" = 1'-0"

SHEET NOTES

1. ALUMINUM WINDOW SYSTEM
2. PAINTED METAL GUTTER AND DOWNSPOUT
3. POOL EQUIPMENT BUILDING BEYOND
4. STONE VENEER POOL AND PATIO PRIVACY WALL
5. PORTE COCHERE
6. SIDE ENTRANCE CANOPY BEYOND
7. E.V. CHARGING STATION
8. PAINTED METAL LOUVER
9. BOARD AND BATTEN PATTERN
10. HORIZONTAL SIDING
11. POOL AREA POLE LIGHT BEYOND
12. WALL LIGHT SCONE
13. ALUMINUM STOREFRONT SYSTEM
14. OPEN WEB WOOD TRUSS
15. METAL WALL COPING
16. WINDOW TRIM - TERRANEO
17. BOLLARD LIGHT
18. FLAG POLE
19. RAISED PANEL
20. 6'-0" HIGH METAL FENCE BEYOND
21. ENTRY AREA PLANTER
22. BIKE RACK
23. BUILDING SIGN WITH BACKLIT CHANNEL LETTER
24. WALL COPING - TERRANEO

LEGEND

- WOOD SIDING - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: AGED WHISKEY (DET686)
  MANUF: DUNN EDWARDS
- FASCIA - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: GRAY MATTERS
  MANUF: SHERWIN WILLIAMS (7066)
- PAINTED METAL: GUTTER / DOWNSPOUT / COPING
  COLOR: GEORGIA CLAY (DE5181)
- TERRANEO WINDOW TRIM / WALL COPING
  COLOR: GLAZIER 207
  MANUF.: DRYVIT SYSTEM INC.
- ALUMINUM WINDOW FRAME
  COLOR: DARK BRONZE
  ALUMINUM STOREFRONT
  COLOR: DARK BRONZE
  MANUF: KAWNEER
- GLAZING
  COLOR: SMOKE GREY / OCEAN GREY VANCEVA
  MANUF.: GUARDIAN GLASS SUPERNEUTRAL 68
- STONE VENEER
  COLOR: COGNAC
  MANUF.: EL DORADO
- STANDING SEAM METAL ROOF
  COLOR: A606-4 WEATHERING STEEL
  MANUF.: CORTEN ROOFING

MONUMENT AND BUILDING SIGN DETAILS

SCALE: AS NOTED

GENERAL NOTES

1. COLORS INDICATED ON THIS DRAWING ARE APPROXIMATE AND WILL VARY DEPENDING ON PRINTER/MONITOR DISPLAY SOURCE. REFER TO COLORS AND MATERIALS BOARDS FOR TRUE REPRESENTATION OF ALL PROPOSED FINISHES.
2. ALL LANDSCAPING INDICATED ON THIS DRAWING IS DIAGRAMMATIC AND INTENDED ONLY TO CONVEY A SENSE OF GENERAL LANDSCAPED AREAS. REFER TO ACTUAL LANDSCAPE PLAN FOR ALL PROPOSED LANDSCAPING.

1 EAST EXTERIOR (FRONT) ELEVATION

SCALE: 3/16" = 1'-0"

1 RESPONSE TO CITY COMMENTS 01-25-2021: REVISED MONUMENT SIGN.

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

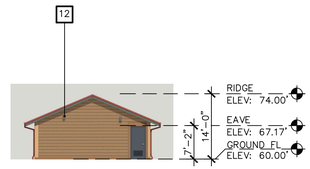
JOB NO. AMS03
DATE. 3/11/2021
DRAWING NO. DR2.0

SHEET NOTES

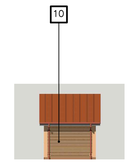
1. ALUMINUM WINDOW SYSTEM
2. PAINTED METAL GUTTER AND DOWNSPOUT
3. POOL EQUIPMENT BUILDING
4. 7FT HIGH STONE VENEER POOL & PATIO PRIVACY WALL
5. PORTE COCHERE
6. SIDE ENTRANCE CANOPY BEYOND
7. E.V. CHARGING STATION
8. PAINTED METAL LOUVER
9. BOARD AND BATTEN PATTERN
10. HORIZONTAL SIDING
11. POOL AREA POLE LIGHT
12. WALL LIGHT SCONE
13. ALUMINUM STOREFRONT SYSTEM
14. WOOD WINDOW TRIM
15. METAL WALL COPING
16. WINDOW TRIM - TERRANEO
17. BOLLARD LIGHT
18. FLAG POLE
19. BOLLARD
20. 72" HIGH METAL FENCE
21. PAINTED METAL ROLL-UP DOOR
22. BIKE RACK
23. WALL COPING - TERRANEO
24. 16" W X 24" H LOUVERED VENT

2 WEST EXTERIOR ELEVATION

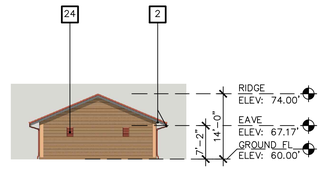
SCALE: 1/16" = 1'-0"



EAST (FRONT)ELEVATION



WEST ELEVATION

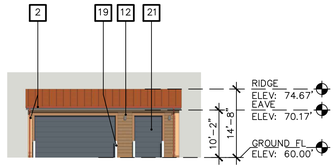


NORTH ELEVATION

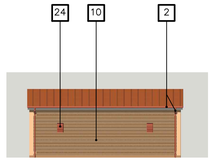
SOUTH ELEVATION

5 POOL EQUIPMENT EXTERIOR ELEVATION

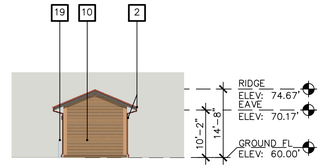
SCALE: 1/16" = 1'-0"



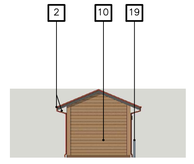
EAST (FRONT) ELEVATION



WEST ELEVATION



NORTH ELEVATION



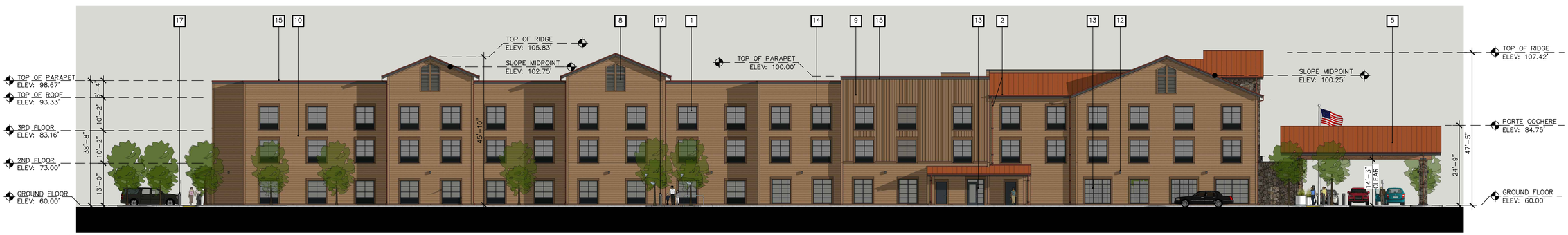
SOUTH ELEVATION

6 TRASH ENCLOSURE EXTERIOR ELEVATION

SCALE: 1/16" = 1'-0"

3 NORTH EXTERIOR ELEVATION

SCALE: 1/16" = 1'-0"



4 SOUTH EXTERIOR ELEVATION

SCALE: 1/16" = 1'-0"

LEGEND

- WOOD SIDING - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: WITH THE GRAIN (DET668)
  MANUF: DUNN EDWARDS
- WOOD TRIM - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: AGED WHISKEY (DET686)
  MANUF: DUNN EDWARDS
- FASCIA - COLONIAL SMOOTH
  MANUF: HARDIPLANK
  COLOR: GRAY MATTERS
  MANUF: SHERWIN WILLIAMS (7066)
- PAINTED METAL: GUTTER / DOWNSPOUT / COPING
  COLOR: GEORGIA CLAY (DE5181)
- TERRANEO WINDOW TRIM / WALL COPING
  COLOR: GLAZIER 207
  MANUF.: DRYVIT SYSTEM INC.
- ALUMINUM STOREFRONT
  COLOR: DARK BRONZE
  ALUMINUM WINDOW FRAME
  COLOR: DARK BRONZE
  MANUF.: KAWNEER
- GLAZING
  COLOR: SMOKE GREY / OCEAN GREY VANCEVA
  MANUF.: GUARDIAN GLASS SUPERNEUTRAL 68
- STONE VENEER
  COLOR: COGNAC
  MANUF.: EL DORADO
- STANDING SEAM METAL ROOF
  COLOR: A606-4 WEATHERING STEEL
  MANUF.: CORTEN ROOFING

GENERAL NOTES

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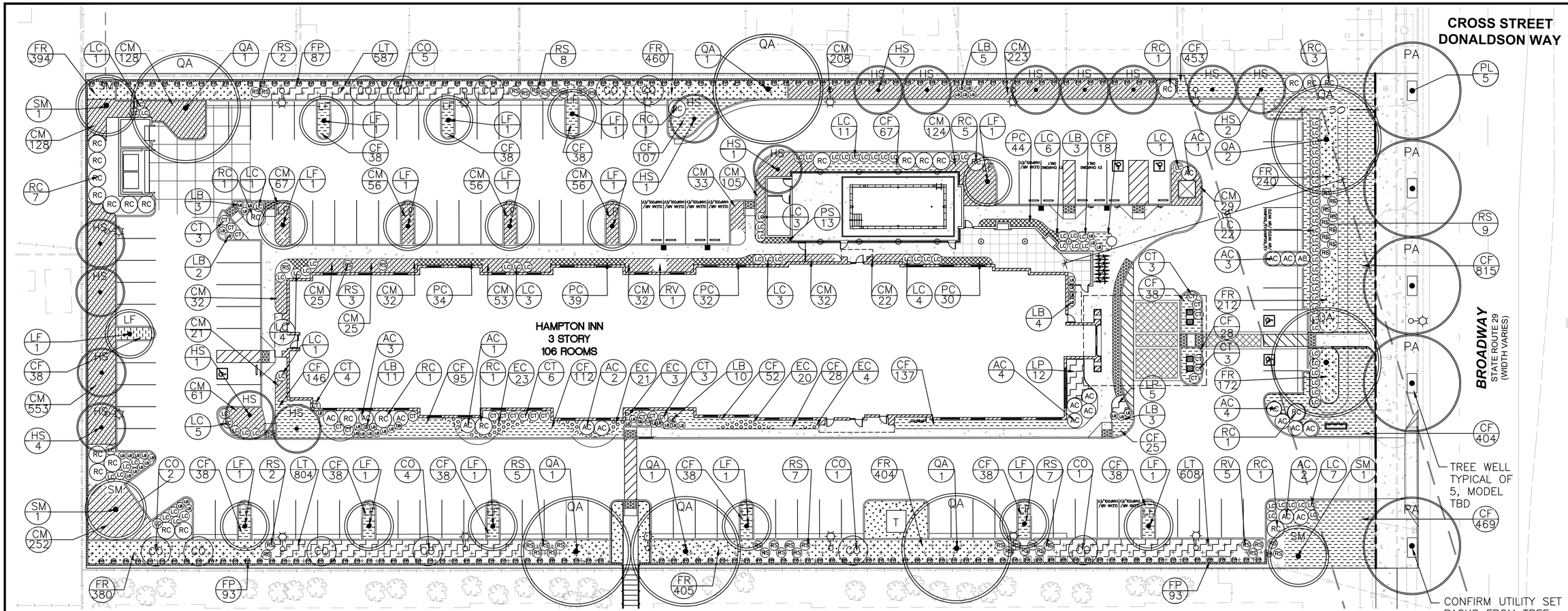
1 RESPONSE TO CITY COMMENTS 01-25-2021:
REVISED TRASH ENCLOSURE

ARCHITECTURAL DIMENSIONS
300 Frank H. Ogawa Plaza
Oakland, CA 94612
TEL. 510.463.8300 • FAX. 510.463.8395

PROJECT INFO.

HAMPTON INN
3443 BROADWAY STREET
AMERICAN CANYON, CA

JOB NO. AMS03
DATE. 2/02/2021
DRAWING NO. DR2.1



PLANT SCHEDULE

TREES

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	WATER REQUIREMENT	REFERENCE	HEIGHT X WIDTH	PROJECT SPACING
HS	15	HESPEROCYPARIS SARGENTII	SARGENT CYPRESS	15 GAL.	LOW	WUCOLS	45' X 20'	AS SHOWN
LF	15	LYONOTHAMNUS FLORIBUNDUS SSP. ASPLENIFOLIUS	CATALINA IRONWOOD	15 GAL.	LOW	WUCOLS	40' X 20'	AS SHOWN
PA	5	PLATANUS X ACERIFOLIA 'YARWOOD'	YARWOOD LONDON PLANE TREE	15 GAL.	MODERATE	WUCOLS	60' X 40'	AS SHOWN
QA	8	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL.	VERY LOW	WUCOLS	50' X 50'	AS SHOWN
SM	3	SCHINUS MOLLE	PEPPER TREE	15 GAL.	VERY LOW	WUCOLS	25'–50' / 25'–40'	AS SHOWN

SHRUBS

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	WATER REQUIREMENT	REFERENCE	HEIGHT X WIDTH	PROJECT SPACING
AC	65	ACACIA COGNATA 'COUSIN ITT'	LITTLE RIVER WATTLE	1 GAL	LOW	SAN MARCOS GROWERS	2' X 6'	AS SHOWN
CO	11	CERCIS OCCIDENTALIS	WESTERN REDBUD	5 GAL.	LOW	WUCOLS	12' X 12'	AS SHOWN
CT	62	CNEORUM TRICOCCON	SPURGE OLIVE	1 GAL.	LOW	WUCOLS	2' X 4'	AS SHOWN
LB	134	LEUCOPHYTA BROWNII	CUSHION BUSH	1 GAL.	LOW	WUCOLS	2' X 3'	AS SHOWN
LC	84	LOROPETALUM CHINENSE 'PURPLE DAYDREAM'	PURPLE DAYDREAM LOROPETALUM	1 GAL.	LOW	WUCOLS	3' X 4'	AS SHOWN
RC	28	RHAMNUS CALFORNICA 'LEATHERLEAF'	COFFEE BERRY	5 GAL.	LOW	WUCOLS	7' X 7'	AS SHOWN
RS	48	RIBES SPECIOSUM	FUCHSIA–FLOWERING GOOSEBERRY	1 GAL	LOW	BASMAA	4' X 4'	AS SHOWN

GROUNDCOVERS AND VINE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	WATER REQUIREMENT	REFERENCE	MATURE HEIGHT X WIDTH	PROJECT SPACING
CF	3336	CALAMAGROSTIS FOLIOSA	MENDOCINO REED GRASS	1 GAL.	MODERATE	WUCOLS	1.5' X 1.5'	1.5' O.C.
CM	5318	CAREX MORROWII 'ICE DANCE'	MORROW'S SEDGE	1 GAL.	MDERATE	WUCOLS	1' X 2'	2' O.C.
EC	77	ERIOPHYLLUM CONFERTIFLORUM	GOLDEN YARROW	1 GAL.	LOW	WUCOLS	3' X RUNNING	2' O.C.
FP	180	FICUS PUMILA	CREEPING FIG	5 GAL.	MODERATE	WUCOLS	SPREADING	AS SHOWN
FR	2667	FESTUCA RUBRA 'PT. MOLATE'	CREEPING RED FESCUE	1 GAL.	LOW	WUCOLS	1' X 1'	1' O.C.
LT	1999	LEYMUS TRITICOIDES	CREPING WILD RYE	1 GAL.	LOW	WUCOLS	3' X 1'	3' O.C
PC	192	POLYSTICHUM CALIFORNICUM	CALIFORNIA SWORD FERN	1 GAL.	MODERATE	WUCOLS	3 X 2'	2' O.C.

PLANT PALETTE

TREES

SARGENT CYPRESS

CATALINA IRONWOOD

LONDON PLANE TREE

COAST LIVE OAK

PEPPER TREE

SHRUBS

LITTLE RIVER WATTLE

WESTERN REDBUD TREE SHRUB

SPURGE OLIVE

CUSHION BUSH

PURPLE DAYDREAM LOROPETALUM

COFFEE BERRY

FUCHSIA-FLOWERED GOOSEBERRY

GROUNDCOVER & VINE

MENDOCINO REED GRASS

MORROW'S SEDGE

GOLDEN YARROW

CREEPING FIG

CREEPING RED FESCUE

CREEPING WILDRYE

CALIFORNIA SWORD FERN

GRAPHIC SCALE
0 20
1"=20'

DATE:	05-13-21
SCALE:	1"= 20'
DESIGNED:	GM, LW
DRAWN:	GM, LW
CHECKED:	LB
PROJ. MGR:	LB

FILE PATH: D:\DOCUMENTS_BATHA DESIGN GROUP\PROJECTS\HAMPTON INN_AMERICAN CANYON\PLNT & IRR PLN J-8-21.DWG

REV. #	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			

BATHA DESIGN GROUP
LANDSCAPE ARCHITECTURE & URBAN DESIGN
350 FRANK H. OSWALT ROAD, SUITE 201 CHICO, CALIFORNIA 95973
PH: 530.345.2784 FAX: 530.345.2787

PRELIMINARY PLANTING PLAN

HILTON HAMPTON INN

3443 BROADWAY
AMERICAN CANYON NAPA COUNTY CALIFORNIA

SHEET LP-1 OF

PROJECT 20-2498

Hampton Inn - 3443 Broadway - Letters of Support

Hampton Inn Supporters

1. Caroline Ray Poage - 162 James Rd - 058-212-019
2. Gateway Crossings - 3439 Broadway - 058-312-010
3. Howard & Claire Spencer - 306 Donaldson Way W - 058-311-009
4. John & Jacqueline Mikolajcik - 3519 Broadway - 058-311-013
5. Karla Ward - 151 James Rd - 058-301-005
6. Michael Aldredge - 173 James Rd - 058-301-002
7. Napa Valley Casino - 3466 Broadway - 059-040-002
8. Napa Valley Casino - 3464 Broadway - 059-040-002
9. Navajo Rug Cleaning Co. - 3456 Broadway - 059-040-004
10. Orama LLC - 3438 Broadway -059-080-001
11. Autofix Auto Repair And Collision - Victor & Pamela Smith - 9 Donaldson Way - 058-311-012
12. ZZB Growth LLC - 058-312-005

Hampton Inn - 3443 Broadway - Locations of properties related to Letters of Support

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-312-005 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

Zzb Growth LLC
Po Box 527
Burlingame, CA 94011

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

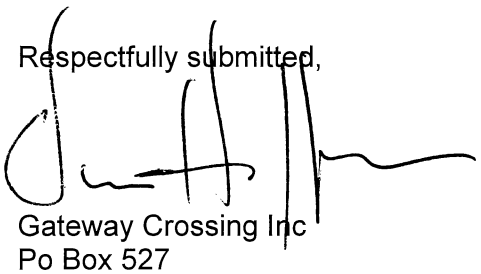
Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-312-010 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,



Gateway Crossing Inc
Po Box 527
Burlingame, CA 94011

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 059-040-004 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

Navajo Rug Cleaning Co Inc
3456 Broadway
American Canyon, CA 94503

Napa Valley Casino
P.O. Box 10078 American Canyon, CA 94503 | (707) 644-8851

May 27, 2021

City of American Canyon
Attn: City Council Members
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway Street, Am Cyn

Dear Mayor, Vice Mayor and City Council Members,

I have reviewed the information on the proposed Hampton Inn Hotel project and we are in full support.

I am the property owner of APN 59-040-002, 3464 & 3466 Broadway Street, a direct neighbor to the project.

We would welcome the hotel to the area and look forward to a successful project.

Respectfully,

Von Altizer, Managing Member
NVC Land, LLC
President, Napa Valley Casino

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 059-080-001 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

Orama LLC
Po Box 4203
Walnut Creek, CA 94596

General Plumbing Supply Co.
AMERICAN CANYON • AUBURN • BERKELEY • BRENTWOOD
LIVERMORE • SAN FRANCISCO • SONORA • WALNUT CREEK
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Richard Amaro, Jr.
President
richard.amaro@genpl.com

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• Commercial
• Luxury Products • Show Room

1530 San Luis Road
Walnut Creek, CA 94597
(925) 939-4622
FAX (925) 939-1548

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-212-019 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

[redacted]

Caroline Rae Poage
[redacted]
American Canyon, CA 94503

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-311-009 in American Canyon.

After reviewing the information, I would like to express ~~my~~ I do not support for the proposed project as designed. Thank you for your consideration.

would prefer a 2-story or less building.

Respectfully submitted,

[redacted] (for Howard)

Howard I & Claire L Spencer
[redacted]
American Canyon, CA 94503

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-311-013 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

[redacted]

John & Jacqueline Mikolajcik
[redacted]
Fairfield, CA 94534

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-301-005 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

[redacted]

Karla Ward
[redacted]
American Canyon, CA 94503

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-301-002 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

[redacted]

Michael C Aldredge
[redacted]
Fairfield, CA 94533

May 21st, 2021

City of American Canyon City Council
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: Proposed Hampton Inn Hotel Project
3443 Broadway

Dear, Mayor, Vice Mayor and City Councilmembers,

I have recently received information regarding the proposed Hampton Inn Hotel project to be located at 3433 Broadway. I am the Property Owner of APN 058-311-012 in American Canyon.

After reviewing the information, I would like to express my support for the proposed project. Thank you for your consideration.

Respectfully submitted,

[redacted]

Victor M & Pamela J Smith
[redacted]
Napa, CA 94559

Initial Hotel "Modern" Architecture

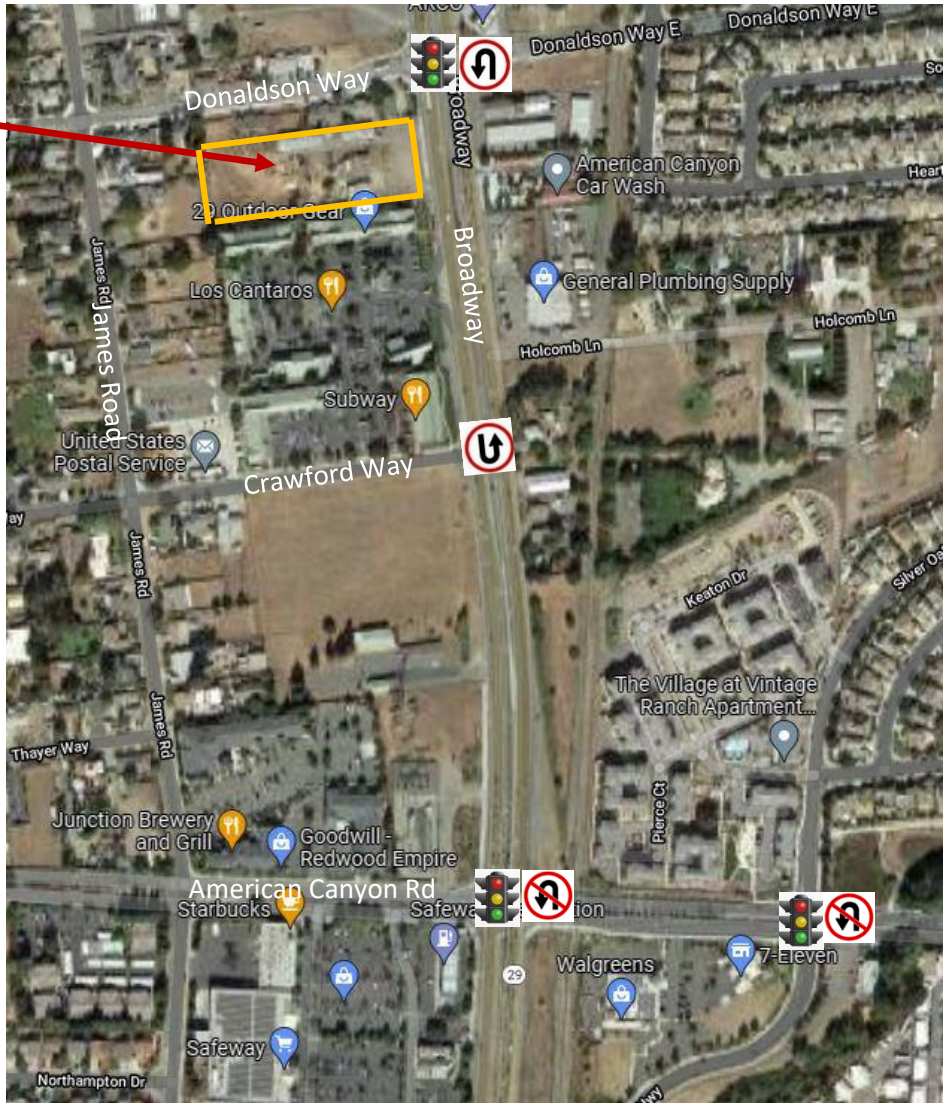
Proposed Hotel "Modern Farmhouse" Architecture

ATTACHMENT 16

Overhead Utility Pole at 3443 Broadway

Intersection Turning Movements

Proposed Hampton Inn Site



MEMORANDUM

To: Jay Patel, Anjani Management

From: Benjamin C. Sigman and Luke Foelsch, Economic & Planning Systems, Inc.

Subject: American Canyon Hotel Market Study; EPS #211014

Date: March 8, 2021

The Economics of Land Use

The proposed Hampton Inn ("Project") in American Canyon is a 106-room upper midscale hotel with high-quality accommodations and services. The Project would be sited on approximately 2.5 acres at 3443 Broadway Street. Anjani Management engaged Economic & Planning Systems, Inc. (EPS) to review local hotel market conditions in Napa County and to produce a high-level assessment of market demand for the proposed hotel.

The market projections contained in this analysis reflect EPS professional opinion concerning broad economic circumstances, local hotel market potential, and an uncertain regional real estate development outlook. Importantly, this analysis is being prepared as the world seeks to address the COVID-19 pandemic, an unprecedented public health crisis that has caused sudden and dramatic economic shifts locally and globally. Particularly because the economic effect of the pandemic has been both significant and abrupt, the health crisis may affect market potential for the proposed project in unforeseen ways. This analysis assumes a relatively rapid recovery in Northern California wine country tourism and future growth that is consistent with pre-pandemic trends. If the pandemic's economic effects persist or result in lagging negative effects on growth, hotel demand could be less than is projected by this study.

Key Findings

Napa Valley supports a diverse tourism market, and hospitality demand and supply has been steadily growing in recent years. Napa County attracts an estimated 3.8 million+ visitors annually, about 30 percent of whom stay overnight at lodging facilities. Before the pandemic struck, visitation to Napa County had been increasing, with visits up over 30 percent between 2012 and 2018. To satisfy growing demand for overnight accommodation, the County has seen a spate of new hotel development and hospitality investment interest, with over 300 rooms delivered since 2016, over 300 rooms under construction, and a pipeline of almost 1,400 new rooms proposed countywide.

Economic & Planning Systems, Inc.
1330 Broadway
Suite 450
Oakland, CA 94612
510 841 9190 tel

Oakland
Sacramento
Denver
Los Angeles

www.epsys.com

The proposed Hampton Inn is likely to compete most directly with branded "upper midscale" and "upscale" hotels in Southern Napa County. Hampton Inn is a franchise hotel licensed by Hilton Hotels Corporation. Designed to attract business and leisure travelers, the hotel is market positioned to provide branded (i.e., national chain) "focused service" hospitality at the upper-midscale price point. The Hampton Inn offers guests free internet service, complimentary hot breakfast, and grab-and-go food options. This hotel may also compete indirectly with somewhat more expensive upscale hotels, as well as with similarly priced extended stay hotels. This analysis considers potential direct and indirect competition in Southern Napa County, within about a 15-minute drive of American Canyon.

The competitive set of hotels in Southern Napa County have historically performed well, though the COVID-19 pandemic had a profound effect on room rates and occupancy. Branded upper midscale hotels in Napa County reached a highpoint average daily room rate (ADR) in 2019 of almost $170. Across a broader set of branded upper midscale and upscale hotels, ADR was about $172 that year. These hotels achieved healthy occupancy rates before the pandemic, in the range of 76 to 83 percent. However, the COVID-19 pandemic has had a severe effect on tourism and hospitality. Room rates at branded upper midscale hotels in Southern Napa County fell by almost 30 percent and occupancy dropped to 60 percent in 2020.

With a recovery to pre-pandemic hotel market conditions between 2021 and 2022, and historic trending in hotel demand growth from 2023 onward, this analysis finds unmet demand for an estimated 275 upper midscale and upscale rooms in Southern Napa County by 2025. Hotel demand, expressed in room nights, had been increasing by about 7 percent per year between 2016 and 2019. Anticipating full recovery and future growth in tourism will be hastened by widespread COVID-19 immunizations during 2020, this analysis projects that Napa County lodging demand will rapidly rebound from pandemic conditions and will return to its pre-pandemic growth trajectory by 2023. In this recovery scenario, the demand for upper midscale and upscale accommodations in Southern Napa County will be well satisfied through 2022, accounting for the addition of the soon-to-open Cambria Hotel in Napa. Between 2023 and 2025, growth in hotel demand is likely to support an estimated 275 additional rooms, which might be satisfied by the proposed Hampton Inn or other hotel proposals.

The supply and demand forecast considers the soon-to-open Cambria Hotel in Napa, but leaves open the possibility that the proposed Hampton Inn could be delivered to market before other potentially competitive proposed supply. There are at least five hotels comprising nearly 800 rooms proposed for the Southern Napa County upper midscale and upscale market segment that could compete with the proposed Hampton Inn for unmet demand projected by 2025. In American Canyon, the proposed hotels include the Home2 Suites (102 rooms) and a hotel within the Napa Valley Ruins and Garden project (200 rooms). This analysis finds that there likely will be sufficient unmet market demand to support the Home2 Suites and Hampton Inn by 2025, a total of about 208 rooms. It is anticipated that the hotel at Watson Ranch is a longer-term development opportunity, given that the hotel is programmed for later phases of the multi-phase Watson Ranch Specific Plan and because of the significant infrastructure development that needs to be installed prior to hotel construction.

The proposed Hampton Inn would generate approximately 25 jobs onsite totaling over $1 million in employee compensation, stimulate additional economic multiplier effects in American Canyon, and provide tax revenue to the City's General Fund. The operations model for the proposed hotel relies on a Hilton-generated management plan that supports operations with about one job for every four rooms. These jobs include four managerial

positions, a chief engineer, desk staff, and part-time cleaning and maintenance positions. In addition to onsite employment, the project will stimulate visitor spending in American Canyon, and room rates and local restaurant and retail purchases will be subject to transient occupancy tax and sales tax. Available Napa tourism data indicate each visitor party to the Napa Valley region spends on average about $4,800 per trip, and the proposed Hampton Inn would contribute to American Canyon's local capture of this spending.

Hotel Market Analysis

Napa Valley is a world-renowned wine region and an international destination for food and wine tourism. Recent research finds that the county hosted an estimated 3.8 million visitors in 2018, up from 3.5 million in 2016.[1] Looking back to 2012, when the county saw just 2.9 million visitors, there has been a 30 percent increase in tourism in just six years.[2] Lodging guests make up almost a third (30 percent) of the county's visitor volume. The proposed Hampton Inn in American Canyon will serve both business and leisure visitors to Napa County.

Geographic Trade Area

A trade area is a geographic region that contains the majority of the competitive supply that will affect the performance of a hotel project. Trade areas are influenced by a variety of factors, including the presence of the targeted customer base, the location of key competitors and their relative distance, and geographic and psychological barriers. Trade areas typically vary with the type of hotel and/or hotel size involved. The analysis of the proposed Hampton Inn in American Canyon initially considered the countywide lodging market, shown in **Figure 1**. However, with over 70 percent of Napa County visitors spending time in the City of Napa, and given the cluster of activities and lodging there, this market analysis defines the trade area for the Proposed hotel as Southern Napa County, including the City of Napa and areas within about a 15-minute drive of American Canyon.

Hotel Chain Scale

Smith Travel Research (STR), the leading provider of market data on the hotel industry, provides an industry-standard classification scale for hotels. STR's "chain scale" (i.e., market segmentation) distinguishes hotels into different tiers based largely on their Average Daily Rate (ADR).[3] The STR scale is as follows, listed from lowest to highest daily rates:

Economy	Midscale	Upper Midscale	Upscale	Upper Upscale	Luxury
$	$$	$$$	$$$$	$$$$$	$$$$$$

"Luxury" hotels consist of the top 15 percent average room rates. Hotels with average room rates that are approximately 70 to 85 percent of what is achieved at the top end of the market are considered "upper upscale" and "upscale" hotels. Midscale hotels, including upper midscale, are 40 to 70 percent of the highest room rates in the market. Hotel chain scale is an important

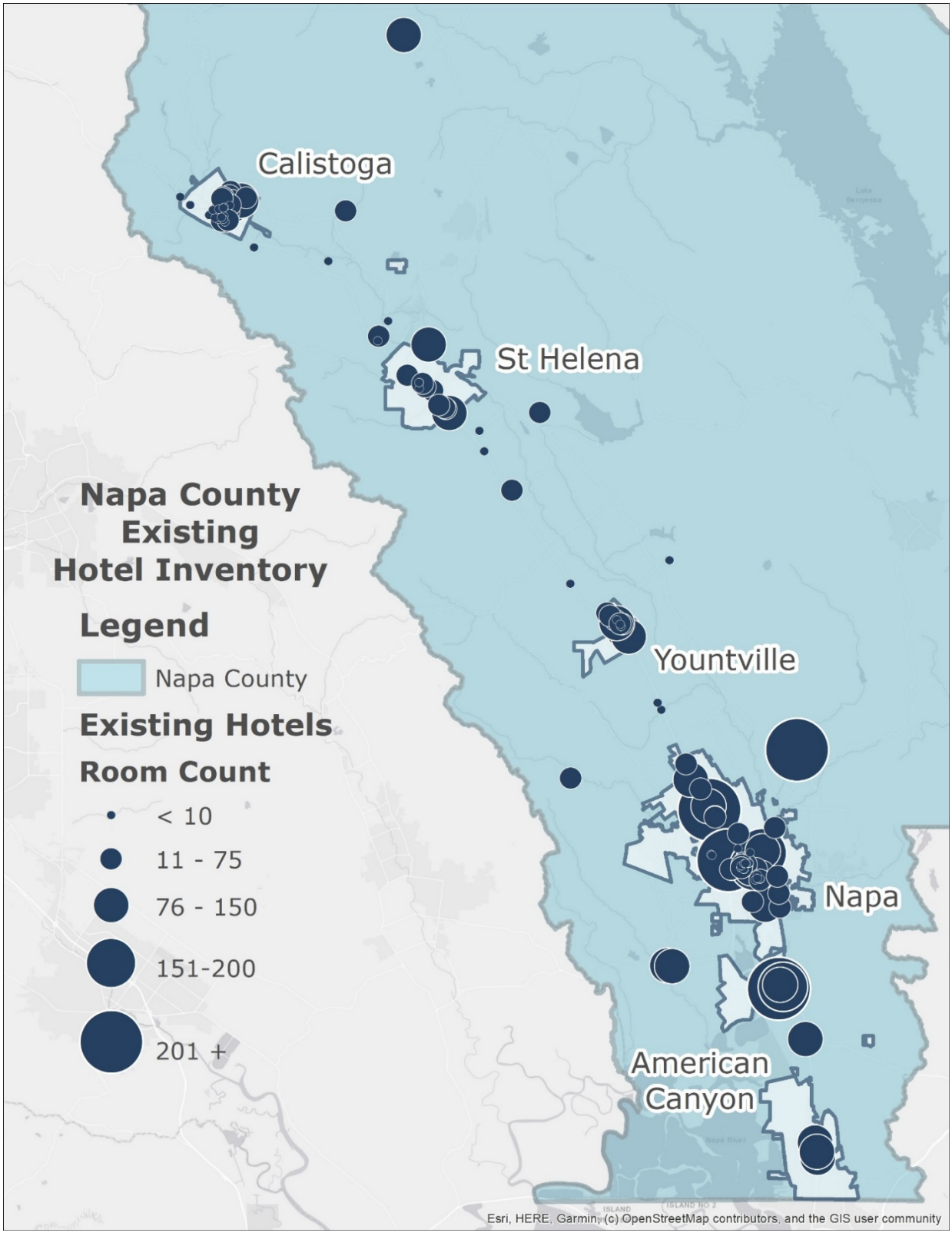
[1] Destination Analysts, The Napa Valley Visitor Profile 2018, May 2019.

[2] Destination Analysts, 2012 Napa Valley Visitor Profile.

[3] Average daily rate (ADR) is a measure of the average rate paid for rooms sold and is calculated by dividing room revenue by rooms sold at each hotel property. ADR commonly is lower than the "rack rate" (published full price) which does not reflect pre-booking and other discounts.

factor in establishing the competitive market segment for a hotel project, as each scale caters to a different segment of customers. For example, an "economy" hotel introduced into a trade area where customers are consumers of luxury hotel rooms would not satisfy hotel demand.

Figure 1 Hotels in Napa County



Source: Smith Travel Research, CoStar Group

Market Orientation of Proposed Project

Hampton Inn categorizes itself as a "focused service" hotel, a take on "limited service" that strives to target hotel services and amenities that are well aligned with customer preferences. The franchise's positioning focuses on the consistency and reliability of its product, promoting its "100% Hampton Guarantee," through which the brand promises guests a great experience and value. According to Hilton, "consistent quality is essential to maintaining guest satisfaction" and Hilton strives to achieve this goal through its "comprehensive internal measurement process."[4] According to STR's market segmentation, Hampton Inn is classified as an upper midscale hotel. Unlike the Home2 Suites, another upper midscale Hilton hotel (similarly priced), Hampton Inns are not extended stay format, which caters to the needs of long-term guests with an in-room kitchen (refrigerator and microwave). Rather, the Hampton Inn offers complimentary hot breakfast and grab-and-go options tailored to regional tastes.

Given the proposed Hampton Inn's market orientation, this analysis considers potential demand for branded upper midscale and upscale hotels. The competitive set of existing hotels includes primary (i.e., direct) competitors, which are upper midscale like Hampton Inn as well as upscale hotels in the trade area. Currently there are no similarly priced extended stay hotels in the trade area. **Figure 2** presents a summary of existing hotels most likely to compete with the proposed Hampton Inn.

Figure 2 Existing Hotels in Napa County

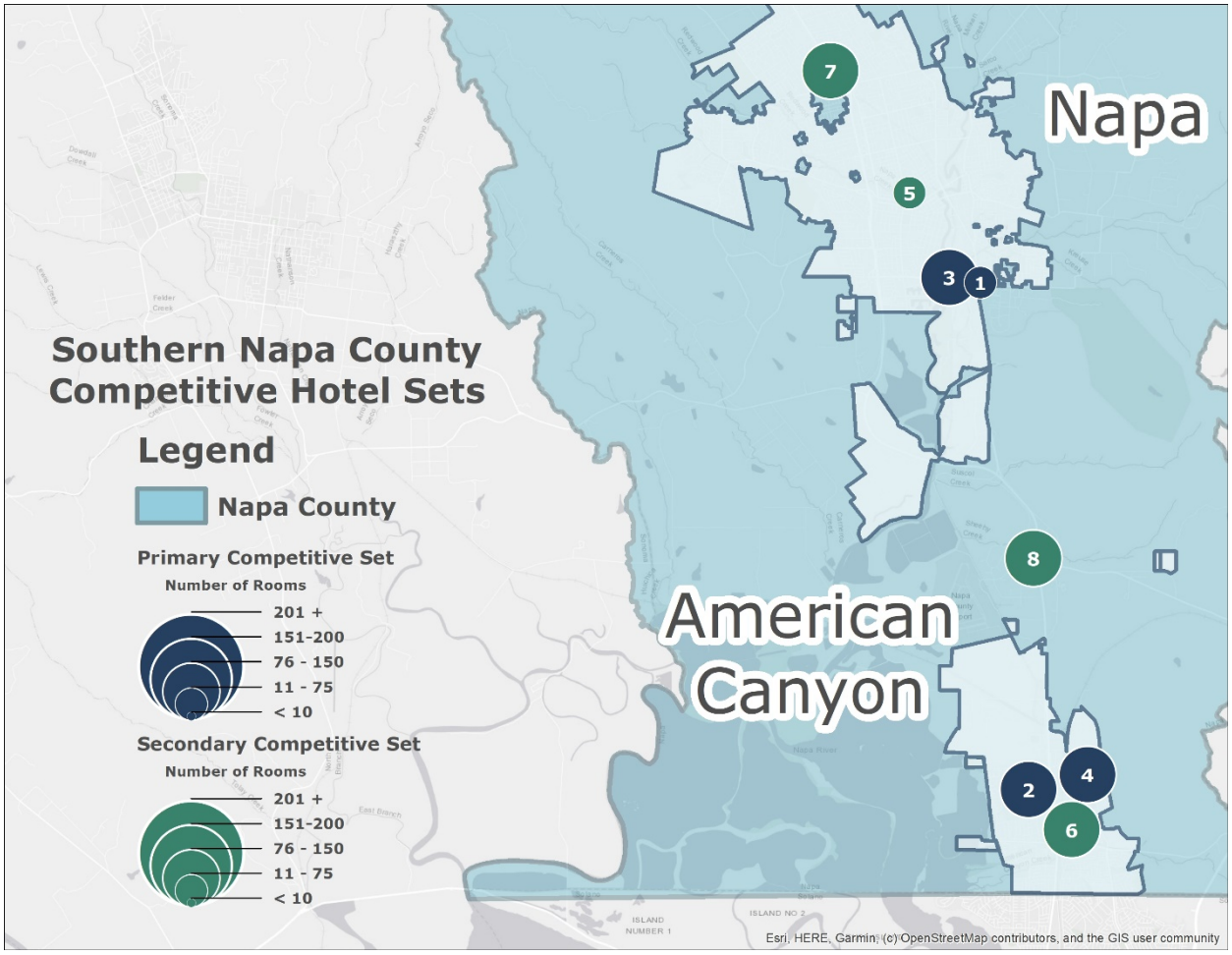
ID	Property Name	City	Open Date	Rooms	
				Count	Share of Total
	Primary Set (Upper Midscale)				
1	Best Western Plus Inn @ The Vines	Napa	Jun 1983	69	10%
2	Fairfield Inn & Suites Napa American Canyon	American Canyon	May 2004	80	11%
3	Hampton Inn & Suites Napa	Napa	Mar 2016	115	16%
4	Holiday Inn Express & Suites Napa Valley	American Canyon	Mar 2009	101	14%
	Subtotal			**365**	**52%**
	Secondary Set (Upscale)				
5	Ascend Collection Hotel Napa Valley	Napa	Jun 1970	21	3%
6	DoubleTree by Hilton Hotel & Spa Napa Valley	American Canyon	Nov 2006	132	19%
7	Hilton Garden Inn Napa	Napa	Sep 2002	80	11%
8	SpringHill Suites Napa Valley	Napa	Jan 2009	100	14%
	Subtotal			**333**	**48%**
	TOTAL			**698**	**100%**

Source: Smith Travel Research

[4] Hampton by Hilton Development Brochure.

The proposed project will compete most directly with upper midscale hotels in the trade area. The primary competitive set contains four hotel properties, including two hotels in American Canyon and two hotels in Napa. In addition, the project will compete to a lesser degree with four upscale hotels, including one in American Canyon and three in the City of Napa. **Figure 3** maps the competitive set of hotels in the trade area, which are numbered correspondingly with the ID numbers indicated in **Figure 2**. The hotels in **Figure 2** and **Figure 3** make up the competitive market for the proposed Project and are the basis for this study's supply and demand analysis.

Figure 3 Southern Napa County Competitive Hotels



Source: Smith Travel Research, CoStar Group

Hotel Market Trends

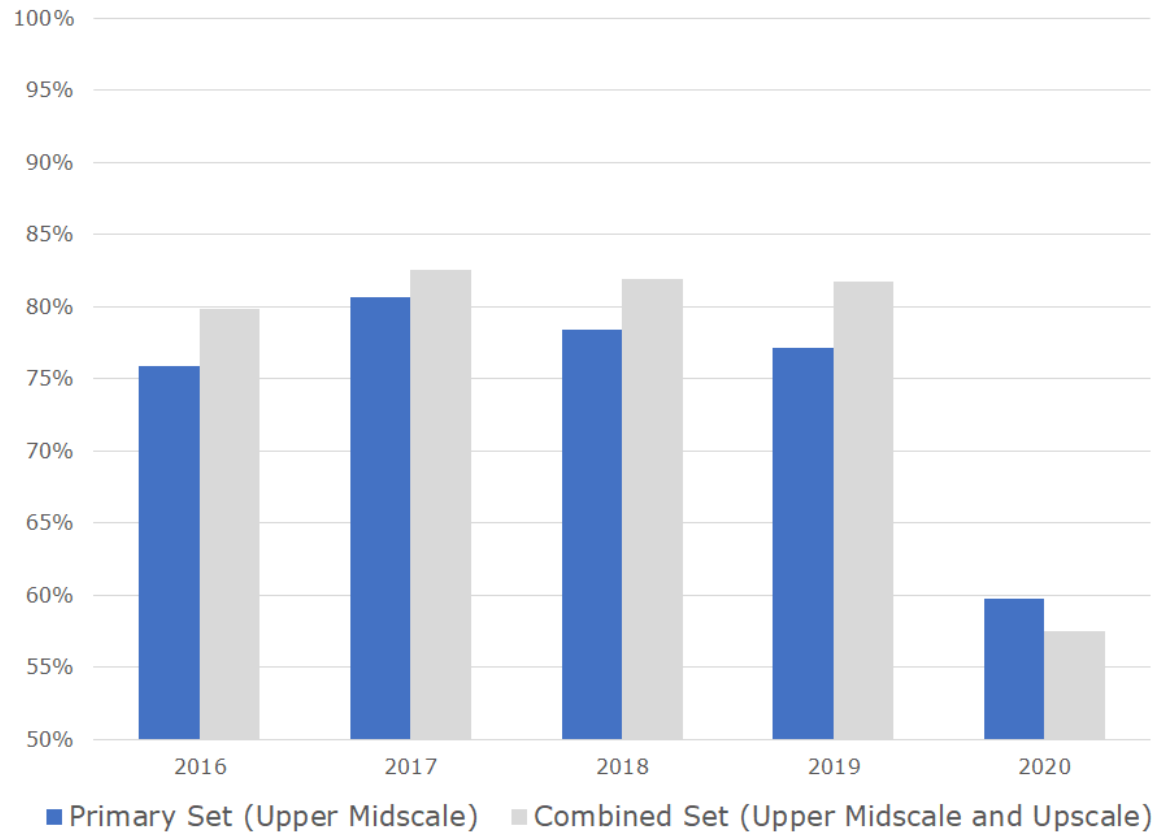
To assess demand for the proposed Hampton Inn, EPS acquired historic market data for existing properties in both the primary and secondary competitive sets (as defined in the previous section) and considered potential future hotel competition. As previously noted, EPS considered the broader Napa County market but narrowed the relevant competitive set to branded upper midscale and upscale hotels in southern Napa County for the purposes of this analysis. The data indicate that there are almost 700 existing hotel rooms in the competitive set.

Hotel Market Trends

Occupancy

Pre-COVID, occupancy rates for the primary set have been steadily hovering in the range of 76 to 83 percent, in line with the roughly 70 to 80 percent occupancy rate required to maintain economic viability.[5] The combined primary and secondary sets maintained a slightly higher occupancy rate than those in the primary set, generally achieving about 5 percentage points higher annual occupancy rates. Notably, COVID has inverted this relationship, with occupancy rates in the primary set surpassing the combined set in 2020, indicating a shift in demand away from more expensive upscale properties for the time being.

Figure 4 Occupancy Trend for the Competitive Sets



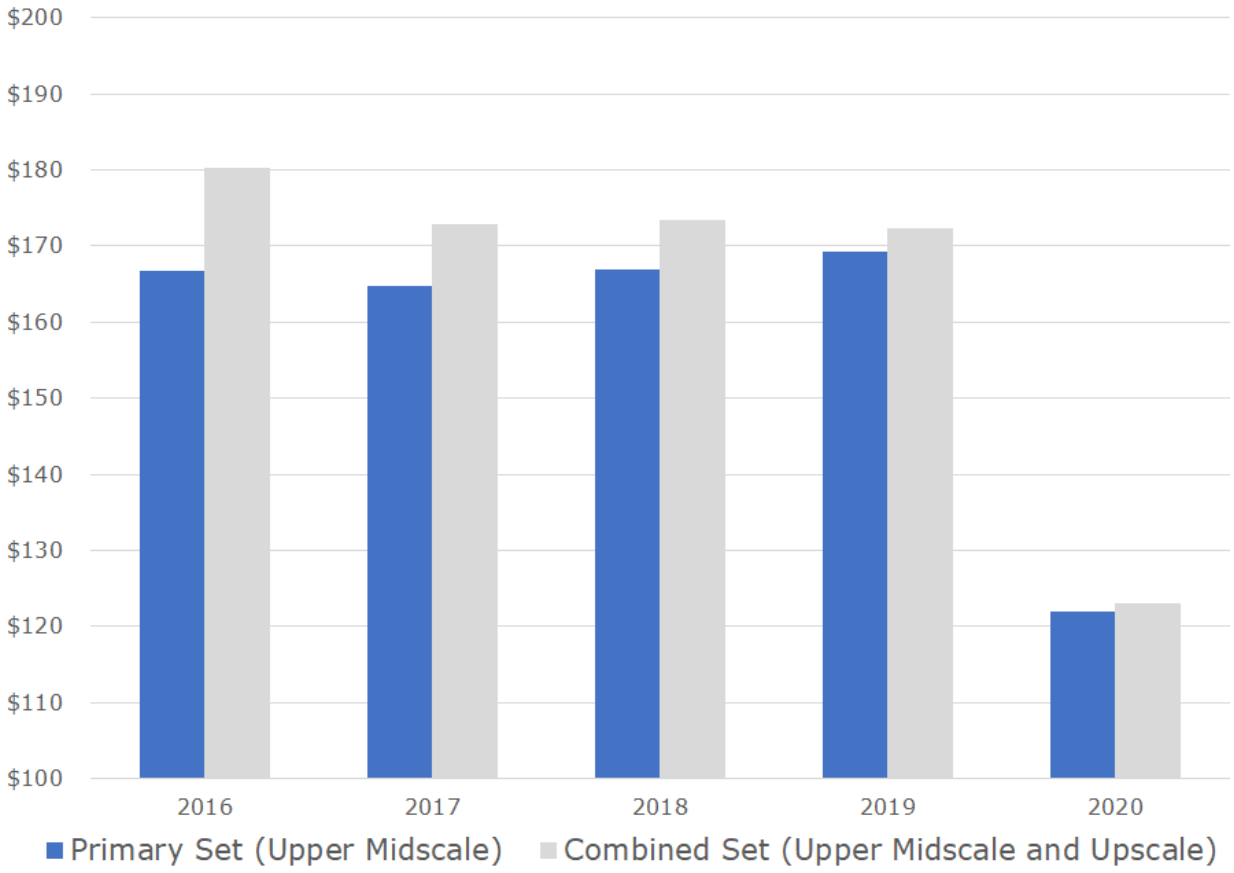
Source: Smith Travel Research

[5] It is standard for hotel operators to expect a certain amount of frictional vacancy at all times and to strive to achieve a vacancy of 70 percent or higher.

Average Daily Room Rates

Prior to the effects of COVID, the average daily rates (ADR) for upper midscale properties in the trade were fairly stable, rising slightly since 2016, an indication of a healthy hotel market.[6] Properties in the full competitive set have consistently achieved higher ADRs than those in the primary set, owing to the upscale properties in the mix, but data show that room rates have been slipping, falling from about $180 per night to $172 in 2019, as seen in **Figure 5**. The negative effect of the pandemic on the hotel market is readily apparent in the precipitous drop in ADR in 2020. The gap between primary and combined competitive set ADR is at its narrowest in 2020, a further indication of the recent shift in demand toward midscale options in 2020, although the recent shift may be a temporary effect attributable to governmental restrictions on non-essential (leisure) travel rather than a structural shift in consumer tastes.

Figure 5 Average Daily Room Rates for the Competitive Sets



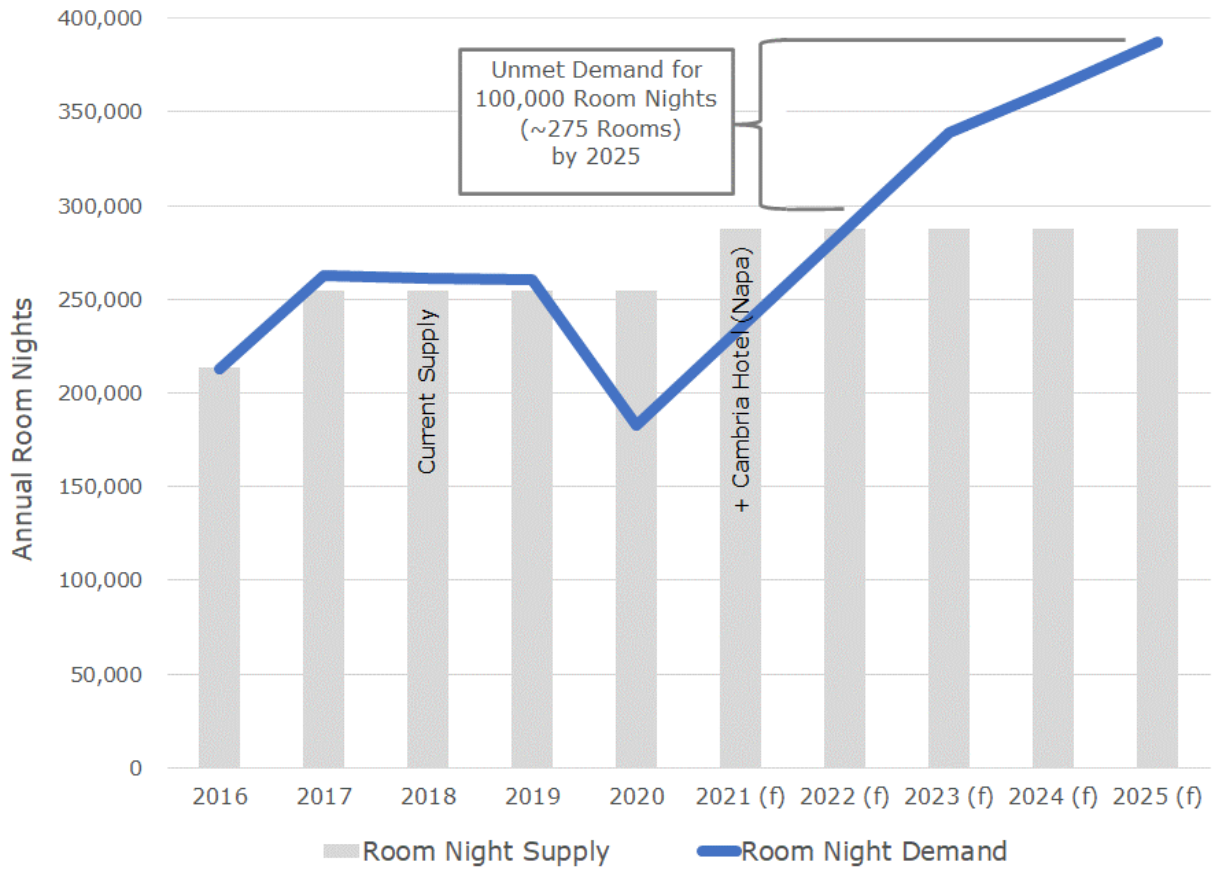
Source: Smith Travel Research

[6] ADR measures the average rate paid for rooms sold and is calculated by dividing room revenue by rooms sold at each hotel property.

Supply and Demand Outlook

Based on historic hotel performance trends and generally consistent with forecasts for domestic hotel industry recovery, EPS developed a projection of hotel demand in the Southern Napa County upper midscale and upscale hotel market segment. The projection is an estimate of market-supportable hotel room nights from 2021 to 2025. **Figure 6** presents the number of room nights that could be added to the market without negatively affecting the occupancy performance of existing and soon-to-open hotel properties (i.e., ~80 percent occupancy is sustained). EPS estimates that by 2025 the market area could add nearly 100,000 room nights in about 275 rooms, over and above the 2021 market supply level. The forecast reflects 7 percent annual room night growth, consistent with the historical trend. The projected hotel room growth could occur anywhere within the Southern Napa County trade area, though American Canyon is particularly well positioned to support new rooms given its location as a gateway to wine country, existing cluster of hotels, and buildable sites on State Route 29.

Figure 6 Room Night Demand and Supply Projection



Source: Smith Travel Research and EPS

A number of planned hotel projects may be developed in the trade area. In fact, almost 1,700 rooms are under construction or planned for Napa County, and nearly 800 of those rooms could be competitive with the proposed Hampton Inn. Based on information from CoStar Group, EPS identified proposed projects countywide and in Southern Napa County that could be branded upper midscale or upscale hotels. There are at least 11 hotels planned for the trade area, six of which (including one already under construction) are potential competitors with the proposed Hampton Inn. Two potential competitors are in American Canyon, the Home2 Suites and the hotel at Watson Ranch. While details were unavailable through our data supplier, EPS understands that there also is potential interest in developing the American Canyon Adobe Lumber site as a hotel. **Figure 7** details known pipeline projects, including each hotel's location, development status, class (i.e., market scale), anticipated opening date, and room count.

Figure 7 Planned Hotels in the Trade Area

ID	Property Name	City	Status	Class	Year Built (Anticipated)	Rooms Count	Rooms Share of Total
	Southern Napa						
1	AC Hotels by Marriott Napa	Napa	Proposed	Upscale	2023	150	9%
2	Auberge Resort Stanly Napa Valley	Napa	Under Construction	Luxury	2021	130	8%
3	Cambria Hotels Napa Valley	Napa	Under Construction	Upscale	2021	90	5%
4	Embassy Suites Addition	Napa	Proposed	Upper Upscale	2023	54	3%
5	Franklin Station Hotel	Napa	Proposed	Boutique	2023	100	6%
6	Home2 Suites by Hilton	American Canyon	Proposed	Upper Midscale	2024	102	6%
7	Hotel at Napa Pipe	Napa	Proposed	Unknown Flag	2022	150	9%
8	Residence Inn Napa	Napa	Proposed	Upscale	2023	100	6%
9	The Westin Verasa Napa - Expansion	Napa	Proposed	Upper Upscale	2023	32	2%
10	Wine Train Hotel	Napa	Proposed	Luxury	2022	151	9%
11	Hotel at Watson Ranch	American Canyon	Proposed	Unknown Flag	unknown	200	12%
	Subtotal					**1,259**	**75%**
	Northern Napa						
12	Enchanted Resorts Hotel	Calistoga	Proposed		2023	110	7%
13	Four Seasons Resort and Residences Napa Valley	Calistoga	Under Construction		2021	85	5%
14	Tapestry Collection by Hilton	Calistoga	Proposed		2023	84	5%
15	The Farmstead at Long Meadow Ranch Lodge	Saint Helena	Proposed		unknown	65	4%
16	The Inn at the Abbey	Saint Helena	Proposed		2023	79	5%
	Subtotal					**423**	**25%**
	TOTAL					**1,682**	**100%**
	Potential Direct Competitors						
1	AC Hotels by Marriott Napa	Napa	Proposed	Upscale	2023	150	9%
3	Cambria Hotels Napa Valley	Napa	Under Construction	Upscale	2021	90	5%
6	Home2 Suites by Hilton	American Canyon	Proposed	Upper Midscale	2024	102	6%
7	Hotel at Napa Pipe	Napa	Proposed	Unknown Flag	2022	150	9%
8	Residence Inn Napa	Napa	Proposed	Upscale	2023	100	6%
11	Hotel at Watson Ranch	American Canyon	Proposed	Unknown Flag	unknown	200	12%
	Total Potential Direct Competition					**792**	**47%**

Source: Smith Travel Research, CoStar Group

While there clearly is a significant pipeline of hotel development, it is likely that these projects will occur over a lengthy time period, and that some will never come to fruition. Focusing on American Canyon, while there are two hotels in the pipeline that could compete with the proposed Hampton Inn, EPS does not expect these hotels to be direct competitors or to be fully built out in the next five years.

Home2 Suites

Home2 Suites by Hilton is an upper midscale, all-suite extended stay hotel brand that competes primarily with other extended stay hotels. The hotel's rooms offer a fully equipped kitchen, including a refrigerator, microwave, and dishwasher (induction cook tops are available). The hotel targets business and leisure travelers. Though the hotel will compete to some degree with other similarly priced lodging options, this hotel will target the unique extended stay hotel market niche, which appears to be undersupplied in Napa County today. In fact, Hilton often co-locates Home2 Suites with Hampton Inn, as is the case in Livermore and South San Francisco today.

Hotel at Watson Ranch

Watson Ranch is a master-planned, mixed-use community located on the eastern side of American Canyon. The plan includes redevelopment of a former cement plant site into the "Napa Valley Ruins and Gardens" town center, including events venues, restaurants, retail and hotel uses. The remainder of the plan area is programmed for over 1,250 housing units, a new school, parks, and supporting infrastructure. The City expects this plan to take shape over many years, and building will occur in multiple phases, beginning with single family homes.

The project's hotel rooms currently are slated for phases two and three of the plan, which initially had been slated for 2024 through 2028.[7] The lead time for hotel development at Watson Ranch could be longer, particularly owing to the infrastructure investments that are necessary to support growth in the plan area. The development agreement for Watson Ranch makes clear that the investment of infrastructure is significant and that the project developer is seeking public financing of public improvements. Required infrastructure includes new streets and roadways, a potable water system, wastewater system, recycled water system, storm drainage system, and dry utilities, as well as off-site transportation improvements, water, sewer, and storm drain lines to serve the project.

Economic Impact Considerations

In addition to filling part of the projected future gap in hotel room supply in the Southern Napa County upper midscale market, the proposed Hampton Inn will generate economic benefits in American Canyon and the surrounding region. The hotel will support approximately 25 direct on-site jobs, generating roughly $1 million in employee compensation. **Figure 8** shows the composition of the proposed Hampton Inn staffing and their expected compensation levels. Staffing is based on the applicants estimate, and was verified by Hilton corporate information on Hampton Inn operations. Employee compensation is based on occupation data for California, obtained by EPS from the US Bureau of Labor Statistics.

[7] Fiscal Impact Analysis, Watson Ranch, Seifel Consulting, Inc., 2018.

Figure 8 Hampton Inn Staffing

Title	Jobs	Annual Compensation	Total Compensation
General Manager	1	$140,000	$140,000
Frontdesk Manager	1	$75,000	$75,000
Front Desk Full Time	5	$30,000	$150,000
Chief Engineer	1	$115,000	$115,000
Housekeeper Manager	2	$49,000	$98,000
Part Time Staff	15	$30,000	$450,000
Total	25	$439,000	$1,028,000

Source: BLS; IMPLAN; Economic & Planning Systems

Beyond the economic impacts stemming from the additional jobs in American Canyon, the project will support further economic benefits from visitors to the proposed Project. According to recent research, the average lodging guest in the Napa Valley region spends about $400 per day, travels in a party size of about four, and stays for three days.[8] Each visitor party spends about $4,800 over the course of their trip to the Napa Valley area. Without new hotel development in American Canyon, the community could miss an opportunity to host visitors and spending in the local economy. The proposed Hampton Inn offers an opportunity for American Canyon to capture spending by visitors who might otherwise find lodging outside of the city.

[8] Destination Analysts, The Napa Valley Visitor Profile 2018, May 2019.

Attachment 19

July 22, 2021

American Canyon City Council
4381 Broadway
Suite #201
American Canyon, CA 94503

Re: Hotel Statistics & Analysis for American Canyon

Dear Mayor Garcia and American Canyon Council Members:

Visit Napa Valley's primary mission is to promote, protect and enhance the wine region's position as an attractive travel destination, while also enhancing its public image as a dynamic place to visit, live and work. The tourism industry in Napa County historically supports 16,000 local jobs and provides nearly $85 million in tax revenues to our local governments.

Visit Napa Valley has been asked to share a perspective related to the proposed hotel expansion in American Canyon. We have reviewed the EPS Study and also provide the attached slide deck for additional context in your evaluation. Some highlights include:

- American Canyon hotel occupancy rates have led Napa Valley during the pandemic, per the data provided for calendar year 2020 as well as year-to-date through June 2021.

- The "limited service" hotel category has also outpaced all other sectors in terms of occupancy, both before and during the challenges of the Covid-19 pandemic.

- As the gateway to Napa Valley, American Canyon benefits from group and leisure travel coming to Napa Valley. At the same time, due to American Canyon's proximity to the greater Bay Area, it is less dependent on the leisure travel market, as it also has a considerable niche with the essential worker and per diem travelers (a category of travel which remained very stable, even during the downturns experienced in other areas of the tourism sector during the pandemic).

- In addition to the data provided in the attached slides, more information is available here:
  - https://www.visitnapavalley.com/industry/
  - https://www.visitnapavalley.com/industry/reports/vnv-monthly/#str-data

Please feel free to contact me with any follow up questions.

Sincerely,

Linsey Gallagher
President & CEO

Rating Criteria: Lodging

The Star Rating Process

The Forbes Travel Guide process of rating each establishment includes:

- **Facility inspection:** Every property is visited by a trained facility inspector, who uses a checklist to evaluate cleanliness, physical condition and location. This inspection is unannounced and results in a Forbes One, Two or Three Star rating. Spas are the only exception -- the minimum standard for a Forbes spa rating is three stars.
- **Service evaluation:** Based on the facility inspection, properties that might qualify for a Forbes Four Star or Five Star Award certification will receive a visit from a second, this time, incognito inspector. This inspector makes an anonymous visit and performs an incognito evaluation based on more than 550 service standards. During service evaluations, inspectors behave as regular guests and never reveal that they represent the Forbes Travel Guide. This inspection largely focuses on the guest experience and the consistency in service, not just the physical facilities and amenities.

Only facilities that meet the Forbes Travel Guides rigorous standards are rated and listed in both the travel guides and on the website. Deteriorating, poorly managed establishments are deleted. A Forbes Travel Guide listing and review constitutes a positive quality recommendation; every listing is an accolade, recognition of achievement.

Star Definitions

★★★★★**Five Star Hotels:** These exceptional properties provide a memorable experience through virtually flawless service and the finest of amenities. Staff are intuitive, engaging and passionate, and eagerly deliver service above and beyond the guests' expectations. The hotel was designed with the guest's comfort in mind, with particular attention paid to craftsmanship and quality of product. A Five Star property is a destination unto itself.

★★★★**Four Star Hotels:** These properties provide a distinctive setting, and the guest will find many interesting and inviting elements to enjoy throughout the property. Attention to detail is prominent throughout the property, from design concept to quality of products provided. Staff are accommodating and take pride in catering to the guest's specific needs throughout their stay.

★★★**Three Star Hotels:** These well-appointed establishments have enhanced amenities that provide travelers with a strong sense of location, whether for style or function. They may have a distinguishing style and ambience in both the public spaces and guest rooms; or they may be more focused on functionality, providing guests with easy access to local events, meetings or tourism highlights.

★★**Two Star Hotels:** The Two Star hotel is considered a clean, comfortable and reliable establishment that has expanded amenities, such as a full-service restaurant.

★**One Star Hotels:** The One Star lodging is a limited-service hotel or inn that is considered a clean, comfortable and reliable establishment.

Forbes Star Rating Criteria & Expectations - Lodging

The following are suggested criteria of what a guest can expect at each star level. They are not individually mandated and are a representative sampling of the hundreds of points covered during our inspection process. Additionally, at each star level the lodging establishment is required to meet or exceed the requirements of the previous star rating. For example, a Three Star hotel meets the criteria expectations of a Three Star hotel, a Two Star hotel and One Star hotel, and so forth.

★**One Star Hotels:** Clean, comfortable and reliable establishments providing travelers with limited services and basic amenities. These properties focus on providing a value experience while meeting traveler's expectations. Most hotels do not have a full-service restaurant or dining room. Many Hampton Inns and Fairfield Inns consistently earn a Forbes One Star rating.

Characteristics of a One Star Hotel, Motel or Inn include:

Services Detail

- Staff is well-groomed with professional, neat and well-maintained attire.
- All staff encountered are pleasant and professional in their demeanor.
- Coffee, hot tea and breakfast pastry are available on-site (could be in-room).

Facilities Detail

- Self parking area is free of debris, good condition; surfaces, curbs, paths.
- All outdoor walkways and approaches are well-maintained and cleaned.
- Outdoor awnings, signs, marquees, flags, and plantings are clean and in good condition.
- Public spaces are free of obvious hazards.
- Lobby floors, walls and ceiling are free of debris, marks and damage.
- Elevator landings, cars and doors/tracks are clean and in good condition.
- Guest room corridor floors, walls and ceilings are free of debris, marks, and damage.
- Vending and/or ice machines are located within one floor of guest room.
- Vending and/or ice areas and equipment are clean, well-lit, and well-maintained.
- All furniture, fixtures and equipment are clean, neat and well-maintained.
- Ashtrays throughout public areas are well-maintained and free of excessive debris.
- Temperature in all interior public areas are maintained in general comfort range.
- If public phonebook present, it is neat and in good condition.
- Public washrooms very hygienic and neat, with well-stocked paper and soap.
- Public washroom fixtures, walls and floors are in very good condition.
- Guest rooms are equipped with direct dial phones.

Guest Room Detail

- Hardware and hangings (door locks, racks, artwork, etc.) are secure and in good condition.
- Carpet/floor is free of debris, stains, wear, loose threads, open seams, etc.
- Walls and ceilings are free of marks, stains and damage.
- Drapes are free of stains, damage; pull easily and hang properly.
- Furniture is free of dust, marks and damage.
- All printed material including collateral, phonebooks and stationery are neat, crisp and current.
- Drawers and shelves are clean, free of dust and debris.
- All light bulbs operate; all light fixtures and lamps are in good condition, clean.
- Mirrors and windows are free of smudges and damage throughout.
- If safe is provided, it is clean, functional and convenient.
- Guest rooms are equipped with data ports (guest can connect laptop to the Internet).
- Room equipped with accurate, functional clock and radio/stereo.
- Color television works and is equipped with remote control.
- Televisions will feature basic cable or satellite channels.
- Telephones are available in each guest room.
- Ice bucket and glasses (may be molded plastic) are clean, hygienic.
- If minibar is present, it is hygienic, free of spills and damage, all products are sealed, price list present.
- If coffeemaker is present, it is hygienic, contains ample, sealed supplies and cups.
- All bedding and linens are free of debris, hairs, damage and stains.
- Room heating and air conditioning is easily controlled by guest and is quiet.
- Air is fresh and clean, no stuffiness or odors.
- Sink, tub, shower, toilet, bidet are very clean, free of hairs, stains and discoloration.
- Bathroom tile and grouting is clean, not discolored, cracked or mildewed.
- Faucets and drains operate smoothly and easily.
- Hygienic soap and shampoo is provided.
- Minimum bath linen is present: one bathmat; two each of facecloth, hand towel and bath towel.
- Towels are free of spots, stains, tears and obvious frays.
- If robes are provided, they are free of spots, stains and loose threads.

Specialized Facility Detail

- Pool/beach furniture is clean, hygienic and well-maintained.
- Pool deck or beach/sand is clean and free of excessive debris.
- Pool deck and tiling are in good condition, free of excessive damage or wear.
- Pool water is clean, free of debris and free of notable odors.
- Pool fittings and equipment (ladders, dive boards) are secure and in good condition.
- Tennis court surfaces are in good condition, free of damage and well-marked.
- Tennis courts and surrounding areas are clean and free of debris.
- Fixtures, nets, lights, and fences are well-maintained and good condition.

★★**Two Star Hotels:** Comfortable establishment that is clean and reliable with expanded amenities and services that include a full-service restaurant on site. The hotel décor, furnishings, amenities, property grounds and guest room design will be moderately enhanced in quality. Doubletree Hotels, Courtyard by Marriott and Four Points by Sheraton are well-established names in the Forbes Two Star category.

A Two Star Hotel, Resort or Inn meets all the criteria expectations and all of the qualities for a One Star Hotel, Resort or Inn plus the following characteristics:

Services Detail

- Front desk staff are articulate, smile and make eye contact.
- Staff is attired in well-fitting, consistent uniforms.
- Baggage assistance is available on request.
- The front desk is staffed twenty-four hours.
- Restaurant on-site serves three meals daily.
- If Inn, twenty-four hour guest service available on-call

Facilities Detail

- Lobby provides a comfortable seating area.
- Signs and notices are professional, matching décor, not "handwritten".
- Vending and/or ice machines are located on each guest floor.
- Service doors are clean, free of marks and damage, and closed.
- Public phones are convenient, clean and well-maintained.
- A variety of different sized and appointed rooms are available in hotel.
- If available, meeting rooms are well-signed so that it is easy to find and arrive at a specific room.
- If available, meeting room doors are in good condition, free of nicks and damage.
- If available, meeting room interiors are in generally good condition, including walls, floors and ceiling.

Guest Room Detail

- Guest room door and frame are free of marks, scratches and scuffs.
- There is comfortable seating for two people (other than bed).
- Guest service directory, pad and pen/pencil present and conveniently placed.
- Enclosed closets (means closets must have doors).
- There are a minimum six non-captive hangers.
- There are three spacious drawers or enclosed shelves (inside closet).
- A Luggage rack or bench provided; and adequate space to leave suitcase.
- Extra clean and hygienic blanket and pillow are provided in room.
- Lighting throughout the room is adequate.
- The room can be fully darkened.
- A full-length mirror is present in room.
- A hairdryer present in room, clean and functional.
- Hygienic soap, shampoo and two other bath amenities are provided.
- Guest rooms are equipped with easily accessible data ports or Ethernet/ wireless internet access.

Specialized Facility Detail

- Guest can pick up e-mail and access the Internet from a Business Center workstation.
- Business Center working areas are clean, tidy and professional.
- There are comfortable office-style chairs at the Business Center guest workstations.
- All fitness, treatment and relaxation areas are hygienic, neatly organized and

maintained.
- Fitness equipment is clean, in very good condition, and conveniently laid out.
- Fitness/workout area is well-ventilated, with comfortable temperature.
- Sound system or television is provided in fitness/workout areas.
- Towels are provided in locker and fitness areas.
- Grooming area is equipped with hairdryers; soap and shampoo conveniently placed
- All amenities are neatly and professionally presented, and are very hygienic.
- Locker room, showers, sauna and hot tub are extremely clean, and hygienic in appearance.
- Floors throughout the casino are well-maintained and free of excessive debris.
- Air circulation in casino is adequate, not stuffy or smoky.
- Slot banks are free of excessive debris, soiled glassware, and soiled ashtrays.
- Slot chairs are in good condition, clean and free of rips and stains.
- Cashier and change booths are tidy, well-organized, and well-signed.
- Table game tops are well maintained, free of damage and wear.

★★★**Three Star Hotels:** Well-appointed establishment with consistent service and enhanced amenities providing travelers with an elevated level of comfort and convenience. Hotels will provide such services as, room service, fitness center and optional turndown service. Hotels will have a distinguishing style and ambience with both the public space and guest rooms. Many Hyatt, Hilton, Marriott, Westin and Fairmont hotels are established names with consistent service in the Forbes Three Star category.

A Three Star Hotel, Resort or Inn meets all the criteria expectations and all of the qualities for a Two Star Hotel, Resort or Inn plus the following characteristics:

Services Detail

- Confirmation number provided during reservation service.
- Reservationist can give clear and vivid description of hotel facility and style.
- Turndown service is available upon request.
- Valet parking is available.
- Baggage assistance is automatic.
- Same day laundry and dry cleaning available five days/week.
- Complimentary newspapers are delivered to room automatically.
- Complete room service is available.
- Workstation is available where guest can access Internet.
- Basic fitness equipment is provided, including treadmills and cycles.
- If Inn, restaurant on-site which serves full breakfast is available and one additional meal service.
- If Resort, complimentary newspapers (or newsfaxes) are delivered to room automatically.

Facilities Detail

- High quality, varied, and major brand sundry selections are available in an on-site store.
- If public phonebook present, it is displayed in attractive cover.
- Pay-per-view movies are available.
- Suite accommodations (separate bedroom and living areas) are available.

Guest Room Detail

- Each guest room has two phones (one could be in the bathroom).
- Comfortable desk and chair are available for working, complete with telephone, data port, and light.
- Guest rooms are equipped with Ethernet/ wireless internet access.
- Insulated ice bucket, vinyl or better, as well as glass glassware; clean and hygienic are present in room.
- Minibar is present (defined as selection several beverages and snacks).
- If Inn, refreshments present in room or readily available
- If coffeemaker is present, ceramic mugs and napkins are available.
- Pillows are plush and full, no foam.
- Framed artwork or interesting architectural features exist in room.
- Excellent lighting is provided in bathroom for makeup and shaving.
- Hygienic soap, shampoo and four other bath amenities are provided.
- Amenities are presented attractively, thoughtfully (not simply lined up on counter).
- Towels are of absorbent quality, with soft nap and no discoloration.
- If Inn, Pay-per-view movies available or VCR/DVD is available.
- If Resort, guest room provides ample seating for more than two persons.

Specialized Facility Detail

- If Business Center is present, a semi-private working area with workstation and telephone is available for guests.
- If tennis is available on site, water is available courtside.
- If pool or beach service is present, ample towels are available poolside or at the beach.
- Pro shop/clubhouse interiors are clean and well-maintained; displays and counters neat and tidy.
- Pro shop/clubhouse and surrounding areas are clean with well-maintained appearance.
- Golf carts are clean, well-organized and maintained.
- Rental equipment is clean and good condition, including bags.

Forbes Four and Five Star Criteria and Expectations

At the Forbes Four and Five Star level, both a facility inspection and service evaluation will be performed. For each property, more than 750 criteria including cleanliness, physical facilities and employee attitude and courtesy, are measured and evaluated to produce a mathematically derived score. At the Forbes Four and Five Star level, 25% of the overall score is based on the facility inspection and 75% is based on the service evaluation.

"Service" can seem pretty subjective, but the staff at Forbes Travel Guide use strict standards and a good stopwatch to make their findings as accurate and objective as possible. For hotel ratings, inspectors spend three days and two nights at the hotel, interacting with staff, ordering room service, working out in the fitness center, making requests with the concierge, dining in the restaurants and taking advantage of other services that a standard guest would encounter.

Inspectors respond "yes" or "no" to standards that are classified in a way that assess efficiency, graciousness and warmth, technical skill level as well as food quality,

housekeeping and concierge services, to name a few. For every "no" answer, a hotel loses one point, and there's very little grey area. For example, upon arrival, luggage is delivered to the guest's room in 10 minutes or guests are always asked permission before being placed on or into a recording. It either happens or it doesn't, there's no middle ground. Inspectors also write pages of commentary during the evaluations.

The Forbes Four and Five Star Hotel Incognito Service Evaluation

The hotel service evaluation is based on a three-day, two-night stay. The following categories are evaluated during the stay by the Forbes incognito inspector:

- Reservations
- Arrival
- Departure
- Communications (PBX Operator)
- Room Service (Dinner)
- Breakfast Service (in Restaurant)
- Bar/Lounge Service
- Housekeeping Daily Service
- Housekeeping Request and Turndown Service
- Laundry Service
- Business Center (if applicable)
- Guest Services/Concierge (by phone and in-person)
- Guest Room Conditions
- Public Area Conditions
- Fitness Room (if applicable)
- Pool/Beach Service (if applicable)
- Casino (if applicable)

Within each category, questions are "tagged" for certain qualities/classifications.
Classifications:

- Courtesy/Manners
- Graciousness/thoughtfulness *and* sense of personalized service
- Efficiency
- Guest comfort & convenience
- Luxury
- Technical execution skill and knowledge
- Staff appearance
- Food quality
- Cleanliness & condition

Sample Service Questions from Hotel Incognito Evaluation
Note: All questions are answered with a YES or NO and then allow for comments/remarks from the inspector. Also, each question has the applicable *classification* tag in parentheses following the statement.

Reservations
Reservations agent can readily describe variety of rates and types; effectively enabling choice. (Technical execution, skill & knowledge)

Staff exhibits the ability to anticipate needs; not always requiring prompting by guest. (Graciousness/thoughtfulness and sense of personalized service)

Arrival
Arriving guests are greeted and assisted curbside within sixty seconds of arriving by car or taxi. Exactly how long did it take? (Efficiency) *Note: inspectors carry recorders that can not only measure this particular exercise but the entire arrival process.*
Orientation to the hotel is discreet and helpful, consisting of not more than four relevant and important facts, but not delaying guests' arrival to room. (Guest comfort and convenience)

Guest Services/Concierge
Staff maintains alert posture; no hands in pockets, folded arms; Staff avoids excessive personal chatting amongst themselves; Staff does not smoke, drink or eat in guest view. (Staff appearance)
When asked about restaurant recommendations, staff mentions at least three appropriate options; describing cuisine, atmosphere and anticipates transportation and dress code. (Technical execution skill and knowledge)

Guest Room Conditions
Would you describe the bed to be plush and inviting? Linens of exceptional quality and comfort? Use of oversized or numerous pillows? Bedcovers elegant and stylish? (Sense of luxury)
Would you describe this room as being extremely well maintained? (nothing broken, worn, damaged, slow plumbing etc.) (Cleanliness and condition)

Room Service
Staff is extremely well spoken, polite and clear, avoiding slang and phrase- fragments. (Courtesy/manners).
Hot foods are hot when served (not warm); frozen items are firm at the time of consumption (desserts adequately protected or offered as second course delivery). (Food quality)

Forbes Four Star Criteria

★★★★**Four Star Hotels:** Outstanding establishment in a distinctive setting that provides travelers with exceptional service and a luxury experience. Service and amenities are refined and sophisticated and may include automatic turndown service, valet parking and 24-hour room service. Ritz-Carlton, Mandarin Oriental and Four Seasons are prominent names in the Forbes Four Star category, known for personalized service and hospitality, in addition to luxurious accommodations. Other notable Forbes Four Stars include the Post Ranch Inn, Canoe Bay and the Windsor Court Hotel.

A Four Star Hotel, Resort or Inn meets all the criteria expectations and all of the qualities for a Three Star Hotel, Resort or Inn plus the following characteristics:

Services Detail

- Written confirmation is automatic or offered, either by mail, fax or e-mail.

- Written confirmation is personalized, professional and accurate; it reflects the style and image of the property.
- Guests name is used effectively, but discreetly, as a signal of recognition.
- The time from arriving at the reception area until registration is complete does not exceed five minutes (includes queuing).
- Bed is plush and inviting with oversized or numerous pillows.
- Bedcovers are elegant and stylish and with linens of exceptional quality and comfort.
- All written information is provided on good quality paper or pads, custom-printed or logoed.
- Bathroom presentation and placement of amenities and linens is thoughtful, careful, and elegant.
- Fresh ice is provided during evening service or at another time during the day.
- Turndown service is automatically provided.
- During turndown service, guest clothing is neatly handled and guest toiletries are neatly arranged and displayed on a cloth or shelf.
- Room service is delivered within 30 minutes.
- Room service order is delivered within five minutes of quoted time.
- One hour pressing is available.
- If resort, two hour pressing available
- Same day laundry and dry cleaning is available seven days/week.
- Staff arrives in guest room to pick up clothing within ten minutes of placing request.
- Wake-up call is personalized with guest's name and time of day.
- Wake-up call is delivered within two minutes of requested time.
- Wine by the glass service will include an offer of a tasting sample.
- Special service desk identified as concierge/guest service is situated apart from reception/front desk.
- The final bill is offered to guest for review prior to printing final receipt.
- If Inn, choice of at least two complimentary newspapers are offered on-site.
- If Inn, restaurant on site serving a full breakfast plus two additional meal services.
- If casino services are present, when playing slots for more than 20 minutes, drink service is offered.
- If casino services are present, when playing a table game for more than 15 minutes, drink service is offered.

Facilities Detail

- Lobby areas feature elegant live plants and/or fresh floral displays.
- A dedicated and secure luggage storage area is available.
- Public phones are equipped with seats, privacy panels and pad/pens.
- Public washrooms are furnished with upgraded materials and appointments/luxurious design.
- Televisions feature premium cable or satellite television.
- Guest room telephones have two lines.

Guest Room Detail

- Selection of at least 10 hangers including a variety of bars, clips and padded.
- Closet is very well lit and generously spacious.
- In-room safe is present.
- If Inn, in-room safe is present or readily accessible on-site.

- Minibar is present, is non auto-charge, and premium products are attractively displayed.
- Bed is triple sheeted or features washable duvets.
- Live plants are present in guest rooms.
- Shaving/makeup, lighted magnifying mirror is present.
- Double sinks or separate vanity counter are present in the bathroom.
- Ample cosmetic and toiletry storage space exists for two persons.
- Hygienic soap, shampoo and five other bath amenities are provided.
- Bathroom amenities will be exceptionally luxurious in quality and variety.
- One robe per guest is provided; plus additional towels in the bathroom.
- Luxurious bath linens, oversized towels and a bath rug are all present in the bathroom, no plastic shower curtains.

Specialized Facility Detail

- Fitness equipment is available with personal headphones/televisions
- Current newspapers and national-title magazines are provided in fitness and locker areas.

Forbes Five Star Criteria

★★★★★**Five Star Hotels:** Exceptionally distinctive luxury environment offering consistently superlative, personalized service and the ultimate in amenities, make these hotels and inns the best in the U.S. and Canada. Attention to detail and the anticipation of every need are evident throughout this exclusive group of hotels. These hotels are remarkable in every aspect from the plush and elegant guest room design to the unforgettable culinary experiences. The Forbes Five Star category includes such properties as the Peninsula Beverly Hills, the Four Seasons Hotel Chicago, the Ritz-Carlton San Francisco and the Mandarin Oriental New York.

A Five Star Hotel, Resort or Inn meets all the criteria expectations and all of the qualities for a Four Star Hotel, Resort or Inn plus the following characteristics:

Services Detail

- Staff is extremely well spoken, polite and clear, avoids slang and phrase-fragments.
- Staff is extremely well informed about requirements within their department.
- Overall service is flawless from initial reservation call to departure service.
- Guests are offered an escort to their rooms unless they specifically decline.
- Choice of at least two complimentary newspapers is offered and distributed.
- Welcome gift or amenity provided by management during the visit.
- Twenty-four hour room service is available, including hot food.
- Wine by the glass is presented in bottle and poured in room, for room service.
- During turndown service, something noteworthy and thoughtful is included in the presentation.
- At least two types of premium quality snacks are automatically offered and distinctly presented during bar and lounge service.

- All mixed drinks are presented with modified or full club service.
- Any work undertaken by the staff is handled with complete professionalism, and returned to guests neatly, in folders or envelopes.
- If Inn, restaurant on site serving a full breakfast and dinner plus one additional meal service.
- If pool service is available, guests are proactively greeted and escorted to their chairs, and set-up assistance is provided or offered.
- If pool service is available, during a 90 minute period and in warm conditions, some sort of complimentary refreshment is offered (for example, mineral water, fresh fruit, water spritz).

Facilities Detail

- Public washrooms feature well-maintained cloth towels, fresh plants or flowers.

Guest Room Detail

- Guest bathroom is equipped with a telephone.
- CD player/stereo is present and functional.
- Ice bucket and glasses are high quality (glass, metal, stone etc.), with tongs which are clean and hygienic.
- Fresh flowers are present in guest rooms.
- Separate showers are present in bathroom.

City of American Canyon
Active Community Development Projects
October 2021

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
1.	The Residences at Napa Junction Preapplication (PL21-0026)	American Canyon Ventures LLC – 89-3990238	Proposed apartment with 452 dwelling units. 15% would be affordable to very low income residents.	Northwest of Napa Junction III Shopping Center 15.05 acres	9/29/21 Application submitted	William He
2.	Core Tree Care Administrative Design Permit (PL21-0025)	Core Tree Care	Contractor for PG&E to process vegetation cleared from PG&E powerline easements.	352 Green Island Road 4.8 acres	9/21/21 Application submitted 9/24/21 Comments to applicant 10/12/21 Application resubmitted	William He
3.	Napa Cove Design Permit (PL21-0027)	CRP Affordable Housing	Preapplication to review the Napa Cove affordable housing project.	3508 Broadway 3.48 acres	10/1/21 Application submitted 10/13/21 PRC meeting	Brent Cooper
4.	Walmart Sign Modification (PL21-0023)	BRR Architecture	Update Walmart store signs.	7011 Main Street	8/19/21 Application submitted 9/28/21 Application approved	William He
5.	NACC Development Agreement Annual Review (PL21-0021)	Napa Airport Corporate Center, I, LLC	Annual report on good faith compliance with the terms of the Development Agreement.	Southeast corner S. Kelly Drive/Devlin Road	8/5/21 Application received 10/5/21 City Council approved	Brent Cooper
6.	Watson Ranch Lot 10 Residential (PL21-0013, PL21-0014)	DR Horton	Tentative Subdivision Map and design Permit for 219 single family homes	NEC Loop Road/Rio Del Mar 26.55 acres	6/4/21 Application submitted 7/2/21 Comments to applicant 7/20/21 Application resubmitted 8/26/21 PC review approved 9/21 21 City Council approved	William He
7.	Sunsquare Mixed Use Building (PL21-0020)	John Howland Architect	3-story mixed-use building with 20 apt units over a 9,820 SF office	425 Napa Junction Road	8/3/21 Application submitted 8/20/21 Comments to applicant	William He

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
8.	PG&E Regional Center (PL21-0011)	Pacific Gas and Electric	Conditional Use Permit for Facilities for service crews to install, repair and replace electric and gas infrastructure in the region.	500 Boone	5/19/21 Application submitted 6/9/21 Comments to applicant 6/16/21 Meeting with applicant 9/30/21 PC review approved	William He
9.	Giovannoni Logistics Center (PL20-0042)	Buzz Oates Construction	EIR for approximately 2.4 million sqft logistics center and Design Permit for two warehouses. Building A is 627,976 square feet; and Building B is 469,512 square feet	300 Green Island Road (Bldg A) 1200 Devlin Road (Bldg B) 70 acres	11/13/20 Application submitted 12/12/20 Comments to applicant 01/05/21 Application resubmitted 01/12/21 Notice of Preparation (NOP) published 2/3/21 NOP scoping meeting 3/10/212 Comments to applicant 9/17/21 Meeting with applicant. November Admin draft EIR anticipated	Brent Cooper
10.	Giovannoni Logistics Center (PL20-0043)	Buzz Oates Construction	Tentative Parcel Map for the Giovannoni Logistics Park	North of Green Island Road and East of future Devlin Road 70 acres	11/13/20 Application submitted 12/12/20 Comments to applicant 01/05/21 Application resubmitted 3/10/212 Comments to applicant 7/13/21 Application resubmitted 8/6/21 Comments to applicant 9/17/21 Meeting with applicant. November Admin draft EIR anticipated	Brent Cooper
11.	Oat Hill Lot Line Adjustment (PL20-0039)	Oat Hill Properties II, LLC	Increase Lot C of 14 RM 4 from 10.17 acres to 13.59 acres; and decrease Parcel F of 12 RM 53 from 10.64 acres to 7.22 acres.	Southwest corner Hess Road and Napa Junction Road	10/2/20 Application submitted 11/7/20 Comments to applicant 2/25/21 Application resubmittal 3/1/21 Comments to applicant 3/11/21 Application deemed complete	Paul Wade

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
12.	7-11 Gas Station Conditional Use Permit (PL20-0035)	Best American Canyon Partners	Proposed 7-11 gas station	218 American Canyon Road	10/13/20 Application submitted. 11/11/20 Comments to applicant. Project on hold due to Fuel Station 10-month, 15-day moratorium	William He
13.	Hampton Inn Hotel Zone Change and Design Permit (PL20-0029, PL20-0030)	AMS Associates, Inc.	New 3-story, 106 room Hampton Inn Hotel.	3443 Broadway 2.52 acres	8/26/20 Application submitted 9/21/20 Comments to applicant 12/1/20 CC Zone Change Workshop 12/21/20 Application resubmitted 1/25/21 Comments to applicant 10/5/21 CC/PC workshop 10/28/21 PC review scheduled	William He
14.	Rotten Robbie Fuel Station (PL20-0047)	Robinson Oil Company	Conditional Use Permit for a Fuel station, a convenience store, a car wash, and three truck-fueling positions.	3519 Broadway St 3.33 acres	01/07/21 Application submitted 9/15/21 Project withdrawn by Applicant	William He
15.	Oat Hill General Plan Amendment, Zone Change, Subdivision Map and Design Permit – Parcel A (PL20-0022, PL20-0024 and PL20-0025)	Oat Hill Properties, II, LLC	Policy amendments and site plan to allow construction of 121 multi-family dwelling units for rental and condominium purposes.	Top of Oat Hill on the southwest slope. 13.7 acres	8/25/20 Application submitted 3/25/21 PC recommendation 6/23/21 ALUC review 7/20/21 City Council intent to overrule ALUC 9/7/21 City Council Overrule and Project Entitlements approved 9/21/21 City Council approved Second Ordinance reading, Design Permits, and Tentative Subdivision maps	William He

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
16.	Oat Hill General Plan Amendment, Zone Change, Subdivision Map and Design Permit – Parcel B (PL20-0023, PL20-0026 and PL20-0027)	Oat Hill Properties, II, LLC	Policy amendments and site plan to allow construction of 85 multi-family dwelling units for rental and condominium purposes.	Lower Oat Hill on the southwest slope. 7.1 acres	8/25/20 Application submitted 9/11/20 Comments to applicant 2/8/21 30-day Mitigated Negative Declaration public review starts 2/22/21 Application resubmitted OSAC Review 3/25/21 PC recommendation 6/23/21 ALUC review 7/20/21 City Council approved intent to overrule ALUC 9/7/21 City Council Overrule and Project Entitlements approved 9/21/21 City Council approved Second Ordinance reading, Design Permits, and Tentative Subdivision maps	William He
17.	SDG Commerce 217 Distribution Center (PL20-0008)	SDG Commerce 217, LLC	Conditional Use Permit for a new 217,000 sqft distribution warehouse.	1075 Commerce Court 10.39 acres	3/18/20 Application submitted 4/8/20 Comments to applicant 6/23/20 Second Submittal 1/28/21 PC Review continued to 2/25 2/25/21 PC Approved 3/5/21 Appeal Received 4/1/21 30-day Recirculated MND begins 5/4/21 30-day review period extended to 6/3/21 7/20/21 City Council appeal continued August 17. 8/17/21 City Council tabled item to December 2021	William He

Project Applications Under Review						
No.	**Project Name**	**Applicant**	**Description**	**Location/Area**	**Application Status**	**Planner**
18.	Circle K and Fuel station Lot Line Adjustment (PL20-0011)	STEM, LLC	Lot Line Adjustment to merge two parcels into a single parcel.	Northeast corner Lombard/Napa Junction Road 2.25 acres	4/15/20 Application submitted 5/15/20 Comments to applicant 5/19/20 Second submittal 6/10/20 Comments to applicant 9/24/21 LLA recorded	William He
19.	Element 7 Cannabis Business Permit (PL19-0008)	Element 7	Construct a 7,000 square foot building for Cannabis manufacturing, distribution and non-storefront retail (Delivery) business.	1300 Green Island Road	4/10/19 Application submitted 9/29/20 Application on Hold	Brent Cooper
20.	Reesan Live, Inc. Cannabis Business Permit (PL19-0024)	Reesan Live, Inc.	Construct an 82,328 sqft 2-story warehouse for cannabis cultivation, manufacturing, distribution and nonstorefront retail delivery.	834 Green Island Road	8/16/19 Application submitted. 4/1/20 Project on Hold	Brent Cooper

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
1. Lemos Pointe Grading Permit (DV21-0007)	Rough grading for the Lemos Point Apartment Project	Northwest corner Loop Road/Rio Del Mar	6.7 acres	6/9/21 Application submitted 8/9/21 Application approved.	Edison Bisnar
2. Napa Junction III Building 6B (BP19-0495)	Construct a 6,000 sqft single story medical office building.	416 Napa Junction Road	1.06 acres	11/26/19 Application submitted 2/13/20 Awaiting completion of improvement plans 9/30/20 Permit approved 5/25/21 Permit issued	William He
3. Napa Junction III Building 6B (DV20-0001)	Improvement plans for a 6,000 sqft single story medical office building.	416 Napa Junction Road	1.06 acres	2/18/20 Application submitted 3/10/20 Received revised stormwater plans 9/30/20 DV Plans approved. 5/25/21 Construction started	Edison Bisnar
4. Fume Commercial Cannabis Will Serve (DV20-0014)	Extend reclaimed water line to supply irrigation demand of the project.	180 Klamath Court	1.37 acres	12/16/20 Will serve and wastewater study received 1/28/21 PC approved the CUP 3/26/21 Will Serve comments to the applicant.	Edison Bisnar

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
5. Canyon Estates (DV18-0023)	Improvement plans, grading plans, potable water pump station plans and Final Map.	Northeast corner Silver Oak/ Newell Drive	35 acres	10/31/18 Applicant submitted 4/17/19 3rd submittal received 5/22/19 Pump station submittal received 6/13/19 Grading and Improvement Plan Comments to applicant 7/14/20 Preconstruction meeting 3/19/21 Preconstruction meeting 3/22/21 Begin Construction	PW Engineering
6. Canyon Estates Lot Line Adjustment (PL19-0011)	Lot Line adjustment to consolidate habitat area in Napa County.	Northeast corner Silver Oak/ Newell Drive	35 acres	4/18/19 Lot line adjustment application submitted 6/13/19 Comments to applicant	Paul Wade
7. Pick-n-Pull (DV19-0004)	Grading permit for new customer parking lot and vehicle inventory yard.	5759 Broadway	9.52 acres	2/21/19 Application submitted 3/8/19 Comments to applicant 5/6/19 Inquired status with applicant 6/10/19 2nd Applicant submittal 7/18/19 Comments to applicant 8/13/19 3rd Applicant Submittal 11/6/19 Grading Permit approved. All Civil Improvements are complete.	Paul Wade

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
8. Pick-n-Pull (BP19-0061)	Tenant improvement to the large building (Bldg #2).	5759 Broadway	9.52 acres	2/12/19 Application submitted 11/6/19 Grading Permit approved. 3/6/20 Temporary occupancy approved for limited building use. 9/22/21 Final Occupancy permit	Tom Trimberger
9. Copart (DV20-0008)	Grading permit for an auto storage lot and office building Conditional Use Permit PL18-0019.	1587 and 1660 Green Island Road	20 acres	4/23/20 On-site private wastewater treatment system application submitted to the County 8/13/20 1st Submittal received 10/1/20 1st Plan Check returned 12/3/20 2nd Submittal received 2/11/21 2nd Plan Check returned	Edison Bisnar
10. Home2Suites Will Serve and Improvement Plan (DV19-0015)	Will serve application and improvement plans for a 102-room hotel.	3830 Broadway	2.0 acres	9/5/19 Will Serve Application submitted 5/25/20 Improvement Plan Application submitted 3/15/21 5th Submittal received. 5/17/21 DV approved. 7/9/21 Fee Reduction Request Received 8/19/21 Comments to applicant 9/16/21 and 10/7/21 Applicant submittal	Edison Bisnar

Major Building/Grading Permits					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
11. Home2Suites Building Permit (BP19-0499)	Building permit for 102 room hotel.	3830 Broadway	2.0 acres	12/3/19 Application submitted 12/19/19 Comments to applicant 3/9/20 Checked in with applicant 4/15/20 Building resubmittal 5/1/20 Comments to applicant 07/16/20 Building resubmittal 07/24/20 Comments to applicant 09/17/20 Building resubmittal 09/25/21 Comments to applicant 02/01/21 Waiting fire sprinkler plan submittal.	Interwest
12. Napa Logistics Building 3 (BP20-0179)	Building permit for new 201,839 sqft warehouse.	300 Boone Drive	24.5 acres	05/26/20 Application submitted 09/10/19 Comments to applicant 9/10/20 Permit Issued 02/18/21 Forms and Footings inspection 4/13/21 Walls and insulation installed 4/27/21 HVAC equipment installation 6/15/21 A 60-Day Temporary Occupancy Permit approved for interior stocking. 8/6/21 Final C/O issued	Interwest
13. Circle K and Fuel station Improvement Plans (DV20-0003)	STEM, LLC	Improvement plans for a new Circle K fuel station and convenience store.	Northeast corner Lombard/Napa Junction Road 2.25 acres	4/13/20 Application submitted 10/4/21 Grading permit approved	Edison Bisnar

Major City-Initiated Projects					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff**
1. Fuel Station zoning code amendment (PL21-0028)	Amend the zoning code to prohibit fossil-fuel stations in American Canyon and modify nonconforming standards for existing fuel stations.	Citywide	N/A	10/7/21 Project initiated	Brent Cooper
2. Climate Change General Plan Amendment (PL21-0017)	Incorporate climate change, adaptation, and greenhouse gas reduction policies into the General Plan Land Use Element	Citywide	N/A	5/27/21 PC Workshop on General Plan amendment 6/24/21 Continued PC workshop 7/22/21 PC recommended approval 9/7/21 CC approval	Brent Cooper
3. Fuel Station Urgency Ordinance (PL21-0005)	Potential moratorium on new fuel stations in American Canyon	Citywide	N/A	2/2/21 City Council workshop 2/16/21 City Council hearing continued to 3/2/21 3/2/21 City Council approved 45-day urgency ordinance 4/6/21 10 month, 15-day urgency ordinance approved	Brent Cooper
4. Comprehensive General Plan Update	Review and update to bring the General Plan into conformance with current State standards and community values	Citywide	N/A	7/1/19 Drafting a Request for Proposal (RFP) 7/4/19 Community input at 4th of July festival 9/17/19 Joint CC/PC meeting to discuss scope of work 12/3/19 Mintier Harnish selected 9/15/20 Council workshop to discuss revised scope. 3/24/21 Circulation Committee meeting. 6/15/21 Council workshop on WSC alternatives 10/5/21 CC/PC workshop	Brent Cooper

Major City-Initiated Projects					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff**
5. Paoli/Watson Lane Annexation (PL19-0003)	General Plan Amendment, rezoning, and annexation of the Paoli/Watson Lane Property.	Southeast of Paoli Loop/SR-29	80 acres	9/5/17 City Council authorization to proceed 5/28/20 City received a Property Owner notice of intent to circulate a petition to annex the Paoli Loop/Watson Lane Property.	Bill Ross, City Attorney

Major Regional Projects					
Project Name	**Description**	**Location**	**Area**	**Status**	**Staff Liaison**
1. Napa Valley Transportation Authority 2045 Countywide Transportation Plan	Update the 2015 NVTA Countywide Plan with new mobility priorities for the next 25 years.	Napa County	N/A	8/19 Project Kick-off 9/19 – 01/20 Public Input 01/21 Drafting the Plan	Alberto Esqueda (NVTA)
2. Replacement Napa Junction Elementary School	Coordination with the Napa Valley Unified School District on the new elementary school design.	Northeast corner Wetlands Edge/ Eucalyptus Drive	10 acres	8/14/19 Ground breaking ceremony August 2021, School Opens	Jason Holley
3. Regional Working Group on Climate Change	Countywide Working Group to evaluate efforts to adopt policies that will combat climate change.	Countywide	N/A	Most recent meeting: 2/26/21 Regular ongoing meetings continue.	Brent Cooper